WHAT IS THE NEW STARTS PROCESS?

Picture Boston without the T; Chicago without the L; or Washington, DC without Metro. Hard to imagine, isn’t it? These public transit systems help to create livable cities that are easy for commuters to navigate. However, planning, engineering, constructing and obtaining local, State and Federal funding for a transit project in any city is anything but easy. If a community seeks federal funding, in order to enjoy the benefits of a fixed guideway transit project, they must first go through the Federal New Starts process.

Washington Metropolitan Area Transit Authority

The New Starts project evaluation and approval process encompasses every minute detail of transit projects from design to construction and it is all administered by the Federal Transit Administration (FTA). The New Starts program is the principal federal program that enables transit systems to secure the necessary funds to build or extend fixed guideway projects. It is a multi-year process that includes extensive FTA oversight and review, annual reporting of project status and updated information, with a lot of planning, design, engineering and paperwork from initiation of the project to opening the project for revenue service.

This handbook is designed to help you navigate your way through the chutes and ladders of the process. As Congressional staff, you’ll play a critical role and we hope that you’ll keep this resource handy to guide you through what is a very long, very complex, but very important process. This handbook will cover:

- New Starts Basics
- Congressional Involvement in Project Authorization and Funding
- Overview of New Starts, Small Starts, and Very Small Starts – eligibility, reviews and ratings
- Project Development Process – how a project moves through the FTA ratings and evaluation process
I. NEW STARTS BASICS

Under current FTA policy, there are three kinds of projects, based mostly on project cost and operating characteristics. FTA has developed somewhat different rules and guidance for each:

- **New Starts** – mostly heavy rail, commuter rail, light rail and some bus rapid transit projects that exceed $250 million in total project cost and which seek more than $75 million in section 5309 (New Starts) funds.

- **Small Starts** – fixed guideway projects of any type provided the projects do not exceed $250 million in project cost and seek no more than $75 million in section 5309 (New Starts) funds.

- **Very Small Starts** – specifically bus rapid transit projects that cost less than $50 million and which have operating characteristics consistent with FTA guidance.

Application to enter into Preliminary Engineering (PE)

Annual updates submitted to FTA each year after approval to enter into PE

Application to enter into Final Design (FD)

Application for and approval of a Full Funding Grant Agreement (FFGA)

Small Starts projects have three major reporting and review steps (which will be discussed in greater detail later):

- **Application to enter into Project Development (PD)**

- **Annual updates submitted to FTA each year after approval to enter into PD**

- **Application for and approval of Project Construction Grant Agreement (PCGA)**

The House and Senate authorizing and appropriations committees are extensively involved in each phase following entry into PE with regular briefings provided by FTA and Congressional review prior to entry into FD and execution of the FFGA or PCGA.

Trinity Railway Express Commuter Rail

North Coast Transit District Light Rail System

There are four major reporting and review steps for New Starts projects (which will be discussed in greater detail later):
II. CONGRESSIONAL INVOLVEMENT

Authorization

For New Starts/Small Starts projects to go from “idea” to “real”, they must first be authorized by Congress. This happens in the surface transportation authorization bill which is considered by Congress roughly every six years. In the summer of 2005, the current surface transportation bill, SAFETEA-LU became law. SAFETEA-LU is set to expire on September 30, 2009 and Congress must act quickly to ensure that a new bill will be ready.

- SAFETEA-LU (P.L. 109-59): August 10, 2005
- What “TEA” will be next???

Aside from their quirky acronyms, these bills are noted for their impact on the development of the nation’s system of highways, bridges, and most importantly, transit. In terms of New Starts, SAFETEA-LU authorized hundreds of New Starts projects. This set the stage for a host of existing transit systems to build system extensions and for fixed guideway transit service to be initiated in several new parts of the country. Obtaining an authorization for a new project, or an extension to an existing project is the key that unlocks the door to being eligible to compete for Federal funding. SAFETEA-LU authorized New Starts projects in four categories:

- Project Authorizations (52)
- Preliminary Engineering (264)
- Final Design and Construction (38)
- Full Funding Grant Agreement (31)

ACTION STEP: Your project must obtain an authorization in each surface transportation bill as no projects authorized in a prior surface transportation authorization bill carries over to the next bill. The House Transportation and Infrastructure Committee has already requested that House Members submit project requests and it is expected that the Senate Banking, Housing and Urban Affairs Committee will also make a similar request for projects before Congress completes action on the surface transportation authorization bill.

FRIENDLY ADVICE: Unless the community has a very clear idea regarding the project alignment and length, it is better to have an authorization that describes the project in general rather than specific terms.
Appropriations

So you have a project authorization, now what? The annual appropriations process provides funding to the FTA. Funding may be provided from the section 5339 Alternatives Analysis program for early project work and from the section 5309 New Starts program for preliminary design and later stages, including construction for projects that have signed FFGA. This funding for “Fixed Guideway Capital Projects” is limited and highly competitive. Priority for annual funding is given to those projects which already have their FFGAs in place. In fact, the President’s Budget usually follows the funding schedule included in the FFGA and this serves as a guide for appropriators until the project is complete.

ACTION STEP: Securing early funding for your project from section 5339 or section 5309 is challenging due to the competition. Thus, your Member must make this request a very high priority.

FFGA and is under construction, securing larger sums of funding is harder because nearly 85 percent of the monies are provided to projects with FFGAs.

Key Project Decision Points

Much like our education system, transit projects must pass a series of levels in order to graduate. At each level, they are graded on various project components and elements:

- Alternatives Analysis/Major Investment Study (AA):
- Preliminary Engineering (PE)
- Final Design (FD):
- Full Funding Grant Agreement (FFGA)

Any of these levels can be a “make it or break it” for the project. This is where the chutes and ladders come into play. Note: We will discuss the Small Starts program a little later in the handbook as well as a more detailed discussion of the New Starts project evaluation and approval process. We are just hitting the high points in this section.

ACTION STEP: Securing early funding for your project from section 5339 or section 5309 is challenging due to the competition. Thus, your Member must make this request a very high priority.

FRIENDLY ADVICE: If your local project is not expected to enter into PE within the upcoming fiscal year, then seek funding from section 5339. If your project is expected to be in PE within the upcoming fiscal year, then seek funding from section 5309. Until your local project is poised to enter into FD or receives an

- Port Authority of Allegheny County Light Rail
- Washington Metropolitan Area Transit Authority Heavy Rail
**ACTION STEP:** Regular briefings on project status and staying in touch with FTA can help a project move along in the New Starts project evaluation and approval process. This may require your office to make inquiries with FTA at various points in the process to check on the project status.

**Tri-County Metropolitan Transportation District of Oregon**

**FRIENDLY ADVICE:** The New Starts process is lengthy and frustrating. It is easy to get impatient. However, while your Member should stay abreast of the project and communicate regularly with FTA, the ability of a Member to influence the FTA project evaluation and approval process is minimal and should be undertaken advisedly as the issues usually are technical and must be resolved between the project sponsor and FTA. Moreover, the committees of jurisdiction will take the full 60 days when reviewing the FFGA. However, your member may wish to weigh-in to show support for the project so that the committees are aware of your support and interest in the project.

**Authorized and Appropriated Funding Levels**

As discussed earlier, the surface transportation bills set the authorized funding amounts for the New Starts program. However, it is up to the appropriators to actually provide this funding. Depending on the leadership of the House and Senate Transportation and Housing and Urban Development (THUD) subcommittees, the authorized and appropriated levels do not always match up. The chart below illustrates the authorized versus funding levels since fiscal year 2004.

As a congressional staffer, you can help to keep your local project on track by working to ensure that the appropriated levels match the authorized amounts. The larger the pot of funding for appropriations, the greater likelihood your project will receive the Federal resources that it needs.

**New Start Funding (FY04-09)**

*Numbers obtained from Senate transportation appropriations bill. No other bills are currently available.*

**Annual Guidance and Reporting Instructions**

By law, FTA must publish its annual guidance and reporting instructions in the Federal Register. These “Notices of Availability” signal proposed changes to project and reporting requirements and can have a significant impact on projects that are in the New Starts pipeline. For instance, FTA can propose new levels of detail for environmental review and cost-effectiveness. Changing the rules of the game mid-stream can be devastating for a project that is trying to compete for an eventual FFGA. As such, these publications are carefully reviewed and scrutinized by the transit industry. The industry has an opportunity to comment, however FTA has the ability to move forward with proposed changes as they see fit.
Given this dynamic, on occasion Congress has had to include report language providing specific direction to FTA.

As required by section 3011(d)(6) of SAFETEA-LU, FTA must comply with the following reporting instructions:

- 180 days after enactment of SAFETEA-LU;
- Each time significant changes are made to the process or criteria;
- At least every two years.

In turn, projects in the pipeline must provide updated information to FTA per the following schedule:

**July 14th:** FTA requests any changes to project justification criteria since the last evaluation by FTA. Items that require updates include:
- Travel forecasts
- Capital costs
- Operations & maintenance cost methodology
- Annualization factor

**August 18th:** Transit agencies/local project sponsors submit formal New Starts templates, land use and financial information to FTA

**September 30th:** This is the cutoff date for FTA to consider any new, updated or revised information. This deadline is driven by the annual Federal budget process. As mentioned earlier, the Administration’s Budget typically provides funding guidance for projects in the New Starts pipeline.

**Annual New Starts Report to Congress**

The information generated by the reporting process above, is then included in the annual New Starts Report to Congress. This report is of particular interest to the House and Senate committees with jurisdiction over funding and authorization of FTA and it serves as a guide for the Administration’s Budget request to Congress. The report provides summaries and
funding recommendations for projects in PE, FD, pending FFGAs, existing FFGAs, pending Small Start PCGAs and existing PCGAs. Project summaries include an updated project rating. The project ratings are key to leveraging congressional support and funding.

The New Starts Report is available on FTA’s website under reports and publications at http://www.fta.dot.gov/publications/reports/reports_to_congress/publications_2618.html

Congressional Review of FFGA and PCGA

Before FTA can execute an FFGA or PCGA with a local project sponsor, Congress is given a 60-day period to review the project. During this timeframe, the project is transmitted to the following committees of jurisdiction:

✓ House Transportation & Infrastructure
✓ Senate Banking, Housing and Urban Development
✓ House Appropriations
✓ Senate Appropriations

Any of these committees can raise concerns which must be resolved. This is the last chance for Congress to object before FTA and the project sponsor enter into a legally binding contract.

III. OVERVIEW OF NEW STARTS AND SMALL STARTS PROGRAM

Eligible Projects

Within Fixed Guideway Capital Improvements or New Starts, there are two authorized categories: New Starts and Small Starts. Small Starts and Very Small Starts, which FTA established through guidance documents, follow a similar course as their New Starts counterparts, but they are designed to provide transit solutions for cities that may not qualify for the New Starts process or that have smaller scale projects. These programs were created in SAFETEA-LU and the first generation of Small Starts and Very Small Starts are just starting to navigate their way through these new avenues.

✓ New Starts
  • Think along the lines of subways, light rail and commuter rail;
  • Eligible projects are those that are:
    o Total cost of $250 million or more; and
    o With a federal share of $75 million or more.

✓ Small Starts
  • Think along the lines of streetcars, commuter rail and bus rapid transit projects;
  • These types of projects are ideal for a simplified evaluation and rating process by FTA. Specifically, Small Starts applicants have only two pre-
grant phases, as opposed to three for New Starts. Applicants first complete AA, and then move into "project development," which combines the New Starts PE and FD work;

• To be eligible, total project cost must be less than $250 million with the Federal share not to exceed $75 million;

• In addition, a project must meet one of the following guideway criteria:
  - Be a fixed guideway for at least 50% of the project length in the peak period –
  - AND/OR
  - the project must be a corridor-based bus project with:
    - Transit Stations;
    - Signal Priority/Pre-emption (for Bus/LRT);
    - Low floor/level boarding vehicles;
    - Special Branding of service;
    - Frequent Service of 10 minute peak/15 minute off peak;
    - Service offered at least 14 hours per day.

• Funding for Small Starts was first provided in the FY08 Appropriations cycle.

✓ Very Small Starts
  - Think along the lines of very small bus or ferry projects;
  - Very small starts has a significantly streamlined application process to help expedite projects;
  - Eligibility is similar to Small Starts, but also contains the following:
    - Projects that cost less than $50 million;
    - Existing daily riders of over 3,000;
    - Cost under $3M per mile (excluding rolling stock).

Funding for System Planning and Alternatives Analysis

Prior to passage of SAFETEA-LU new systems or extensions of existing fixed corridors could use New Starts funding for system planning and AA activities. Today, projects seeking assistance for initial planning efforts can look to the following Federal resources:

- 5303 Metropolitan Planning
- 5307 Urbanized Area Formula
- Title 23 flexible funding
- 5339 Alternatives Analysis Program

Timely Local Decision Making

It is important to think of the New Starts process as a marathon and not a sprint. On average, it takes close to 10-years to move a project from AA to FFFA. This is truly an example where communities must be ahead of curve with their long-term planning, population
forecasts and travel demand models. As this process moves forward, the ways in which a community elects to develop and grow will impact the project’s ability to move through the New Starts process. In some ways, this can feel like the age old question of which came first, the chicken or the egg? Let us assure you that if you are a community that wants transit, you must make local land use decisions as if the transit system is already in place. Think in terms of mixed use development rather than gated communities, higher densities rather than single family homes and walkable communities rather than streets without sidewalks.

Approval of a Local Match

Due to the highly competitive nature of the New Starts process, having a solid local match in place is the lynchpin for success. Trust us; we’ve seen too many great projects stopped dead in their tracks because they could not secure a local match. This local match will leverage the Federal investment. Nowadays, while the statute requires a minimum of 20% local funding, localities are providing approximately 50% of the total project cost and without it, the FTA won’t seriously consider project proposals. To secure a local match, many communities have turned to innovative financing mechanisms such as:

- Tax Increment Financing
- Dedicated Local Sales or Property Tax
- State funding from the Highway Trust Fund
- Flexing of Federal funds from the Surface Transportation Program
- Toll revenues

Contingent Commitment Authority

Current law permits FTA to commit future budget authority for New Starts and Small Starts projects beyond what is available in an authorization bill pursuant to 49 U.S.C. 5309(g)(B) 5338(c), and 5338(f). Contingent commitment authority (CCA) beyond the budget authority provided in a surface transportation authorization bill is an amount equal to the last three years of an authorization bill and is especially important at the end of an authorization bill. Thus, if the last three years of an authorization bill provided $1.4 billion, $1.6 billion and $1.8 billion, respectively, then FTA would be able to commit an additional $4.8 billion in budget authority ($1.4B + $1.6B + $1.8B = $4.8B). This upside of CCA is that it helps ensures that projects can continue to advance in the project development process and go to construction, if they are ready. The down-side of CCA is that the FTA will have already committed budget authority for New Starts/Small Starts projects that is made available in the new surface transportation authorization bill.
IV. FTA NEW STARTS PROJECT RATING AND EVALUATION PROCESS

Process Overview

When evaluating a project for the New Starts process, FTA considers the following project justification factors:

- Mobility Improvements
- Cost Effectiveness
- Public Transit Supportive Land Use
- Economic Development Effects
- Environmental Benefits
- Operating Efficiencies
- Financial Plan

These factors, as outlined below, also happen to be project requirements directed by SAFETEA-LU. SAFETEA-LU states that projects proposed for New Starts funding be justified based on a comprehensive review of six criteria. It is important to note that not all of these factors carry the same weight.

Until recently, FTA assigned a 50% weight to cost effectiveness with the remaining 50% assigned to the other criteria. There is much debate throughout the industry as to whether cost effectiveness captured the full breadth of all of the project benefits. In response, Congress did change the law as part of the SAFETEA-LU Technical Corrections Bill to require FTA to give "comparable, but not necessarily equal" weight to these criteria. Implementation of this change will be realized in the 2009 New Starts Guidance with cost effectiveness being assigned a 20% weight.

- Mobility Improvements (Applies only to New Starts)

As required under SAFETEA-LU, this element measures the following:

- Amount of time potential riders will save using the proposed system;
- Amount of time that commuters continuing to use cars will save by having reduced vehicle congestion (this is currently not being captured, but FTA does seek to assign a factor to the projects impact on travel time for auto users);

- Amount of transit dependent riders using the proposed project;
- Amount of transit dependent user benefits per mile;
- Share of user benefits received by transit dependent population as compared to share of transit dependent population in the region.
✓ Cost effectiveness (Applies to New Starts and Small Starts)

FTA defines cost effectiveness as the total annualized capital cost and annual operating costs divided by user benefits, which are expressed in terms of travel time savings. FTA does give additional dollar value credit for project features such as technology utilized and the fact that a rider does not need to make a transfer. FTA currently requires that a project must realize a "medium" or higher for cost effectiveness to be recommended for funding. To the right is a chart that shows the breakpoints as of the 2008 New Starts Guidance and Reporting Instructions.

It is important to note that cost effectiveness has been the subject of much contention. The formula used to produce these values is highly complex and arcane. For "costs", the formula adds annual operating costs plus an annualized value of the construction cost. For "effectiveness", FTA measures the change in travel time equivalents between the proposed project and (for most New Starts [projects and some Small Starts projects] a theoretical "Baseline" enhanced bus alternative. The benefits do not include any benefits to roadway or highway users, changes in development patterns or densities connected to the project, any locational choices for residents or businesses connected to the project, or other benefits that cannot be calculated in terms of travel time.

Since a picture is worth a thousand words, on the following page there is a chart prepared by the General Accountability Office in the report, "Public Transportation: Improvements Are Needed to More Fully Assess Predicted Impacts of New Starts Projects" (July 2008) that illustrates how FTA compares projects to determine which ones are "cost effective."

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<thead>
<tr>
<th>COST EFFECTIVENESS BREAKPOINTS – 2008</th>
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<tbody>
<tr>
<td>RATING</td>
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<td>High</td>
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✓ Public Transit Supportive Land Use

Outside of creating transportation options, New Starts projects also impact and shape the ways the communities develop. For instance, FTA takes a close look at development plans around proposed stations and alignments. The goal is to link mixed-use and high density development throughout the corridor to maintain and increase transit ridership. For example, placing an auto dealership next to a transit station would not be viewed as an optimum land use choice. However, creating a development that includes housing, job opportunities, retail options and essential services does support transit as well as helping to attract new riders. This may require changes in zoning ordinances at the local level, but everyone benefits from Transit Oriented Development (TOD).
Figure 3: Example of a TSUB Calculation

Baseline alternative:

- 100 transit travelers
- Wait time: 5 minutes
- Local bus: 20 minutes
- Transfer time: 4 minutes
- Train: 20 minutes
- Destination

Calculations:

\[ 4 \text{ minutes transfer time} + 5 \text{ minutes wait time} = 9 \text{ minutes total wait/transfer time (baseline)} \]

Build alternative:

- 120 transit travelers
- Wait time: 3 minutes
- Train: 30 minutes
- Destination

Calculations:

\[ 9 \text{ minutes total wait/transfer time (baseline)} - 3 \text{ minutes total wait/transfer time (build)} = 6 \text{ minutes wait time savings} \]

\[ 40 \text{ minute total run time (baseline)} - 30 \text{ minute total run time (build)} = 10 \text{ minutes run time savings} \]

User benefits = \[ \frac{A}{100} \times \left( 2 \times \text{wait time savings} + 6 \times \text{run time savings} \right) \]

Original trips:

- 100 number of original travelers
- \( \frac{A}{2} \) wait time savings
- \( \frac{A}{6} \) run time savings

New trips:

- 20 number of new travelers
- \( \frac{B}{2} \) wait time savings
- \( \frac{B}{10} \) run time savings

TSUB value = \[ \frac{A}{100} \times \left( 2 \times \frac{B}{2} \times \text{wait time savings} + 6 \times \frac{B}{10} \times \text{run time savings} \right) = 2,420 \text{ minutes} \]

Wait/transfer time savings weighted as double because wait and transfer times are generally perceived as more onerous by travelers.

FTA divides the total time savings accruing to new transit users by two because travelers value the user benefits created by projects differently.

Source: GAO and FTA.

*The baseline alternative assumes low-cost improvements are made to the transportation network.

*The build alternative assumes the proposed New Starts project (i.e., fixed guideway transit infrastructure investment) is constructed.

*For more information on how TSUB is calculated, including why user benefits are valued differently for new transit travelers, see appendix III.
In fact, FTA funds are available to support TOD elements such as transferring land for nearby real estate development; preparing land for development; providing enhanced access; and developing on-site community services such as dependent care, health care, public safety, or commercial conveniences.

In its evaluation of the land use for New Starts projects, FTA explicitly considers the following transit supportive land use categories and factors:

- Existing Land Use
- Transit Supportive Plans and Policies, including the following factors:
  - Growth management;
  - Transit supportive corridor policies;
  - Supportive zoning regulations near transit stations;
  - Tools to implement land use policies.

- Performance and Impacts of Policies, including the following factors:
  - Performance of land use policies; and
  - Potential impact of transit project on regional land use.

- Economic Development Effects

Land Use Development is closely linked to economic development. Studies have shown that development occurs alongside permanent transportation investment and in corridors where there is existing or potential jobs, housing or attractors, such as sports arenas, colleges and universities, or major entertainment districts. In addition, homes near transit stations also maintain values at a better rate than those that are accessible only by cars. Until recently, FTA did not separately measure economic development, even though it is statutory justification criteria for project review. However, the 2009 New Starts Guidance will seek to separately measure and assign a weight to this criteria.

- Environmental Benefits (Applies to New Starts only)

FTA recognizes potential project benefits as they relate to air quality. When assigning ratings for environmental benefits, FTA specifically assigns the following:

- Projects in non-attainment areas for any transportation-related pollutants receive a High rating.
- Projects that are in attainment areas receive a Medium rating.

While FTA does report on environmental benefits, the measure will receive a minimal weight in the 2009 New Starts Guidance until a better measure can be developed.

- Operating Efficiencies

FTA’s measure of this criteria looks at comparing the proposed project to not having a project, often referred to as the no-build or Transit System Management (TSM) alternative.
This evaluation looks at the entire transit system.

Financial Plan

Although Federal law calls for a Federal/non-Federal cost share of 80/20, project success is hinged on being able to provide a far greater local share. For instance, communities serious about seeing their projects actually built will put together financing plans that contain a 50% non-New Starts share. The annual appropriations bills contain report language requiring at least a 40% local and/or State match while FTA strongly encourages project sponsors to secure at least 50% local and/or State match. FTA evaluates projects based on the stability and dependability of local financing sources. Also critical to the evaluation is the ability to support operations and maintenance of the system. FTA has a vested interest in not only seeing that transit agencies can fund new construction, but also provide for the system for the future and leverage the Federal investment and commitment.

V. Project Development Process – New Starts

Earlier in the handbook we promised to provide a detailed discussion of the New Starts project evaluation and approval process. Hold onto your hats, here we go...

Alternatives Analysis/Major Investment Study (AA):

This is the first step in what we told you is a very long, very complex, but very important process. This process allows communities to compare transportation investments in a specified corridor before deciding which one is right for the community. This initial work will result in selection of the Locally Preferred Alternative (LPA) as well as to identify and analyze non-Federal sources to build, operate and maintain a future system. The LPA must be adopted by the Metropolitan Planning Organization (MPO).

The broader purpose of the study is to inform local elected officials, community leaders, transit officials and citizens regarding the benefits, costs, and impacts of alternative transportation investments. FTA requires that the local travel demand model be no more than five years old, capable of identifying transit riders and able to interact with the FTA SUMMIT software for determining the user benefits of a project. Project sponsors must compare the costs, ridership and modeled travel time benefits of the proposed project (Build Alternative) to an enhanced bus investment (Baseline Alternative) and/or current conditions (No Build Alternative). Some communities may also elect to include a Draft Environmental Impact Statement (DEIS) as part of AA.

There is no formal role for FTA during AA, however FTA does provide guidance called Procedures and Technical Methods for Transit Project Planning which provides details on the AA study process. Successful projects have also benefited from continued outreach to FTA during this initial phase as it allows FTA to address technical and procedural issues early in the process. Having FTA look over your
shoulder at this point is not such a bad thing as it also avoids projects having to unnecessarily repeat project requirements down the line. After all, their approval is necessary to advance through the New Starts pipeline.

AA is complete when local decision makers select the LPA and it is adopted by the MPO. At this point, you're ready to ask for FTA’s approval into PE.

AA usually takes about 12-24 months to complete depending upon the complexity of the project. FTA must rate and approve the proposed project for it to enter into PE. FTA seeks to make an assessment of the proposed project compared to the Baseline Alternative to make a determination of the relative costs, ridership and benefits.

NEPA – The National Environmental Policy Act of 1969

Before moving on to PE, the next phase in the New Starts process, we want to take a moment to discuss some of the environmental requirements such as NEPA, Environmental Assessments (EA) and Finding of No Significant Impact (FONSI) as these requirements can literally stop projects in their tracks.

The National Environmental Policy Act (NEPA) was signed into law on January 1, 1970. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment, and it provides a process for implementing these goals within the federal agencies. For New Starts, the NEPA process typically begins in AA with a process to engage the public on the alternatives to be considered and to narrow those alternatives through the "scoping process." Completion of the NEPA process is a condition for entering into final design. As you know, New Starts and Small Starts projects are Federal projects and must follow all Federal environmental regulations. Thus, public transportation agencies must work with FTA to analyze the special, economic, and environmental consequences and benefits of proposed projects and activities. NEPA requires an assessment of each possible alignment included in the LPA, environmental issues triggered by the alternative (i.e. wetlands mitigation, potential for soil erosion, air quality “hot spots” due to idling cars or buses, impact of project on wildlife, improvements to air quality, station area development plans, etc), and address environmental justice issues (i.e. alignment choice, location, neighborhoods impacted and investment in bus system). It is a very important step in the project development process that should not be taken lightly.

The environmental review process required by NEPA and related laws includes an environmental impact analysis and the preparation of documentation for public review. Smaller, relatively routine actions that do not individually or cumulatively have a significant environmental impact are considered to be "categorically excluded" from extensive environmental analysis. For larger capital projects (i.e. FTA New Starts projects), environmental evaluation typically results in the development of the Environmental Impact Statement (EIS). An EIS is a detailed written document that discusses the environmental impacts and benefits of a proposed project and alternatives to reduce the harm to the community and the natural environment. During the Federal environmental review process, local public transportation agencies usually work concurrently with state and other local agencies to comply with non-Federal
environmental laws. While NEPA requires a comparison of the proposed project (Build Alternative) to the Baseline Alternative and No Build, this is not a comparison of project costs and benefits, but is intended to compare the environmental impacts of each of the alternatives.

If an Environmental Assessment (EA) is being performed, the publication of a Finding of No Significant Impact (FONSI) concludes the process. If an EIS is conducted, the conclusion of the NEPA process is the publication of a Record of Decision (ROD). While the environmental process is typically conducted by the project sponsors, FTA is responsible for publishing the FONSI and ROD and has legal responsibility for the document in the event that the decision is challenged in court. Projects cannot begin to acquire right-of-way or initiate project construction until NEPA clearance has been received, but the NEPA and New Starts processes are separate and based on different laws.

**Preliminary Engineering**

Thanks for taking a brief intermission to discuss the environmental requirement’s with us. Now let’s dive back into the New Starts process as we move from AA to PE.

Following the selection of the LPA, and approval for entry into PE, a community can embark on a more detailed evaluation of the selected project. A project sponsor is required to select an alignment for the project, identify station locations, refine project costs, adopt local land use plans and ordinances, complete the NEPA process, and ensure that local and State funds necessary to build, operate and maintain the project are in place by the end of PE. Current FTA policy requires a project sponsor to increase the level of engineering to a much higher level of design than previously required. This has increased the cost of this phase of project development.

FTA also takes on a formal role by assigning a Project Management Oversight Consultant (PMOC) and a Financial Management Oversight Consultant (FMOC). PMOCs work with the project sponsor and FTA to review project cost estimates, identify key decision steps, review the proposed project construction schedule and conduct a Risk Assessment to ensure that all potential risks to project costs and schedule are identified and quantified. The FMOC is responsible for reviewing and making an assessment of all potential sources of funding for constructing, operating and maintaining the project. The FMOC must report to FTA if there are any issues regarding the amount of money available to the project and the sensitivity of those funding sources to changes in economic conditions.

If the alignment proposes to utilize existing freight railroad track or right-of-way, FTA requires that an operating agreement or line sale agreement between the project sponsor and the freight railroad be executed prior to completion of PE.
PE typically takes about 18-36 months to complete depending upon the complexity of the project. Concurrent with the completion of PE, the Final Environmental Impact Statement (FEIS) is published and the Record of Decision (ROD) is published in the Federal Register by FTA and EPA. FTA must rate and approve the project for it to enter into final design. If a project receives a "medium" or higher rating it is approved to enter into Final Design (FD). This approval is then submitted to Congress for a 30-day review.

During FD, project sponsors refine all project costs and develop a final cost estimate that will be included in the FFGA. The finalization of the project's financial plan is key. Other important activities during FD include:

- Right-of-way acquisition;
- Utility relocation;
- Preparation of final construction plans (including construction management plans) and detailed specifications;
- Final project scope, schedule and budget;
- Construction cost estimates;
- Bid documents; and
- Development of a plan for the collection and analysis of data needed to undertake Before and After Study.

On FTA's side, they are tasked with reviewing the project sponsor’s technical and financial capacity and making a determination that both are sufficient to not only construct the project, but to also provide for its operation and the continued operation of the entire existing (and planned) transit system. FTA wants to ensure the ongoing viability of the existing and expanded transit system after operations begin.

FTA’s approval of project entry into FD includes providing pre-award authority to the grantee to undertake design expenses prior to the execution of the FFGA or PCGA. In addition, the project sponsor may request a Letter of No Prejudice (LONP), which provides for eligibility for Federal funding of specified activities not covered under the pre-award authority. With such activities specified in the LONP, the project sponsor will then be allowed to pursue, for example, real estate acquisition; utility relocation; site preparation, and procurement.

**Final Design**

FD is the last step in the project development process. More importantly, it signifies that a project is one step closer to moving from dream to reality. But before we get ahead of ourselves, there are some critical boxes that must be checked during FD.

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Las Vegas Metropolitan Area Express Bus Rapid Transit

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At some point after a project is approved for entry into FD, the project sponsor will submit a financial plan and FTA will conduct a financial capacity assessment. Upon being recommended for a FFGA by FTA, a project sponsor may then request initiation of negotiations for a FFGA. Congratulations, three steps down, one more to go!

**Completion of FD typically takes about 12-18 months.**

**Full Funding Grant Agreement/Project Construction Grant Agreement**

This is the final phase; break out the red ribbon, giant scissors and let the construction begin! The FFGA is a contract between FTA and the project sponsor that sets out the terms and conditions for constructing the project. Congressional committees of jurisdiction have 60-days to review. Once the 60-days are over, if there are no objections, FTA can execute the agreement. The FFGA legally binds the project sponsor to complete the project even if Congress doesn’t provide funds according to schedule.

FFGAs are used for projects requiring $75 million or more of New Starts funding. For projects requiring less than $75 million in Small Starts funding with a total project cost of less than $250 million, the requisite agreement is the PCGA. The FFGA/PCGA sets forth the obligations of the project sponsor and include several attachments that define the project, including cost, scope, and schedule; commits to a maximum level of New Starts or Small Starts financial assistance (subject to appropriation); establishes the terms and conditions of Federal financial participation; defines the period of time for completion of the project; and helps FTA and the project sponsor manage the project in accordance with Federal law.

The FFGA/PCGA assures the project sponsor of predictable Federal financial support for the project (although the annual payout is subject to Federal appropriations, Congress has consistently honored the payout schedule and amounts established by the FFGA), while placing a limitation on the amount of this support. Thus, an FFGA/PCGA limits the exposure of the Federal government if the project experiences any cost increases during construction, as it is the responsibility of project sponsors to properly manage, design, and construct their project. FTA utilizes its PMO Program to obtain independent feedback on project status and progress, including the establishment of scope, budget, and schedule, as well as to provide guidance on management, construction, and quality assurance practices.

**Negotiations for an FFGA typically take 12-15 months from entry into FD, completing internal DOT and OMB, the 60 day Congressional review until signing of the FFGA.**
VI. Project Development Process - Small Starts/Very Small Starts

For transit systems to be successful, they must reflect the communities that they serve. It makes no sense to bring the Big Apple to Kansas City and vice versa. In recognition that in the transit world one size does not fit all, two new programs were created. Aptly named Small Starts and Very Small Starts, these programs seek to provide transit solutions on a smaller scale. Their smaller size is intended to be matched by a less rigorous and more flexible process at FTA.

In the previous section we walked you through the process from AA to FFGA for New Starts projects, in this section, we'll highlight the differences in the process for Small Starts and Very Small Starts as their differences extend beyond just their price tags.

Alternatives Analysis

While larger projects require that a number of alternatives be considered in an AA to assess the numerous tradeoffs in costs, benefits, and impacts, the consideration of a Small Starts project often implies that fewer useful alternatives exist and in some cases, there may only be two alternatives, one representing the Small Start and the other today’s service levels. Nevertheless, the number of alternatives considered must continue to meet the environmental requirements, good planning practices, and proper identification of project costs and benefits for funding recommendations.

In addition, SAFETEA-LU states that the results of planning and AA will be analyzed and considered when evaluating proposed Small Starts projects. Therefore, the AA report should address the evaluation and rating criteria to support a decision regarding entry into project development.

Small Starts study sponsors are encouraged to submit to FTA key study deliverables such as ridership forecasts and capital costs as they are developed – and before formally requesting entry into project development – to ensure the acceptability of this information to support FTA’s evaluation and rating of proposed projects. While Congress intended the Small Starts process to be simplified, many project sponsors have found the process to be only slightly less complex and the application materials almost equivalent to the New Starts process. As with the New Starts program, we highly recommend working closely with the FTA during each phase of the project.

Very Small Starts

Projects that qualify as Very Small Starts may utilize a very simple project definition-based AA process. The key elements of the highly simplified AA report are:

- A clear description and assessment of the transportation problem or opportunity to improve transportation service in the corridor;
- A clear description of the project designed to solve the problem or take advantage of
the opportunity to improve transit service in the corridor. This section should include a clearly defined scope, list of project elements, their associated costs and expected effect on transit service in the corridor;

- A comparison of the Very Small Start to conditions today; including an assessment of the effectiveness of the proposed project in solving the problem or taking advantage of the opportunity in the corridor;

- A determination of whether or not the project sponsor can afford the capital and operating costs of the alternatives;

- A well supported explanation for the choice of a proposed project that includes an analysis of the likelihood of the proposed project to achieve the project goals and any uncertainties associated with achieving the project goals; and,

- A plan for implementing and operating the proposed project that addresses the project sponsor’s technical capability to build, operate and maintain the proposed project.

The above description of an AA for Very Small Start project applies only if FTA determines that it qualifies under a NEPA categorical exclusion (CE). If the project will require an EA or an EIS, and the AA is not being combined with the NEPA document, then the requirements of the FHWA/FTA guidance on Linking Planning and NEPA would apply in order for the AA to have standing in the subsequent NEPA document. If the project is not eligible for a CE and the AA is being combined with the EIS or EA, then the NEPA requirements of the EIS or EA (whichever FTA has determined appropriate) would apply, in addition to the AA requirements listed above.

Small Starts Baseline Alternative

The measures of mobility that support project justification are based on a comparison between the proposed Small Starts project and a baseline alternative. FTA must approve the baseline alternative used in the evaluation of Small Starts before the project is allowed to enter into project development.

Small Starts

In most cases, Small Starts projects and fixed guideway Very Small Starts projects must define a transportation system management (TSM) alternative to use as the baseline. The TSM alternative will generally have the features and costs similar to a Very Small Starts arterial bus project. In general, the baseline alternative for Small Starts projects will be defined to address the problem or opportunity in the corridor using low-cost non-fixed guideway improvements, while providing for comparable levels of service to the proposed Small Start.

Very Small Starts

Very Small Starts Projects that do not involve constructing a new fixed guideway, and are composed of pre-approved low-cost elements, will use the no-build alternative as the baseline alternative. The no-build is defined as the continuation of existing transit service policies in the study area to the forecast year.
Local Financial Commitment

For all Small Starts – including Very Small Starts - FTA will evaluate the financial capability of the project sponsor to construct and operate the proposed investments. However, due to the small scale and relative simplicity of these projects, FTA attempts to streamline the financial evaluation.

If the project sponsor can demonstrate the following, the project will receive a “medium” financial rating:

- A reasonable plan to secure funding for the local share of capital costs or sufficient available funds for the local share (all non-New Starts funding must be committed before receiving a PCGA);
- The additional operating and maintenance cost to the agency of the proposed Small Starts project is less than 5 percent of the agency’s operating budget; and
- The agency is in reasonably good financial condition.

Completion of an alternatives analysis study, selection of a locally preferred alternative from that study and its adoption in the region’s constrained long range plan, development of a project management plan, etc.) and prepare and submit the same information for evaluation and rating as traditional New Starts projects entering preliminary engineering with the following key differences:

- FTA’s cost-effectiveness measure and related travel forecasting results are calculated and reported using the opening year forecast;
- The land use information is appropriate to the importance of land use to the proposed project’s success;
- The financial plan need only cover the period up to and including the opening year, and;
- Project sponsors are not required to submit information on mobility improvements.

Project Construction Grant Agreement (PCGA)

Where FTA decides to provide Section 5309 funding for the construction of a Small Starts project, including Very Small Starts projects; FTA will negotiate a PCGA with the grantee during project development. The terms and conditions of the PCGA will include, at a minimum, the following terms:

- The project sponsor must complete construction of the project, as defined, to the point of initiation of revenue operations, and be locally responsible for additional costs incurred or necessitated by the project during construction;
- FTA and the project sponsor will establish a schedule for section 5309 funding during the construction period; and
- Specific annual funding levels under the PCGA are subject to the availability of appropriations.
Execution of the PCGA will be subject to a 60-day congressional review.

All Small Start projects that receive a PCGA will be subject to the Before-and-After Study requirement. The Before-and-After Study describes the impact of the project on transit services and ridership and evaluates the consistency of predicted versus actual project characteristics and performance. Small Starts that cannot qualify as Very Small Starts shall follow FTA guidance on the Before-and-After Study requirement for New Starts. For Very Small Starts, the Before-and-After Study will consist of a very simple analysis of the following:

- A post-construction cost summary in FTA standardized cost categories compared to the cost estimate at the time of entry into project development;

- A comparison of actual ridership (on’s and off’s) in the corridor provided in the application to enter project development and new counts done two years after opening; and

- A comparison of transit schedules and frequencies between the transit services in the corridor as it existed at the time of entry into project development and two years after opening.

CONCLUSION

Congratulations, you made it to the end! We started this handbook by asking you to imagine Boston without the T; Chicago without the L; or Washington, DC without Metro. Now that you know the chutes and ladders of FTA’s process, we challenge you to imagine your community with a New Starts, Small Starts or Very Small Starts project.
Appendix A – Glossary of Terms

Alternatives Analysis – Alternatives Analysis (AA) is a study conducted as a first step in the transportation planning process to evaluate all reasonable mode and alignment alternatives for addressing a transportation problem in a corridor or subarea. Alternatives analysis results in the selection of a Locally Preferred Alternative (LPA). An AA also provides sufficient information to enable FTA to make the findings of project justification and local financial commitment criteria for those projects seeking New Starts or Small Starts funding.

Baseline Alternative - The Baseline Alternative should represent the "best that can be done" to improve transit service in the corridor without major capital investment in new infrastructure. At a minimum, the New Starts baseline must include in the project corridor all reasonable cost-effective transit improvements short of the major capital investment often required for a New Starts project. The Baseline Alternative should include relatively low cost actions such as traffic engineering, enhanced bus service and other transit operational changes, and modest capital improvements such as reserved lanes, park-and-ride lots, and transit terminals. The New Starts baseline should be designed to address identified transportation needs in the New Start project’s service area and demonstrate the extent to which these problems can be solved without a proposed major capital investment such as a New Starts fixed guideway transit project.

Contingent Commitment Authority – Contingent commitment authority enables FTA ensure an adequate and ongoing level of funding for projects as FTA is permitted to incur obligations for letters of intent, full funding grant agreements (FFGA), and early systems work agreements up to an amount equivalent to the last three years of funding, less amounts for those projects not covered under a letter of intent or FFFGA. For Small Starts FTA is permitted to incur obligations for project construction grant agreements up to an amount equivalent to the last year of funding allocated by Congress, less an amount necessary for grants not covered by a PCGA.

Cost Effectiveness – Cost effectiveness is determined by calculating the incremental cost per hour of transportation system user benefits in the forecast year. This measure, expressed in constant base-year dollars, is based on the annualized total capital and annual operating costs divided by the forecast change in annual user benefits, comparing the proposed project to the New Starts baseline alternative. It is intended to enable FTA to evaluate and rate New Starts projects for the purpose of determining which projects are most meritorious.

Early Systems Work Agreement – Secretary may enter into an early system work agreement with a project sponsor for a project if a record of decision under the National Environmental Policy Act has been issued and there is reason to believe that a full funding grant agreement (FFGA) will be issued and the terms of the agreement will promote completion of the project. The agreement commits an amount of available budget authority and provides for the reimbursement of preliminary costs of carrying out the project, such as land acquisition, timely procurement of system elements, reasonable financing costs and other activities, and allows a project to advance into final design even when FTA may otherwise lack sufficient budget authority to execute a Full Funding Grant Agreement.

Environmental Assessment – FTA may require an applicant for financial assistance to prepare an Environmental Assessment (EA) when the significance of the environmental impact is not clearly established. An EA includes a brief discussion of the following: the need for the proposal; alternatives; the environmental impacts of the proposed action and alternatives; and a listing of agencies and
persons consulted. An EA can result in either a Finding of No Significant Impact requiring no further environmental evaluation, or identification of potentially significant impacts requiring the applicant to conduct an Environmental Impact Statement.

**Environmental Impact Statement** - Depending on the nature of the proposed project, FTA may immediately require applicants to develop an Environmental Impact Statement (EIS), or request an EIS based on the outcome of an Environmental Assessment (EA). In either case, an EIS requires that a substantial technical analysis and public review process be conducted to evaluate project alternatives, identify potential social, economic and environmental impacts of the project, and designate methods to avoid or mitigate these impacts. Successful completion of an EIS results in FTA signing a Record of Decision (ROD). Once FTA has signed a ROD, the applicant can proceed with the project having complied with NEPA and FTA may act on the application for federal assistance.

**Financial Management Oversight Consultant (FMOC)** – An entity under contract to the FTA to evaluate the financial capacity of project sponsors seeking a full funding grant agreement. The FMOC performs the following activities:

- Review capital and operating financing plans and related documents.
- Analyze capital and operating budgets for evidence of a stable and reliable revenue base to support financing the project.
- Determine the existence of any significant unforeseen liabilities and any conditions that may lead to their development.
- Critique the reasonableness of revenue projections and financing assumptions.
- Assess the status of the grantee's commitment to fund the program.
- Review the Long Range Financial Plan model, assess the adequacy of the process, and, if appropriate, review status of debt financing plan and the process for tracking bond issues.

**Final Design** – Final design (FD) is the third step in the New Starts project development process. During this step the local project sponsor can acquire right-of-way and produce the plans, specifications, and estimates necessary to construct the project. When FD of a New Starts project is sufficiently advanced that the capital cost estimate and project impacts are well established, FTA may enter into an FFGA with the applicant for a New Starts project.

**Finding of No Significant Impact** – If it is determined that there will be no significant environmental impacts (such as air quality, noise, traffic impacts), a FONSI will be prepared to conclude the NEPA process and document the decision. The FONSI document is the EA modified to reflect all applicable comments and responses. If it was not done in the EA, the FONSI must include the project sponsor’s recommendation or selected alternative. No formal public circulation of the FONSI is required, but the public must be notified of the availability of the FONSI.

**Fixed Guideway** - Fixed guideway is defined as any transit service that uses and occupies a separate right-of-way or rails for the exclusive use of public transportation and other high occupancy vehicles, or uses a fixed catenary system and a right-of-way usable by other forms of transportation. The term includes, but is not limited to, heavy rail, commuter rail, rapid rail, light rail, trolleybus, streetcars, aerial tramway, inclined plane, cable car, automated guideway transit, ferryboats, the portion of motor bus service operated on exclusive or controlled rights-of-way, and high-occupancy vehicle (HOV) lanes.
**Full Funding Grant Agreement** – The issuance of the Full Funding Grant Agreement (FFGA) is the final step in the New Starts project development process. It is a document that defines the scope of a project, the Federal financial contribution, and other terms and conditions for funding a New Starts project. The FFGA binds the local agency to complete construction of the project within a fixed time schedule, sets a fixed ceiling on the total Federal contribution, and establishes a schedule for Federal contributions.

**Letter of No Prejudice** – A Letter of No Prejudice (LONP) enables a local project sponsor to commit local funds for project-related activities and ensure that they will be considered as eligible activities for inclusion in the FFGA. FTA allows a project sponsor to submit a written request for an LONP for a New Starts or Small Starts project following the publication in the Federal Register of a Record of Decision and the documented inclusion of the project in the local Transportation Improvement Program (TIP). The request must be accompanied by sufficient information and justification to the appropriate FTA regional office, including the a description of the activities to be covered; justification for advancing the identified activities, including an accurate assessment of the consequences to the project scope, schedule, and budget should the LONP not be approved; information that indicates that the project sponsor will maintain its ability to receive a rating of “medium,” or better and that its cost effectiveness rating will be “medium,” or better, unless such project has been specifically exempt from such a requirement; there is an allocated level of risk and contingency for the activity requested; the status of procurement progress, including, if appropriate, submittal of bids for the activities covered by the LONP; the adequacy of the Project Management Plan; resolution of any readiness issues that would affect the project, such as land acquisition and technical capacity to carry out the project; and, a brief summary of project characteristics and project map.

**Locally Preferred Alternative** – Alternatives analysis is concluded when a locally preferred alternative (LPA) is selected by local and regional decision-makers and adopted by the metropolitan planning organization (MPO) in its financially-constrained metropolitan transportation plan. It may include undertaking a Draft Environmental Impact Statement (DEIS) or Environmental Assessment (EA).

**Long Range Transportation Plan** - Regional or metropolitan transportation planning in urbanized areas – those over 50,000 in population – is performed by the metropolitan planning organization (MPO). MPOs are responsible for developing the long-range (minimum 20 years) transportation plan in cooperation with the state and affected transit operators.

**Minimum Operable Segment** - The purpose of selecting the MOS is to identify a segment of the Locally Preferred Alternative that provides the most cost-effective solution with the greatest benefits for the project. The MOS must be able to function as a stand-alone project and not be dependent on any future segments being constructed.

**Preliminary Engineering** – Preliminary Engineering (PE) is the second phase of the New Starts project development process. It is during PE that the local project sponsor refines the design of the LPA; develops more precise estimates of costs and impacts, completes the environmental process required under National Environmental Policy Act, updates and further develops the project management plan to ensure construction quality and financial control, and works to obtain funding commitments of non-Federal funds. FTA defines the PE phase within the New Starts Program as the process of finalizing the project definition (scope, cost, and financial plan) such that all cost estimating is complete to the level of confidence necessary for the project sponsor to implement the financing strategy, including establishing
the maximum dollar amount of the FTA New Starts financial contribution needed to implement the project.

**Project Construction Grant Agreement** – As with the FFGA, the PCGA is the final step in the Small Starts process. It defines the project, including cost, scope, and schedule; it commits to a maximum level of Small Starts financial assistance (subject to annual appropriations); it establishes the terms and conditions of Federal financial participation; it defines the period of time for completion of the project; and it helps FTA and the project sponsor manage the project in accordance with Federal law.

**Project Development** – For Small Starts projects, preliminary engineering and final design work is combined into one phase referred to as Project Development (PD). PD is the second step in the Small Start project development process. To be approved to enter PD, a project sponsor must complete alternatives analysis, adopt the locally preferred alternative (LPA), include the LPA with the long range plan, complete project scoping under NEPA, and, receive a “Medium” rating or better from FTA. In addition, a project sponsor must develop an acceptable Project Management Plan, including a fair and reasonable project budget and schedule.

**Project Management Oversight Consultant** – The Project Management Oversight Consultant (PMOC) is engaged in a continuous review and evaluation of grantee and FTA processes to ensure compliance with statutory, administrative, and regulatory requirements. This oversight activity begins early in project implementation, usually at the time of preliminary engineering. The PMOCs serve to supplement the FTA technical staff to evaluate grantee project management and technical capacity and capability to successfully implement these major transit projects. PMOCs also monitor the projects to determine whether the projects are progressing on time, within budget, and in accordance with approved grantee plans and specifications. They are also involved in activities such as design constructability, change order reviews, and value engineering submittals.

**Project Management Plan** - Project sponsors must develop a project management plan (PMP) to establish the engineering approach, procedures, and roles and responsibilities for undertaking the project; undertake engineering surveys and studies to ascertain construction needs and requirements; identify all required real estate, and utility, railroad and other third party agreements; validate capital as well as operating and maintenance costs; and define all required contract or other procurement packages.

**Record of Decision** - Joint FHWA/FTA environmental regulations state that until FTA issues a record of decision (ROD), no action concerning the proposal shall be taken which would (1) have an adverse environmental impact; or (2) limit the choice of reasonable alternatives. While work on a required program EIS is in progress and the action is not covered by an existing program statement, FTA will not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action: a) is justified independently of the program; b) is itself accompanied by an adequate EIS; and c) will not prejudice the ultimate decision on the program. FTA may not issue a ROD until 30 days after the final EIS is filed with the Environmental Protection Agency (EPA) and it publishes a notice of availability in the Federal Register.

**Transportation Improvement Program** - Local officials conduct assessments of transportation conditions throughout the region. Regional goals and objectives are developed or updated, data on regional traffic patterns are collected, and future land use and travel are projected. A wide range of multimodal alternatives is examined leading to the adoption of policies, plans, and Transportation
Improvement Programs (TIPs). Transportation plans and programs must be financially constrained and, in nonattainment areas, must conform to State implementation plans for air quality. “Financially constrained” or “fiscal constraint,” means that the metropolitan transportation plan, TIP, and Statewide Transportation Improvement Program (STIP) includes sufficient information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. For the TIP and the STIP, financial constraint/fiscal constraint applies to each program year. The TIP must be consistent with the long-range plan and must include all projects in the metropolitan area that are proposed for funding with federal funds.
Appendix B – Fixed Guideway Technology

Bus Rapid Transit

Bus Rapid Transit (BRT) is typically defined in terms of six project characteristics as well as service frequency. The specific elements include:

- Running ways that range from lane markings, dedicated lanes or skip lanes on a city street to segregated transitways or tunnels.
- Stations that offer a higher level of sophistication than traditional bus service and often include real-time bus information.
- Vehicles that range from standard buses to articulated buses that have differentiation in logos or markings that separate the service from traditional bus service.
- Many BRT systems offer fare collection systems (both onboard and off-vehicle) that rely on electronic media.
- Most systems provide for signal preemption or prioritization to enable the BRT system to gain an operational advantage compared to automobiles operating on city streets.

Metropolitan Areas with Bus Rapid Transit Systems

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<tr>
<th>Albuquerque, New Mexico</th>
<th>Los Angeles, California</th>
<th>Pittsburgh, Pennsylvania</th>
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<tr>
<td>Boston, Massachusetts</td>
<td>Miami, Florida</td>
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<td>Las Vegas, Nevada</td>
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Commuter Rail

Commuter rail (also called metropolitan rail, regional rail, or suburban rail) is an electric or diesel propelled railway for urban passenger train service consisting of local short distance travel operating between a central city and adjacent suburbs. Service must be operated on a regular basis by or under contract with a transit operator for the purpose of transporting passengers within urbanized areas, or between urbanized areas and outlying areas. Such rail service, using either locomotive hauled or self propelled railroad passenger cars, is generally characterized by multi-trip tickets, specific station to station fares, railroad employment practices and usually only one or two stations in the central business district. Intercity rail service is excluded, except for that portion of such service that is operated by or under contract with a public transit agency for predominantly commuter services, which means that for any given trip segment (i.e., distance between any two stations), more than 50% of the average daily ridership travels on the train at least three times a week.

Metropolitan Areas with Commuter Rail Systems

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<th>Albuquerque, New Mexico</th>
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<td>Boston, Massachusetts</td>
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<td>Chicago, Illinois</td>
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<td>Harrisburg, Pennsylvania</td>
<td>New York City, New York</td>
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Light rail (streetcar, tramway, or trolley) is lightweight passenger rail cars operating singly (or in short, usually two-car, trains) on fixed rails in right-of-way that is not separated from other traffic for much of the way. Light rail vehicles are typically driven electrically with power being drawn from an overhead electric line via a trolley or a pantograph.

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<th>Metropolitan Areas with Light Rail/Streetcars</th>
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<tr>
<td>Astoria, Oregon (Streetcar)</td>
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<td>Baltimore, Maryland (LRT)</td>
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<td>Boston, Massachusetts (LRT)</td>
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<td>Buffalo, New York (LRT)</td>
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<td>Charlotte, North Carolina (LRT/Streetcar)</td>
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<td>Cleveland, Ohio (LRT)</td>
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<td>Dallas, Texas (LRT/Streetcar)</td>
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<td>Galveston, Texas (Streetcar)</td>
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<td>Houston, Texas (LRT)</td>
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<td>Issaquah Valley, Washington (Streetcar)</td>
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**Heavy Rail**

Heavy rail (metro, subway, rapid transit, or rapid rail) is an electric railway with the capacity for a heavy volume of traffic. It is characterized by high speed and rapid acceleration passenger rail cars operating singly or in multi-car trains on fixed rails; separate rights-of-way from which all other vehicular and foot traffic are excluded; sophisticated signaling, and high platform loading. If the service were converted to full automation with no onboard personnel, the service would be considered an automated guideway.
### Metropolitan Areas with Heavy Rail

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<th>Metropolitan Area 1</th>
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<td>Atlanta, Georgia</td>
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<td>Northern New Jersey</td>
<td>Washington, District of Columbia</td>
</tr>
<tr>
<td>Cleveland, Ohio</td>
<td>New York City, New York</td>
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Acknowledgements

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The New Starts program website can be found below:

http://www.fta.dot.gov/index_5221.html

An introduction to the New Starts program can be found at this cite:

http://www.fta.dot.gov/planning/newstarts/planning_environment_2608.html

The New Starts 2009 New Starts Guidance can be found below:

http://www.fta.dot.gov/planning/newstarts/planning_environment_9063.html

The New Starts procedural guidance can be found below:

http://www.fta.dot.gov/planning/newstarts/planning_environment_218.html

The New Starts technical guidance can be found below:

http://www.fta.dot.gov/planning/newstarts/planning_environment_8092.html

More information regarding the National Environmental Policy Act can be found at this link:

Other sites where very useful information can be found:

American Public Transportation Association:
www.apta.com

Federal Highway Administration:
www.fhwa.dot.gov

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