

Federal Transit Administration's "New Starts" and "Alternatives Analysis" Process: A Non-Technical Narrative

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Introduction

Collectively, the cities of Rockford and Belvidere, along with Boone County are pursuing federal funding to plan, design, construct, and operate a new transportation facility to provide an efficient transportation link connecting the Boone/Winnebago region with the Chicagoland area. This action addresses the current increase and projected long-term growth in trips between the two regions. Advancing this project through planning and ultimately through engineering and construction requires compliance with the Federal Transit Administration's "New Starts Process" and its initial phase -- Alternatives Analysis.

This paper uses a narrative format to explain the New Starts Program and the Alternatives Analysis (AA) process. Background and guidance on this program and its many phases are predominantly geared to a technical audience tasked with performing the many activities comprising the New Starts Project Development Program.

The project sponsor(s) is responsible for performing a thorough technical and business assessment identifying:

- > Project purpose and need
- > Strengths and weaknesses of each transit alternative
- > Capital and Operating costs,
- > Cost-effectiveness, and
- > Funding plan

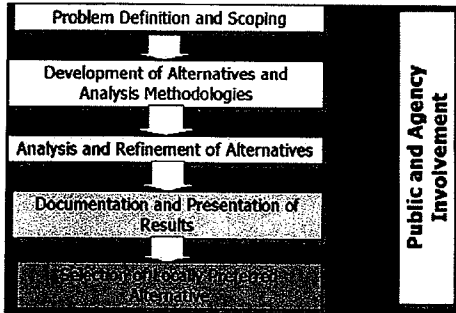
This paper intentionally excludes the program's technical aspects and federal guidelines. Use of this narrative format enables the reader to grasp an understanding of the New Starts Process and how its initial phases relate to each other. In addition to providing program information, another objective of this paper is to increase program understanding, and in doing so, motivate the general public and other stakeholders to become actively involved in the public involvement process that is an integral component of this entire undertaking.

While it is premature at this juncture to focus on project details, one factor is certain; federal funding is necessary to pay for a large portion of the planning, engineering and construction of this transportation improvement. A key outcome from this project phase is obtaining a positive response from the U.S. Department of Transportation that this proposed transportation improvement should advance and that they commit to becoming a funding partner as future phases begin.

New Starts Process

Proposed major transit investments seeking federal funds are required to follow a prescriptive multi-phased planning and engineering program established by the Federal Transit Administration (FTA). The Federal Transit Administration (FTA) is the U.S. Department of Transportation agency providing capital

funding for major transit investments. When federal transit funding is sought for a major transit investment, whether the project is an entirely new facility or a major upgrade to an existing major transit facility like commuter rail, light rail or bus rapid transit, FTA requires project sponsors, like Rockford, Belvidere and the County to strictly adhere to the processes comprising FTA's New Starts program.



Consequently, the Alternatives Analysis for the Elgin to Rockford Corridor will be conducted consistent with FTA's New Starts Program guidelines.

New Starts, as it is commonly referred, is a technical analysis and business planning process designed to provide input for informed decision-making. It systematically guides local decision-makers through an orderly evaluation process of potential transit alternatives chosen for their ability to effectively solve transportation needs and problems.

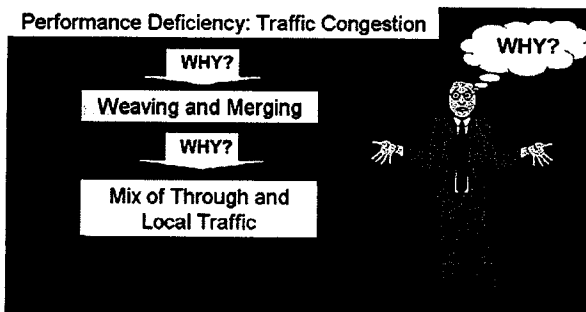
Purpose and Need Statement

One of the first activities performed is the definition and validation of the project purpose and why it is needed. It is *the* starting point for:

- Building consensus for making the required financial investment
- Identifying alternatives considered as potential solutions to meet the *need*
- Evaluating each alternative's effectiveness, and
- Making the "case" for the federal investment

Preparing an effective purpose and need statement is a challenging task. All too often, project sponsors justify a transportation need based on *symptoms* instead of the *underlying root causes* of a transportation problem(s). The New Starts Program requires that transportation problems be defined and solutions be proposed not based on symptoms but based on the transportation problem's root cause(s).

"X" mode is needed because we have traffic congestion. This does not define nor justify need. In this example, an underlying problem might be: "Local traffic or residential and/or, employment growth is outstripping infrastructure development".



Defining the underlying cause of a severe transportation problem provides the context from which to select, evaluate, and assess the effectiveness of alternatives that might potentially provide solutions to the problem. Often it is difficult to determine the fine line between symptoms and root causes. The adjacent diagram albeit simple is effective in highlighting the difference between "symptoms" and underlying (root) causes.

Phrases like "congested roadways"; "support desired economic development and land use change"; "growing number of transit dependents"; "slow and unreliable transit service"; and "long transit travel

times” frequently appear in Purpose and Need Statements as justification for major transit improvements and for FTA funding to implement these improvements.

The Purpose and Need Statement identifies major transportation problems and substantiates their root causes. This document becomes the key resource used to define potential transportation alternatives and formulate evaluation criteria used to measure the extent to which an alternative contributes to a project purpose.

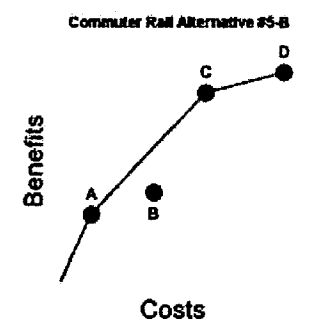
During the initial weeks of this New Starts project work plan, the consultants will meet with city and county staff and other stakeholders to define the problem and to identify the underlying cause(s).

Alternatives Analysis Process

While the purpose and need defines the transportation condition and its underlying cause(s), the Alternatives Analysis process achieves two purposes. First, the AA serves as the means to identify potential solutions. Second, each potential solution (alternative) is evaluated in increasing detail by evaluation criteria linked to achieving the objective(s) contained in the Purpose and Need.

In addition to the alternatives defined by city and county staff with public input, the FTA requires the project sponsor to also evaluate at least two FTA-required low-cost alternatives. The first is termed the “No-Build Alternative. This alternative includes no other transportation improvements other than those already funded in the region’s capital improvement program.

Second, any study considering major transit investments must also include an option that optimizes transportation facilities and services in the corridor but stops short of major capital expenditures. This option is called the Transportation System Management (TSM) alternative, which will usually serve as the asis of comparison during the alternatives analysis and serve as the basis of comparison during the alternatives analysis and serve as the New Starts baseline alternative during preliminary engineering and final design.



The FTA-required low-cost alternatives are purposely included and they function as business planning tools and decision making resources.

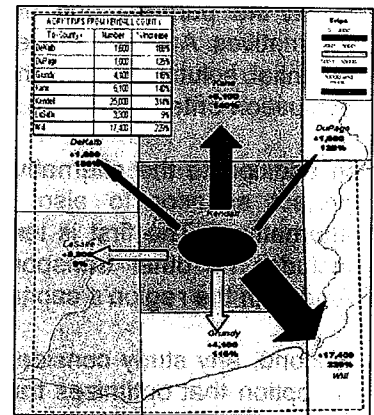
For example, evaluating a high cost alternative, determining its benefits, its costs, and other potential benefits falls short of a more complete evaluation that compares the high cost alternative and its benefits against the same benefits derived from the lower cost alternatives. This comparison vividly illustrates the “gap” in this comparison of benefits. If the low cost alternative increases roadway capacity by accommodating 2,000 more cars per day at the cost of \$35 million and the higher priced alternative accommodates 2,300 more cars per day at the cost of \$95 million, the benefit derived from the higher cost alternative falls drastically short as a sound investment of public funds. This, of course, is a simplistic example. An actual comparison of alternatives would include numerous criteria and most likely introduce an analysis of trade-offs as part of the evaluation process.

Alternatives are evaluated against the same set of criteria three or four times during the Alternatives Analysis phase. The first “pass” is the most general evaluation -- focusing on critical criterion as a means to reduce the initial number of alternatives. The *intensity* and *exactness* of analysis does increase with each evaluation round. Each evaluation round culminates with an updated ranking of alternatives. Lowest scoring alternatives are eliminated from consideration.

“Why Evaluate Alternatives – We Already Know What We Want”

During the alternatives analysis phase it is not uncommon for a project sponsor or the public to ask the following: “*We already know what we want to build. So why do we have to study other alternatives?*”

If decision-making proceeds in this manner, particularly for major costly investment, the outcome could lead to a course of action based on incomplete or flawed reasoning. The foundation upon which the expenditure of public funds would be based would not be as strong. While Alternatives Analysis does involve several months of data collection, analysis, and decision-making it fosters dialogue among stakeholders, provides opportunity to test plausible scenarios, provides continuous opportunity for public input, and systematically leads to a long-term decision based on a thorough evaluation and documentation of the facts.



The final step in the Alternatives Analysis process is selecting the “locally preferred alternative” (LPA). Selection of the LPA is a major benchmark in the New Starts and AA processes. The LPA is that alternative that best satisfies the documented purpose and need for the improvement within environmental and funding constraints. It signifies that the technical and business planning process has advanced to the stage where an alternative can be objectively selected. The LPA recommendation will be made by Rockford, Belvidere, and Boone County and ultimately approved by the Boone/Winnebago metropolitan planning agency .

Following LPA selection, a series of “templates” designed by FTA are then completed by the project sponsors and sent to FTA for their review of the project with the intent of obtaining their approval and receiving federal funding to advance the LPA into the design stage and to also perform more extensive environmental study. This FTA requirement promotes consistency in the description of alternatives analysis results among other projects, nationally, that also are seeking federal funding. It enables FTA to analyze each candidate project on its own merits and against the merits of other “competing” projects elsewhere in the region and the U.S.

Local and Federal Benefits Derived From AA

The New Starts Program/Alternatives Analysis Process is most often viewed as a federal requirement. While the process is federally required when federal funding is sought for a project, local government(s) sponsoring the study/project also derives value from the process. Understanding the local benefits linked to the AA process is important to eliciting support for the study effort as well as the project.

From a local perspective, answers to the following questions begin to define and structure local priorities:

- > What do we want to do?
- > What are the benefits?
- > How much does it cost?
- > Where's the money going to come from?
- > How do we make the project happen?

From FTA's perspective, answers to the following questions help them to evaluate the extent to which a project is worthy of federal investment:

- > What's the problem and were all reasonable alternatives considered?
- > How solid is the Locally Preferred Alternative decision?
- > Were the New Starts criteria developed and evaluated objectively and correctly?
- > How does the project rate in FTA's scoring system?
- > Should FTA fund it?

Planning, public involvement, establishing and solidifying broad based project support are critical at this early stage in the New Starts planning process. In the coming months the Alternatives Analysis for the Elgin to Rockford Corridor will focus on:

- > Defining the purpose and the need for a major transportation improvement
- > Identifying and evaluating alternative routings and transit technologies,
- > Forecasting ridership
- > Estimating costs
- > Calculating public benefits

This narrative is intended to acquaint the public and other stakeholders in the study area about the major federal-defined planning process that is underway. It is a technical process, it is a time intensive process, and above all it is a process that benefits from ongoing public input. It is a process that focuses and strengthens public decision-making.

Note: Individuals interested in reading more detail about the FTA New Starts Process can find this material at: http://www.fta.dot.gov/planning/planning_environment_5221.html

