

# *New Starts*

Roundtables 2004

**Boston**

April 14-16, 2004



**San Diego**

May 12-14, 2004





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# Background

2004 marks the fifth year of the New Starts Roundtables (NSR) event. The NSR were initiated in 1999 to bring FTA and local agency staff together to share information and experiences, to identify and discuss common issues, and to generate suggestions for improving the planning and development process.

The guiding principles are:

- **A partnership** between FTA and local sponsors;
- They provide project sponsors an opportunity to **share lessons learned** with other participants;
- Attendance is open to **senior staff of public agencies** engaged in the planning and development of major transit capital investments; and
- **Frank but respectful dialogue** is encouraged.

In an effort to bring the NSR program to the project sponsors, the first four years of Roundtables have been hosted in Washington, DC, Las Vegas, New Orleans, Los Angeles, Tampa, Denver, Portland and Chicago. Roundtable themes have included: “Issues and Lessons Learned in the New Starts Criteria, Evaluation, and Rating Process,” “Lessons Learned in Planning Project Development,” “Successes and Challenges in Local Financial Planning, ” and “Improving Planning and Project Development.”

The 2004 Roundtables are the third for Jennifer Dorn, FTA’s 14th administrator. Ms. Dorn’s priorities include, “meeting the demands caused by increasing transit ridership by leveraging federal investments, establishing vigilant oversight at all levels of government, developing transit projects that consider all reasonable alternatives, and working to encourage the development of the men and women employed in the transit industry while taking steps to attract highly qualified people to the public transportation field.”

This year the Steering Committee selected Boston, Massachusetts for the East Coast Roundtable and San Diego, California for the West Coast Roundtable. The Boston Roundtable was held on April 14-16 for grantees from FTA Regions I through VI. The San Diego Roundtable took place on May 12-14 for grantees from FTA Regions VII through X.

The theme of the 2004 Roundtable series was “Getting to Yes—How the Planning and Project Development Process Affects Local Decision Making. FTA staff from both Headquarters and the Regional offices led the Roundtables, and presentations were made by FTA staff, project sponsors, private contractors, and Roundtable host agencies.

Over 90 representatives from dozens of sponsoring agencies attended the 2004 Roundtable series. Participants included representatives from transit systems, Metropolitan Planning Organizations (MPOs), State Departments of Transportation (DOTs), private contractors, the General Accounting Office (GAO) and the Senate Banking Committee, and city, county and regional governments.



## Day One

### Welcome and NSR Participant Introductions

Both Roundtables opened with a joint welcome from Lynn Sahaj, FTA Associate Administrator for Planning and Environment, and representatives from host agencies and FTA regional offices. In both Boston and San Diego, Ms. Sahaj welcomed participants and reassured them that there were no changes to New Starts ratings criteria for 2004. However, she explained that FTA was continuing to seek improvements to the process, particularly in the areas of:

- **Communication;**
- **Timeliness of Feedback; and**
- **Transparency of Roles.**

Ms. Sahaj looked forward to working with Roundtable participants to identify methods by which to improve these, and other, aspects of the program

In Boston, Dick Doyle, FTA Administrator for Region I, drew an analogy with the upcoming Boston Marathon in describing the perseverance and dedication required on the part of project sponsors in the New Starts process. Mr. Doyle welcomed the attendees to Boston, suggesting that the city embodies the power of transit to foster livable cities. Michael Mulhern, the Massachusetts Bay Transportation Authority's General Manager also welcomed NSR participants, highlighting the modal diversity of the MBTA's system and its history of innovation, represented most recently by the Silver Line Bus Rapid Transit system.

In San Diego, Region IX Administrator Leslie Rogers introduced two broad issues with implications for both the New Starts process and funding levels—FTA's proposed reorganization and the reauthorization of the federal surface transportation program. Gary Gallegos, the executive director of the San Diego Association of Governments (SANDAG) welcomed West Coast Roundtable participants to San Diego. Mr. Gallegos discussed the consolidated transit system in San Diego and the one-county MPO as strengths when it comes to enhancing transit in the region. Although competition from the automobile is always a major challenge in southern California, Mr. Gallegos described a shift in attitude towards transit, evidenced by UCSD's expressed desire to have a station on the proposed Mid-Coast corridor line.

#### Participant Introductions and Issues

At both roundtables, participants introduced themselves, described their project currently in Preliminary Engineering (PE) or Final Design (FD), and identified their most important issue related to New Starts.

Issues that were raised by attendees include the following:

- **Need for improved communication**
- **Expedited risk assessment process**
- **NEPA—New Starts relationship**
- **SUMMIT model**
- **Small Starts criteria**
- **Project delays**
- **Baseline alternative definition**



- AA/NEPA redundancy
- Importance of “positive momentum” for projects

Ron Fisher, of the FTA Office of Planning and Environment, made note of these and other comments provided by attendees and explained that FTA would evaluate how the Roundtables addressed these issues over the following days. Mr. Fisher emphasized that everyone in the room, both representing FTA and project sponsors, were “in this together” when it comes to addressing these issues.

## FTA Updates – Growing New Starts

Ms. Sahaj made the first presentation at both roundtables, entitled “Identifying Common Goals and Strategies to Grow Transit Through New Starts.” She explained that the success of the New Starts program has resulted in increased pressures on the program:

- More competition for funding
- More scrutiny (media interest in the New Starts Report has grown)
- More political interest at both the national and local levels

Ms. Sahaj provided project sponsors with an overview of the New Starts Congressional review process, while identifying the various thresholds that trigger particular reviews. This discussion included a summary of the different oversight roles played by four Congressional committees, the Inspector General, and the General Accounting Office. FTA’s approach to growing New Starts, as presented by Ms. Sahaj included:

- Protecting the integrity of the program and the industry;
- Capturing the full range of project benefits when evaluating projects; and
- Continuing to improve FTA customer-responsiveness and transparency.

In the discussion of New Starts program goals and priorities, she also emphasized the need to submit New Starts Reports in a timely fashion (or else FTA faces a \$100,000 per day fine), and FTA intentions to pull together all New Starts guidance and regulations in a timely fashion and in one place for project sponsors.

David Vozzollo in Boston, and Sean Libberton in San Diego, both of the FTA Office of Planning and Environment, followed with a presentation that addressed a number of issues that have been “heard through the grapevine”:

*Only cost effectiveness matters.* They presented ratings history that showed that only low cost effectiveness in conjunction with low land use ratings resulted in a “Not recommended”

*FTA keeps moving the goalposts.* They explained that most measures have been fairly consistent over the past few years, although FTA hopes to better capture economic development benefits around stations in the future





*FTA is anti-rail and pro-BRT.* “FTA is pro-transit, and pro- good decisions for the corridor in question”

*Finance costs are included to lower cost effectiveness ratings.* They are only included to level the playing field in capital cost reporting; they have never been included to calculate cost-effectiveness

*Projects would fare better with cost per new rider than with cost per user benefit measure.* Mr. Libberton and Mr. Vozzollo reminded attendees how dissatisfied everyone was with the previous measure, and characterized the new transportation system user benefits (TSUB) measure as more complete and technically sound

*Last minute change to SUMMIT severely impacted many projects.* Yes, there was an error, but the change did not affect ratings, but only served to identify the outliers.

## Reauthorization Update

Rich Steinmann, from the FTA Office of the Administrator, presented an overview on the House Reauthorization bill at both roundtables. The House bill includes \$51.5 billion (of the overall \$275 billion program) for transit, with \$8.4 billion of that for the New Starts program. The bill also includes \$4.6 billion in contingent commitment authority. Mr. Steinmann highlighted some of the other key implications for the New Starts program:

- Current three-level rating system is maintained
- Supplemental New Starts Report is eliminated
- Land use is elevated to a statutory criteria (same in Senate bill)

- Prohibits FTA from requiring lower Federal share than 80% (so a 60/40 split can not be used to impact financial criteria rating)
- Continues to allow Alternatives Analysis in 5309 New Starts

Mr. Steinmann also discussed the proposed Small Starts program and its simplified criteria, ratings system, and process. Small Starts projects would also have a “stripped down” version of the FFGA, called the Project Construction Grant Agreement, which would include only scope, cost, schedule, federal funding maximum amount, and local funding sources. He explained that although there is no maximum cost for a project to pursue Small Starts funding, the federal share would be capped at \$75 million.

At the East Coast Roundtable, Sherry Little, a staff person on the Senate’s Banking, Housing, and Urban Affairs Committee, provided participants with an overview of the Senate version of the reauthorization bill. The Senate version includes \$56.5 billion for transit, of which \$9.6 billion is for New Starts. Ms. Little spent a few minutes describing the committee process and the large number of meetings that occur on the topic throughout the six years between reauthorization bills. She emphasized how politicized the atmosphere has become in an election year, and also described the diversity of perspectives on the panel (Wyoming and New York senators have very different views of the importance of transit, for example). She identified the major themes that guided the committee discussions as the need to streamline, improve accountability and efficiency, and provide funding flexibility.





Mr. Steinmann provided San Diego attendees with the highlights from Ms. Little's Boston presentation.

Ms. Little summarized key aspects of the Senate bill:

**Small Starts:** Streamlined criteria for projects under \$75 million. Senate wanted to "find a home" for BRT in New Starts, with the result being the elimination of the "fixed guideway" requirement for Small Starts.

**Accountability:** "Complete carrot, no stick approach" incentives, such as higher federal match for the most accurate cost and ridership estimates, and the ability for grantees to keep a portion of savings from underruns; also would require "Before and After studies and contractor performance assessment reports.

**Ratings and Reporting:** Five levels (High to Low) rather than the current Highly Recommended, Recommended, Not Recommended, and strengthened criteria to assure that New Starts projects do not degrade local bus service.

## How User Benefits Capture Transportation Benefits

In both Boston and San Diego, Ron Fisher gave a presentation on overcoming difficulties and seizing opportunities with the User Benefits measure. He began by explaining that submissions for both the FY04 and FY05 New Starts Reports featured a high number of unexplainable forecasts and lots of "not rated" projects. While FY04, as the first year using the SUMMIT reports, was expected to have some difficulties, the situation was not greatly improved in FY05 even with closer FTA staff review of the SUMMIT reports. Mr. Fisher said that the reasons for these unexplainable forecasts resulted from three factors:

- Insufficient technical expertise due in part to the dot.com boom related shift to the private sector
- Absence of quality control
- Inattention to interpretation of forecasts

Mr. Fisher suggested that FTA would continue to be more involved in providing technical assistance in the person of FTA staff or contractors, and that this support would be year round—not only in late summer. He emphasized the importance of transparent and more intuitive forecasts that would allow for making stronger cases for the project.

Mr. Fisher then introduced Tom Maziarz of the Capital Region Council of Governments in Hartford to demonstrate the power of SUMMIT reports when they are used to their full potential.

Mr. Maziarz, who oversees the modeling work for transit projects in the Hartford region, gave an overview of the New Britain Busway project to demonstrate how User Benefits can be used as an analysis tool. The Busway is a 9.4 mile BRT project with 12 stations running in an abandoned rail right of way connecting the small industrial city of New Britain with Hartford.







An early observation using SUMMIT was that there were unexpectedly high benefits to the Hartford-North neighborhood. This neighborhood lies beyond the CBD and the terminus of the Busway. Upon further analysis, Mr. Maziarz identified the area as very low income with a high percentage of non-automobile owning households. He reasoned that even though a transfer was required to get downtown and access the Busway, that residents in Hartford-North would benefit from the opportunity to use the line. Mr. Maziarz explained how CRCOG was able to use this information to add a downtown circulator to the end of the Busway which not only provided better distribution of trips through the CBD, but also improved transfers from passengers originating in Hartford-North.

Mr. Maziarz described other instances where the analytical capabilities of SUMMIT resulted in service design changes, many of which resulted from improved access to medical centers. These examples were presented with colorful maps generated by SUMMIT, which clearly demonstrated the benefits. He emphasized that all of the information on market share is in SUMMIT, and that the user simply needs to pull it out. Mr. Maziarz concluded by describing how the SUMMIT maps were used to demonstrate to decision makers that the Busways benefits would accrue to both urban and suburban riders, a revelation that resulted in the selection of this project over a competing BRT proposal.

## Linking NEPA and New Starts: NEPA and Alternatives Analysis

Lynn Sahaj introduced a panel discussion on the relationship between the National Environmental Policy Act (NEPA) and the New Starts Alternatives Analysis (AA) process. The panelists were:

Moderator: Brigid Hynes-Cherin, FTA Office of Budget and Policy

Susan Borinsky, FTA Office of Planning and Environment

Ron Fisher, FTA Office of Planning and Environment

Joseph Petrocelli, NYC MTA (Boston)

Karl Rohrer, Virginia Dept. Rail and Public Transportation (Boston)

Richard Feder, Port Authority of Allegheny County (Boston)

Toni Bates, SANDAG (San Diego)

David Mieger, LACMTA (San Diego)

Ms. Hynes-Cherin introduced the panelists at each roundtable and described the source of confusion was that AA often describes two processes: the New Starts prerequisite for entering Preliminary Engineering (PE) and the NEPA document requirement to include an evaluation of alternatives. Despite the similarities in the two processes, there are key differences:

*Timing:* If AA/Draft Environmental Impact Statement (DEIS) does not result in a Locally Preferred Alternative (LPA), then the alternatives are further addressed during a supplemental DEIS.

*Mitigation treatments:* Usually done at a broader level in AA than during the NEPA EIS process. NEPA requires the PE level of analysis.

*Alternatives:* New Starts AA results in a selection of mode and alignment, which ends the discussion of alternatives. In NEPA, any reasonable alternative that comes along later in the process has to be included.

She explained that the net effect is that the way these two processes are approached can have a significant affect on how your project develops.

Mr. Fisher explained that before 1993, AA was done in concert with the NEPA EIS process, and it was done at a level of detail so that PE could be used to define mitigation measures. It is much more varied now so that some project sponsors are beginning NEPA when they start AA, and some when they are 50% through AA, or upon entering PE.

### **Boston Panel Summaries**

Mr. Petrocelli suggested that the evolution of the Environmental Impact Statement (EIS) over the last 10 to 15 years has resulted in incredibly complex documents supported by a very high level of analysis. He made an observation that if you combine AA and an EIS, it can be very difficult to get the public to attend a meeting where several projects, rather than just one, are being reviewed. Mr. Feder responded that agencies should not do an AA/EIS unless they are very confident they can implement the project. Mr. Rohrer said that it depends on rising scrutiny—"you have to prove it over and over and over again." He suggested the part of the answer would be coming up with a standardized process where "FTA expects this level of effort at this place."

Mr. Rohrer observed that the Major Investment Study (MIS) became a glorified feasibility study, and that it was a way to get answers without spending the money necessary to undertake NEPA. Then, after decisions were made based on the MIS, you had to go back and do the analysis again upon starting the NEPA process.

Mr. Feder described the challenge faced in Pittsburgh when developing a TSM alternative. The region was undertaking a multimodal alternatives analysis for a very wide travel corridor that almost encompasses all routes on one side of the city. When the Port Authority began to evaluate a build option consisting of a BRT line, the scope of the initial study resulted in a TSM alternative that essentially covered an entire side of the region. The result was that this overly ambitious TSM alternative looked very good when compared with the build scenario since it essentially represented system-level service improvements that were not within the Port Authority's ability to implement. One lesson from his experience in Pittsburgh is that if you do good planning, you'll minimize—not eliminate—problems.

Ms. Borinsky said that the corridor should dictate your choices with regard to starting NEPA. If you have commuter rail on an existing freight ROW, and therefore not many options, you should proceed with an AA/DEIS. However, she suggested that in the multi-modal Pittsburgh example that it would be prudent to only start the New Starts AA.

### **San Diego Panel Summary**

Ms. Bates echoed Ms. Borinsky's comments from Boston, using two San Diego examples to illustrate. On the Mission Valley East extension, the choices were only light rail or TSM, so they were able to do an AA/DEIS. With the Mid-Coast Corridor several alternatives were on the table (Bus Rapid Transit, light rail, commuter rail, High Occupancy Vehicle lanes, etc.) so they initially pursued an EIS.

Mr. Meiger said that in Los Angeles they are big proponents of the MIS process—the East Side Light Rail project started with 57 alternatives before being narrowed to seven. He cautioned that the money starts to run out by the time you get to PE and that you want to narrow your list before then. He recommended getting started as early as you can with the NEPA process and to "do your homework."



There were several questions from attendees, including how to deal with the public or elected officials coming back with new alternatives after AA completion, or contending with other federal alternatives analysis processes (the Coast Guard, for example). Ms. Borinsky replied that one of the most significant issues today is environmental streamlining and said that interagency task forces were in the process of meeting. She suggested that proponents develop a limited number of alternatives so that what is presented in AA can stand up in NEPA. She also recommended National Transportation Institute courses on the subject. She acknowledged that FTA's needs can vary depending on the project—sometimes they want to streamline, other times they need to have all the information.

## Linking NEPA and New Starts: NEPA and Preliminary Engineering

The same panelists next addressed the issue of coordination between NEPA and the New Starts Preliminary Engineering (PE) phase. Ms. Borinsky opened with three questions for the panelists to consider:

1. Have you had to introduce new alternatives after entering PE, and how did you handle this?
2. Do you have suggestions for avoiding “11th hour” alternatives?
3. Are you still in PE if another alternative comes up?

She identified a major problem as the fact that proponents can be spending money looking at a new alternative concurrently with spending other money to advance a different project through PE.

Mr. Petrocelli said that based on his experience in New York, “large projects live and die by momentum.” He cited the East Side Access project example where design changes arose that essentially constituted a new alternative, although several years and extensive public participation had already occurred around the overall project. Ms. Borinsky asked whether the design changes could have occurred during AA. He replied that the alternative arose only as the result of tunnel engineering and that it would have been impossible to identify it earlier.

Mr. Rohrer described a situation in northern Virginia where the local officials were not going to fund anything other than rail. The result was they advanced a project into PE that everyone knew was not going to be built.

Mr. Fisher suggested that some projects might have entered PE prematurely. He and Ms. Borinsky asked the panelists and attendees to consider addition steps FTA can take to ensure that the results of AA are projects that can advance all the way through PE, and to contact them directly with input on the practical implications of these steps.

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## Day One Summary

Ms. Sahaj closed Day One of both the East and West Coast Roundtables with a summary of the issues raised and topics discussed, and provided a preview of Day Two's sessions. In the evening, the Boston and San Diego host agencies with sponsorship from HNTB and Cubic Transportation Systems, respectively, organized evening events for attendees. In Boston, a reception was held at the Top of the Hub restaurant in the Prudential Tower. In San Diego, a reception was held at Coronado Island's Peohe's restaurant.



## Day Two

### Linking NEPA and New Starts: New Starts Rating Information and NEPA

After a brief introduction of the Day Two agenda, Ms. Sahaj and Mr. Vozzollo reintroduced the NEPA panelists from Day One (with the addition in San Diego of Kim Crawford of Triangle Transit Authority and William Van Meter of Denver Regional Transportation District, and in Boston of Andrew Brennan of the MBTA) to discuss the relationship between New Starts rating information and NEPA documents.

Ms. Borinsky outlined some of the key issues in FTA's goal to harmonize the NEPA and New Starts procedures:

- **TSM vs. Baseline—they are the same once you compare your project against the criteria**
- **Land use plan changes after EIS completion—is it reasonable for FTA to ask that the public process be reopened after land use plan changes?**
- **Cost effectiveness—would it be useful to require this during AA?**
- **FTA has an obligation to ensure that the data in NEPA documents is consistent with the data ratings in the New Starts process**

The panelists made several observations on these issues:

Mr. Brennan referred to the old New Starts process where the baseline was the no-build scenario. He described the confusion on a project like the MBTA's Silver Line Phase III where the TSM (a bus in mixed traffic on a very congested corridor) would never be implemented. He questioned the merit of including the TSM option in the NEPA documents. Ron Fisher responded that if you do a TSM alternative in AA, you must include the no build, TSM and New Starts project

in your NEPA documents. However, FTA has changed policy so that the TSM does not need to be carried in detail if it is described in the evaluation chapter.

Mr. Rohrer explained that the sponsoring agency (at least in the case of the Dulles corridor) has no control over local land use decisions, so he questioned the need for the agency to respond to land use plan changes in a public process. Brigid Hynes-Cherin pointed out that land use plans are an important component of project justification. Mr. Rohrer agreed, but noted that agencies are not allowed to use these plans (for example, Fairfax County's density bonuses for station-area development) to increase ridership figures.

Mr. Brennan suggested that the increased competitiveness of the New Starts program will result in most agencies gravitating towards including cost effectiveness in AA. He inquired as to whether cost effectiveness could be used to eliminate alternatives in NEPA. Ms. Borinsky replied that environmentally favorable alternatives should not be hastily eliminated due to cost effectiveness alone—the resource agencies are not interested in cost effectiveness when evaluating environmental impacts of a project.

Mr. Van Meter explained that Denver RTD had used different land use assumptions in NEPA than in the New Starts submittal for the T-REX project, because the New Starts baseline alternative should not include the highway component. As a result there were two different sets of projections and impacts and no consistency between the two documents. Mr. Fisher acknowledged this challenge on the T-REX project. He stressed the general need to make relevant documents that decision makers can relate to, suggesting that the transit profession has a problem in that it builds projects with great benefits, but is not very good at explaining these benefits to the public or decision makers.



## Requirements of PE Approval Process

At both roundtables, FTA staff discussed the prerequisites for New Starts projects before they should be considered for entry into Preliminary Engineering. Ron Fisher and Sean Libberton made the presentation in Boston and San Diego, respectively.

Both presenters began by emphasizing the importance of AA, and identified key lessons learned:

- Pay attention to the early decisions
- You do not want to deal with planning issues in PE
- Locals need to invest the time and resources to do it right

Mr. Fisher and Mr. Libberton reviewed the baseline alternative and the need for it to answer the question—what are we getting out of the New Starts project? The baseline alternative should be a real alternative, one designed to satisfy purpose and need. They cautioned not to get caught up in the bureaucratic terms, and reminded attendees that the TSM/baseline was not a new feature of New Starts.

Mr. Fisher and Mr. Libberton outlined the key requirements for advancing into PE:

- AA must be complete (preferred mode, general alignment selected)
- FTA needs to understand all alternatives, travel benefits of LPA, and rationale for LPA selection
- FTA approval of baseline alternative
- Project inclusion in constrained long range plan
- Project sponsor has demonstrated technical capacity (Project Management Plan, staffing plan, etc.)

Both presenters emphasized the need to get FTA involved early in order to expedite the PE approval process. This includes FTA review of AA study products, and early notification of intent to request entry into PE. David Vozzollo concluded by reinforcing the importance of good local decision making in satisfying the prerequisites for PE

## Defining PE

Although FTA had provided internal guidance on the PE process to regional offices in 1999, PE guidance has never been issued specifically for grantees. To help clarify some misconceptions, attendees were given presentations on FTA's view of what constitutes PE. In Boston, Don Emerson of Parsons Brinckerhoff made the presentation. In San Diego, a panel of David Vozzollo, Linda Gehrke from the FTA Region X office, and Neil McFarlane of TriMet discussed the issue.

Both presentations opened with a recommendation to review the "What is PE?" white paper included in the attendee binders. The resources at the back of the white paper were highlighted as being of particular interest. The presenters then discussed what did and did not constitute PE.

What PE is NOT:

- Just engineering
- 30% of Final Design (FD)
- Enough analysis to complete NEPA
- Design to exhaust the entire PE budget



#### What PE IS:

- Major phase in the continuum of local planning and project development decisions
- Analyses that support decisions on all aspects of a project that affect cost, benefits and impacts
- Completion of Financial Plan, NEPA compliance, Project Management Plan (PMP) for FD and construction

Both presentations also reviewed the timing of key decisions in the process. Decisions that typically precede PE were identified as LPA selection, purpose and need description, financial plan, and the initial PMP. LPA and Financial Plan refinement, environmental mitigation measures, and PMP extension were identified as activities completed after entering PE.

Both presenters and attendees discussed how they defined PE. Mr. McFarlane said that he knows a project is at PE when the General Manager asks him “can you build this project at this price” and he can reply “yes”. For New York City MTA’s Peter Cafiero, PE represents the amount of work needed to arrive at a solid cost estimate. He explained the need to be able to say specifically what a project is and attach a cost and a schedule to it. The presenters agreed that PE work must be sufficient to make informed decisions, minimize risk and uncertainty, and finalize PMP for implementation.

Ron Fisher identified the rising costs of projects once they have advanced into FD as a source of embarrassment to FTA and project sponsors and solicited ideas for what can be done in PE to address this concern. Some issues and potential solutions were identified:

*Dennis DiZoglio* of the MBTA suggested that New Starts projects should remain in the Planning department through PE—confusion has been created by projects moving to the Construction department prematurely.

*Sharon Dent* of HARTLine believes that the growing portion of PE funds that are being used to develop NEPA documents is compromising the quality of PE work.

*Mr. McFarlane* emphasized the importance of tying down third party commitments. He also cautioned that not every project fits every delivery system and that “the project should help define the procurement” when it comes to decisions about design/build.

Mr. Vozzollo concluded the San Diego session by encouraging greater teaming efforts in the future between project sponsor departments. He also explained the pressure FTA was under from the Office of Management and Budget, and other agencies, due to a few high profile problems with project costs skyrocketing during FD. He believes that FTA and project sponsors can do a better job of sharing lessons learned from these projects, “as painful as that may be.”

## Final Design Approval Procedures and Requirements

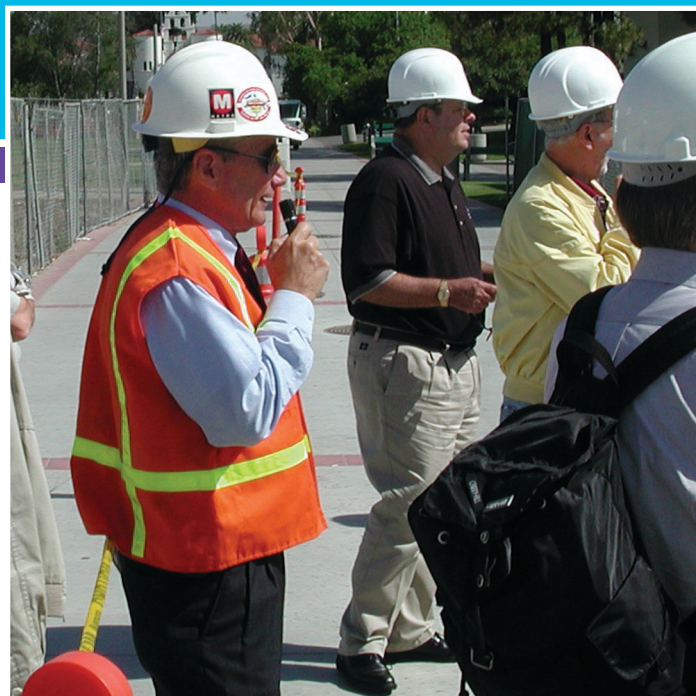
In Boston, Sam Carnaggio of the FTA Office of Program Management gave a presentation on the process of advancing from PE into Final Design.

Mr. Carnaggio briefly reviewed the documents under development during FD (Right of Way Acquisition, Utility Relocation, and Final Construction plans). He also identified the following tools available to project sponsors working on FD:

- [FTA Regional Offices](#)
- [Project Management Oversight \(PMO\) contractors](#)
- [Financial Management Oversight \(FMO\) contractors](#)
- [Risk Analysis](#)
- [Risk Mitigation](#)

The overall theme of Mr. Carnaggio's presentation was the need for grantees to have confidence in their project and in their capabilities to build it. He emphasized the need to make FTA confident in your project because by the time it is in FD it is also FTA's project (and success or failure, depending on the outcome). David Vozzollo listed technical and financial capacity and the resolution of real estate issues as particularly important for FTA to have confidence in the project. Ron Fisher added that FTA is looking for 50% of non-New Starts funding being committed by FD.

Discussion with attendees covered issues such as the period between a Record of Decision and the FD letter (is PE still ongoing during this period?) and the need for project sponsors to be able to opt for getting a design/build contractor on board early enough in design to reap the benefits of the D/B approach.



## Standardizing Capital Cost Estimates

In Boston, Mr. Carnaggio was joined by Susan Herre of the FTA Office of Planning and Environment for a session on capital cost analysis finding. David Vozzollo and Ron Fisher made a similar presentation in San Diego.

The presenters explained that due to FTA's need to be more accountable for the New Starts program, it is imperative that they get "projects that deliver on their promises." FTA has developed a number of cost controls, including:

- [Risk Assessments;](#)
- [Better AA cost estimates;](#)
- [Before/After Studies;](#)
- [Light Rail/Heavy Rail Studies; and](#)
- [Standardized cost categories.](#)



They acknowledged that often cost increases are simply due to factors that are beyond grantee control. However, FTA needs to know the reason. They reassured attendees that cost categories consisted of 5 site-specific, and 5 project-wide general categories. Ms. Herre provided a handout that had the full outline of the standardized cost categories and she said an accompanying definition sheet was in development.

Key benefits of the standardized cost categories will be that within one project it will now be easier to see what is causing project cost increases. In addition, it will be easier to look across all New Starts projects to identify those that are in trouble.

Currently there are several New Starts projects serving as pilot projects for the standardized cost categories, including the host cities of Boston (Silver Line Phase III) and San Diego (Mid Coast Corridor). The goal is to have across-the-board implementation by January 2005 (in time for the FY 2007 New Starts Report).

Ms. Herre outlined next steps for the standardized cost categories:

*Short Term:* FTA will revise documents so that the categories can be included.

*Long Term:* A cost database will be created from the information. This will allow for the identification of patterns of change among projects, and attention to be focused on areas of greatest volatility.

Mr. Vozzollo also asked attendees to be on the lookout for a cost database and calculator currently under development by Booz Allen.

Dennis DiZoglio of the MBTA expressed his satisfaction with the pilot program, saying that it has allowed his agency to better monitor progress. His only concern was comparisons across projects due to the relatively high contingency (50%) the MBTA build into their cost estimates.

Alberto Parus of Miami Dade Transit applauded the FTA effort to develop the standardized cost categories and suggested that they be included on FTA's website to assist grantee planners in asking their engineering departments why particular costs may be higher than the national norm.

*Note:* Standardized Cost Categories have since been added to the FTA website as of July 2004 at [www.fta.dot.gov](http://www.fta.dot.gov) (click on "grant programs").

## Applying Risk Assessment

David Vozzollo made presentations in both Boston and San Diego on risk assessment where he outlined both the risk analysis process and the risk mitigation process, stressing that risk management tools are not new and have been applied extensively in other industries as well as transportation. Mr. Vozzollo opened his presentation by pointing to the need for risk management to be applied as a cooperative effort with project sponsors, where FTA and sponsors share roles and responsibilities. FTA has promoted two key benefits of risk management:

- As a management tool for project sponsors
- As an oversight tool for FTA and contractors

Mr. Vozzollo described the nature of project risk and uncertainty, cautioning that although the transit industry tends to focus on one cost number, in reality there is always a distribution curve around that estimate—the true cost is only known with certainty when the project has been built and all the bills are paid. He outlined a six-step process for conducting risk assessment, covering both early analysis and later mitigation and management tasks:

1. Validation of base conditions
2. Risk identification and quantification (documented in a risk register)
3. Assessment (modeling)



#### 4. Discussion/review

#### 5. Risk mitigation planning

#### 6. Implementation/monitoring

Mr. Vozzollo next reviewed the various technical methods for quantifying risks, including which methods were suited for which types of projects. After quantifying risks, project sponsors should take those with the biggest potential impact on cost or schedule, and identify methods to minimize the risk. Grantees should frequently check back to ensure they are following up on their risk management plan (RMP). The RMP represents a critical component of FTA – grantee collaboration in risk assessment.

Mr. Vozzollo described the primarily positive experience of five project sponsors who had implemented FTA's new risk assessment approach—LA East Side, Pittsburgh North Shore, Charlotte LRT, Las Vegas Monorail, and Cleveland Bus Rapid Transit (BRT), in addition to his own experience with the Lower Manhattan Recovery Office.

John Muth of Charlotte Area Transit System briefly addressed the Boston attendees on more of the specifics from the Charlotte LRT risk assessment. He explained that risks were based on 30% design plans and that the top four risks accounted for 75% of the risk. Mr. Muth said that CATS identified real estate costs as the greatest source of cost increase risk, and how they were able to explore methods for addressing this risk once it was identified. He emphasized the need for risk assessment to be “as transparent as possible” and suggested that it become a prerequisite for entry into PE and FD.

Sam Carnaggio of FTA made a brief presentation in Boston on the newly released Light Rail Cost Study, which reviewed the experiences of 19 projects designed since 1991 and identified trends and cost characteristics. He mentioned that a similar heavy rail study was under way which would also support FTA's risk assessment efforts.

Although FTA's risk assessment work is still very much in a “learning phase,” FTA and project sponsors have already benefited from this effort. Mr. Vozzollo said that the next step is to roll out the entire program. He and Lynn Sahaj explained that FTA will use the PMO to assign contractors to each project sponsor once the FTA procedure has been developed. In addition to the new procedures, Mr. Vozzollo said that FTA is also working on putting together a lessons learned document and possibly developing a risk assessment workshop.

### Updated Annual Reporting Instructions

Ron Fisher made the final presentation at both roundtables, presenting the key features of the 2004 New Starts criteria reporting instructions. The features highlighted included:

- No changes to measures or the evaluation process;
- Clarified requirements for exempt projects;
- Improved guidance on “making the case” document and SUMMIT reporting; and
- Instructions to be supplemented by detailed land use and financial “contractor guidance (still being refined by FTA).





Since there had been confusion in the past on FTA's expectations for the "making the case" document, Mr. Fisher provided an overview of FTA's intent:

What "making the case" is:

- 3 page narrative of quantitative benefits
- Rationale for this project over other corridor improvements
- Who benefits and why?
- Focused on transportation benefits

What it isn't:

- A description of how big the corridor problem is—you need to make a connection with the New Starts project
- A glossy executive summary of the planning study (content is much more important than format)
- A summary of financial and political commitment
- All "what" and no "why"

Mr. Fisher explained that the key to making the case is to interpret SUMMIT reports, relate benefits to project purpose and need, and select a sample of significant markets to demonstrate project benefits. He cited Hartford and New York's 2nd Avenue Subway as two project sponsors who have done a good job. He concluded the presentation with some a review of Summit reporting requirements and the tentative schedule FY 2006 New Starts criteria submissions.



## Summary of Roundtable and Next Steps

Lynn Sahaj thanked participants at both Roundtables for their attendance. After offering attendees a final opportunity to raise any unaddressed concerns, she encouraged all to contact FTA headquarters or regional offices should issues arise after the Roundtables. She offered particular thanks to the two host cities, and the MBTA and SANDAG, as well as to HNTB and Cubic Transportation for hosting the Wednesday night receptions. Ms. Sahaj closed by describing how much she had gained from her first Roundtable series, and the benefits of hearing both east coast and west coast perspectives on the New Starts process.

## Day Three Tours

On the final day of the Roundtables, the host agencies led tours of a local New Starts corridor. In Boston, the MBTA gave attendees a walking tour through the soon to be completed Silver Line bus tunnel. The tour focused on construction techniques, and transit oriented development. Attendees were also given a bus tour of the already opened surface portion of the Silver Line. In San Diego, attendees were taken by bus along the Mission Valley East extension. This tour provided attendees with some insight into some terrain-related technical challenges, and the excitement at San Diego State, as well as other area universities, about the potential benefits of campus light rail service.

## Rating the New Starts Roundtables

Participants unanimously gave the 2004 New Starts Roundtables high ratings on post-conference evaluation forms. Attendees were asked to rate the usefulness of the information covered, the preparedness of presenters, and the effectiveness of presentations. The clear majority of responses rated these aspects of the Roundtables "Excellent".

Participants were also asked to share their thoughts on the strong points of the New Starts Roundtable series. Some of the most frequently mentioned strengths of the program included:

- Risk analysis presentations
- NEPA/New Starts link
- FTA staff presentations
- Information exchange

Participants also looked ahead and offered a variety of suggestions for topics to cover in the 2005 Roundtable series. The New Starts topics that generated the most interest were:

- New experiences and progress with risk assessment
- Financial projections and planning assumptions
- "Making the case" for economic benefits
- Small Starts guidance
- Issues related to entering Final Design

Attendees also recommended locations for the 2005 Roundtables, with San Francisco, Seattle, Salt Lake City, New York City, and Dallas being the most frequently named locations.

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Special thanks to Tonya Holland and Beth Day for coordinating the 2004 New Starts Roundtables. For more information on next year's Roundtable program and meetings, contact the FTA Office of Planning and Environment at (202) 366-2360.

# New Starts

Roundtables 2004

**Boston**

April 14-16, 2004

**San Diego**

May 12-14, 2004