Legal Handbook for the New Starts Process

DETAILS

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LEGAL HANDBOOK FOR THE NEW STARTS PROCESS

This report was prepared under TCRP Project J-5, "Legal Aspects of Transit and Intermodal Transportation Programs," for which the Transportation Research Board is the agency coordinating the research. The report was prepared by Daniel Duff, Edward J. Gill, Jr., and G. Kent Woodman, Thompson Coburn LLP. James B. McDaniel, TRB Counsel for Legal Research Projects, was the principal investigator and content editor.

The Problem and Its Solution

The nation's 6,000 plus transit agencies need to have access to a program that can provide authoritatively researched, specific, limited-scope studies of legal issues and problems having national significance and application to their business. Some transit programs involve legal problems and issues that are not shared with other modes; as, for example, compliance with transit-equipment and operations guidelines, FTA financing initiatives, private-sector programs, and labor or environmental standards relating to transit operations. Also, much of the information that is needed by transit attorneys to address legal concerns is scattered and fragmented. Consequently, it would be helpful to the transit lawyer to have well-resourced and well-documented reports on specific legal topics available to the transit legal community.

The *Legal Research Digests* (LRDs) are developed to assist transit attorneys in dealing with the myriad of initiatives and problems associated with transit start-up and operations, as well as with day-to-day legal work. The LRDs address such issues as eminent domain, civil rights, constitutional rights, contracting, environmental concerns, labor, procurement, risk management, security, tort liability, and zoning. The transit legal research, when conducted through the TRB's legal studies process, either collects primary data that generally are not available elsewhere or performs analysis of existing literature.

Applications

Each year the Federal Transit Administration (FTA) makes available more than $1 billion in federal funds for new or expanded fixed guideway New Starts transit projects. As a result of this federal funding source, fixed guideway transit systems now flourish. Many areas and cities compete for these federal funds and the transforming transportation projects they help construct.

Because there are more proposed New Starts projects than there are federal funds to construct them all, Congress and the FTA have created an evaluation and project development process that each project must undergo before it can be assured of federal funding.

The next step is for a project sponsor to seek approval from the FTA for federal funding of a project, and a lengthy process begins. If the project appears sound, FTA will permit it to enter preliminary engineering, a process in which the scope and cost of the project is further refined and reviewed as the FTA's New Starts criteria are applied to the project. If all goes well, the project proceeds into final design, the transition period from project development to project construction. If the project ultimately is approved for funding by the FTA, a Full Funding Grant Agreement is entered into and the project is constructed.

The FTA's project development process is long and arduous, and there are key legal issues that arise throughout the process. While the FTA has a wealth of materials on its Web site about the project development and rating and evaluation process, transit lawyers have noted there is no single source to turn to for questions about the New Starts process. The purpose of this Handbook is to provide information to transit attorneys on the FTA's New Starts process. The report should be useful not only for transit attorneys and managers, but also for legislators, civic leaders, and local transit supporters interested in the overall New Starts process.

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CHAPTER I: THE NEW STARTS PROGRAM—HISTORY AND FRAMEWORK

A. The Federal New Starts Program

The Federal New Starts program effectively began in the 1970s as part of an effort to provide federal funding for public transportation, including major capital investments in fixed guideway public transit systems. It was administered by an agency of the U.S. Department of Transportation (USDOT), the Urban Mass Transportation Administration (UMTA), now known as the Federal Transit Administration (FTA). The program has grown significantly both in terms of the amount of federal funds made available under it each year and in the complexity of its requirements.

B. Statutory and Regulatory History of the Federal New Starts Program

Essentially all New Start projects rely on some level of federal investment. Because the program is and was discretionary, federal officials as early as the mid-1970s sought to establish a way to review and to determine which projects should be funded. Those early efforts were in the form of policy statements.

The first policy statement was published in 1976[1] and subjected New Start projects to an analysis of alternatives, including a Baseline Alternative that focused on low-cost methods to make the best use of the existing transportation system, the Transportation System Management (TSM) alternative. Significantly, the statement required projects to be "cost effective." This policy statement was supplemented by a 1978 "Policy on Rail Transit,"[2] which repeated the alternatives analysis requirement, established requirements regarding the local financing of the project, and created the concept of a multiyear commitment of federal funds with a cap or limit on such funding in the form of a Full Funding Grant Agreement (FFGA). A 1980 policy statement linked the alternatives analysis and environmental impact processes.[3]

These policy statements were refined and expanded upon in a 1984 "Statement of Policy on Major Urban Mass Transportation Capital Investments,"[4] which introduced a rating methodology to compare competing projects—a cost-effectiveness index based upon forecasts of incremental cost per incremental rider under the build alternative compared to a base alternative based on TSM.

The next major action came from Congress in a transit and highway authorization act, the 1987 Surface Transportation and Uniform Relocation Assistance Act[5] (STURAA). Here Congress established criteria that a New Start project had to meet to be eligible for federal funding. Paramount among the criteria was that the project be "cost effective" and "supported by an adequate degree of local financial commitment." STURAA also required an annual report from FTA to Congress on its recommendations for New Starts funding. To implement STURAA's requirements, FTA issued a Notice of Proposed Rulemaking[6] (NPRM) that would have embodied in a regulation the FTA's "Cost Per New Rider" Index.

Not for the last time, however, Congress, in the Fiscal Years (FY) 1990 and 1991 Department of Transportation Appropriations Acts,[7] mandated that the FTA rule not proceed. The proposed rule was subsequently withdrawn by FTA in 1993.[8]

Congress focused again on the New Starts process in the next transit and highway reauthorization legislation, the 1991 Intermodal Surface Transportation Efficiency Act[9] (ISTEA), making significant changes to the legislative New Starts criteria. Among other things, the Act expanded the New Starts criteria, requiring that a project be justified, based on a comprehensive review of its mobility improvements, environmental benefits, cost-effectiveness, and operating efficiencies.

In response, FTA in 1994 issued a policy discussion paper to stakeholders on how it proposed to implement ISTEA's New Starts requirements, and in 1996 FTA issued a *Federal Register Notice*[10] that adopted the ISTEA criteria and set forth the measures to be used to evaluate New Start projects. This policy was amended in 1997 to reflect USDOT guidance on valuing travel time and to make other changes.[11]

Congress again returned to the New Starts process in the next transit and highway reauthorization act, the Transportation Equity Act for the 21st Century[12] (TEA-21). While the Act did not change the fundamental New

[1] 41 Fed. Reg. 41512 (Sept. 22, 1976).

[2] 43 Fed. Reg. 9428 (Mar. 7, 1978).

[3] 45 Fed. Reg. 71986 (Oct. 30, 1980).

[4] 49 Fed. Reg. 21284 (May 18, 1984).

[5] Pub. L. No. 100-17, 101 Stat. 132 (1987).

[6] 54 Fed. Reg. 17878 (Apr. 25, 1989).

[7] Pub. L. No. 101-164, 103 Stat. 1069 (1989); Pub. L. No. 101-516, 104 Stat. 2155 (1990).

[8] 58 Fed. Reg. 6948 (Feb. 3, 1993).

[9] Pub. L. No. 102-240, 105 Stat. 1914 (1991).

[10] 61 Fed. Reg. 67093 (Dec. 19, 1996).

[11] 62 Fed. Reg. 60756 (Nov. 12, 1997).

[12] Pub. L. No. 105-178, 112 Stat. 107 (1998).

Starts project justification criteria or multiple-measure project evaluation process, it did make a number of critical changes to the overall process. FTA was now to create overall project ratings of Highly Recommended, Recommended, or Not Recommended. The major investment study, which had been a separate requirement, was incorporated into the planning and environmental regulations promulgated by FTA and the Federal Highway Administration (FHWA). FTA approval would now be needed to advance from preliminary engineering to final design. TEA-21 also added new factors to the project evaluation process, including the cost of sprawl, infrastructure savings due to compact land use, population density and current transit ridership in a corridor, and the technical capacity of the grantee to undertake the project. In addition to the annual New Starts report required to be submitted to Congress, TEA-21 added a Supplemental New Starts report to be issued each August to address updated information for projects that have completed Alternatives Analysis and Preliminary Engineering (PE) since the latest report submitted to Congress. Reflecting concern about FTA's use of policy statements to implement New Start procedures, Congress mandated that FTA publish as a regulation the manner in which it would evaluate and rate proposed New Starts projects.

Accordingly, FTA published an NPRM to implement TEA-21 changes to the New Starts process in 1999[13] and published a Final Rule on "Major Capital Investment Projects" effective early in 2001.[14] FTA noted in the rule that the statute requires FTA to determine that a proposed New Starts project is justified based on a comprehensive review of its various benefits and improvements. FTA uses an approach in which projects are evaluated and rated against a multiple set of measures. Thus measures are established for the following criteria: mobility improvements, environmental benefits, operating efficiencies, cost-effectiveness, existing land use, transit-supportive land use policies and future patterns, and other factors including the extent to which policies and programs are in place as assumed in forecasts, project management capability, and other relevant factors. For each project, FTA assigns one of five descriptive ratings for each of these criteria—High, Medium-High, Medium, Low-Medium, or Low. As required by TEA-21, FTA will assign overall ratings of Highly Recommended, Recommended, or Not Recommended to each proposed project. The rule discusses the New Starts "baseline" alternative that is to be used; it is to include "the best that can be done" in terms of public transportation in the affected corridor in the absence of the new fixed guideway system. Its purpose is to isolate the costs and benefits of the proposed project.

Subsequently, FTA published a range of New Starts program guidance. In January 2003, FTA issued *Advancing Major Transit Investments Through Planning and Project Development,*[15] which describes the planning and project development process before FTA approval to enter PE and Final Design. This was supplemented by *Additional Guidance on Local Initiation of Alternatives Analysis Planning Studies*[16] and *New Starts Baseline Alternative Review and Approval Procedures.*[17] FTA also began to implement a rigorous risk management program to improve proposed New Starts projects and to ensure that they could deliver on cost, schedule, and ridership promises.

In April 2005,[18] FTA issued a "Dear Colleague" letter that made a number of changes to the New Starts rating and evaluation process. Most significantly, FTA announced that a New Starts project would have to deliver a Medium or higher rating for cost effectiveness, and placed increasing emphasis and weight on the cost-effectiveness factor.

Not surprisingly, the next transit and highway reauthorization bill, the Safe, Accountable, Flexible, Efficient Transportation Equity Act—A Legacy for Users[19] (SAFETEA-LU), made significant changes to the New Starts program. The three-level rating system for New Starts was replaced by a five-level system: High, Medium-High, Medium, Medium-Low, and Low. Economic development and land use was added to the project justification criteria. A grantee will be allowed to keep a portion of cost savings if a project is completed under budget. Further, the legislation created a new "Small Starts" Program for a project with a federal share of less than $75 million and an overall project cost of no more than $250 million. Simplified procedures and criteria are to apply to the program, which is to be funded annually at $200 million from the New Starts program. Once again, Congress mandated that FTA implement by rulemaking its evaluation and rating process for New Start projects, and also mandated that FTA issue New Starts policy guidance not less than once every 2 years. Further, each year the General Accountability Office (GAO) is required to report on FTA's processes and procedures for evaluating, rating, and recommending New Starts projects for funding and on FTA's implementation of these processes and procedures.

[13] 64 Fed. Reg. 17062 (Apr. 7, 1999).

[14] 65 Fed. Reg. 76864 (Dec. 7, 2000).

[15] FED. TRANSIT ADMIN., ADVANCING MAJOR TRANSIT INVESTMENTS THROUGH PLANNING AND PROJECT DEVELOPMENT (2003), *available at* http://www.fta.dot.gov/documents/NSAMTIguidance.pdf.

[16] FED. TRANSIT ADMIN., ADDITIONAL GUIDANCE ON LOCAL INITIATION OF ALTERNATIVES ANALYSIS PLANNING STUDIES, *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_2590.html.

[17] FED. TRANSIT ADMIN., NEW STARTS BASELINE ALTERNATIVE REVIEW AND APPROVAL PROCEDURES, *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_2589.html.

[18] FED. TRANSIT ADMIN., *Changes to the New Starts Rating Process*, Dear Colleague Letter (Apr. 29, 2005), *available at* http://www.fta.dot.gov/news/colleague/news_events_28.html.

[19] Pub. L. No. 109-59, 119 Stat. 1144 (2005).

Following enactment of SAFETEA-LU, FTA published *Guidance on New Starts Policies and Procedures* in 2006.[20] It also published an Advance NRPM on Small Starts.[21] These approaches were consolidated into FTA's August 3, 2007, NRPM to implement the provisions of SAFETEA-LU.[22] That rulemaking proposed a number of significant policies; among other things, the NPRM proposed to weight cost-effectiveness within the project justification rating at 50 percent and to require that a project be rated Medium on cost effectiveness to obtain a funding recommendation. This was the first time many of these policies would be embodied in a regulation rather than in guidance. Subsequently, a number of concerns were expressed about the rule: that the weights given different criteria would be in the rule, not in guidance; that cost-effectiveness was given a weight of 50 percent, and that FTA would insist on a Medium rating for cost-effectiveness at every decision point; that the rule did not distinguish land use from economic development; that high-occupancy toll lanes might be eligible New Start activities; and that the Small Starts program was not simplified.[23]

Because of these and other concerns, Congress once again acted to put on hold a New Starts rulemaking. The Consolidated Appropriations Act, 2008,[24] enacted into law December 26, 2007, combined a number of appropriations laws into this omnibus bill, including that covering the Department of Transportation Appropriations for FY Year 2008. The legislation includes a provision from the transportation conference report that prevented FTA from implementing the Final Rule on the New Starts/Small Starts Program. FTA was allowed to review comments received on the proposed rule.

FTA continued to publish policy guidance, however. Its 2008 Notice of Availability of Final Guidance on New Starts/Small Starts Policies and Procedures[25] focused on a number of issues, including information on the "making the case" report for the alternatives analysis process and the requirement of new documentation of uncertainties in forecasting capital costs and ridership. Most significantly, in rating potential New and Small Starts projects, FTA proposes to give additional attention to the adequacy of the local financial commitment for ongoing recapitalization of the existing transit system. FTA essentially will be looking for assurances that the existing transit system is in a state of good repair and is likely to remain so whether or not the project under consideration is implemented.

Because of continuing concern about how much weight FTA would have placed on the cost-effectiveness criterion, Congress included a provision addressing this issue in the SAFETEA-LU Technical Corrections Act of 2008.[26] It added at the end of the New Starts project ratings provision at 49 U.S.C. § 5309(d)(5)(B) a requirement that FTA "…shall give comparable, but not necessarily equal, numerical weight to each project justification criteria in calculating the overall project rating."[27]

On February 17, 2009, FTA published a *Federal Register Notice* withdrawing its August 3, 2007, NPRM on Major Capital Investment Projects.[28] It noted that the revisions to the statute required by the SAFETEA-LU Technical Corrections Act of 2008 required such a fundamental change in how FTA weighs the several project justification criteria that a new approach to rulemaking for the New Starts and Small Starts programs would be required.

Accordingly, on May 19, 2009, FTA published a *Federal Register Notice of Availability of Proposed Guidance on New Starts/Small Starts Policies and Procedures and Request for Comments*.[29] FTA proposed that the project justification rating of a project seeking New Starts funding be based on ratings for the following criteria with the proposed weights shown in parentheses: mobility improvements (20 percent), environmental benefits (10 percent), cost-effectiveness (20 percent), operating efficiencies (10 percent), economic development effects (20 percent), and land use policies and future patterns supportive of public transportation (20 percent). For Small Starts, FTA proposed that the project justification rating of a project seeking Small Starts funding be based on ratings for the following criteria with the proposed weights shown in parentheses: cost-effectiveness (one-third), economic development effects (one-third), and land use policies supportive of public transportation (one-third).

C. New Starts Project Development Process and Timeline

As required by New Starts statutory language,[30] a New Starts project must emerge from a regional, multimodal, transportation planning process. The early stages of the New Starts process involve Systems Planning and Alternatives Analysis. These do not require FTA approval to proceed. Systems Planning identifies regional transportation needs; Alternatives Analysis provides information about the costs, benefits, and impacts of different corridor-level transit options such as rail lines or bus routes. The Alternatives Analysis phase results in the selection of a locally-preferred alternative.

The selection of a locally-preferred alternative means that a project sponsor can submit a request to FTA for

[20] 71 Fed. Reg. 3149 (Jan. 30, 2006).

[21] 71 Fed. Reg. 4864 (Jan. 30, 2006).

[22] 72 Fed. Reg. 43328 (Aug. 3, 2007).

[23] FTA outlined these issues in its Notice withdrawing the 2007 NPRM, describing these concerns as "the most widely held." 74 Fed. Reg. 7388 (Feb. 17, 2009).

[24] Consolidated Appropriations Act, 2008, Dec. 26, 2007; Pub. L. No. 110-161, 121 Stat. 1844.

[25] 73 Fed. Reg. 46352 (Aug. 8, 2008).

[26] SAFETEA-LU Technical Corrections Act of 2008, Pub. L. No. 110-244, 122 Stat. 1572.

[27] 49 U.S.C. § 5309(d)(5)(B).

[28] 74 Fed. Reg. 7388 (Feb. 17, 2009).

[29] 74 Fed. Reg. 23776 (May 19, 2009).

[30] 49 U.S.C. § 5309(c)(1)(A).

entry into PE. Once that phase and federal environmental requirements are completed, the project sponsor seeks FTA approval to proceed into Final Design and, as the project's cost and budget become fixed, the sponsor seeks approval to enter into an FFGA and proceed to construction.

In shorthand, the project development process may be broken down into five key categories:

- *Systems Planning,* in which a priority corridor or sub-area is defined.
- *Alternatives Analysis* to determine mode and alignment within the corridor or sub-area.
- *PE,* to focus on final scope and cost.
- *Final Design,* to finalize project development.
- An *FFGA,* to establish terms and conditions of federal funding; and, finally, construction of the project.

Each New Starts project is unique and subject to a variety of local issues and concerns that will affect how long it takes to get the project through the project development process and up and running. Moreover, much depends on the size and complexity of a particular project. The development of a commuter rail line over existing freight rail tracks, for example, should take less time going through the FTA project development process than would the construction of a new light rail system in a dense urban area. It is thus not possible to predict how long a particular project will take to proceed through the New Starts process from its earliest stages to the time when operations begin. But after a review of reports, discussion with FTA staff, project sponsors and others, it is possible to make some general approximations of the length of time it takes for a project to make its way through the New Starts process.

In general, the FTA project development process can be estimated to take from 6 to 12 years.

The first phase, Alternatives Analysis, generally can take from 1 to 2 years. Note that this is the only phase that does not require FTA approval to proceed.

The second phase, PE, does require FTA approval to proceed, and can be estimated to take 2 to 3 years.

The third and fourth phases, Final Design and Construction, can be estimated to take from 3 to 7 years.

Finally, a 2007 report of the National Surface Transportation Policy and Revenue Study Commission (see Section E.2 of this digest) compares New Starts projects that have recently gone through the FTA New Starts process with those that completed the process some 10 years ago, and concludes that the period of time to complete the FTA New Starts process has, in some cases, doubled.

D. Key Decision Points in the Process; A Cautionary Note

There are three key inflection points in the FTA New Starts project development process where a proposed New Starts project is rated and evaluated under the New Starts criteria and where FTA approval is needed to proceed to the next stage:

1. From Alternatives Analysis to PE.
2. From PE to Final Design.
3. From Final Design to an FFGA (which allows construction to begin).

On its Web site, FTA has a checklist of requirements to be met for each of these decision points requiring FTA approval. [31]

While FTA approval is not necessary to undertake Alternatives Analysis, it is critical to involve FTA staff early on in that process.

Finally, a cautionary note: While this Handbook and FTA guidance may give the impression that the New Starts project development process proceeds in a linear and orderly fashion, manifestly it does not. It stops and starts for any number of reasons and for various lengths of time. The transit lawyer advising a project sponsor should perhaps counsel patience and perseverance above all else in dealing with the lengthy New Starts process.

E. Key Areas of Concern About the Process

1. Deloitte's New Starts Program Assessment Report for FTA

In response to criticism about the growing complexity of the New Starts process, FTA hired Deloitte Consulting in 2006 to do a detailed study and analysis of the New Starts program; the report was issued on February 12, 2007.[32] One of the key objectives of the report was to review the FTA New Starts project development process to see if there were ways to streamline or simplify it. The report has numerous case studies and makes many detailed recommendations of ways to improve the project development process.

In its "Key Findings," the report noted the following broad-based transit industry concerns about the New Starts process:

- New Starts is generally perceived as a good program.
- The project development process is perceived by grantees as intensive, lengthy, and burdensome.
- Clear and concise definitions of requirements do not exist for each stage of project development.
- The precise status of a project is not always known during the project development process.
- The annual project rating requirement creates unnecessary burden.

[31] FED. TRANSIT ADMIN., NEW STARTS CHECKLISTS (2008), *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_218.html.

[32] DELOITTE DEVELOPMENT LLC, NEW STARTS PROGRAM ASSESSMENT (Feb. 12, 2007), *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_6916.html.

• Enforcement of policies across the program is inconsistent.
• Grantees generally deem FTA staff knowledgeable, dedicated, and professional—but understaffed.
• Roles, responsibilities, authority, and accountability are not clearly defined in current organizational structure.
• Organizational conflicts exist between Headquarters offices and between Headquarters and Regions.
• Project sponsors are not realizing the full benefit of alternative delivery methods.
• Use of technology to enable processes is ineffective and inadequate.
• The current nomenclature for New Starts phases does not accurately reflect the required process activities and causes confusion for program stakeholders.

Among other conclusions, the report also noted that:

• The frequency of FTA's policy changes in recent years kept staff in a mode of perpetual policy creation and review and caused significant confusion for stakeholders.
• The current "one size fits all" approach treats all project sponsors the same throughout the project development process, although they differ significantly in New Starts experience and knowledge.

The report proposes a number of interesting modifications to the New Start project development phases, and recommends use of a Project Development Agreement (PDA) between FTA and a project sponsor early in the process to specify timelines and responsibilities of both parties. (See the discussion of PDAs in Chapter II.E.)

2. Report of the National Surface Transportation Policy and Revenue Study Commission

The National Surface Transportation Policy and Revenue Study Commission was established under Section 1909 of SAFETEA-LU. It required the commission to study and report on the current condition and future needs of the surface transportation system and potential funding sources to meet such needs. In December 2007, the commission issued a two-volume report, *Transportation for Tomorrow*.[33] Among other things, the report recommends investing $225 billion annually for up to 50 years to help improve the surface transportation system.

In a section on the highway and transit project development process, the report notes that "[s]imply put, it takes too long and costs too much to deliver transportation projects."[34] That chapter includes an exhibit prepared by FTA showing "Time to Complete New Starts Process."[35] The exhibit shows that in 1992, it took 60 months to complete the Alternatives Analysis, PE, and Final Design phases, while projects conducted in 2003–2006 took from 85 to 140 months to proceed through Final Design. The report concludes that:

> [E]xcessive delay in making [surface transportation] investments will continue to waste public and private funds. Federal funds are currently distributed to State and local transportation agencies along with many 'procedural strings' that lead to excessive delays. Particularly for larger projects, the complex process of planning, evaluation of environmental impacts, and arranging project funding can take as long as 15 years—an unacceptably long time in the face of immediate and growing transportation problems and in contrast to the ever-shortening cycle of private sector and entrepreneurial decision making. These delays lead to unnecessary cost increases that waste taxpayer funds. [36]

3. General Accountability Office

As a result of SAFETEA-LU, the New Starts statute now requires the GAO to report each year on FTA's processes and procedures for evaluating, rating, and recommending New Starts projects for funding and on FTA's implementation of these processes and procedures.[37] The GAO generally has been supportive of the New Starts process in various reports prepared for Congress, although GAO has criticized FTA's Transportation System User Benefit for not capturing the benefits to *highway* users that transit can bring and for not broadly weighing economic and environmental benefits that transit can provide. Most recently, in testimony before Congress, GAO noted that frequent changes to the New Starts program have led to confusion and delay; the current New Starts evaluation process measures do not capture all project benefits; and striking an appropriate balance between a robust evaluation process and minimizing a complex process is difficult. This report is interesting in that GAO offers suggestions to help expedite the New Starts process, including tailoring the process to risks posed by the projects, using letters of intent and early system work agreements more frequently, using road maps or project schedules, combining two or more project development stages, and applying changes only to future projects.[38]

GAO reports and studies dealing with the FTA New Starts process may be found on the GAO Web site.[39]

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[33] NATIONAL SURFACE TRANSPORTATION POLICY AND REVENUE STUDY COMMISSION, TRANSPORTATION FOR TOMORROW: REPORT OF THE NATIONAL SURFACE TRANSPORTATION POLICY AND REVENUE STUDY COMMISSION (2008), *available at* http://transportationfortomorrow.org/final_report/report_html.aspx.

[34] *Id*. at vol. II, pp. 6–8.

[35] *Id*. at exhibit 6-4.

[36] *Id.* at vol. I, p. 4.

[37] 49 U.S.C. § 5309(k)(2).

[38] GOV'T ACCOUNTABILITY OFFICE, NEW STARTS PROGRAM CHALLENGES AND PRELIMINARY OBSERVATIONS ON EXPEDITING PROJECT DEVELOPMENT (GAO-09-763T, 2009), www.gao.gov/new.items/d09763t.pdf.

[39] www.gao.gov.

4. Congressional Action

Finally, as noted above in the section on "Statutory and Regulatory History of the New Starts Program," congressional legislation put on hold FTA's New Starts rulemaking, which has since been withdrawn by FTA. Congress further provided in legislation that FTA give comparable but not necessarily equal numerical weight to each project justification criteria in calculating the overall project rating. In light of these actions, FTA has indicated that a new approach to rulemaking for the New Starts and Small Starts programs is required.[40] In the meantime, FTA is relying on existing guidance and is developing additional guidance.

F. The Legal Framework and Fundamental Requirements

While we discuss the overall New Starts process throughout this report, we particularly focus on four areas:

- The FTA process of evaluating and rating New Starts projects.
- The environmental process.
- Methods of project delivery.
- The FFGA.

As will be seen from a reading of this Handbook, there are many statutory and regulatory requirements applicable to a New Starts project. But at the outset it may be useful to review the key statutory and regulatory requirements that form the fundamental framework of a project. A New Starts project:

- Will likely be a "major federal action" subject to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 *et seq*., and FTA's and FHWA's environmental regulations at 23 C.F.R. Part 771.
- Will be a "major metropolitan transportation investment" subject to the metropolitan planning requirements at 23 C.F.R. Part 450.
- Will be "a new fixed guideway system or extension of an existing fixed guideway system" subject to the major capital investment requirements at 49 U.S.C. § 5309 and 49 C.F.R. Part 611.
- Will be a "major capital project" subject to the project management oversight requirements at 49 U.S.C. § 5327 and 49 C.F.R. Part 633.
- Will be subject to the full range of federal requirements and conditions of assistance applicable to every transit capital project. FTA publishes an *Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements*, which is a good resource to review in one place a complete list of the federal requirements that each transit capital project is subject to. FTA also has a Circular on its capital investment program, which has a chapter on New Starts and Small Starts. [41]

G. Projects Eligible for New Starts Funding/Eligible Applicants

SAFETEA-LU created a new program for the funding of smaller New Start projects; thus there now are two categories of New Starts funding: regular (or large) New Starts and Small Starts.

1. New Starts Eligible Projects

The New Starts statutory language defines a "major new fixed guideway capital project" as one for which the federal assistance sought under § 5309 is $75 million or more, and defines "new fixed guideway capital project" as a minimum operable segment of a capital project for a new fixed guideway system or extension to an existing fixed guideway system.[42] In short, a New Starts project must be for a minimum operable segment of a project; that is, the proposed project, upon completion, must be usable and ready to be put into revenue service. Further, it should be for a project seeking $75 million or more in Federal New Starts funding.

A "fixed guideway" is defined as "a public transportation facility using and occupying a separate right-of-way or rail for the exclusive use of public transportation and other high occupancy vehicles; or using a fixed catenary system and a right-of-way usable by other forms of transportation."[43] As noted on FTA's Web site, this includes, but is not limited to, rapid rail, light rail, commuter rail, automated guideway transit, people movers, and exclusive facilities for buses (such as bus rapid transit) and other high-occupancy vehicles.

2. Small Starts Eligible Projects

The New Starts statutory language also provides for "capital investment grants less than $75,000,000."[44] It provides that a new fixed guideway project is subject to the requirements of that subsection if the federal assistance provided or to be provided is less than $75 million and the total estimated net capital cost of the project is less than $250 million.

Eligible Small Starts projects include new fixed guideway systems and extensions, including bus rapid transit, streetcar, and commuter rail. Also eligible are nonfixed guideway corridor improvements (e.g., bus rapid transit) if a substantial portion of the project operates in a separate right-of-way in a defined corridor dedicated for public transit use during peak hours or if it has other characteristics of a fixed guideway system.

[40] 74 Fed. Reg. 7388 (Feb. 17, 2009).

[41] FED. TRANSIT ADMIN., C 9300.1B, CAPITAL INVESTMENT PROGRAM GUIDANCE AND APPLICATION INSTRUCTIONS, ch. V (2008), *available at* www.fta.dot.gov/laws/circulars/leg_reg_8642.html.

[42] 49 U.S.C. § 5309(a)(2), (a)(3).

[43] 49 U.S.C. § 5302(4).

[44] 49 U.S.C. § 5309(e).

3. $25 Million Threshold

Before SAFETEA-LU created the Small Starts program, the statute exempted a project from the New Starts process when the § 5309 assistance provided for a new fixed guideway capital project is less than $25 million. SAFETEA-LU added the Small Starts program and provided that the $25 million exemption would end once a final regulation applicable to Small Starts was issued.[45] That regulation is on hold, and thus the $25 million threshold remains in effect.

4. New Starts Project Eligible Applicants

Entities eligible to apply for and receive New Starts and Small Starts funds include a local governmental authority, including a political subdivision of a state or states; an Indian tribe; and a public corporation, board, or commission established under state law.[46]

CHAPTER II: FTA PROJECT EVALUATION AND RATING PROCESS

A. Purpose and Statutory Basis

Significant federal funds are made available by FTA for new fixed guideway investments at the local level. SAFETEA-LU, for example, authorizes $6.6 billion in total funding through FY Year 2009 for more than 330 possible New Starts projects identified or earmarked in the statute.[47] All of those projects are not going to be funded; federal transit law creates detailed criteria a project must meet before it can be assured of funding.

Any such New Starts project must emerge from a regional, multimodal transportation planning process and then proceed through the project development phase—Alternatives Analysis, PE, and Final Design—followed by, if all is well, a recommendation for funding by FTA in its *Annual Report on New Starts* and the execution of an FFGA.

The process is long and complex. In presentations on the New Starts process, FTA staff emphasize that FTA's goal is to fund meritorious projects by developing reliable information on project benefits and costs; ensuring that projects are treated equitably across the country; and facilitating communication among FTA, the transit industry, and Congress.

Because discretionary federal funds are being made available, FTA's administration of the New Starts program is closely watched and is not without controversy. Much attention has focused on FTA's decision in its 2005 Dear Colleague letter[48] and in its August 2007 NPRM[49] to place increased weight and attention on the cost-effectiveness criterion. This is, in part, why Congress put the NPRM on hold and why it added language in the SAFETEA-LU Technical Corrections bill to the effect that FTA must give comparable, but not necessarily equal, weight to each of the factors discussed below. FTA thus is engaged in a review of its New Starts program and is developing new guidance and new regulations to address the hold on its regulation and the new statutory language. In the meantime, FTA is expected to return generally to the multimeasure project evaluation approach it used before the 2005 Dear Colleague letter was issued.

B. Project Evaluations—Criteria

How does FTA decide whether or not to fund a particular New Starts project? During the project development phase, a New Starts project is continuously evaluated by the FTA on the basis of a variety of statutory criteria. Based on these evaluations, FTA makes decisions about moving projects along through the project development process. Based on statutory requirements, FTA uses two broad evaluation criteria, *project justification* and *local financial commitment.*

The project justification criteria are specified in law[50] and summarized in FTA guidance.[51] They include the following:

Mobility Improvements. FTA measures this by user benefits per passenger mile on the project, transit-dependent user benefits per passenger mile on the project, number of transit dependents using the project, and share of user benefits received by transit dependents compared to share of transit dependents in the region.

Environmental Benefits. FTA considers the current air quality designation by the Environmental Protection Agency (EPA) and essentially provides that projects in nonattainment areas for any transportation-related pollutants receive a High rating, while projects in attainment areas receive a Medium rating.

Cost Effectiveness. FTA measures this criterion as the cost per hour of travel time saved using the Transportation System User Benefit (TSUB) measure. (The next section of this Handbook, Project Ratings, discusses legislation that effectively requires FTA to place less emphasis on the cost-effectiveness criterion.) TSUB was introduced in 2000–2001 and replaced FTA's "incremental cost per incremental rider" measure. The TSUB is meant to reflect the significant user benefits of a new transit project based largely on projected time-savings. In brief, the TSUB is calculated by taking the total cost of building and operating a transit project and

[45] 49 U.S.C. § 5309(e)(1)(B).

[46] 49 U.S.C. § 5302(a)(6).

[47] *See* § 3043, Project Authorizations for New Fixed Guideway Projects, Pub. L. No. 109-59, 119 Stat. 1144 (2005).

[48] FED. TRANSIT ADMIN., *Changes to the New Starts Rating Process*, Dear Colleague Letter (Apr. 29, 2005), *available at* http://www.fta.dot.gov/documents/Dear_Colleague_Letter_April-29-2005.pdf .

[49] 72 Fed. Reg. 43328 (Aug. 3, 2007).

[50] 49 U.S.C. § 5309(d)(2)(B).

[51] FED. TRANSIT ADMIN., 2009 NEW STARTS AND SMALL STARTS EVALUATION AND REPORTING PROCESS (2007 (as revised)), *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_9063.html.

dividing that by the estimated travel time riders would save under the project; the result essentially is how the project's cost-effectiveness is determined.

More specifically, a project sponsor uses local models to forecast ridership in the year 2030, the year chosen to estimate benefits over time. A Baseline Alternative assuming low-cost improvements to the transportation network is compared to the proposed New Starts project. Travel-time savings from a proposed transit project can result from a shorter wait, a shorter walk, or shorter in-vehicle times. Factors beyond time are also taken into account—travel time reliability and convenience, for example. FTA uses a software tool called Summit to analyze and report travel demand model results. Summit is designed to calculate and report the user benefit measure automatically. FTA introduced Summit to provide consistent reporting measures, add a degree of transparency, and level the playing field among projects. The TSUB currently does not quantify all benefits; for example, the travel-time savings to highway users resulting from less congestion because of the New Start project. Rather, FTA factors in a constant savings to all projects in this regard and is working with FHWA to see if more specific data can be entered into its Summit software program to capture these savings. FTA's cost-effectiveness review ultimately leads to a project cost per mile for each New Starts project. A project with a per-mile cost of under $11.99 is given the highest rating; a project that exceeds $30 per mile is rated lowest. A medium rating is given to a project with a per-mile cost of $15.50 to $23.99. These numbers are adjusted annually for inflation.

Finally, a project sponsor that has private sources of funding or private equity funding sources as part of its financial plan should discuss with FTA the possibility that the availability of those funding sources could lower its cost-effectiveness rating. FTA explored such an approach when it developed guidance in connection with its Public–Private Partnership Pilot Program.[52]

Operating Efficiencies. FTA measures this by system operating cost per passenger mile. Note that in its New Starts guidance,[53] FTA has indicated that it would no longer evaluate operating efficiencies as a stand-alone criterion. Rather, FTA has concluded that the operating efficiencies of proposed New Starts projects are adequately captured under FTA's measure for cost-effectiveness. A project sponsor is free to show operating efficiencies separately if it chooses.

Transit-Supportive Land Use and Future Patterns. FTA measures this by reviewing existing land use policies and future plans and policies. Transit-oriented development is encouraged. A key goal is to link mixed-use and high-density development in the transportation corridor to maintain riders and attract new ones.

Economic Development Effects. This criterion was added by SAFETEA-LU. FTA continues to develop ways to measure and quantify the effects of economic development.

Reliability of Forecasts. Although forecasting reliability is not specifically a project justification criterion, FTA continues to focus on the reliability of a project's forecasts and works on ways to consider or measure the reliability of forecasts, including focusing on the statutory requirement for Before-and-After studies (see Chapter V.K) once a project is completed to compare project forecasts with actual experience.

Other Factors. FTA also considers a variety of other factors when evaluating project justification, including the nature and extent of the transportation problem the project plans to address, and other factors the project sponsor believes make the case of the proposed project but are not captured elsewhere. In particular, FTA considers the substantive arguments made for the worthiness of a project in the "Making the Case" document a project sponsor develops, a brief (three-page) narrative designed to describe succinctly the benefits of the proposed project compared to its Baseline Alternative.

While these multimodal measures are included in the statute, FTA over the past few years has focused mostly on the cost-effectiveness and land use criteria. As noted, however, Congress in 2008 directed FTA to give comparable, but not necessarily equal, weight to each project justification criteria in calculating the overall project rating.[54]

The *local financial commitment criteria* are specified in law[55] and require an acceptable degree of local financial commitment for the project. FTA generally gives a higher rating based on a higher non-New Starts share of funding. Many localities seek Federal New Starts funding, and the process is highly competitive. Having a strong local match commitment is critical for a project to proceed. While the statute requires a minimum of 20 percent local share, in fact localities provide approximately 50 percent of total project cost. Without a strong local share commitment, a project is unlikely to receive federal support.

The proposed local source of capital and operating financing must be stable, reliable, and available within the proposed project timetable. A variety of resources may be used to provide local financing beyond the Fed-

[52] *See* FTA's Notice establishing its Public Private Partnership Pilot Program, 72 Fed. Reg. 2583, Jan. 19, 2007, and FTA's discussion of this issue in its 2007 NPRM on New Starts

> (Arrangements under which private sector interests take responsibility for the design, construction, operations, finance, and maintenance of projects can result in transferring much of the long term risk of project capital and operating costs to the private partner...As a result, projects which utilize such approaches are likely to be rated better, because operating costs will be lower (producing better ratings of cost effectiveness), and the reliability of the estimates of such costs will be higher (producing higher ratings of reliability)).

72 Fed. Reg. 43328, 433334 (Aug. 3, 2007). The future of the "Penta P" program in the new administration is uncertain.

[53] FED. TRANSIT ADMIN., *supra* note 51.

[54] The SAFETEA-LU Technical Corrections Act of 2008, Pub. L. No. 110-244, 122 Stat. 1572 (2008).

[55] 49 U.S.C. § 5309(d)(4)(A).

eral New Starts § 5309 share, including dedicated local sales or property taxes, flexing federal funds from the Surface Transportation Program administered by FHWA, toll revenues, and dedicated state funding.

Moreover, the statute requires that "[l]ocal resources are available to recapitalize and operate the overall proposed public transportation system, including essential feeder bus and other services necessary to achieve the projected ridership levels without requiring a reduction in existing public transportation services or level of service to operate the proposed project."[56] This language was added by SAFETEA-LU. FTA has been placing increasing emphasis on this element of a proposed project's local financial commitment and will review a project carefully to make certain that its implementation will not detract from or harm existing transit services.

In short, FTA briefly summarizes the measures to be used for the evaluation of the local financial commitment to a proposed New Starts project in the FY 2009 evaluation cycle as follows:[57]

> First, the *local share rating*, which takes into account the amount of the proposed share of total project costs from sources other than the § 5309 New Starts or Small Starts program, including federal formula and flexible funds, the local match required by federal law, and any additional capital funding;
>
> Second, the *capital finance plan rating*, which reviews the strength, stability, and reliability of the proposed capital financial plan; and
>
> Third, the *operating finance plan rating*, which reviews the ability of the sponsoring agency to fund operation and maintenance of the entire system as planned once the project is built.

C. Project Ratings

Each of the project justification criteria and the local financial criteria is given an individual rating. As required by statute,[58] FTA assigns ratings of High, Medium-High, Medium, Medium-Low, or Low throughout the process as information on different elements of the project is refined and updated. This five-level system mandated by SAFETEA-LU replaces the three-level system required under TEA-21 of Highly Recommended, Recommended, and Not Recommended. It is important to understand that these ratings can and do change as information is being updated, refined, and more focused the farther along a project is in the project development process. The overall project rating is determined by averaging the ratings for project justification and local financial commitment.

Moreover, the statute specifically provides that a project is ready for an FFGA only if it "…has been rated as medium, medium-high, or high…."[59]

The various ratings are then combined by FTA into summary project justification and finance ratings for each New Starts project under review. How the different ratings are weighted is thus critically important. FTA has often stressed the importance of the cost-effectiveness criteria. Indeed, the FTA's NPRM on New Starts issued in August 2007[60] would have imposed a weighting of 50 percent on the cost-effective criterion alone. As noted, FTA has withdrawn this rulemaking.[61]

Because of concern about how much weight FTA would have placed on the cost-effectiveness criterion, Congress included a provision addressing this issue in the SAFETEA-LU Technical Corrections Act of 2008.[62] It added at the end of the statutory ratings provision a requirement that FTA "…shall give comparable, but not necessarily equal, numerical weight to each project justification criteria in calculating the overall project rating."[63] FTA will undertake new rulemaking to address this and other requirements, and will provide interim guidance in the meantime. Indeed, on May 19, 2009, FTA published a *Federal Register Notice of Availability of Proposed Guidance on New Starts/Small Starts Policies and Procedures and Request for Comments*.[64] In that notice, FTA proposed to make significant changes in the weight it assigns the different criterion, as follows: mobility improvements (20 percent), environmental benefits (10 percent), cost effectiveness (20 percent), operating efficiencies (10 percent), economic development effects (20 percent), and land use policies and future patterns supportive of public transportation (20 percent). For Small Starts, FTA proposed that the project justification rating of a project seeking Small Starts funding be based on ratings for the following criteria with the proposed weights shown in parentheses: cost effectiveness (one-third), economic development effects (one-third), and land use policies supportive of public transportation (one-third).

FTA has noted that when the average of its ratings is unclear (for example, a project justification rating of Medium-High and a local financial commitment rating of Medium), it will round up the overall rating to the higher rating (e.g., project justification rating of Medium-High and local financial commitment rating of Medium yields an overall rating of Medium-High) except in the following circumstances:

A Medium overall rating requires a rating of at least Medium for both project justification and local financial commitment.

A Medium-Low overall rating requires a rating of at least Medium-Low for both project justification and local financial commitment.[65]

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[56] 49 U.S.C. § 5309(d)(4)(A)(iii).

[57] FED. TRANSIT ADMIN., *supra* note 51.

[58] 49 U.S.C. § 5309(d)(5)(B).

[59] 49 U.S.C. § 5309(d)(B)(ii).

[60] 72 Fed. Reg. 43328 (Aug. 3, 2007).

[61] 74 Fed. Reg. 7388 (Feb. 17, 2009).

[62] The SAFETEA-LU Technical Corrections Act of 2008, Pub. L. No. 110-244, 122 Stat. 1572 (2008).

[63] *Id*.

[64] 74 Fed. Reg. 23776 (May 19, 2009).

[65] FED. TRANSIT ADMIN., ANNUAL REPORT ON FUNDING RECOMMENDATIONS, PROPOSED ALLOCATIONS OF FUNDS FOR

Not all projects that receive a good summary rating are necessarily eligible to be approved for funding and an FFGA. In fact, only a few are proposed for an FFGA in a given fiscal year. FTA will recommend a project for an FFGA only when it believes that the project will be able to meet the following conditions during the fiscal year for which funding is proposed:

- All nonfederal project funding must be committed and available for the project.
- The project must be in the Final Design phase and have progressed far enough for uncertainties about costs, benefits, and impacts (i.e., environmental or financial) to be minimized.
- The project must meet FTA's tests for readiness and technical capacity, which confirm that there are no remaining cost, project scope, or local financial commitment issues.

D. Applying the Criteria—An Ongoing Process

FTA evaluates New Starts projects throughout the project development process according to the New Starts criteria and FTA guidance. FTA makes decisions about moving projects forward as more detailed information becomes available throughout the project development process. The criteria are applied at several key steps in the project development process: FTA approval is needed to proceed from Alternatives Analysis to PE, to proceed from PE to Final Design, to be included in FTA's recommendations for allocating § 5309 New Start funds in the coming fiscal year as reflected in the *Annual Report on New Starts*, and before execution of an FFGA. A project must receive an overall rating of at least Medium to be approved by FTA at each stage. As proposed New Starts and Small Starts projects proceed through the project development process, information concerning costs, benefits, and impacts is refined and the ratings are updated to reflect new information. As noted, FTA also applies the statutory criteria for project justification and financing when it develops recommendations for allocating New Starts funds in the coming fiscal year in its *Annual Report on Funding Recommendations*.

Moreover, FTA is required by statute to publish policy guidance for its review and evaluation process each time significant changes are made and not less than once every 2 years.[66] This guidance is to include an opportunity for public comment.

E. The Project Evaluation Process—Legal Issues/Use of Project Development Agreement

A critical question that a lawyer for a project sponsor involved in the FTA New Starts process should emphasize is whether a particular requirement in the lengthy New Starts process is required by regulation or policy. Is it in the FTA New Starts regulation? Is the requirement in current FTA guidance? Or is it in pending FTA guidance that is not final and is subject to change?

Consistency of requirements is important for getting New Starts project development work done in a timely manner. One of the greatest frustrations expressed by project sponsors who have overseen a project through the New Starts process is the frequency of FTA policy changes in recent years. This in part is why the statute requires FTA to publish a New Starts regulation and guidance for comment at least once every 2 years.

In this regard, a lawyer working on a New Starts project should be aware of FTA's proposal in its 2007 New Starts proposed rulemaking to require a project sponsor to execute a PDA before FTA approval of entry into PE.[67] FTA included in its rulemaking a model agreement in this regard.[68] FTA proposed that this be an agreement between FTA and a project sponsor that sets forth the principal issues to be resolved, products to be completed, all significant cost and ridership uncertainties and the strategies to address them, and the schedule for reaching significant milestones during the course of project development. While FTA has withdrawn this rulemaking,[69] we believe the concept of a PDA is important and is likely to play some part in a future New Starts rulemaking. Even if not required by FTA, a lawyer nonetheless should consider asking FTA if it could use a PDA so that the project sponsor has a clear understanding of its responsibilities as it proceeds into the FTA project development process. It is important to emphasize that the use of a PDA would only work, however, if it contains real bilateral commitments on the part of both parties and does not become just another document that recites the requirements applicable to the project sponsor in the project development process. The more that can be negotiated with FTA in terms of firm deadlines and commitments for review and comment on key project submittals can only benefit the project sponsor, provided that FTA signals a real commitment to its part of the bilateral agreement.

CHAPTER III: ALTERNATIVES ANALYSIS PHASE

A. Purpose and Process

1. Overview

Federal transit law provides in pertinent part that "[t]he Secretary may approve a grant under this section for a major new fixed guideway capital project only if the Secretary, based upon evaluations and considerations set forth in paragraph (3), determines that the project is—(A) based on the results of an alternatives analysis…."[70] Thus, the first phase required by statute

FISCAL YEAR 2009, App. B at B-8 (2008), *available at* http://www.fta.dot.gov/regional_offices_7753.html.

[66] 49 U.S.C. § 5309(d)(6).

[67] 72 Fed. Reg. 43328 (Aug. 3, 2007).

[68] *See* App. A (Model Project Development Agreement) to pt. 611, 72 Fed. Reg. 43328, 43374 (Aug. 3, 2007).

[69] 74 Fed. Reg. 7388 (Feb. 17, 2009).

[70] 49 U.S.C. § 5309(d)(2)(A).

in the planning and project development process for a New Starts project is Alternatives Analysis. It is the only part of the process that does not require FTA approval to begin. Following the results of early regional (or "systems") planning, a local project sponsor performs an Alternatives Analysis to evaluate the type of service and alignment options for a particular corridor in the community. FTA guidance describes Alternatives Analysis as a bridge between the early, general Systems Planning, which looks at regional travel patterns and transportation corridors in need of improvements, and project development, where a project's design is sufficiently defined that the detailed review of its impacts under the environmental process can be completed.

Alternatives Analysis is fundamentally informational in nature. That is, from the Alternatives Analysis phase a local project sponsor will develop information that leads to decisions on mode, general alignment of that mode, and a financial plan to pay for the project. FTA notes that an Alternatives Analysis covers a number of disciplines—from engineering and ridership forecasts to all of the various issues that arise under the environmental process.

2. Intent of Alternatives Analysis

More specifically, Alternatives Analysis allows a local project sponsor to begin to identify and compare the costs, benefits, and impacts of different transportation alternatives so that local decision-makers have the information necessary to make a decision as to what in their view is the best transportation model for a particular corridor.

FTA guidance identifies some key guiding principles of Alternatives Analysis:[71]

- Local process, local decisions.
- Early and ongoing participation by a wide range of stakeholders.
- Identification of corridor problems, project "purpose and need," and goals and objectives.
- Development of a range of alternatives that address causes of transportation problems.
- Analysis of costs, benefits, and impacts of alternatives.
- Refinement and evaluation of alternatives.
- Locally preferred alternative chosen after careful, balanced, and open analysis of alternatives.

3. Funding of Alternatives Analysis

Note that as a result of SAFETEA-LU, § 5309 New Start/Small Start funds no longer may be used for initial planning efforts such as Alternatives Analysis. But other sources of federal funding for Alternatives Analysis are available, including the SAFETEA-LU–created Alternatives Analysis program,[72] the Metropolitan Planning Program,[73] Urbanized Area formula programs,[74] or flexible funding programs under the federal highway program.[75]

4. FTA Involvement in Alternatives Analysis

While the Alternatives Analysis phase is the only part of the New Starts project development process that does not require FTA approval to proceed, FTA makes it very clear that it should be actively involved in the early stages of local corridor and subarea planning. Historically, FTA was closely involved in Alternatives Analysis studies in the 1980s but had little involvement with them in the 1990s. But since 2000 or so, FTA's emphasis has been on settling planning questions before the PE phase, and it has a renewed interest and involvement in the Alternatives Analysis phase.

"As an aid to reasonable schedule setting, and to help ensure that the work is complete enough to satisfy both good planning practice and FTA requirements for alternatives analysis, *FTA requests the opportunity to review and comment upon the scope of work of local corridor planning studies that may result in the selection of a transportation improvement requiring New Starts funding*"[76] (FTA emphasis).

Because doing things correctly at the outset of a proposed New Starts project in its early planning stages can minimize costly changes or revisions further downstream in the process, it makes good sense to involve FTA staff early in the Alternatives Analysis process.

Moreover, FTA has specified a number of technical principles and assumptions applicable to every Alternatives Analysis that the chief executive officer of the local project sponsor must certify are being followed. Indeed, in its guidance, FTA clearly states that it will not advance a project into PE unless and until the project sponsor's chief executive officer signs the *Lead Agency Certification of Technical Assumptions in the Development of the New Starts Criteria* and FTA "finds substantive compliance" with its principles.[77]

5. Steps of Alternatives Analysis/Timing of EIS

A review of FTA guidance on Alternatives Analysis indicates that it may be broken down into a number of steps.[78]

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[71] FED. TRANSIT ADMIN., NEW STARTS/SMALL STARTS PROGRAM (2008), *available at* www.fta.dot.gov/documents/APTA_Legislative_Conference_3-12-08.ppt.

[72] 49 U.S.C. § 5339.

[73] 49 U.S.C. § 5303.

[74] 49 U.S.C. § 5307.

[75] *See* 23 U.S.C. § 133 and § 149, among others.

[76] FED. TRANSIT ADMIN., ADVANCING MAJOR TRANSIT PROJECTS THROUGH PLANNING AND PROJECT DEVELOPMENT, PART I, PLANNING AND PROJECT DEVELOPMENT 4 (2006), *available at* http://www.fta.dot.gov/planning/newstarts/planning__environment_2591.html. Similar language recommending FTA involvement in various stages of Alternatives Analysis is used throughout the document.

[77] *Id.* at 8–9.

[78] *Id.*

(i) *Initiation of the Study*.—The study is initiated after Systems Planning, during which travel patterns are reviewed and transportation corridors in need of improvements are identified. FTA in its policy guidance asks project sponsors to prepare an Initiation Package. It should include a clear and comprehensive statement of the problem the study is addressing, the alternatives identified for consideration, and the information to be prepared to support decisions on the alternatives. This is followed by a "purpose and need" statement that sets the overall study in perspective and explains why a significant amount of local financial resources may be sought for a project that could have significant environmental impacts.

(ii) *Lead Agency/The Scoping Process*.—A local lead agency identifies the transportation problem to be solved and is chosen to oversee the alternative analysis process. The lead agency, which is often the project sponsor and local transit system but could also be a metropolitan planning organization (MPO), state, or some combination thereof, is in charge of the Alternatives Analysis process. At the outset of the study of alternatives, the project sponsor "scopes out" the overall process. Key issues are identified; the type of information needed in technical analyses is considered and identified.

Further, the scoping process involves consulting and seeking the participation of the public and interested and affected agencies and organizations. It is important to get all issues on the table early on, secure the participation of the public, and determine the roles and involvement of agencies and other entities. A scoping meeting with all interested parties is generally held. The project sponsor should make it clear that the purpose of the meeting is not to identify an alternative but rather to map out the overall Alternatives Analysis effort. Attendees are encouraged to get on mailing lists or citizen advisory groups. It is important to document the meeting. Out of this effort a work plan or road map is finalized to guide the Alternatives Analysis process.

(iii) *Development of Alternatives and Analysis Methodologies*.—FTA guidance indicates that in addition to the build alternative, alternatives evaluated in an alternative analysis should include a no-build alternative, at least one TSM alternative, and a number of build alternatives that represent a range of reasonable responses to the transportation problem or opportunity at issue. The TSM alternative is often described as the best improvements that can be undertaken in a corridor absent a major capital improvement.

It is also important to distinguish the alternatives reviewed during Alternatives Analysis from the alternatives used for the environmental process and those used by FTA for purposes of New Starts project evaluation (see below).

(iv) *Analysis and Refinement of Alternatives*.—As work progresses, broadly identified capital costs lead to more accurate estimates based on consistent assumptions across all alternatives. FTA has detailed and lengthy guidance on a range of factors and issues to be addressed during the process, including organization and management, definition of alternatives, definition of capital costs, operating and maintenance costs, methods for travel forecasting, estimation of socioeconomic and environmental impacts, financial planning for transit, and evaluation of alternatives.[79]

(v) *Environmental Requirements—Timing of Environmental Impact Statement—As Part of Alternatives Analysis or Not.*—There are fundamentally two options as to when to start the environmental review process. Preparation of an Environmental Impact Statement (EIS) is discussed below. A local project sponsor must decide whether to prepare its environmental documents concurrent with and merged into the Alternatives Analysis study (often called AA/DEIS (Draft EIS)) or whether the Alternatives Analysis planning should be done before the environmental review process.

FTA guidance has information on these two options, and the local project sponsor should consult with FTA as it considers this issue. In general, completion of Alternatives Analysis before the environmental review process makes sense when there are a broad range of potential solutions to the identified transportation corridor issues not generally constrained by development and density patterns—including mode, technology, and alignment. Alternatives Analysis would lead to a more sharply focused corridor improvement.

In contrast, addressing Alternatives Analysis as part of the environmental review process makes sense when development and density patterns limit technology and alignment alternatives and alternatives are more sharply focused at the outset.

B. Metropolitan Planning Process

The development of a major transportation project does not occur in a vacuum, but rather is done as part of the metropolitan transportation planning process. Indeed, for 40 years Congress has mandated that federally-funded transit and highway projects must derive from metropolitan and statewide transportation planning processes.[80]

At the metropolitan level, planning is done through an MPO, a transportation policy-making body comprised of representatives of local government and local transportation agencies. Under federal legislation from the 1970s, an MPO is required for any urbanized area with a population greater than 50,000. Each urbanized area over 200,000 in population is designated a transportation management area with additional planning responsibilities. The cornerstone of the transportation planning process is that it shall be "continuing, coop-

[79] FED. TRANSIT ADMIN., PROCEDURAL AND TECHNICAL METHODS FOR PROJECT PLANNING, FRAMEWORK FOR ALTERNATIVES ANALYSIS, *available at* www.fta.dot.gov/planning/newstarts/planning_environment_3010.html.

[80] 49 U.S.C. § 5303–5306, 23 U.S.C. § 134–135.

erative, and comprehensive."[81] MPOs often have additional responsibilities under state law.

Planning literature identifies five core functions of an MPO:[82]

Establish a setting. The MPO should establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area.

Identify and evaluate alternative transportation improvement options. The MPO uses data and planning methods to generate and evaluate alternatives. Planning studies and evaluations are included in the Unified Planning Work Program.

Prepare and maintain a Metropolitan Transportation Plan (MTP). The MPO develops and updates a long-range transportation plan for the metropolitan area covering a planning horizon of at least 20 years that fosters 1) mobility and access for people and goods, 2) efficient system performance and preservation, and 3) good quality of life.

Develop a Transportation Improvement Program. The MPO develops a short-range (4-year) program of transportation improvements based on the long-range transportation plan. The Transportation Improvement Plan (TIP) is designed to achieve the area's goals, using spending, regulating, operating, management, and financial tools.

Involve the public. Finally, the MPO is to involve the general public and other affected constituencies in the four essential functions listed above.

FTA and FHWA encourage the linking of the transportation planning, project development, and environmental processes. Indeed, the transportation planning regulations include an appendix on linking the planning and environmental processes. Appendix A to 23 C.F.R. Part 450 ("Planning Assistance and Standards") is titled, "Linking the Transportation Planning and NEPA Processes." It provides in pertinent part that "[w]hen the NEPA and transportation planning processes are not well coordinated, the NEPA process may lead to the development of information that is more appropriately developed in the planning process, resulting in duplication of work and delays in transportation improvements."[83]

Note that the Alternatives Analysis phase is completed only when local and regional decision-makers choose a locally-preferred alternative, and it is adopted by the MPO into the region's financially constrained and conforming long-range transportation plan and TIP.

[81] 49 U.S.C. § 5303(c)(3).

[82] FED. HIGHWAY ADMIN. & FED. TRANSIT ADMIN., THE TRANSPORTATION PLANNING PROCESS, KEY ISSUES: A BRIEFING BOOK FOR TRANSPORTATION DECISIONMAKERS, OFFICIALS, AND STAFF 4 (2007), *available at* http://www.planning.dot.gov/documents/briefingbook/bbook.htm.

[83] *See* 23 C.F.R. pt. 450, app. A ("Linking the Transportation Planning and NEPA Processes") (2008).

C. The Environmental Process/Distinguishing EIS Alternatives From Alternatives Analysis

Every federal transit capital grant is subject to environmental review under NEPA,[84] which requires a federal agency undertaking a "major federal action" to address its impact on the human and natural environment. A number of routine federal transit grants may be "categorically excluded" from detailed environmental analysis. In addition, for some projects an Environmental Assessment may be sufficient to satisfy NEPA. After it is conducted, FTA may make a Finding of No Significant Impact (FONSI) if a project has no significant impact on the environment, in which case a comprehensive environmental review would not be necessary. An example of such a project in the New Starts context would be a commuter rail project on existing freight rail lines where train frequencies would be increased only marginally. But most New Starts projects will be subject to a comprehensive environmental review in the form of an EIS that reviews the impacts of the proposed project and its alternatives on a community and its natural environment.

The EIS focuses on a range of impacts, including air and water quality, noise and vibration, historic and cultural properties, parklands, contaminated lands, traffic, displacement of residences and businesses, and community preservation. While the EIS is a federal process, most states have state or local environmental laws and these are usually considered as part of and at the same time as the Federal EIS.

It is important to emphasize that the federal agency FTA is the lead agency responsible for the EIS, yet since the project to be funded is a local one, a federal agency is able to rely on the project sponsor to play a significant role in the development of the EIS. Note, moreover, that SAFETEA-LU included a number of provisions designed to improve the environmental review process and coordination by providing for the integration of environmental considerations early on in the transportation planning process to avoid duplication and delay later in the process. These provisions have been incorporated into the FTA/FHWA joint Final Rule on Environmental Impact and Related Procedures issued on March 24, 2009.[85]

Note, moreover, that Section 6002 of SAFETEA-LU establishes a 180-day statute of limitations on claims against FTA or FHWA and other federal agencies for certain environmental and other approval actions. Such a statute of limitations applies to a permit, license, or approval action by a federal agency if the action relates to a transportation project, and a statute of limitations notification is published in the *Federal Register* announcing that a federal agency has taken an action on a transportation project that is final under the federal law pursuant to which the federal action was taken. If no such notice is published, the period for filing claims is not shortened from what is provided by other parts of

[84] 42 U.S.C. § 4321 *et seq*.

[85] 74 Fed. Reg. 12518 (Mar. 24, 2009).

federal law. If other federal laws do not specify a statute of limitations, a 6-year claims period applies. [86]

A general comment is needed here about the differences in the alternatives reviewed under Alternatives Analysis, the EIS process, and for purposes of the New Starts criteria. First, the EIS may have a smaller range of alternatives than those considered in Alternatives Analysis. The Alternatives Analysis process, after all, is analyzing transportation solutions for a particular metropolitan corridor and should include consideration of a range of possible solutions, including a no-build alternative and, in many cases, highway alternatives. In contrast, the EIS process analyzes a proposed project's impact on the human and natural environment. Consequently, the no-build alternative plays an important role in the EIS process and may be seen as the baseline against which build options can be measured for their impact on the environment. In contrast to the EIS process, while a no-build alternative should be considered, the TSM alternative plays a key baseline role in Alternatives Analysis since it represents the best that could be done without building a fixed guideway system and plays a critical comparative or baseline role for build alternatives.

Then comes FTA's approval of a local New Starts Baseline Alternative when a project is approved to enter into PE. This Baseline Alternative is derived from the Alternatives Analysis process and is used for comparative purposes in the New Starts project evaluation process to establish the incremental costs and benefits of the proposed project. A project is not compared to a "no build" alternative under the New Starts criteria, but rather to the best a transit system could be in the absence of a new fixed guideway system—usually, the TSM alternative. The New Starts Baseline Alternative *could* be, and often has been, the TSM alternative. But FTA has been criticized over the past few years for requiring a New Starts Baseline Alternative that is unrealistically robust and *more than* the TSM alternative and that is unlikely to be implemented locally if the new fixed guideway project is not constructed. FTA has contended that such a robust New Starts Baseline Alternative is necessary to "level the playing field" for all projects and to accurately quantify the costs and benefits of the New Starts proposed project. Given the criticism about this approach, however, it is likely that FTA will be reviewing it.

1. FTA Issues Federal Register *Notice of Intent*

A draft EIS is prepared when FTA determines that the action is likely to cause significant impacts on the environment. The first step is the publication of a Notice of Intent in the *Federal Register*; a project sponsor is expected to announce the intent at the local level through appropriate means as well.[87]

2. Scoping Process

Publication of the notice of intent triggers the start of allowing the public and federal, state, and local agencies and entities an opportunity to identify issues to be addressed in the EIS.

3. Draft EIS: Key Federal Issues[88]

Air Quality—In addition to meeting the requirements of NEPA, a New Starts project also must meet Clean Air Act requirements. "Conformity" is a key term in this regard; in nonattainment or maintenance areas, a federally-funded transit project must conform to its state's air quality implementation plan. Regulations have been promulgated by the EPA.[89] FHWA has detailed information on the conformity process on its Web site.

Endangered Species.—Rare animal and plant species and their habitats are protected under the Endangered Species Act of 1973.[90] The programs are coordinated by the Department of Interior's Fish and Wildlife Service or the Department of Commerce's National Marine Fisheries Service within the National Oceanic and Atmospheric Administration.

During the preparation of the draft EIS, FTA should consult with those two services to see if the New Starts project may affect or is likely to jeopardize a species listed, or proposed, as endangered or designated critical habitat. The two services should be contacted during the environmental scoping process.

Environmental Justice.—Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued in February 1994. The Council on Environmental Quality oversees compliance with the Executive Order; the Order also directs federal agencies to establish their own procedures implementing the Order. USDOT issued its Order implementing the Executive Order in April 1995.[91] Essentially, issues of environmental justice are to be assessed during the EIS process, and include identifying minority or low-income populations to be affected by the project and its impact on health or environmental factors of the populations. Public participation in the affected areas is called for. If a disproportionate and adverse environmental impact is identified, detailed analysis may be required, and alternatives and mitigation factors should be considered.

Floodplains.—Executive Order 11988, Floodplain Management, directs federal agencies to avoid supporting actions on a floodplain. A USDOT Order[92] requires

[86] *Id*. at 12530.

[87] 23 C.F.R. pt. 771. The regulations prescribing the polices and procedures of the FTA for implementing NEPA are published jointly with FHWA.

[88] FED. TRANSIT ADMIN., PLANNING AND ENVIRONMENT, ENVIRONMENTAL RESOURCE INFORMATION, *available at* http://www.fta.dot.gov/planning/planning_environment_5222.html.

[89] 40 C.F.R. pt. 93.

[90] 16 U.S.C. § 1531.

[91] 62 Fed. Reg. 18377 (Apr. 15, 1997).

[92] U.S. DEP'T OF TRANSP., DOT ORDER 5650.2, FLOODPLAIN MANAGEMENT AND PROTECTION (Apr. 23, 1979), *available at*

detailed analysis in an EIS of any action located within a floodplain. If a locally preferred alternative is to be in a floodplain, FTA must find that it is the only practicable alternative and must document actions to avoid or reduce adverse impacts on the floodplain.

Hazardous Materials and Brownfields.—The construction of a New Starts project may involve some interaction with a contaminated site. It is important in the process to identify the site early on, evaluate its condition and, if necessary, remediate any hazardous materials. There are a number of federal laws in this area, including the Comprehensive Environmental Response, Compensation, and Liability Act (or Superfund), Resource Conservation Recovery Act, Oil Pollution Act, and the Underground Storage Tank program.

Brownfields are abandoned or underused properties affected by real or perceived contamination. The EPA has an initiative to provide funding and help to states and localities to clean up and reuse brownfield sites. USDOT encourages transportation projects to use and redevelop contaminated sites where appropriate.

During the EIS process, sites are subject to a preliminary assessment to determine if they have been identified as a hazardous waste site. If further investigation is warranted, a Site Inspection is done for sites with a good probability to qualify to be on the National Priority List of the most serious sites. If listed, a remedial investigation/feasibility study is done at the site. Ultimately, a Record of Decision (ROD) describes which alternative will be used to clean up a site.

Historic, Archeological, and Cultural Resources—The National Historic Preservation Act of 1966[93] requires federally-funded projects to consider the effects on any properties listed, or eligible for listing, on the National Register of Historic Places, and the Advisory Council on Historic Preservation is provided an opportunity to comment on the project. Archeological sites are also protected under this Act.

Navigable Waterways and Coastal Zones.—A New Starts project that affects navigable waterways is subject to permitting and review under a number of statutes including the River and Harbor Act of 1899.[94] If this permitting is triggered, then consultation also would be required with the U.S. Fish and Wildlife Service under the Fish and Wildlife Coordination Act.[95]

If a state has an approved Coastal Zone Management Program under the Coastal Zone Management Act of 1972[96] and the New Starts project will affect the coastal zone, the EIS must show whether the project is consistent with the Coastal Zone Management Program.

Noise and Vibration— A key concern often expressed about a proposed transit New Starts project is what impact it will have on a community in terms of noise and vibration. For that reason, FTA has a lengthy guidance manual, *Transit Noise and Vibration Impact Assessment*[97] on its Web site. The manual presents procedures for predicting and assessing the noise and vibration impacts of proposed New Starts projects and also addresses ways to reduce excessive noise and vibrations caused by projects. The manual's preface notes that, while it is designed primarily for acoustics professionals who conduct the analyses as part of the EIS process, it is written for a broader audience.

Parklands/"4(f)".—A transportation project or program cannot use land from historic sites or publicly-owned parks, recreation areas, and wildlife and waterfowl refuges unless there is no prudent and feasible alternative to using that land and unless the project includes all possible planning to minimize harm to the land or resources.[98]

If "Section 4(f)" property is to be used for a New Starts project, considerable documentation must be developed to show why the alternatives to the project were not chosen.

Social and Economic Impacts.—A transit project, particularly a New Starts project, can shape and change a community. Witness the transit-oriented development in Northern Virginia around Metro stations. These impacts also must be addressed in the EIS process. FTA guidance categorizes and subdivides these broad impacts into land acquisition, community impacts, land use and development, economic impacts, and safety/security.

Land Acquisition.—FTA may approve some land acquisition before the environmental process has been completed, but no project development may occur until the NEPA process has been completed. Environmental documents should contain descriptions of land to be acquired for a project, along with discussion of any persons or businesses to be displaced. Such displacement is governed by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970[99] and its implementing regulations.[100]

Community Impacts.—The EIS process should address the impact the project will have on the community and ways to minimize or mitigate such impacts. Changes in population density, land use patterns, and

http://www.fta.dot.gov/planning/environment/planning_environment_2237.html.

[93] Pub. L. No. 89-665, 16 U.S.C. § 470. Codified at 36 C.F.R. 800.

[94] 33 U.S.C. § 401.

[95] 16 U.S.C. § 661 *et seq*.

[96] 16 U.S.C. § 1451 *et seq*.

[97] FED. TRANSIT ADMIN., TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT (1995), *available at* http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf.

[98] 49 U.S.C. § 303. Section 4(f) of the Department of Transportation Act of 1966 was recodified without substantial change at 49 U.S.C. § 303 but continues to be referred to as "Section 4(f)."

[99] 42 U.S.C. § 4601, ch. 61; Pub. L. No. 91-646, 84 Stat. 1894.

[100] 49 C.F.R. pt. 24 (2008).

access to services are some of the elements to be considered here.

Land Use and Development.—A part of the statutory justification for a New Starts project is that the "Secretary shall—(A) determine the degree to which the project is consistent with local land use policies and is likely to achieve local developmental goals…."[101] Thus, the project needs to include maps showing existing and planned land use, and the extent to which the project would be consistent with such local land use. To the extent that it would not be consistent with local land use, the reasons why and documentation of measures to mitigate any adverse impacts should be presented.

Economic Impacts.—New Starts projects typically are large and significant and thus have considerable economic impacts in terms of displaced businesses, regional construction costs, and the like. A detailed economic impact analysis should be included in the EIS.

Safety and Security.—It is important to show that safety and security issues are considered early in the process of New Starts project development and in the EIS, including traffic and pedestrian hazards caused by the project and rider and employee security issues.

Visual Impacts.—A large-scale New Starts project will have a visual effect on a community and its environment, and this should be considered in the EIS. In addition, FTA has a Circular on *Design and Arts in Transit Projects*[102] that encourages design and artistic considerations in transit projects.

Transportation Impacts/Traffic.—It is axiomatic that a New Starts project will affect transportation in a community, and this needs to be addressed as part of the EIS. FTA looks particularly to impacts on transit—how existing transit will be affected by a New Starts project, for example, among other impacts, and how traffic patterns will be affected, as well as the impact on parking (the availability and location of parking spaces, for example).

Water Quality.—A transit project can affect water quality by affecting drainage patterns or increasing runoff. Further, if wastewater is discharged into a storm system as a result of the project, a permit may be required under the National Pollutant Discharge Elimination System created under Section 402 of the Clean Water Act.[103]

Wetlands.—If a New Starts project could affect a wetlands area, a USDOT Order on Preservation of the Nation's Wetlands applies.[104] This possibility alone could require an EIS, so the assessment of any impacts needs to be done and measures must be taken to minimize adverse impacts.

4. The Draft EIS

The draft EIS affords an opportunity for governmental agencies and the public to review a project proposal and alternatives. It should include a discussion of the purpose and need for action, a review of alternatives and the proposed project, and a review of the affected environment and environmental consequences. It is important to discuss with FTA staff the alternatives to be reviewed for environmental purposes and their relationship to and interaction with the alternatives reviewed as part of the Alternatives Analysis. Recall that NEPA deals with the impacts of alternatives on the human and natural environment; Alternatives Analysis deals with impacts on the transportation corridor.

Upon preparation by the project sponsor, the draft EIS is usually submitted to the FTA Regional Office for final edits and comments before publication. The draft EIS is then signed by the FTA Regional Administrator and the authorized official of the local lead agency, often a transit agency. It is then filed by FTA with the EPA and made available locally by the local lead agency.

A notification of availability of the draft EIS is published by the FTA in the *Federal Register*. In addition, the draft EIS is circulated to affected federal agencies and other interested parties.

There must be a circulation of the draft EIS for at least 45 days, and a public hearing on it must be held with at least 15 days' notice. The applicant shall prepare a report identifying a locally preferred alternative at the conclusion of the draft EIS review period.[105]

D. Completion of Alternatives Analysis Phase

The Alternatives Analysis phase is completed when local and regional decision-makers choose a locally-preferred alternative from among the evaluated alternative strategies and it is adopted by the MPO into the region's financially-constrained and conforming long-range transportation plan.[106]

E. Submit Request to FTA to Proceed to Preliminary Engineering—FTA Checklist

As noted earlier, FTA has checklists for each stage of project evaluation, including one for submittals to FTA to enter PE.[107] The checklist covers four broad categories: Alternatives Analysis; Project Management Plan; New Starts Templates, Certifications, and other Reports; and Administrative Requirements. It is a very

[101] 49 U.S.C. § 5309(e)(4)(A).

[102] *Design and Art in Transit Projects* (1995), *available at* http://ntl.bts.gov/DOCS/9400-1.html.

[103] 33 U.S.C. § 1342.

[104] U.S. DEP'T OF TRANSP., DOT Order 5660.1A, Preservation of the Nation's Wetlands (Aug. 24, 1978), *available at* http://nepa.fhwa.dot.gov/ReNEPA/ReNepa.nsf/docs/6749292D98E3C0CD85256FE400731ADF?opendocument&Group=Natural%20Environment&tab=REFERENCE.

[105] 23 C.F.R. § 771.123(j) (2008).

[106] 49 U.S.C. § 5309(a)(1)(C) and (D).

[107] FED. TRANSIT ADMIN., NEW STARTS PROJECT PLANNING AND DEVELOPMENT CHECKLIST OF PROJECT SPONSOR SUBMITTALS TO FTA TO ENTER PRELIMINARY ENGINEERING (2008), *available at* www.fta.dot.gov/planning/newstarts/planning_environment_218.html.

useful tool for a project sponsor to use as it seeks FTA approval to enter PE.

Legal Capacity Requirement. The "Administrative Requirements" section of the PE checklist includes "Legal Capacity (Authority to Implement Proposed Transit Mode)." Before making a capital grant, FTA must make a determination that the applicant has or will have the legal capacity to carry out the project. FTA generally relies on a certification to this effect. The applicant must have authority under state or local law to be eligible to apply for, receive, and spend federal funds and to carry out the project. Moreover, those acting on behalf of the applicant must be authorized to do so by the applicant.[108] Given the significance of a New Start project, it is important to have an Opinion of Counsel prepared at this point of the FTA process citing relevant statutes and authorities, discussing any pending or threatened litigation affecting the applicant or the project, and demonstrating that the project sponsor has the legal, technical, and financial capacity to complete PE. This document should be updated during the project development phase as necessary.

Formal Request to Enter PE

In sum, before proceeding into PE, FTA reviews documentation on the scope of work; the problem statement, goals, and objectives; definition of alternatives; and study assumptions, results, and methodologies. FTA must select the New Starts Baseline Alternative, and the locally-preferred alternative must be adopted in the region's financially-constrained long-range plan. The project sponsor must demonstrate its technical capacity to undertake PE, and FTA signals that the project sponsor has made that demonstration by accepting the Project Management Plan (PMP).

As discussed in Chapter II, this is the point where a project sponsor should consider asking the FTA to enter into a PDA that would set schedules and timelines for both FTA and the project sponsor for the project development process.

The formal request to enter PE is submitted by the project sponsor to its FTA Regional Office. The FTA regulation on Major Capital Investment Projects provides that "…FTA will approve/disapprove entry of a proposed project into preliminary engineering within 30 days of receipt of a formal request from the project sponsor(s)."[109] The emphasis on "formal request" is important. All required information must be submitted before FTA deems the request to be formal, and FTA will notify the project sponsor when it believes that the appropriate information has been submitted and the 30-day clock starts ticking.

[108] *See* FED. TRANSIT ADMIN., FTA CIRCULAR C 9300.1A, ch. VI: Requirements Common to All Capital Program Grant Applications, 4 b, available at http://www.fta.dot.gov/laws/circulars/leg_reg_4128.html.

[109] *Id*.

CHAPTER IV: PRELIMINARY ENGINEERING PHASE

A. FTA Approval to Enter Preliminary Engineering/Blanket Pre-Award Authority to Incur Costs

FTA approval is necessary to enter PE. Once that is granted and a project sponsor proceeds, the project receives blanket pre-award authority to incur project costs for PE activities before grant approval.[110] All federal requirements must be met before incurring costs to retain eligibility of the costs for future FTA grant assistance. This pre-award authority does not constitute a commitment by FTA that future federal funds will be approved for the project. Note, moreover, that pre-award authority for real estate acquisition activities is not available until the NEPA process has been completed.

B. Purpose of Preliminary Engineering

PE essentially is a phase during which the project sponsor further defines the locally-preferred alternative's scope, schedule, and budget to complete the NEPA EIS process and finalizes the project scope with an accurate cost estimate, a comprehensive PMP to carry the project through construction, and a good financial plan with a significant portion of local funding committed to the project.

An FTA Fact Sheet on PE[111] notes the "Guiding Principles" of PE by stating that it provides a basis for the management of risk of project implementation, including

- Identification of all environmental impacts and adequate provision for their mitigation in accordance with NEPA.
- Design of all major or critical project elements to the level that no significant unknown impacts relative to their costs or schedule will result.
- Completion of all cost estimating to the level of confidence necessary for the project sponsor to implement its financing strategy, including establishing the maximum dollar amount of the New Starts financial contribution needed to implement the project.
- Definition of procurement requirements and strategies to deliver project service.
- Solidification of local funding commitments to the project.

C. Project Management Plan; Project Management Oversight

As noted above, FTA requires a PMP for a project to proceed into PE. This is based on federal transit law,

[110] *Id*.

[111] FED. TRANSIT ADMIN., FTA MAJOR CAPITAL INVESTMENT FACT SHEET, PRELIMINARY ENGINEERING (2007), *available at* http://www.fta.dot.gov/planning/newstarts/planning_environment_218.html.

which requires that for every major capital project, a project sponsor must "prepare and carry out a project management plan approved by the Secretary of Transportation."[112] The statute further provides that the plan must provide for the following:

1. Adequate recipient staff organization with well-defined reporting relationships, statements of functional responsibilities, job descriptions, and job qualifications.
2. A budget covering the project management organization, appropriate consultants, property acquisition, utility relocations, systems demonstration staff, audits, and such miscellaneous costs as the recipient may be prepared to justify.
3. A construction schedule for the project.
4. A document control procedure and recordkeeping system.
5. A change order procedure that includes a documented, systematic approach to the handling of construction change orders.
6. Organizational structures, management skills, and staffing levels required through the construction phase.
7. Quality control and quality assurance functions, procedures, and responsibilities for construction, system installation, and integration of system components.
8. Material testing policies and procedures.
9. Internal plan implementation and reporting requirements.
10. Criteria and procedures to be used for testing the operational system or its major components.
11. Periodic updates of the plan, especially related to project budget, project schedule, financing, ridership estimates, and the status of local efforts to enhance ridership where ridership estimates partly depend on the success of those efforts.
12. The recipient's commitment to submit a project budget to the Secretary each month.
13. Safety and security management.

This section of federal transit law also provides that a portion of funds from FTA's various programs, including New Starts, is made available each year for FTA to provide oversight activities, and it is from these funds that FTA assigns Project Management Oversight Contractors (PMOCs) and Financial Management Oversight Contractors (FMOCs) to projects.

As noted above, a project sponsor must have a PMP to seek entry into PE. At that point, the PMP is focused on the ability of the project sponsor to complete PE. FTA recognizes that as additional data become available, the PMP will be updated and revised. Like much about the project development process, the plan should be frequently updated and revised as more detailed information about the project becomes available.

PE is also when FTA assigns PMOCs to projects. The PMOC serves as an extension of FTA staff and assesses the project sponsor's project management, construction management, and technical capacity. The PMOC monitors project progress, reviewing schedule and budget, conformity to design criteria, and construction to approved specifications. The contractor produces written deliverables to FTA during all phases of the project.

FTA provides that the objectives of the PMOC are to assist it in monitoring and ensuring that the development and implementation of each project:

- Complies with all applicable statutes, regulations, and FTA guidance.
- Proceeds in accordance with the terms of grant agreements, including the agreed-upon scope, budget, and schedule.
- Conforms with sound engineering and project management practices.
- Meets the requirements of the approved plans and specifications.

D. Project Sponsor Updates Data for New Starts Criteria; Standard Cost Categories; Third-Party Agreements

During PE, the project's alignment is refined and project costs are honed, and this updated information is considered under the New Starts Criteria.

Note that in 2005 FTA implemented a new capital costing format, the Standard Cost Categories, to establish a consistent format for the reporting, estimating, and managing of capital costs for New Starts projects.[113] These 10 cost categories were designed by FTA to help expedite the review and decision process. "We don't need two sets of books," is how one FTA staffer described the creation of its cost categories.

Also during PE the project sponsor should be negotiating and completing to the extent possible third-party agreements. These include utility agreements, public–private partnerships and agreements, joint development activities, and railroad and right-of-way agreements. It may not be possible to have completed agreements in PE, but the negotiation process should be underway.

E. FTA Makes Environmental Finding

During PE, the final EIS is developed, and a Record of Decision (ROD) is issued by FTA. Recall that the EIS may be started concurrent with Alternatives Analysis, in which case the final EIS will be completed during the PE stage. In some instances, a draft EIS may not be prepared as part of Alternatives Analysis, in which case the draft and final EIS stages of the environmental process would both take place during PE.

[112] 49 U.S.C. § 5327(a)(1)-(15).

[113] FED. TRANSIT ADMIN., STANDARD COST CATEGORIES FOR CAPITAL PROJECTS (2005), *available at* www.fta.dot.gov/planning/newstarts/planning_environment_2580.html.

1. Final EIS [114]

(i) Consideration of Comments.—As noted above, the draft EIS is circulated for comment for a period of at least 45 days. Once that period closes, work begins on developing the final EIS. The final EIS discusses and responds to substantive comments received, summarizes public involvement in the EIS process, and describes mitigation measures to be incorporated into the proposed project. The project sponsor will normally need to satisfy the FTA Regional Office that all comments have been adequately addressed.

(ii) Identifies Preferred Alternative.—The final EIS identifies the preferred alternative and evaluates all reasonable alternatives considered.

(iii) Describes Mitigation Measures.—The final EIS describes any mitigation measures and how they will be incorporated into the proposed project.

(iv) FTA Reviews for Legal Sufficiency.—The final EIS must be reviewed for legal sufficiency before agency approval.[115] The final EIS, thus, should document compliance to the extent possible with all environmental laws and Executive Orders or provide assurance that their requirements can be met.

(v) FTA Headquarters Review.—FTA Headquarters review is required for major urban mass transportation investments as defined by FTA's regulation on major capital investment projects, including New Starts projects.

(vi) EIS Approval, Not Agency Action or Grant Approval.—It is important to emphasize that the approval of an EIS does not commit FTA to approve any future grant request to fund the preferred alternative.

(vii) Final EIS Availability.—The final EIS is filed with the EPA, its availability published in the *Federal Register*, and copies should be made available to anyone who made substantive comments on the draft EIS or requested a copy. Notice of its availability should be published.

2. ROD

(i) Timing.—The FTA is to complete and sign a ROD at least 30 days after notice of the final EIS has been published in the *Federal Register*.

(ii) Presents Basis for Decision.—The ROD presents the basis for the decision embodied in the EIS, summarizes any mitigation measures that will be incorporated into the project, and documents any required 4(f) approval. The ROD is the FTA's final action with respect to the NEPA process; it is not a decision to proceed to fund a New Starts project, which comes later in the project development stage.

(iii) The ROD and the New Starts Evaluation Process.—One source of ongoing criticism is that the FTA holds up its completion of the ROD as it continues to evaluate the project under the New Starts criteria. A number of project sponsors have urged FTA to improve this aspect of the process, perhaps by using the NEPA process more as part of the evaluation process.

3. Supplemental EIS[116]

(i) When Required.—A supplemental EIS would be required if there are changes to the proposed action that were not evaluated in the EIS or new information or circumstances relevant to environmental concerns and the project would result in significant impacts not evaluated in the EIS. In particular, a supplemental draft EIS may be required for a New Starts project if there is a substantial change in the level of detail on project impacts during project planning and development. The supplement will address site-specific impacts and refined cost estimates that have been developed since the original draft EIS. (23 U.S.C. § 771.130(e)).

(ii) When Not Required.—A supplemental EIS will not be required if changes or new information or circumstances result in a lessening of adverse environmental impacts evaluated in the EIS, or the agency decides to approve an alternative fully evaluated in the final EIS but not identified as the preferred alternative. In the latter instance, however, a revised or amended ROD must be prepared and circulated.

(iii) When Uncertain.—If it is not clear whether a supplemental EIS would be required, the applicant should develop environmental studies, or an environmental assessment may be necessary, upon which a decision can be based.

(iv) Same Process as an EIS.—A supplemental EIS follows the same process generally as an EIS—draft EIS, final EIS, ROD—but scoping is not required.

F. Legal Issues During the Preliminary Engineering Phase/Early Systems Work Agreement

1. General

The key legal issues during the PE phase involve completion of the federal and state environmental review process in accordance with all of the procedural requirements, and matters surrounding the procurement process for project delivery.

Regarding the procurement process, as noted, it is during PE that certain third-party agreements should be negotiated and completed to the extent possible. These include agreements on utilities, interagency matters, public–private partnerships, joint development, and railroad and right-of-way matters.

It is also during the PE process that a project sponsor will be dealing with matters that require long lead times to resolve. These include safety considerations, such as the sharing of railroad right-of-way with freight trains, highway–railroad grade crossings, provisions for pedestrian facilities, transit–airport interfaces, and design of community fences, walls, and noise barriers;

[114] This discussion is based on 23 C.F.R. § 771.125 and 127 (2008).

[115] 23 C.F.R. § 771.125(b) (2008).

[116] 23 C.F.R. § 771.130 (2008).

utility relocation planning; and planning for replacement of wetlands that cannot be avoided.

In the later stages of PE a project sponsor also develops and refines the detailed, comprehensive PMP discussed above to ensure construction quality and financial control, and a financing plan that includes commitments from the sponsor's nonfederal funding partners.

2. Early Systems Work Agreements

Note also that once a ROD has been issued under NEPA, by statute, FTA may enter into an Early Systems Work Agreement (ESWA).[117] The agency has used this commitment authority infrequently but seems likely to begin using it more often. As a legal instrument issued before an FFGA pursuant to which federal funds may be drawn down, it represents a strong level of federal commitment to a project and can be very useful to a project sponsor. For example, an ESWA was entered into in June 2009 for New Jersey Transit's Access to the Region's Core project. An FTA press release noted that the purpose of the ESWA was to help New Jersey Transit meet key milestones and keep the project on budget and schedule by allowing the immediate use of federal and local funds for tunneling and related construction work. In another matter in 2006 involving the Second Avenue Subway project in New York City, the project sponsor wanted greater assurances from FTA of a federal commitment to its project because it was involved in two large federally-funded transit projects. Because the project sponsor and the FTA had a clear and defined sense of the project's scope, budget, and schedule, FTA entered into the ESWA. In this instance, the ESWA was used primarily for enhanced Letter-of-No-Prejudice (LONP) authority. The ESWA remained in effect for about a year before an FFGA for the project was completed. An ESWA was also used on a Utah Transit Authority commuter rail project to address a short-term cash flow problem that arose before an FFGA could be entered into. ESWAs have also been used by Seattle's Sound Transit and by the New Orleans Regional Transit Authority.

Unlike an FFGA, an ESWA is not required to undergo a congressional notification and review process. To use an ESWA, under the statute, FTA must find reason to believe that an FFGA will be entered into for the project and that the ESWA will promote ultimate completion of the project more rapidly and at less cost. FTA staff state that the key issue from their perspective as to whether to issue an ESWA is the ability of the project sponsor to demonstrate a real need for it—that the commitment embodied in an ESWA is necessary to keep a project moving forward. The ESWA may obligate an amount of available funding specified in law and provide for reimbursement of preliminary costs of carrying out the project, including land acquisition, timely procurement of system elements for which specifications are decided, and other activities FTA decides are appropriate to make efficient, long-term project management easier. The agreement can cover a period determined by FTA, and it may extend beyond the current authorization. Interest and other financing costs of efficiently carrying out the ESWA are eligible costs so long as the applicant demonstrates due diligence in seeking the most favorable financing terms. One critical aspect of an ESWA is that if the applicant fails to carry out the project for reasons within its control, all payments made under the ESWA shall be returned to FTA and any reasonable interest and penalty charges included in the agreement.

[117] 49 U.S.C. § 5309(g)(3).

G. FTA Assigns Financial Management Oversight Contractor/Value Engineering

1. Financial Management Oversight Contractor

During PE, FTA assigns FMOCs to a New Starts project. Derived from the same authority as PMOCs (see Section IV.C), FMOCs focus on a range of financial issues.

FMOCs broadly focus on a project's financial management system to determine whether it meets the requirements of the Common Rule.[118] Financial capacity assessments are performed in connection with New Start projects. This type of review assesses the financial capability of grantees to meet FFGA obligations and maintain their existing transit operations.

2. Value Engineering

FTA encourages the application of value engineering (VE) to the planning, design, and construction of all federally-assisted construction projects, and FTA policy requires its use on major capital projects.[119] FTA notes that VE is the systematic application of recognized techniques that identifies the function of a product or service, establishes a value for that function, and provides the necessary function reliably at the lowest overall cost. In all cases, the required function should be achieved at the lowest possible life-cycle cost consistent with requirements for performance, maintainability, safety, security, and aesthetics.

Generally, a multidisciplinary team, usually of five to seven people, conducts the VE review. Note that the training of applicant staff members in VE techniques is an eligible project cost. Applicants are encouraged to use independent consultants with expertise in VE to prepare VE studies. VE on a project should be performed early in the design process before major decisions have been completely incorporated into the design, at or near the end of PE.

[118] 49 C.F.R. pt. 18—Uniform Administration Requirements for Grants and Cooperative Agreement of State and Local Governments (the Common Rule); 49 C.F.R. pt. 18.20 (2008)—Standards for Project Management Systems.

[119] FED. TRANSIT ADMIN., FTA CIRCULAR C 9300.1B, CAPITAL INVESTMENT PROGRAM GUIDANCE AND APPLICATION INSTRUCTIONS, ch. V (2008), available at www.fta.dot.gov/laws/circulars/leg_reg_8642.html.

After every VE review, applicants must provide information to the FTA Regional Office about the changes recommended by the VE team and the expected savings or other benefits.

H. Procurement Process—Methods of Project Delivery

A project sponsor normally selects its overall project delivery method and general procurement and contracting approaches during the PE phase of project development. Depending on the method selected, the project sponsor will then refine its procurement plan and develop procurement and contract documents in the later stages of PE or in the Final Design phase.

The allowable procurement and project delivery methods will derive from the laws, policies, and procedures in the state in which the transit project is being built. Some states provide wide latitude, but in others certain methods, such as design-build, have to be specifically permitted by state law on a project-by-project basis. The project sponsor must research and understand its state's applicable public contracting and procurement laws as one factor in determining the type of procurement approach to pursue. In addition, for projects funded by FTA, the project sponsor must follow the procurement regulations and guidance applicable to FTA projects, such as the Common Grant Rule[120] and FTA's Third Party Contracting Guidelines.[121]

Different procurement and project delivery approaches currently used for transit capital projects are identified and described below.

1. Traditional Design-Bid-Build

This is the project delivery method that has historically been used for transportation capital projects, and remains widely utilized and in some states even statutorily required for public construction contracts. Under this method, following the PE phase, the project sponsor separately procures design services as a professional services contract. This procurement is based on qualifications only; price is not a factor in the award (generally referred to as a Brooks Act procurement). Price for the design services is negotiated with the highest-ranked proposer. The selected engineering/design firm completes all final design work, normally serves as the engineer of record, and produces "biddable" design drawings.

These drawings are then used as the basis for the development and pricing of construction bids on the project. The procurement document is normally an Invitation for Bids (IFB), and the construction contract is awarded to the lowest responsive and responsible bidder. Other than standard determinations of responsiveness, qualifications are not evaluated and scored and are not part of the basis of award.

The construction contract in a design-bid-build system is normally awarded in a one-step, low-bid process, although in some cases project sponsors may use a two-step process—a request for qualifications (RFQ), which yields a short list of eligible bidders, followed by an invitation for competitive low bids.

2. Design-Build

This project delivery method has witnessed increased use in recent years, and is viewed by its proponents as offering cost and schedule advantages over the more traditional project delivery method. Under this method, following the PE phase, the project sponsor issues procurement documents to select a design-build "team" that will be responsible for completing the final design process and building the project. The team would typically be a joint venture comprised of engineering/design firms and construction firms, or a construction firm as the prime contractor with engineering/design and other professional services firms as the subcontractors.

With a prime contractor and subcontractors, each remains a separate legal entity, and the prime is contractually responsible for the performance of its subcontractors. In contrast, under a joint venture, the venture itself is normally established as a single, separate, legal entity, with the joint venture members each being jointly and severally liable for all contractual obligations.

The most widely used procurement process for design-build project delivery is a request for proposals (RFP), in which the project sponsor sets forth the required qualifications and evaluation factors in its RFP, including the relative "weights" assigned to each, and in response proposers submit both qualifications and price. (The price proposal covers both design and construction work.) Award is made to the proposer offering the "best value" to the project sponsor, on the basis of its evaluation and scoring of qualifications and price. In addition, the design-build procurement may in some cases be conducted as a two-step process, either an RFQ followed by an RFP or an RFQ followed by a competitive low bid (IFB).

The proponents of design-build believe that this method allows for faster project delivery, improves coordination of the design and construction functions through use of the team approach, and is more efficient because construction on portions of the project can commence while other portions are still in design. One of the primary identified disadvantages, however, is that proposers are required to develop firm construction price bids for the procurement process at a time when design is only approximately 30 percent complete (the traditional standard for the completion of PE), with the result being that the lack of more complete design necessitates including significant contingency amounts in the construction bid, thereby driving up project costs.

[120] 49 C.F.R. pt. 18 (2008).

[121] FED. TRANSIT ADMIN., FTA CIRCULAR C 4220.1F, THIRD PARTY CONTRACTING GUIDELINES (NOV. 1, 2008), available at www.fta.dot.gov/laws/circulars/leg_reg_8641.html.

3. Construction Manager at Risk (CM@Risk)

This project delivery method is also seeing increased use in transit capital projects. Under this method, following the PE phase, the project sponsor conducts a procurement for the selection of a firm to provide 1) Phase 1 preconstruction services during design, such as constructibility reviews, design reviews, and cost estimating; and 2) Phase 2 construction work, subject to agreement on a fixed price for construction. Under this approach, final design work is performed by a separate firm under a different professional services contract. This method is referred to as "at risk" because the selected contractor is awarded the preconstruction services work, but is not guaranteed the construction work—that work is performed by the contractor only if the contractor and the public sponsor are able to negotiate and agree upon a fixed price for the construction work. Normally, these construction price negotiations are conducted on an "open book" basis, which means that the contractor makes available all unit prices, quantities, scope, and pricing detail on which its proposed price is based, and the project sponsor makes available all supporting information, estimating techniques, and pricing data on which its construction budget was based. If the parties are unable to agree on the construction price, then the contractor's work concludes with the preconstruction services phase and the project sponsor issues bid documents for the construction work.

The normal procurement method used for CM@Risk is a two-step process—an RFQ, followed by an RFP (sometimes called a Request for Final Proposals (RFFP)), in which proposals are submitted by only the short-listed firms selected pursuant to the RFP. Proposals in response to the RFFP are evaluated and scored on the basis of qualifications, and in some cases price may also be a factor in evaluation and award. There does not appear to be a uniform method for dealing with price in this type of procurement. However, one method is as follows: the RFFP is structured so that proposers provide a price for their preconstruction services and a fee (to cover profit and overhead, expressed as a percentage) that will be applicable to the construction work. The fee is considered in the evaluation and selection process as part of the basis of award. The preconstruction services price, however, is not evaluated; it remains sealed (as in a typical Brooks Act procurement) and serves as the basis for the negotiation of the preconstruction services price with the highest-ranked proposer.

The proponents of CM@Risk believe that it offers two primary advantages. First, it facilitates, and even requires, coordination between the design firm/architect and the CM@Risk contractor, thereby promoting a more efficient, constructible project design. Second, since the construction price is negotiated at or near the end of final design and negotiated on an open-book basis, and since the contractor has been working with the designer throughout the design phase, the construction price agreed upon should be more accurate and include less contingency and risk amounts for unknowns than a price developed in a standard design-bid-build procurement or in a design-build procurement.

4. Design-Build-Finance

This project delivery method is basically the same as the design-build method described above in Section IV.H.2, with the addition of a financing component, usually provided by an investment bank or other financial institution member of the design-build team. Again, the team could be structured as a joint venture or as a construction prime contractor with design-firm and banking subcontractors. This project delivery method also falls into the general category of a "public–private partnership." This method would normally utilize the same type of procurement process and documents as the standard design-build method previously described (i.e., a best-value procurement using an RFP or a two-step procurement).

The obvious key additional element in this method is the fact that the design-build-finance team is expected, or more likely required, to provide financing for some portion of the project capital cost. Although projects can clearly differ on this issue, the financing would often contemplate some up-front private contribution to the project capital cost by the bank or other financing partner, with that entity receiving in return some specific access to a revenue stream or other means of financial return in the future. For example, in a highway project, the financing partner could be afforded rights to a share of toll revenues for a specified period of time, to recoup and earn a return on its initial capital investment. Another possibility could be the granting of property development or rental income rights to the financing partner in exchange for its initial contribution. It should be noted that while there has been significant discussion of design-build finance and "public–private partnerships" as an alternative means for developing and delivering transit capital projects, the actual examples of the implementation of this project delivery method in the United States are quite limited. One of the main challenges seems to be to identify and put in place some type of future revenue stream or repayment source that will justify, from a financing perspective, the up-front private investment.

5. Design-Build-Operate-Maintain

The design-build-operate-maintain (DBOM) project delivery method incorporates all of the elements of a standard design-build, as described in Section IV.H.2 above, and then adds an operations and maintenance (O&M) requirement. Normally, the proposing teams would be structured as joint ventures and would include a construction firm, engineering/design firms, and other professional services firms. Unique to this method of project delivery is the fact that the joint venture/proposer would also include an O&M firm, i.e., the "O&M contractor," a firm in the business of providing transit services for public agencies under contract.

Similar to a standard design-build, the most widely used procurement process for a DBOM project is an RFP, with award to the proposer offering the "best value" on the basis of qualifications and price. The price proposal covers design, construction, operations, and maintenance. The DBOM procurement could also be selected as a two-step process, with an RFQ to select a short list of qualified proposers, followed by an RFP. The contract awarded pursuant to this procurement is for the design and construction of the project, followed by O&M services for a specified term (typically 5 or 10 years with an option period). The procuring agency and the selected joint venture normally enter into two separate agreements—a design-build agreement and an O&M agreement—each with its own terms and conditions and pricing.

The proponents of DBOM contend that it offers all the benefits of standard design-build, as cited in Section IV.H.2 above, and has a significant additional advantage because the O&M contractor is "on board" from the outset of the project, and as a result, can coordinate with and advise the designer regarding different design options and work with the construction firm on the operational benefits or on problems with different construction methods and alternatives. The result of this, according to proponents, is that the project will be designed and constructed in a manner that directly takes into account operational issues and thus will be more likely to provide sound and cost-effective O&M over the long term. From the perspective of the procuring agency, one major advantage is that it is able to procure a "total" project, from design through the O&M phase, in a single procurement action. Conversely, there may be some disadvantages in forfeiting the ability to separately select the best design/construction team and the best O&M team—In DBOM, the procuring agency must select the best overall team even though one or another of its members might not be the most highly rated on its own.

I. Submit Request to FTA to Proceed to Final Design

1. NEPA Process Completed

As noted, a project may not proceed into Final Design until the NEPA process is completed. In most cases this means that an ROD has been issued by FTA for the project.

2. Demonstration of Capacity to Carry Out Final Design

The project sponsor must demonstrate that it has the technical capacity to carry out Final Design. This can be done by updating the related information it presented at the PE stage.

3. All Federal Requirements Met

The project sponsor must demonstrate that all applicable federal requirements are or can be met. These include the whole range of federal statutory and regulatory requirements that recipients of federal transit grants are subject to.

4. Project Satisfies Rating Requirement

Under FTA's New Starts criteria, a project must have a Medium or higher rating to proceed into Final Design.[122]

5. Review FTA Online Checklist—Items Necessary to Proceed to Final Design

As noted, FTA has a comprehensive checklist on its Web site indicating the items that are necessary before a project may advance into Final Design. These indicate the level of specificity a project should have achieved by the end of PE and reflect further detail from the FTA's checklist to enter PE previously discussed. A lawyer should note the category "Administrative Requirements," dealing with legal capacity (also discussed in the checklist), in which the project sponsor must show it has the authority to undertake implementation of the proposed transit mode as well as the authority to use its chosen procurement method.[123]

CHAPTER V: FINAL DESIGN PHASE

A. FTA Approval to Enter Final Design/Blanket Pre-Award Authority to Incur Costs

As with proceeding into PE, FTA approval is necessary before proceeding into Final Design. Once granted, that approval allows the project sponsor to begin utility relocation and right-of-way acquisition, develop specifications, and prepare final construction plans. As with approval to enter PE, approval to enter Final Design carries with it blanket pre-award authority to incur project costs for Final Design activities prior to grant approval.[124] All federal requirements must be met before incurring costs to retain eligibility of the costs for future FTA grant assistance.

Pre-Award Authority—Real Property Acquisition Activities. FTA extends automatic pre-award authority for the acquisition of real property and real property rights for a New Starts project upon completion of the NEPA process for that project.[125] As stated by FTA, the NEPA process is completed when FTA signs an environmental ROD or FONSI or makes a Categorical Exclusion (CE) determination. With the limitations noted below, real estate acquisition for a New Starts project may begin, at the project sponsor's risk, upon completion of the

[122] *Id*.

[123] FED. TRANSIT ADMIN., NEW STARTS PROJECT PLANNING AND DEVELOPMENT CHECKLIST OF PROJECT SPONSOR SUBMITTALS TO FTA TO ENTER FINAL DESIGN (2008), *available at* www.fta.dot.gov/planning/newstarts/planning_environment_218.html.

[124] *Id*.

[125] 73 Fed. Reg. 4956, 4975 (Jan. 28, 2008).

NEPA process. For FTA-assisted projects, any acquisition of real property or real property rights must be conducted in accordance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (URA) and its implementing regulations.[126] This pre-award authority is strictly limited to costs incurred 1) to acquire real property and real property rights in accordance with the URA regulation, and 2) to provide relocation assistance in accordance with the URA regulation. This pre-award authority is limited to the acquisition of real property and real property rights that are explicitly identified in the final EIS, environmental assessment, or CE document, as needed for the selected alternative that is the subject of the FTA-signed ROD or FONSI, or CE determination.

As noted by FTA, this pre-award authority does not cover site preparation, demolition, or any other activity that is not strictly necessary to comply with the URA, with one exception. That exception is when a building that has been acquired, has been emptied of its occupants, and awaits demolition poses a potential fire-safety hazard or other hazard to the community in which it is located, or is susceptible to reoccupation by vagrants. Demolition of the building is also covered by this pre-award authority upon FTA's written agreement that the adverse condition exists. Pre-award authority for property acquisition is also provided when FTA makes a CE determination for a protective buy or hardship acquisition in accordance with 23 C.F.R. 771.117(d)(12), and when FTA makes a CE determination for the acquisition of a preexisting railroad right-of-way in accordance with 49 U.S.C. § 5324(c).

FTA cautions that project sponsors should use pre-award authority for real property acquisition and relocation assistance very carefully, with a clear understanding that it does not constitute a funding commitment by FTA. FTA provides pre-award authority upon completion of the NEPA process to maximize the time available to project sponsors to move people out of their homes and places of business, in accordance with the requirements of URA, but also with maximum sensitivity to the plight of the people so affected. Although FTA provides pre-award authority for property acquisition upon completion of the NEPA process, FTA will not make a grant to reimburse the sponsor for real estate activities conducted under pre-award authority until the project has been approved into Final Design. Even if funds have been appropriated for the project, the timing of an actual grant for property acquisition and related activities must await Final Design approval to ensure that federal funds are not risked on a project whose advancement beyond PE is not yet assured.

Note also that FTA extends pre-award authority for costs incurred to comply with NEPA regulations and to conduct NEPA-related activities for a proposed New Starts (or Small Starts) project.[127]

Letter-of-No-Prejudice-Authority. Except for the automatic pre-award authority and ESWAs discussed previously, a project sponsor must obtain a written LONP from FTA before incurring costs for any activity expected to be funded by New Starts funds not yet awarded. To obtain an LONP, an applicant must submit a written request accompanied by adequate information and justification to the appropriate FTA regional office.

B. Purpose of Final Design

In Final Design, the environmental process has been completed and many aspects of the project are taking shape. Final Design represents the final phase of New Starts project development; the project sponsor begins preparing for construction. A project sponsor prepares final construction plans and detailed specification and bid documents. All of the agreements underway—utilities, joint development, public–private partnerships—are finalized during this phase and implementation of their terms begins. If not completed, specific timelines for their completion should be established. Moreover, FTA will lock in the overall project cost and maximum federal amount at this point.

In an online fact sheet on Final Design, FTA provides the following Guiding Principles of Final Design:[128]

- Transition between project development and project construction.
- Focus on execution of various project management and delivery strategies to ensure successful completion of project construction.
- Finalization of project definition, property acquisition, third-party agreement negotiations, procurement of construction services and equipment, and securing all non-New Starts funding commitments.
- Negotiation of an FFGA.

C. Begin Right-of-Way Acquisition/Utility Relocation

Project agreements regarding such elements as right-of-way acquisition and utility relocation should be completed, and acquisition and relocation activities should begin during Final Design. Any agreement not completed should have a timeline established for its resolution and completion.

D. Federal Program Requirements Met

Also at this stage the full range of federal program requirements should be met or the ability to meet them clearly established. Note that the FFGA for the project will, among other things, incorporate by reference the FTA Master Agreement, which contains the standard terms and conditions governing the administration of a

[126] 49 C.F.R. pt. 24 (2008).

[127] 73 Fed. Reg. 4956, 4975 (Jan. 28, 2008).

[128] FED. TRANSIT ADMIN., FTA MAJOR CAPITAL TRANSIT INVESTMENT FACT SHEET, FINAL DESIGN (2007), *available at* www.fta.dot.gov/documents/Fact_Sheet_-_FD__9-18-07.doc.

project funded by the FTA.[129] Because the Master Agreement applies to a variety of FTA grants and agreements, not all of its provisions apply to every project funded by FTA. A project lawyer should become familiar with the many provisions of the FTA Master Agreement that will apply to the New Starts project.

E. Commitment of All Non-New Starts Funding/Financial Capacity

At this point in the process, all non-New Starts funding should be secured. Funds from state and local sources, and other federal funding, must be committed to the project.

Before execution of an FFGA, FTA must find that the project is supported by an acceptable degree of local financial commitment. The local financial commitment is evaluated based on the stability and reliability of the proposed local share of the project's capital costs, the strength of the proposed capital financial plan, and the ability of the local transit agency to fund operation and maintenance of the system as planned, once the project is built.

FTA's FMOC reviews the general financial condition of the grantee and its nonfederal funding entities and the financial capability of the grantee and its nonfederal funding entities.

Financial condition includes historical trends and current experience in the financial ability of the grantee to operate and maintain its transit system at present levels of service. Financial capability refers to the stability and reliability of revenue sources needed to meet future annual capital and operation and maintenance costs. Financial capability considers the nature of funds pledged to support operating costs and capital replacement programs, as well as forecasted changes in fare and nonfare revenue. Capital costs include both replacement and rehabilitation of existing equipment and facilities as well as new investments. Operating and maintenance costs include those for the existing system, as well as increases due to capital investment and service expansion.

FTA will not enter into an FFGA until the plans for financing the project have been completed and the Financial Capacity Assessment has been performed by the FMOC. The plans must demonstrate that the project sponsor can complete the FFGA project and continue to operate its existing service with available resources.

F. Various Plans; Risk Assessment

During Final Design, a project sponsor focuses on ensuring successful delivery of the project on time and on budget through FTA's risk assessment of the scope, schedule, and cost estimate.

FTA has increasingly relied upon risk assessment and risk management in New Starts projects. Project risk may be seen as an unexpected event or circumstance that has a chance of occurring and that may prevent a project from meeting its schedule and cost estimate.

A variety of risks have been identified. Budget risk is the possibility that budget elements will not conform to estimates; event risk simply means that events—bad weather, contractor nonperformance—could affect project schedule and scope; and scope risk may be viewed as significant changes to project scope due to unforeseen circumstances.

A risk assessment involves a series of steps starting with a validation of base conditions followed by risk identification and quantification of potential risks. The next step is the assessment during which risks are evaluated and contingencies reviewed. This leads to risk mitigation planning, implementation, and monitoring. In some cases, FTA has sought to develop and establish a probability percentage to establish the degree or amount of risk (i.e., the risk assessment shows there is an 85 percent probability that the project will be completed on schedule and within budget).

Note that Deloitte's *New Starts Program Assessment* report, written at the behest of FTA, comments on FTA's current risk assessment process, suggesting that it should be defined "…as a process rather than an outcome, starting in AA and continuously updated through FFGA (and during construction)." While it states that the current tool provides important information about cost exposure, "…a true Risk Management process, begun during AA and updated through to FFGA, may be more beneficial in terms of ensuring successful projects."[130]

Also in Final Design, the PMP covers a variety of project plans, including those related to real estate acquisition, construction quality control and assurance, project safety and security, bus and rail fleet management plans, and the final project financial plan.

The project sponsor also prepares, with FTA concurrence, a project execution plan that addresses any reallocation of budget contingencies based on market conditions and project implementation.

G. Submit Updated New Starts Criteria Data; Determine Project Cost

As a project moves into Final Design, much more detailed and specific information becomes available that should be made available to FTA. This is when the project budget becomes more fixed and a final project cost is agreed upon. It is important to recognize that once FTA establishes a project cost, that number will not change. Thus, if the project cost is determined too early in the Final Design process, any subsequent cost increases will not be reflected in it. So timing is critical in working with FTA on the project cost.

[129] FED. TRANSIT ADMIN., FTA MASTER AGREEMENT (Oct. 1, 2008), *available* at www.fta.dot.gov/documents/15-Master.pdf.

[130] Deloitte Development LLC, *New Starts Program Assessment* (Feb. 12, 2007), *available at* www.fta.dot.gov/planning/newstarts/planning_environment_6916.html.

H. The Procurement Process

To the extent possible, third-party agreements should be finalized at this point; if not finalized, clear timelines for their completion should be available.

I. Request Full Funding Grant Agreement—Checklist

On its Web site FTA has a checklist of matters that must be completed before a project sponsor may seek an FFGA.[131] The key factor at this stage of the process is project readiness, as demonstrated by sound capital cost estimates, firm local funding commitments, a strong project management team, and completion of the items in FTA's checklist. The checklist particularly emphasizes that a project sponsor must have ready at this stage updated plans, particularly its PMP, Financial Plan, and Rail and Bus Fleet Management Plans. The following elements drawn from the checklist show some other important elements necessary at this stage:

1. Key Requirements.
(i) Grant application (in FTA's online grants management system,TEAM).
(ii) 13(c) certification of the grant application.
(iii) Authority to proceed with procurement (if other than design-bid).
2. New Starts Evaluation Rating
(i) Receive a Medium or higher overall rating.
3. Letter from Project Sponsor to Regional Administrator Requesting an FFGA.

J. Ability to Proceed Before Full Funding Grant Agreement (Use of Pre-Award Authority or LONPs)

As appropriate, FTA may issue an LONP for capital items that require a long lead time. As noted previously, Final Design carries with it blanket pre-award authority under which a project sponsor may incur Final Design costs that are eligible for FTA reimbursement if all applicable federal requirements are met. Note, however, that this pre-award authority generally does not cover all matters, and it may be necessary for a project sponsor to seek specific LONP authority from the FTA. If granted, the authority is essentially the same as pre-award authority; all federal requirements must be met for costs incurred to remain eligible for federal reimbursement. Note also the previous discussion of ESWAs under which FTA by statute may make federal funds available to a project before an FFGA is entered into.

K. Other Issues: Before and After Study

Note also that, by statute,[132] an FFGA shall require the applicant to conduct a Before-and-After Study that describes and analyzes the impact of the new fixed guideway capital project on transit services and transit ridership, evaluates the consistency of predicted and actual project characteristics and performance, and identifies sources of differences between predicted and actual outcomes. At this point in the process, FTA requires the submission of a plan that provides for the collection and analysis of information once a project is in revenue operation so that the Before-and-After Study ultimately may be completed in a manner satisfactory to FTA. Further, FTA is required annually to submit to Congress a Before-and-After report documenting the results of individual Before-and-After studies.

CHAPTER VI: THE FULL FUNDING GRANT AGREEMENT

A. Background, Purpose, and Significance of Full Funding Grant Agreement; FTA Full Funding Grant Agreement Circular

The FFGA came into use in the late 1970s when FTA's predecessor agency, the UMTA, began providing greater amounts of federal funds for major capital investment projects. UMTA developed policies and procedures to use those funds in the most prudent and effective manner. Moreover, given the number of areas competing for scarce New Starts funding, UMTA wanted to limit the amount of federal funds that it provided for any particular project. It was from this nexus of policy considerations that the FFGA emerged.

Over time the FFGA became more detailed and comprehensive. Early FFGAs limited the federal participation to a maximum amount. Only in the event of "extraordinary" costs—Acts of God, excessive inflation, unanticipated eminent domain costs, or compliance with new federal law—would UMTA entertain a request to provide funds beyond the amount specified in an FFGA.

As the New Starts project development process became more comprehensive and detailed, UMTA wanted to bring consistency and uniformity to the FFGA process and to the FFGA terms and conditions, which were still being negotiated on an ad hoc basis. In 1990 UMTA drafted a model FFGA and accompanying Circular. In subsequent reauthorization legislation in 1991,[133] Congress specifically authorized FTA to enter into FFGAs to set terms and conditions and to establish the maximum federal amounts to be made available. The now-renamed FTA formally issued an FFGA Circular, together with a model FFGA, in 1992. Most significantly, the Circular did not include any provision for "extraordinary" costs.

[131] FED. TRANSIT ADMIN., NEW STARTS PROJECT PLANNING AND DEVELOPMENT CHECKLIST OF PROJECT SPONSOR SUBMITTALS TO FTA FOR A FULL FUNDING GRANT AGREEMENT (2008), *available at* www.fta.dot.gov/printer_friendly/planning_environment_9094.html.

[132] 49 U.S.C. § 5309(g)(2)(C).

[133] Pub. L. No. 102-240, 105 Sta. 1914 (1991).

The FTA's Circular on FFGAs was revised and reissued in December 2002.[134] The Circular includes chapters on various aspects of the FFGA, as well as a model FFGA and examples of attachments in Appendix A.

It is difficult to estimate the amount of time it takes to negotiate an FFGA because much depends on the lag that occurs between entry into Final Design and getting the FFGA executed. There can be much back and forth discussion with FTA over a project's readiness and the documentation that needs to be completed before the FFGA can be addressed; see the checklist previously discussed. Moreover, much depends on the size and complexity of the project and its financing. The more complex a project is, the longer it will take to complete its FFGA. Nonetheless, a rough estimate for the time it takes to complete an FFGA is 12 to 14 months.

1. Purpose of FFGA

(i) Formal Agreement.—The FFGA is, according to its definition in FTA's New Starts regulation, "an instrument that defines the scope of a project, the federal contribution, and other terms and conditions."[135] It is signed by FTA and the project sponsor following detailed review by the USDOT, the Office of Management and Budget, and Congress.

(ii) Coverage.—FFGAs are defined more broadly in FTA's Circular on FFGAs:

> An FFGA establishes the terms and conditions for Federal financial participation in a new starts project; defines the project; sets the maximum amount of Federal new starts funding for a project; covers the period of time for completion of the project; and facilitates efficient management of the project in accordance with applicable Federal statutes, regulations, and policy. Within the limits of law, an FFGA provides assurance and predictability of Federal financial support for a new starts project while strictly limiting the amount of that Federal financial support.[136]

(iii) Terms and Conditions of Federal Participation.—The FFGA sets the terms and conditions of federal participation (see discussion in Section VI.B).

(iv) Multiyear Funding Commitment.—Of critical significance, the FFGA represents a multiyear funding commitment of the federal government for a particular project, subject to the availability of funds from Congress. Thus, the FFGA became a reliable mechanism for FTA to plan on the allocation of Federal New Starts funds over a multiyear period, and brings certainty of funding to the project at the local level.

(v) Limits New Starts Funds.—Most critically, the FFGA sets the maximum amount of Federal New Starts assistance that will be made available to a project. As noted above, early in its history the FFGA allowed a project sponsor to request increased funds on the basis of "extraordinary" costs incurred, although this was no longer permitted beginning in the early 1990s.

A byproduct of the maximum amount concept of the FFGA is that it applies as well to local funds. If a project experiences cost increases for reasons beyond the control of the project sponsor, and the project sponsor wants to apply more local funds to assure that a project does not have to be downsized, FTA has in some cases not permitted the use of such additional local funds because the project would exceed its maximum amount. FTA has not always been consistent on this issue, however, and recently has begun to review this policy in response to industry criticism.

2. Significance of FFGA

Simply stated, the only way to receive New Starts funding is for a project to be subject to an FFGA. Moreover, projects generally receive New Starts funding according to the annual schedule in the FFGA.

An interesting question is whether the New Starts federal funds committed under a FFGA represent a binding obligation of the United States. FTA takes the position that federal funds under an FFGA are always "subject to the availability of funds from Congress." That is, notwithstanding a duly executed FFGA, Congress through the annual appropriations process always retains the authority to decide not to fund a particular project. Others contend that in such an event, the project sponsor would have a legitimate claim against the United States based on the terms of the FFGA. In any event, FTA and Congress to date have honored, subject to minor variations such as across-the-board spending cuts, the total amount of funds reflected in an FFGA, and also have generally honored the annual schedules in FFGAs. Moreover, any issues about out-year FFGA funding commitments being honored are likely to turn on political rather than legal considerations.

B. Terms and Conditions

The standard FFGA includes whereas clauses followed by some 26 sections. Each of the sections is discussed briefly below.[137]

Recitations (Whereas Clauses)

The recitations in an FFGA are standard and address general areas including, but not limited to the grantee's financial plan, previous federal grants; the maximum Federal New Starts financial contribution, the grantee's application and process, and operations and maintenance of the project.

In some instances, specific language is included in the whereas clauses to address unique circumstances. An example would be in those cases where the responsibility for funding operations and maintenance does not rest with the grantee but with another entity. This was the case both in the Phoenix Valley Metro Rail project and in the Northstar, Minnesota, commuter rail project. Another example of a unique circumstance

[134] FED. TRANSIT ADMIN., FTA CIRCULAR C 5200.1A, FULL FUNDING GRANT AGREEMENTS GUIDANCE (2002), *available at* www.fta.dot.gov/laws/circulars/leg_reg_4119.html.

[135] *Id*.

[136] FED. TRANSIT ADMIN., *supra* note 134, "Purpose" section.

[137] *Id*.

would be where special arrangements are made concerning construction of so-called interrelated activities that are not part of the federal project but are essential to it—examples include the vertical circulation building being built as part of the Northstar project and the Minnesota Twins stadium, airport construction at the Minneapolis–St. Paul Airport that was part of the Hiawatha Light Rail Project, and airport construction at San Francisco Airport that was part of BART's airport/Millbrae extension.

1. Section 1—Definitions

The definitions section sets forth definitions of terms that are used throughout the FFGA, and provides definitions for several terms that are more fully explained in specific contract provisions (e.g., Baseline Cost Estimate, Estimated Net Project Cost, and Maximum Federal New Starts Financial Contribution). The FTA also uses this section to define terms that are unique to a specific FFGA (e.g., the term "Twins Interrelated Activities" in the Northstar, Minnesota, commuter-rail-project FFGA is defined as certain activities being performed and paid for by the Minnesota Twins baseball team that are related to the station being constructed in conjunction with the construction of a new baseball stadium).

2. Section 2—Purposes of Agreement

There are four stated purposes of the FFGA: provide federal financial assistance for the project, describe the project being funded and constructed, establish the maximum Federal New Starts financial commitment for the project, and establish the grantee's financial commitment to the project.

3. Section 3—Previous Federal Documents and Grants

This section provides general language concerning previous agreements entered into by the FTA and the grantee. It reflects that the project is governed by the terms and conditions of previous grants that are incorporated by reference into the FFGA, except if a previous term or condition is superseded by the FFGA. It further provides that the terms and conditions of the FFGA take precedence over the provisions of all other agreements between the FTA and the grantee. And it provides that no amendments will be made to prior grants to increase the funding provided by those grants.

4. Section 4—Obligation to Complete the Project

This is an extremely critical provision of the FFGA. It provides that the FTA has no obligation to provide additional funds beyond the maximum Federal New Starts contribution, and that if the total federal funding provided is insufficient to "undertake revenue operation" of the project, the grantee agrees to complete the project and accept sole responsibility for the payment of additional costs. This section requires the grantee to immediately notify FTA if the total project cost will exceed the baseline cost estimate, including the amount and the reason for the overrun. FTA has recently revised this provision to require that if there is an overrun situation, the grantee must prepare a recovery plan that demonstrates that the grantee is taking and will take every reasonable measure to eliminate or recover the difference between the total project cost and the baseline cost estimate. The grantee is obligated to obtain sufficient nonfederal New Starts funds to cover the difference.

5. Section 5—Revenue Operations Date

This section sets forth a specific date that the grantee agrees and promises to achieve revenue operation of the project. The section specifically provides that failure to meet the stated date is a breach of the FFGA. FTA, at its sole discretion, may waive a breach or anticipatory breach and extend the date if there is an unavoidable delay or if FTA determines that the delay results from an event or circumstance beyond the control of the grantee. Delays in receiving FTA funds do not constitute a basis for extension of the date. Moreover, an extension of the date does not constitute a basis for additional federal New Starts funding. FTA has frequently extended the revenue operations date, but has never terminated an FFGA for failure of a grantee to achieve the original revenue operations date set forth in an FFGA.

6. Section 6—Net Project Cost

The section addresses the cost of the project that cannot reasonably be financed from the grantee's revenues. The section specifies that federal funds may only be used to reimburse eligible expenses; and that if the project is completed "under" budget, a reduction of the local share requires a refund to the FTA of a proportional amount of the federal financial assistance provided under the FFGA.

Note, moreover, that FTA has the statutory authority to adjust the final net project cost of a New Starts project to include the cost of eligible activities not included in the originally defined project if FTA determines that the originally defined project has been completed at a cost that is significantly below the original estimate.[138]

7. Section 7—Estimated Net Project Cost

The estimated net project cost is that portion of the cost of the project that reasonably cannot be financed from the grantee's own revenues. The result is those costs that are eligible for federal financial assistance. It should be noted that in most instances, the estimated net project cost is the same as the Baseline Cost Estimate (BCE). The BCE is composed of both federal funding and the local match for that funding.

[138] 49 U.S.C. § 5309(h)(2).

8. Section 8—Limitation of the Federal Funding Commitment

This section addresses the maximum Federal New Starts financial contribution for the project. New Starts funds are the only federal funds limited in amount by the terms of the FFGA. The section provides the total amount of New Starts funding, and the total amount of New Starts funding to be provided after the execution of the FFGA, as set forth in Attachment 6, and conditioned upon the availability of appropriated funds and the grantee's continued performance under the terms and condition of the FFGA.

9. Section 9—Federal Funding—Other Sources

This section addresses any non § 5309 New Starts Federal funds being used for the project. There is no cap on the use of such funds for the project by the grantee, although FTA may expect the grantee to use local funds to pay any project overruns rather than rely on Federal non-New Starts funds.

10. Section 10—Local Financial Commitment—Capital Costs

This section sets forth the total amount of non-federal match capital funds for the project and commits the grantee to provide the so-called local share. The grantee is required to keep the FTA informed of the availability of the local share and of any changes in such availability, including actions to ensure that sufficient local share is available to complete the project. The local share reflects the grantee's commitment set forth in its financial plan, which FTA approves prior to the execution of an FFGA.

11. Section 11—Authorization to Advance Project Without Prejudice

In essence, this section allows the grantee to incur costs or expend local funds for the project before an actual award of federal funding without jeopardizing the eligibility of such costs for the future federal reimbursement so long as the costs are incurred in accordance with all applicable federal requirements. It operates as a "blanket" LONP during project design and construction.

12. Section 12—Local Financial Commitment—Operating and Maintenance

The grantee or an entity identified by the grantee and recognized by FTA in the FFGA commits that it has sufficient funds from a stable and dependable source to operate and maintain the new project as fully set out in the financial plan approved by FTA prior to the execution of the FFGA.

13. Section 13—BCE

The BCE is a calculation of all costs of the project covered by the FFGA necessary to complete the scope of work under the FFGA and eligible for federal assistance. The BCE is established at the time of the government's award of the FFGA. The BCE reflects escalation, contingencies, and schedule dates pertaining to the individual cost elements or contract units based on third-party contracts and force-account work. The BCE is used by the FTA to monitor the grantee's compliance with its cost estimates. Although individual line items may increase or decrease during the course of the project, the BCE is never revised and remains constant throughout the life of the project.

14. Section 14—Baseline Schedule

Under this section the grantee must notify FTA of any developments that threaten the grantee's achievement of the revenue operations date and the actions the grantee intends to take to recover any slippage in the baseline schedule.

15. Section 15—Project Management Oversight

This section contains the grantee's acknowledgement that the project is considered a "Major Capital Project" and thus subject to FTA's requirements concerning Project Management Oversight set out in 49 C.F.R. Part 633.

16. Section 16—Environmental Protection

This section memorializes the grantee's responsibility to undertake all environmental mitigation measures that are identified in the project's environmental documents.

17. Section 17—Labor Protection

This section reflects the grantee's commitment to carry out the project in conformance with the terms and conditions determined by the Secretary of Labor to be "fair and equitable to protect the interests of employees affected by the project" as required by 49 U.S.C. § 5333(b) ("13(c)").

18. Section 18—Government Actions

This section provides timelines for the FTA's response when FTA review, approval, or concurrence is required under the terms and conditions of the FFGA and states that the FTA's approval or concurrence will not be unreasonably withheld.

19. Section 19—Remedies

This section provides that substantial failure of the grantee to complete the project in accordance with the terms and conditions of the FFGA will be a default of the FFGA, and that the FTA will have all remedies at law and equity as set forth in the Master Agreement. The section provides that in the event of default, the FTA may demand that all federal funds provided for the project be returned to the FTA. The section also provides that the FTA's review of the grantee's performance will be conducted under the provisions of Section 15 of the FFGA. If FTA determines that satisfactory progress is not being made by the grantee on the pro-

ject, FTA may withhold approval of further funding and suspend drawdown of federal funds.

20. Section 20—Contents of Agreement

This section specifies all of the documents that comprise the FFGA, including the cover pages setting forth significant characteristics of the FFGA, the terms and conditions of the FFGA, the attachments to the FFGA, the FTA Master Agreement, the FTA's environmental record of the project, prior grants for the project, and any special conditions imposed on the grantee by the FTA in approving the FFGA.

21. Section 21—Simultaneous Creation of Agreement in Electronic Format

This section provides for simultaneous hard copy of electronic execution of the FFGA. Simultaneous to the award and execution of the FFGA in typewritten hard copy, the FFGA is awarded and executed by electronic means through FTA's electronic award and management system. To the extent any discrepancy may arise between the typewritten version and the electronic version of this Agreement, the typewritten version will prevail.

22. Section 22—Amendments to Agreement

This section provides that any amendments to the FFGA, or any of the documents referenced in Section 20, must be in accordance with FTA's Project Management Circular or its FFGA Circular.

23. Section 23—Attachments—Incorporation

This section incorporates the attachments to the FFGA by reference. (See discussion of attachments in Section VI.C)

24. Section 24—Notices

This section contains standard contract language concerning provision of notices to representatives of the FTA and the grantee.

25. Section 25—Applicable Law

This section provides that if federal statues or common law do not govern the interpretation of the FFGA, the state law of the grantee's residence will govern.

26. Section 26—Award and Execution of Agreement

This section includes standard execution by each party, with attestations and affirmation by the grantee's attorney that the grantee is duly authorized to sign the agreement under state and local law, that the agreement is due and proper and in accord with applicable state and local law, that the agreement constitutes a legal and binding obligation of the grantee, and that, to the best of the attorney's knowledge, there is no legislation or litigation pending or imminent that might adversely affect the project.

C. Attachments

Each FFGA includes at least eight attachments as summarized below.[139]

1. Attachment 1—Scope of Project

The first attachment contains a brief narrative statement of the project, including the location of the project, an explanation of its key elements, and a summary of its basic operational functions. If the project is a fixed guideway, the attachment provides the length of the guideway, the mode of transit to be utilized, the number and type of stations, the approximate number of transit vehicles, and the location and type of maintenance facilities. The approximate number of transit vehicles is critical, since FTA will usually permit a grantee to purchase plus or minus two of the approximate number listed in the attachment.

1(a). Attachment 1A—Project Map.—This attachment comprises a color map of the project showing alignment; major streets and highways that the line intersects; existing and proposed tracks; and location and type of new facilities including stations, park-and-ride facilities, and maintenance facilities.

2. Attachment 2—Project Description

This attachment identifies and describes individual contract units of each of the discrete activities necessary to accomplish the stated purpose, objective, and transportation function of the project. FTA requires that standard cost categories be utilized. The standard cost categories are the basis for the baseline cost estimate contained in Attachment 3 and the baseline schedule contained in Attachment 4. Each of the standard cost categories listed contains a very detailed description of the activities undertaken under the category, but should not be so detailed as to restrict the grantee's ability to make some modifications during construction (e.g., under the stations category, the number of stations is specified, but the length of station platforms is usually not specified unless there is a specific project-related reason for doing so). It is very important to carefully draft these descriptions so that they leave some flexibility to make these types of modifications.

Note that this attachment is quite critical in that it is relied upon by the FTA in developing its annual New Starts budget submittal, and is also relied upon by the congressional appropriations committees in their bills providing annual funding for the FTA program.

3. Attachment 3—Baseline Cost Estimate

This attachment reflects the provisions of Section 13 of the FFGA. The attachment sets forth the BCE in three different formats: by Standard Cost Category, the inflated cost to year of expenditure, and by source of funding. The BCE reflects the estimated cost of the project at the time that the FFGA is executed.

[139] *Id.*

3(a). Attachment 3A—Project Budget Activity.—The project budget is a budget for the entire project setting forth the funding sources and activity timelines associated with each source of funds and may include funding from other non-New Starts federal grants that provide the total amount of FTA funding for the FFGA.

4. Attachment 4—Baseline Schedule

The baseline schedule reflects each of the standard cost categories set forth in Attachments 2 and 3—at the beginning of performance, mid-point of performance, and completion. This attachment is not modified during design and construction since it is used to compare planned project implementation to actual performance.

5. Attachment 5—Prior Grants and Related Documents

This attachment provides a listing of all prior FTA grants for the project that are not included in the FFGA; a listing of all documents and FTA actions related to the project (e.g., approval to enter PE and Final Design, issuance of the Record of Decision, and issuance of Letters of No Prejudice); and a listing of all FTA grants that are directly incorporated into the overall federal funding of the FFGA and the project.

6. Attachment 6—Schedule of Federal Funds for the Project

This attachment provides a year-by-year listing of the anticipated sources and amounts of federal funding for the project and the corresponding sources and amounts of the grantee's funding for the project. It sets forth the amount of § 5309 New Starts funds FTA intends to recommend that Congress appropriate for the project, year-by-year, to fulfill the federal contractual commitment to the project. The attachment also specifically cites the federal statute that authorizes the project for final design and construction, notes whether the baseline schedule extends beyond the current authorization of the federal transit program, and states whether FTA intends to provide federal funds for the project in years beyond the authorization existing at the time that the FFGA is executed.

7. Attachment 7—Measures to Mitigate Environmental Impacts

This attachment lists the environmental record for the project. The attachment makes reference to any mitigation measures adopted for the project and references the ability of the grantee to add mitigation measures as necessary. In the past, this attachment would actually include a complete listing of all of the mitigation measures adopted for the project. However, FTA now only requires that the grantee establish a matrix of the measures, including the entity responsible for ensuring compliance with each measure; the attachment only references this matrix.

8. Attachment 8—New Starts "Before and After" Study

This attachment documents the grantee's commitment to conduct a "before and after" study to assemble information and conduct analyses to identify the actual performance of the project in terms of its costs and impacts, evaluate the reliability of technical methods used during the planning and development of the project, and identify potentially useful improvements to those methods.

D. Submission to Congress

Before issuing an FFGA, pursuant to federal transit law,[140] FTA must provide the Committees on Transportation and Infrastructure and Appropriations of the House of Representatives and the Committees on Banking, Housing and Urban Affairs, and Appropriations of the Senate at least 60 days' notice in writing of its intent to issue such an agreement, and shall include a copy of the FFGA as well as the evaluations and ratings for the project. Before that submission is made to Congress, FTA must seek review and approval from the Office of the Secretary of Transportation and the Office of Management and Budget.

Note that formal approval by Congress of the FFGA is not required, only that proper notice must be given. A project is considered approved when the time period has expired and Congress has taken no action to the contrary. In a few rare instances, a congressional committee has written FTA and directed that it not enter into a specific FFGA, resulting in further delays in the FFGA process, but in the majority of cases, FTA is simply able to execute the FFGA as soon as the 60-day period has run its course.

CHAPTER VII: FTA FUNDING RECOMMENDATIONS

A. FTA Ratings

Chapter II discusses the FTA Project Evaluation and Rating process. The ratings are intended to reflect overall project merit; proposed projects that are rated as either High, Medium-High, or Medium have demonstrated significant potential benefits and are therefore eligible for New Starts funding.

B. Ratings Are Not Funding Assurance

Note, however, that project ratings do not translate directly into a funding recommendation or commitment in any given year. FTA must also consider the amount of New Starts funding available on an annual basis and the phase of project development of candidate New Starts projects.

[140] 49 U.S.C. § 5309(g)(5).

C. Basis of FTA New Starts Funding Allocation Decisions

In its 2008 report to Congress,[141] FTA provides that in determining annual funding allocations among proposed New Starts and Small Starts, the following general principles are considered:

1. Project must be authorized; should meet the project justification, local financial commitment, and process criteria established by §§ 5309(d) and 5309(e); and be consistent with Executive Order 12893, Principles for Federal Infrastructure Investments, issued January 26, 1994.
2. Existing FFGA commitments should be honored before any additional funding recommendations are made.
3. Upon completion of an FFGA, or PCGA in the case of a Small Starts, the federal funding commitment has been fulfilled. Any additional costs beyond the scope of the federal commitment are the responsibility of the grantee.
4. Firm funding commitments, embodied in FFGAs or PCGAs, will not be made until projects demonstrate that they are ready for such an agreement, i.e., the project's development and design has progressed to the point where its scope, costs, benefits, and impacts are considered firm and final.
5. Funding should be provided to the most worthy investments to allow them to proceed through the process on a reasonable schedule.

D. FTA Annual Report on Funding Recommendations

By law,[142] each year the USDOT submits its *Annual Report on Funding Recommendations* to the Committees on Transportation and Infrastructure and Appropriations of the House of Representatives and the Committees on Banking, Housing and Urban Affairs, and Appropriations of the Senate, as part of the President's annual budget submission to Congress in late January or early February. This report contains recommendations for the allocation of funds for the design and construction of fixed guideway New Starts and Small Starts capital investments for the upcoming fiscal budget year. As noted, the report is a collateral document to the President's annual budget submission to Congress. It is prepared by FTA, reviewed and approved by USDOT, and reviewed and approved by the Office of Management and Budget before it is submitted to Congress each year.

Most significantly, the Annual Report provides proposed funding recommendations for the upcoming fiscal year for New Starts projects "in the pipeline"—those with existing FFGAs, projects with pending FFGAs, and Small Starts. The report also makes recommendations for funding of Final Design activities for New Starts projects that achieve this status before the development of the pending fiscal year's appropriations bill. This allows FTA the flexibility to make timely recommendations somewhat later in the process as Congress drafts appropriations legislation and as FTA gets a better sense from its project oversight responsibilities of which projects are ready for Final Design funding. Finally, the report makes funding recommendations for Small Starts projects.

FTA has available to fund New Starts projects the amounts authorized in the latest 6-year reauthorization bill. An authorization law authorizes funding and sets federal policy goals. Each year a subsequent appropriations law actually funds specific programs to pay for the authorized activity. SAFETEA-LU, for example, authorized over $9 billion for New Starts funding. In addition, Congress created contingent commitment authority to permit FTA to make commitments beyond the amount in an authorization law subject to future authorization and appropriations law.[143] Contingent commitment authority essentially is an amount equivalent to the last 3 years of New Starts funding under SAFETEA-LU. Consequently, the 6-year funding authorized under SAFETEA-LU for the New Starts program, plus its contingent commitment authority, comprise the funding that FTA manages through its New Starts project development process.

August of each year is a key month in the process. It is by then that FTA must have sufficient data and information on a project to be able to make a recommendation that a project be funded in the next budget; FTA's recommendation must be approved internally at USDOT and by the Office of Management and Budget. That next budget will be presented to Congress in February for the fiscal year beginning October 1. If a project misses this time frame, it may not get funded until the next cycle.

There is also a lengthy appendix to each Annual Report that provides information on New Starts and Small Starts projects in different stages of development. The report includes the most recent ratings of these projects and notes their progress and any significant changes that have occurred since the last report. Each project's project development history and current status are described, as are its project justification and local financial commitment ratings. This is a "snapshot" in time in which FTA is updating Congress on the status of various projects in the pipeline.

Further, before issuing an FFGA, pursuant to federal transit law,[144] FTA must provide the House and Senate Committees noted previously at least 60 days' notice in writing of its intent to issue such an agreement, and shall include a copy of the FFGA as well as the evaluations and ratings for the project. Before that submission is made to Congress, FTA must seek review

[141] FED. TRANSIT ADMIN., *supra* note 65, at B-27 (2008), *available at* http://www.fta.dot.gov/regional_offices_7753.html.

[142] 49 U.S.C. § 5309(k).

[143] 49 U.S.C. § 5309(g)(4).

[144] 49 U.S.C. § 5309(g)(5).

and approval from the Office of the Secretary of Transportation and the Office of Management and Budget.

CHAPTER VIII: SMALL STARTS AND VERY SMALL STARTS

A. The Statutory and Regulatory Framework

SAFETEA-LU created a new "Small Starts" Program[145] ("Capital Investment Grants Less than $75,000,000") with simplified and more streamlined procedures for smaller New Starts projects.

1. Project Cost

To be eligible, a Small Starts project must have a § 5309 Federal New Starts share less than $75 million with a total project cost of less than $250 million. Small Starts projects are to be analyzed and rated under a more simplified New Starts criteria process.

2. Eligible Projects

Eligible Small Start projects include new fixed guideway systems and extensions, including bus rapid transit, streetcar, and commuter rail. Also eligible are non-fixed guideway corridor improvements (e.g., bus rapid transit) if a substantial portion of the project operates in a separate right-of-way in a defined corridor dedicated for public transit use during peak hours or if it has other characteristics of a fixed guideway system.

Under FTA guidance, projects proposed in corridors with any preexisting elements are not eligible for Small Starts funding.

The current statutory exemption for projects costing under $25 million from the New Starts process will be eliminated once the Small Starts regulation is final.[146]

Pursuant to FTA guidance, projects that would otherwise qualify for funding as a New Starts project may not be subdivided into several Small Starts projects.

3. Separate Funding Category

Beginning in Fiscal Year 2007, the Small Starts program is funded at $200 million per year under the overall § 5309 Capital Investment Program.

4. Selection Criteria

FTA may provide Small Starts funding for a project only if FTA finds that the project is based on the results of planning and Alternatives Analysis; justified based on a review of its public transportation-supportive land use policies, cost-effectiveness, and effect on local economic development; and supported by an acceptable degree of local financial commitment.[147]

Regarding local financial commitment, the proposed local source of capital and operating financing must be determined to be stable, reliable, and available within the proposed project timetable.[148] Moreover, if FTA gives priority to projects that are providing more local share than required, "…the Secretary shall give equal consideration to differences in the fiscal capacity of State and local governments." [149]

Because the program is expected to be as highly competitive as the New Starts program, FTA in its guidance strongly encourages project sponsors to provide an overmatch under the Small Starts program.

5. Advancement of Project to Development and Construction/PCGA

Small Starts projects are subject to project justification and financial commitment ratings of High, Medium-High, Medium, Medium-Low, or Low. In contrast to the New Starts project development process, a Small Starts project that meets requirements may advance from planning and Alternatives Analysis to project development and construction.

Rather than an FFGA, a Small Starts project is defined by a PCGA.[150] FTA may enter into a PCGA only if a project has been rated as High, Medium-High, or Medium. A PCGA specifies the scope of the project, its estimated net project cost, the project construction schedule, the maximum amount of § 5309 funding for the project, a schedule of future federal funding, and the source of local funding. The agreement may include a commitment to provide funding for the project in future years.

6. Small Starts Program Regulation

The Secretary was to issue a regulation covering the Small Starts program 6 months after enactment of SAFETEA-LU. An NPRM on New Starts and Small Starts was issued on August 3, 2007, but as noted above, the rulemaking was put on hold by Congress and was subsequently withdrawn by FTA. The Small Starts program is thus operating on the basis of guidance issued by the FTA.[151]

B. Sponsors Submit Detailed Cost Estimate Using FTA's Standardized Cost Categories

1. Project Sponsors Document

A project sponsor documents its funding strategy, specifying dollar amount and percentage of Small Starts funds requested and sources of the proposed non-Small Starts funds.

2. Funding Request Limits

A Small Starts project may request up to 80 percent of the net project cost up to $75 million, but FTA encourages project sponsors to request the smallest amount necessary to complete the project. This does not

[145] 49 U.S.C § 5309(e).

[146] 49 U.S.C. § 5309(e)(1)(B).

[147] 49 U.S.C. § 5309(e)(2).

[148] 49 U.S.C. § 5309(e)(5)(A).

[149] 49 U.S.C. § 5309(e)(5)(B).

[150] 49 U.S.C. § 5309(e)(7).

[151] 74 Fed. Reg. 7388 (Feb. 17, 2009).

preclude the project sponsor from applying federal funds, other than Small Starts funds, to the project.

C. Small Starts—Results of Planning and Alternatives Analysis

While through the rulemaking process commenters had proposed that the Small Starts Alternative Analysis phase be streamlined, FTA has kept Alternatives Analysis essentially the same as under the New Starts process with some modifications. For example, commenters had proposed that the definition of the Small Starts baseline should be the same as the NEPA "no build" alternative in all cases. FTA, in its August 3, 2007, NPRM on Major Capital Investment Projects, did not accept that but did propose a more streamlined process. The agency acknowledged that many Small Starts will be TSM improvements—lower-cost, operations-oriented upgrades to existing transit services that do not require construction of a new fixed guideway—and that in such cases a no-build alternative would be the appropriate Small Starts baseline. As a compromise, FTA proposed to accept a no-build alternative as the Small Starts baseline unless the proposed project included a dedicated right-of-way for 50 percent or more of its length in the peak period, in which case TSM would "usually" be the Baseline Alternative. Again, this FTA rulemaking has been withdrawn.

D. Project Development

1. Project Development Phases

Perhaps the most significant aspect of the Small Starts program is that all PE and Final Design work is combined into one phase. Note, however, under NEPA regulations, Final Design activities may not commence before completion of the NEPA process. Beyond this, the project development process parallels the New Starts project development phase rather than significantly streamlines it, and FTA has received criticism in this regard that is likely to be responded to in a future rulemaking.

2. Pre-Award Authority

As with the New Starts process, Small Starts projects entering project development receive blanket pre-award authority to incur project costs for PE costs incurred before grant approval. Upon completion of the NEPA process, pre-award authority is automatically granted for Final Design and to acquire real estate and relocate businesses. All other activities must receive an LONP to be eligible for federal reimbursement. Under both pre-award authority and an LONP, all federal requirements must be met before incurring costs to retain eligibility of the costs for future FTA grant assistance.

3. Project Justification

As with the New Starts process, project justification under Small Starts involves a comparison between the proposed Small Starts project and a Baseline Alternative. FTA will approve the Baseline Alternative to be used in the evaluation of Small Starts before the project is allowed to enter into project development.

E. Project Justification Rating

1. Criteria

Rather than all of the project justification criteria used under the New Starts program, the Small Starts program limits the criteria to land use, cost-effectiveness, and other factors (including economic development).[152] FTA continues to review how to develop rating criteria for economic development. Note, moreover, that on May 19, 2009, FTA published a *Federal Register Notice of Availability of Proposed Guidance on New Starts/Small Starts Policies and Procedures and Request for Comments*.[153] For Small Starts, FTA proposed that the project justification rating of a project seeking Small Starts funding be based on ratings for the following criteria with the proposed weights shown in parentheses: cost effectiveness (one-third), economic development effects (one-third), and land use policies supportive of public transportation (one-third).

2. Cost-Effectiveness

A significant change proposed by FTA in terms of the Small Starts program is that projects be evaluated based on the opening year of service versus the New Starts planning horizon covering no less than 20 years. At the same time, the number of user benefits used in the calculation will be increased by a factor of 1.5, reflecting a national 20-year growth assumption. Because of this shorter time frame, FTA believes the Small Starts planning and project development phases can be simplified.

F. Financial Capability

While the overall financial capability requirements are similar to the New Starts requirements, FTA's review has been streamlined significantly. A project will receive a Medium rating for local financial commitment if there is a reasonable plan to secure local share, the project operating and maintenance budget is under 5 percent of the agency's operating budget, and the agency is in sound financial condition. If a project cannot meet these conditions, it must submit a detailed financial plan as under the New Starts criteria.

G. Overall Rating

All Small Starts projects will need to achieve an overall rating of Medium or better, consisting of a Medium or better rating for both project justification and local financial commitment.

[152] 49 U.S.C. § 5309(e)(4).

[153] 74 Fed. Reg. 23776 (May 19, 2009).

H. Authority to Proceed to Project Construction Grant Agreement

1. Funding Recommendations

As with New Starts projects, FTA's funding decision for Small Starts projects is distinct from the project evaluation and rating process. Projects that meet or exceed the criteria for Small Starts are eligible, but are not guaranteed, to be recommended for funding. Funding decisions for the Small Starts program are included in the Annual Report on Funding Recommendations.

2. Requirements to Proceed to PCGA

A project proceeding to a PCGA must

(i) Be authorized for construction by federal law.
(ii) Have an overall rating of Medium or better.
(iii) Meet all applicable federal and FTA program requirements.
(iv) Be ready to use Small Start funds.

I. Project Construction Grant Agreement

The statutory requirements applicable to the Small Starts program provide for a PCGA,[154] which FTA has described as a simplified FFGA. FTA negotiates a PCGA with the grantee during project development. As with the FFGA, FTA must provide Congress 60 days' notice of its intent to enter into a PCGA. The terms and conditions of the PCGA include, at a minimum:

1. The grantee will be required to complete construction of the project, as defined, to the point of initiation of revenue operations, and to absorb out of local or non § 5309 Capital Investment Grant funds any additional costs incurred or necessitated by the project during construction.
2. FTA and the grantee will establish a schedule for anticipating federal contributions during the construction period.
3. Specific annual contributions under the PCGA will be subject to the availability of appropriations and the ability of the grantee to use the funds effectively.
4. The total amount of federal funding under PCGAs and potential funding under Letters of Intent will not exceed the amount authorized for Small Starts under 49 U.S.C. § 5309.

J. Very Small Starts—Created by FTA, Not Statute

When it issued its New Starts and Small Starts proposed rulemaking, FTA proposed the creation of a Very Small Starts program. This was an FTA proposal; it was not required by a provision of law. As noted earlier, FTA has withdrawn this rulemaking, although there is still guidance on the Very Small Starts program on FTA's Web site.

1. Very Small Starts—Key Features

FTA guidance provides that Very Small Starts must meet Small Starts eligibility requirements; must have a total project cost of less than $50 million and an average cost of less than $3 million per mile (exclusive of rolling stock); and must have at least 50 percent of the project in a fixed guideway during the peak period or when congestion inhibits transit system performance or be a corridor bus project that includes the following elements:

- Substantial transit stations.
- Traffic signal priority/preemption, to the extent, if any, that there are traffic signals on the corridor.
- Low-floor vehicles or level boarding.
- Branding of the proposed service.
- Ten-minute peak/Fifteen-minute off-peak headways or better while operating at least 14 hours per weekday (not required for commuter rail or ferries).
- Located in corridors with existing riders who will benefit from the proposed project in excess of 3,000 per average weekday.
- Having a total capital cost less than $50 million (including all project elements) and less than $3 million per mile, exclusive of rolling stock.

Projects that would otherwise qualify for funding as a New Starts or Small Starts project may not be subdivided into several Very Small Starts projects.

2. Project Development and Evaluation Process

FTA's proposed project development process is similar to that for the Small Starts process and, indeed, for the New Starts process. For Very Small Starts, "…[t]he steps that must be undertaken are essentially the same as those required under section 611.17 for New Starts PE and final design, but again combined and tailored to the much smaller scale of the proposed Very Small Starts project."[155] As with Small Starts, the project must be rated at least Medium to advance into project development. Also as with Small Starts, the commitment document for a Very Small Starts project would be the PCGA.

3. Warrants

Perhaps most significant about FTA's proposed Very Small Starts program would be its reliance upon "warrants" by a project sponsor that it meets a set of defined characteristics. That is,

> [b]ecause Very Small Starts projects are made eligible based on a set of project characteristics that assures that they are effective and cost-effective, rather than rate these projects on the basis of an evaluation of information, FTA will simply assign an overall project justification rating of "medium" to these projects if they meet the predefined characteristics, although "other factors" can be used to increase this rating.[156]

[154] 49 U.S.C. § 5309(e)(7).

[155] 72 Fed. Reg. 43328, 43359 (Aug. 3, 2007).

[156] *Id.*

This proposed approach by the FTA to allow a project sponsor to rely upon a set of predefined characteristics raises the issue of whether FTA would adopt this approach more broadly, as part of the Small Starts program or even, in certain instances, the New Starts process.

CONCLUSION

This *Legal Handbook for the New Starts Process* presents an overview of the FTA's New Starts project development process and the legal issues associated with it. Given the issues at stake and the amount of discretionary funding project sponsors compete for, it is not surprising that the FTA's project development process is lengthy and complex. Moreover, there are many actors involved in the process. Indeed, a key actor, Congress, by legislation has directed FTA to modify the weight it assigns its project justification criteria, and FTA consequently has withdrawn a pending New Starts rulemaking and indicated that it would be developing a new rulemaking and new guidance.

Nonetheless, although there have been changes before in the evaluation criteria and how FTA rates them, the overall framework of the New Starts process has been in place for some time and should remain generally the same. The environmental process, the methods of project delivery, and the FFGA, for example, are not likely to change.

However, given the prospects for some changes in the process, a lawyer for a New Starts project sponsor about to receive FTA approval to proceed into PE should consider advising the project sponsor to enter into a PDA with FTA (see Chapter II). A PDA should act as a "road map" for the project, establishing timelines and responsibilities for both the project sponsor and the FTA for principal issues to be resolved, products to be completed during project development, all significant uncertainties and the strategies to deal with them, and the schedules for reaching significant milestones during the course of project development. As noted earlier, such an agreement only works if both sides are fully committed to honoring it to the maximum extent feasible. If so, a PDA should bring focus and greater certainty to the complex and lengthy process outlined in this Handbook.

Appendix A: Selected Projects

This Appendix to the Handbook includes descriptions of New Starts projects that provide interesting and real-life examples of issues and problems that inevitably arise as a project proceeds through the New Starts project development process. The projects described also give a good sense of project timelines.

TO PE OR NOT TO PE, THAT IS THE QUESTION

Many proposed New Starts projects have undergone a lengthy Alternatives Analysis process, but the project sponsors never have sought approval from the Federal Transit Administration (FTA) to proceed into Preliminary Engineering (PE). There are as many reasons for this as there are proposed projects—a failed referendum, change in political leadership, downturn in the economy. It is often difficult to get all of the different moving pieces at the local level involved in supporting a major transportation project working together at the same time.

Some of the most successful projects—those in Denver and Salt Lake City, for example—initially were voted down in local referenda. But in both cases the projects ultimately were approved and became so successful that voters overwhelmingly voted to extend the rail systems. In short, it can take a long time at the local level to get the necessary support to begin the process to construct a new transit system.

RESTRUCTURING A PROJECT TO MAKE IT WORK—NORFOLK, VIRGINIA, LIGHT RAIL TRANSIT[157]

Hampton Roads Transit is constructing the Norfolk Light Rail Transit (LRT) Project, a 7.4-mi, double-track, LRT line within Norfolk, Virginia, that will serve as the initial segment of a regional transit system. The project initially was to be larger, but the project sponsor was able to restructure it in response to the results of a local referendum.

The project began as an 18-mi LRT system between Norfolk and Virginia Beach; in 1997, FTA approved it into PE. A draft Environmental Impact Statement (EIS) was completed in 1999. In that same year, however, Virginia Beach voters did not approve a funding measure for the project. As a result, the project was revised to be constructed in Norfolk only, and FTA approved that downsized project into PE in 2002. A supplemental draft EIS was completed in 2003. The project scope and budget were reduced to fit the now 7.4-mi system. FTA completed its environmental impact work on the project in 2006, and the project was approved into Final Design in 2006. A Full Funding Grant Agreement (FFGA) was entered into in 2007, and the project is expected to enter revenue operations in 2010.

PROCEEDING FROM PE TO FINAL DESIGN: IF AT FIRST YOU DON'T SUCCEED—THE DULLES CORRIDOR METRORAIL PROJECT[158]

The Dulles Corridor Metrorail Project presents an interesting study on a number of fronts but especially in its changing of modes (from bus rapid transit (BRT) to rail), its changing of project sponsors, and in the U.S. Department of Transportation's (USDOT) decision to allow it to proceed into Final Design after first indicating that it would not.

Following years of study, in March 2000 FTA approved initiation of PE for the Dulles Corridor BRT Project. Upon completion of a draft EIS in 2002, a 23.1-mi Metrorail extension to the Dulles Airport area replaced BRT as the locally-

[157] This and the following summaries are based in part on project profiles in FED. TRANSIT ADMIN., ANNUAL REPORT ON FUNDING RECOMMENDATIONS, PROPOSED ALLOCATIONS OF FUNDS FOR FISCAL YEAR 2009, A-63 (2008), http://www.fta.dot.gov/regional_offices_7753.html. The project summaries in the FTA's annual proposed allocation of New Starts funds provide useful information on pending projects.

[158] *Id*. at A-123.

preferred alternative (LPA). Due to funding concerns, an 11.9-mi project terminating at Wiehle Avenue was identified by the project's original sponsor, the Virginia Department of Rail and Public Transportation (DRPT), as the first phase of implementation of the LPA. FTA approved a supplemental draft EIS in 2003 reflecting this new terminus.

FTA approved DRPT's request to proceed into PE for the Wiehle Avenue Project in 2004. DRPT received a Record of Decision on the final EIS for both this project and the full LPA in 2005.

In 2006, the Commonwealth of Virginia accepted the Metropolitan Washington Airports Authority (MWAA) proposal to assume control of the Dulles Toll Road (essentially the route of the extension) and responsibility for construction of the project. MWAA was expected to be able to accelerate implementation of the initial project as well as the full extension to Dulles using Dulles Toll Road revenues. The project was transferred to MWAA in 2007.

The project scope includes construction of five new stations, a major park-and-ride lot at the terminus, expanded rail yard storage, and purchase of 64 heavy-rail vehicles. The extension would be operated by the Washington Metropolitan Area Transit Authority.

The total cost of the project is approximately $2.9 billion; the federal New Starts share sought is $900 million or 30.4 percent of the overall project cost.

As the project sponsors were seeking FTA's approval to allow the project to move from PE into Final Design, FTA expressed a number of concerns. In a January 24, 2008, letter to Virginia Governor Timothy M. Kaine, FTA Administrator James Simpson wrote that the project had received an overall rating of Medium-Low. Under FTA procedures, the FTA may not permit a project to proceed into Final Design with such a rating. The letter further provided that "FTA is concerned that the cumulative risks and uncertainties that characterize the Dulles Project in its current form are extremely likely to result in further cost escalation and schedule delay."

Not surprisingly, the FTA letter generated significant press coverage in the Washington, DC, area. Ultimately, FTA granted a request by Governor Kaine for more time to respond to FTA's concerns and "to make additional adjustments—large or small—to proceed forward into Final Design."

An April 30, 2008, letter from USDOT Secretary Mary E. Peters was the next milestone in the process. "Dulles Rail Revival—Back From the Dead, Thanks to Effective Advocacy" was the *Washington Post*'s reaction to the Secretary's letter allowing the project to proceed into Final Design. In her letter the Secretary noted that "…the financial stability and oversight of the Project has improved" and "…cost reductions have been verified and mechanisms have been established to enhance inter-organizational cooperation, technical capacity and project management." It also noted that "…much work remains to be done to ensure full Federal support of this Project, and there is no guarantee at this time the Project will be eligible for a Full Funding Grant Agreement (FFGA)."

The Secretary's letter emphasized two specific ongoing issues of concern. The first involved the upkeep and maintenance of the existing Metrorail system, noting that the Washington Metropolitan Area Transit Authority itself had only recently identified $489 million in urgent unfunded capital needs. Second, the Secretary urged the Governor "…to continue efforts to reduce public exposure and transfer risk from the public to the private sector." Nonetheless, an FFGA for the project was signed on March 10, 2009.

Clearly, given its location in the Washington, DC, area, the project is in a politically charged environment. But it survived a change in mode and project sponsor, as well as initial reluctance by the FTA to allow it to proceed into Final Design. While newspaper coverage of the change in USDOT's position focused on effective advocacy by project sponsors, the

record shows that a number of changes to the project were made by project sponsors in response to FTA and USDOT concerns.

A SUCCESSFUL LARGE-SCALE TRANSPORTATION PROJECT: LESSONS LEARNED—THE DENVER T-REX PROJECT

Denver's Transportation Expansion (T-REX) Project is a successful example of a design–build contract delivery method applied to a multimodal (highway and LRT) infrastructure megaproject. While there are a number of other examples of highly successful design–build infrastructure projects, none was multimodal and of the size and scope of the T-REX Project.

A comprehensive 2007 report on the project is available on the Federal Highway Administration Web site.[159] It is an invaluable compendium of lessons learned on various aspects of the project, including the following:

- Project goals.
- Project management/organization.
- Risk assessment.
- Procurement process.
- Design–build contract.
- Partnering.
- Public information.
- Project budget.
- Quality management.
- Contract management.
- Right-of-way process.
- Utilities.
- Noise walls.
- Intergovernmental agreements.
- Third-party enhancements.
- Light rail stations and transit-oriented development.

[159] FED. HIGHWAY ADMIN., TRANSPORTATION EXPANSION PROJECT: FINAL LESSONS LEARNED REPORT (June 2007), *available at* www.fhwa.dot.gov/majorprojects/lessonslearned/trex/TREX.pdf. The report includes a summary of the overall project and how it was accomplished, as well as a separate section on each "lesson learned" as listed above.

- LRT system engineering.
- Project acceptance/close-out.

The report notes that the project team early on established three key goals: meet or stay below budget, finish on or ahead of schedule, and deliver a quality project. These goals were formulated early in the design and development stage. They played a key part in the development of procurement documents and led to the success of the project.

INNOVATIVE APPROACHES TO A PROGRAM OF INTERRELATED PROJECTS—FTA'S PROPOSED PARTICIPATION IN UTA'S TRANSIT 2015 PROGRAM

In August 2007, FTA entered into a Memorandum of Understanding (MOU) with the Utah Transit Authority (UTA). UTA will be constructing approximately 70 mi of additional light rail and commuter rail transit by the year 2015 at an estimated cost of $2.85 billion. Voters passed local taxing referenda that will finance the projects.

There are essentially five different transit projects being built at the same time.

In brief, the MOU would have allowed the five individual projects in a program of interrelated fixed guideway projects to move ahead at the same time—commuter rail between Salt Lake City and Provo, the Mid-Jordan Light Rail Line, the West Valley Light Rail Line, the Airport Light Rail Line, and the Draper Light Rail Line.

Within the five interrelated projects, FTA would have permitted some to be funded entirely with local funds and some to be funded with an 80 percent federal share. It is important to note that the Federal New Starts share for the entire program of interrelated projects is 20 percent or less. In rating UTA's local financial commitment for the FTA-funded portions of the projects, FTA indicated that it would consider the local funding for the *entire* Transit 2015 Program, rather than the local share of the FTA-funded projects individually.

Moreover, and perhaps most significantly, the full range of federal grant and environmental requirements would have been limited to the projects specifically funded by FTA.

The MOU would have created an expedited FTA review process to evaluate, rate, and approve individual projects within an interrelated program of projects. At the close of the Bush Administration, however, the Office of Management and Budget would not let FTA proceed with the MOU. But the concept of interrelated projects attracted much interest and is likely to be considered again.

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