

**Commission Briefing Paper 4K-03**  
**Evaluation of Methods to Incorporate Projects**  
**With National Transportation Benefits**  
**into Local Planning Processes**

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**Introduction**

This paper is part of a series of briefing papers to be prepared for the National Surface Transportation Policy and Revenue Study Commission authorized in Section 1909 of SAFETEA-LU. The papers are intended to synthesize the state-of-the-practice consensus on the issues that are relevant to the Commission's charge outlined in Section 1909, and will serve as background material in developing the analyses to be presented in the final report of the Commission.

This paper presents information on how transportation projects with "national" benefits have been accounted for in Federally-required metropolitan and statewide transportation planning processes. Beginning with a brief overview of existing metropolitan and statewide transportation planning processes and practices, this paper also discusses challenges faced by today's transportation planning processes in addressing globalization and economic development issues. Finally, this paper presents brief "case study" examples of three recently-completed and two current corridor/project planning efforts, followed by a set of key policy and program issues to be considered over the course of the next 10-20 years. This paper compliments the information contained in briefing papers 4L-02 (Implications of Investment in Corridors of National Significance) and 4K-04 (Evaluation of Methods to Engage Private Sector in MPO and State Planning Processes).

**Background and Key Findings**

Beginning over 40 years ago, Congress has directed that Federally-funded highway and transit projects must flow from transportation planning processes, based on "3-C" principles (continuous, cooperative, and comprehensive). Since enactment of the Intermodal Surface Transportation Efficiency Act of 1991, metropolitan and statewide transportation planning processes have been expected to serve as the key forums for prioritized transportation decision-making inclusive of all modes. In recent years, multi-jurisdictional coalitions have emerged as effective partners in dealing with regional, corridor, and bi-national trade transport development that cannot be easily addressed using traditional planning approaches. Nevertheless, surface transportation projects and investments involving Federal funds must be considered within the realm of metropolitan and statewide transportation planning processes.

Based largely on a web-based literature review, the key findings and considerations presented in this paper are:

**This paper represents draft briefing material; any views expressed are those of the authors and do not represent the position of either the Section 1909 Commission or the U.S. Department of Transportation.**

- There appear to be several common factors or “themes” related to the success of recently-completed and current “national projects.”
- Although State Departments of Transportation (State DOTs) and Metropolitan Planning Organizations (MPOs) typically develop and use performance measures and/or project prioritization/selection criteria for defining and advancing projects, there are no substantive criteria (qualitative or quantitative) for defining “national transportation benefits.”
- In metropolitan areas, it is particularly crucial for the MPO(s) to be engaged at the outset, since the MPO is the regional forum for transportation decision-making (via the Transportation Improvement Program). However, certain corridors and projects may require, as well as benefit from, multi-State and/or multi-MPO transportation planning efforts.
- As time progresses, the future success of corridor-level plans and projects to move people and goods faster and safer likely will be tied to multi-faceted and multimodal solutions, not just focused on the highway system.
- Moving from a planning-level “vision” to tangible project implementation is (and will continue to be) a challenge, particularly as State DOTs, MPOs, and other stakeholders look for innovative approaches to fund large-scale transportation projects.
- Challenges also are likely to arise on funding “national priority projects” within the context of metropolitan and statewide transportation planning processes, especially for transportation projects and solutions in which costs are borne locally, but benefits are accrued more widely.

### **Transportation Planning Overview**

The Federal-Aid Highway Act of 1962 first created the federal mandate for urban transportation planning in the United States, during a time in which urban areas were beginning to plan National Interstate and Defense Highway System routes through and around their areas. Through subsequent legislation, Congress has directed that Federally-funded highway and transit projects must flow from transportation planning processes, based on “3-C” principles (continuous, cooperative, and comprehensive).

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) introduced unprecedented focus and direction for strengthening transportation planning processes, including the establishment of a formalized statewide transportation planning process. ISTEA acknowledged the importance of the overall transportation system in providing mobility for people and goods, as well as connections to economic activity. In addition, ISTEA called for linkages between transportation planning and other societal goals (e.g., system operation, maintenance, and management; human and natural environment; economic development; financing; and freight considerations).

At the metropolitan level, Metropolitan Planning Organizations (MPOs) are designated for urbanized areas over 50,000 population, as defined by the Bureau of the Census. At the statewide level, State Departments of Transportation (State DOTs) are responsible for coordinating with other stakeholders, including the various MPOs and modal agencies. Key products from metropolitan and statewide transportation planning include long-range

transportation plans (covering at least 20 years) and short-range transportation improvement programs containing specific transportation projects/project phases for advancement.

Subsequent reauthorizing legislation, the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), have built upon the ISTEA theme for comprehensive transportation planning and decision-making. Recognizing that transportation needs, issues, and solutions expand beyond State boundaries, SAFETEA-LU Sections 3006 and 6001 added a statutory provision (49 U.S.C. 5304(c) and 23 U.S.C. 135(c), respectively) granting Congressional consent to two or more States to enter into agreements or compacts for conducting coordinated transportation planning related to interstate areas and localities in the States.

### **Globalization and Economic Development Challenges for Local Planning**

Transportation is closely linked to economic development, and is viewed as a catalyst for economic development. In fact, many recent project/corridor studies (Western Transportation Trade Network, Latin America Trade and Transportation Study, and Trans-Texas Corridor) list improved economic development opportunities as a goal.

Additionally, in today's global economic environment, many freight movements encompass interstate and international travel. The growth in international trade expected through 2020 will place a continuing burden on international gateways and gateway communities. However, gateways create a "free rider" transportation problem, in which the costs and congestion associated with trade are borne locally, while the benefits are distributed broadly throughout the county. As population continues gravitating to coastal and border regions (particularly the southern border through demographic shifts and immigration) public agencies, port authorities, and the private sector will be faced with stiff competition for land and access by which improvements in freight efficiency might be advanced. Moreover, gateway-type projects are likely to combine existing or modified Federal-aid programs and public/private partnerships through an innovative finance program underpinned by user fees, as was the case with the Alameda Corridor.

Given the importance of freight to the economy and projected growth in freight traffic, a dynamic and responsive transportation planning process is needed to address deficiencies in the freight transportation system. Likewise, reconciling the vastly different timeframes used in planning by the public and private sectors, encouraging private sector involvement in State and MPO planning processes, and facilitating multi-jurisdictional cooperation and coordination are critical to ensuring that freight perspectives are included in planning and programming major transportation improvements.

However, public decision-making affecting these movements tends to occur at the State and MPO levels. For example, since the enactment of ISTEA, challenges in giving freight investments optimal consideration in transportation planning and decision-making have included: (a) limited resources; (b) lack of communication with freight interests on shipper and carrier needs; (c) the perception that freight projects have limited benefit for the local/regional population as a whole; (d) costs borne locally, but benefits accruing more widely; and (e) the perceived priority needs of passenger-related projects.

In recent years, multi-jurisdictional coalitions have emerged as effective partners in dealing with regional, corridor, and bi-national trade transport development that cannot be easily addressed using traditional planning approaches. The I-95 Corridor Coalition and the Latin America Trade and Transportation Study are two examples of multi-jurisdictional alliances that have been successful in addressing freight issues. Pooled resources, improved understanding of partners' concerns, and enhanced communications are important benefits of such alliances.

### **Case Study Examples and Common “Success Themes”**

The following summarizes three successful “national” projects that have been planned, developed, and completed since ISTEA, using funds from the National Corridor Planning and Development and Coordinated Border Infrastructure Programs, in combination with other funding sources.

- ***Commercial Vehicle Processing Center (Buffalo, New York):*** The Buffalo and Fort Erie Public Bridge Authority and a user group consisting of trucking associations, commercial carriers, brokers, and the U.S. Customs Service had been seeking to improve the operation of the border crossing at the Peace Bridge. A Commercial Vehicle Processing Center (CVPC) intended to assist truck drivers with incomplete paperwork was developed on the Canadian side of the border. Fewer vehicles failing the primary inspection would mean less congestion on the bridge. The CVPC opened in late FY 1999, and within the first year, the number of vehicles failing the primary inspection fell from 36 percent to 15 percent.
- ***Freight Action Strategies (FAST) Corridor (Seattle-Tacoma-Everett, Washington):*** Beginning in 1994, local, State, port authority, private sector, and Federal officials began developing plans to improve highway/railroad crossings and port access highways in the vicinity of the ports of Seattle, Tacoma, and Everett. The roundtable discussions precipitating this overall project started with shippers and carriers (marine, rail, truck, air, and intermodal), local governments, the three ports, the Washington State DOT and State Transportation Commission, Federal Highway Administration, Federal Transit Administration, Federal Railroad Administration, Maritime Administration, and the 833rd U.S. Army Transportation Battalion (part of the Military Transportation Management Command). The first grade separation project was completed in FY 2001, and by January 2003, 10 such projects were completed. As a result, traffic back-ups disappeared, safety improved, and railroad efficiency has increased. Because a high percentage of jobs in the Seattle-Tacoma-Everett metropolitan area (as many as one in three) are tied to international trade, systematic improvement of port access is seen as vital to the area's economic well-being.
- ***Alameda Corridor East (San Gabriel Valley, California):*** Similar to the FAST program, many Alameda Corridor East (ACE) officials (local, regional, State, and private sector) have been working to improve highway/railroad grade crossings (including many grade separation projects) in an East-West corridor with high railroad traffic serving the Port of Los Angeles/Long Beach. The first completed projects have resulted in decreases in congestion, improvements in safety, and reductions in air pollutant emissions. Without

these improvements, increasing rail corridor traffic would worsen the region's congestion, safety, and air quality problems, as well as restrict economic development. ACE is a model for public-private cooperation, and illustrates how a systemic approach of multimodal development, involving multiple jurisdictions and combined funding sources, can be brought together to address a problem of regional and national interest.

Additionally, the following are two other "national" projects that have recently entered the planning and project development phases:

- ***Trans-Texas Corridor (Statewide)***: The Trans-Texas Corridor Plan calls for developing the corridor in phases over approximately 50 years, with routes prioritized according to the State's transportation needs. To date, the plan identified four corridors as priority segments. This corridor system includes: (a) separated tollways for passenger vehicles and trucks; (b) six rail lines (three in each direction), with two tracks for high-speed passenger rail, two tracks for commuter rail, and two tracks for freight; and (c) a protected network of safe and reliable utility lines for water, petroleum, natural gas, electricity, and data. One of the sections under study, I-69/TTC, extends from northeast Texas to the Mexican border, incorporating about 1,000 miles of the planned I-69 corridor that will extend northward to the Michigan/Canada border. To pay for the Trans-Texas Corridor, the Texas DOT (TxDOT) is looking at a variety of financing methods. TxDOT expects public-private partnerships, such as those that tap into funding sources from the private sector in return for toll revenues, to play a key role in financing and constructing the system. Other options include right-of-way leasing and State and Federal funds.
  
- ***Chicago Region Environmental and Transportation Efficiency Program (Chicago, Illinois)***: The Chicago region is the world's third busiest intermodal hub, where six of the seven Class I freight railroads converge. In addition, nearly a quarter of the nation's rail shipments move to or through the Chicago region. The Chicago Region Environmental and Transportation Efficiency Program (CREATE) project will maximize the use of five train transportation corridors, including four primarily handling freight traffic and one primarily handling passenger traffic. The project involves approximately 60 improvements, including: (a) 25 new roadway overpasses or underpasses at locations where automobile and pedestrian traffic currently crosses railroad tracks at grade level; (b) six new rail overpasses or underpasses to separate passenger and freight train tracks; (c) viaduct improvements; (d) grade crossing safety enhancements; and (e) extensive upgrades of tracks, switches, and signal systems. The Northeastern Illinois Planning Commission, the comprehensive planning agency for Chicago's six-county metropolitan region, includes CREATE as an important objective in its *2040 Regional Framework Plan* for relieving the region's freight bottleneck issues. Six private freight railroads are planning to make a \$212 million equity contribution to support the \$1.534 billion CREATE program. Selecting the project improvements for CREATE was a collaborative process between the freight railroads, State and local transportation agencies, and passenger railroads Metra and Amtrak). Input on grade crossings and traffic congestion was considered from the Illinois Commerce Commission and the Chicago Area

Transportation Study (the MPO for the Chicago region). This project is planned to be completed in multiple phases, requiring six to 10 years to construct.

Among the common factors or “themes” related to the success of such projects include:

- A well-defined project purpose and need with clear goals and vision;
- Collaborative and cooperative efforts among the different agencies and even non-traditional transportation partners (e.g., U. S. Customs and Border Protection, trucking associations, and neighboring countries);
- The ability of the project sponsor and other cooperating agencies to leverage and combine multiple funding sources;
- Discrete project phasing to allow the project to be readily constructed and/or put into operation; and
- The implementation resulted in observable changes and identifiable performance measures (e.g., decrease in congestion, safety improvement, reduction in pollutant emission, and mobility efficiency) that could be documented.

#### **Future Implications: Issues to Consider**

Based on above background information and examples, the following are key policy and program issues worthy of consideration over the course of the next 10-20 years:

- ***National Transportation Benefits: Defining the Basic Criteria.*** Although State DOTs and MPOs typically develop and use performance measures and/or project prioritization/selection criteria for defining and advancing projects, there are no substantive criteria (qualitative or quantitative) for defining “national transportation benefits.” Furthermore, with changing travel and economic trends, traditional transportation planning approaches for defining “benefits” may not be appropriate, possibly calling for the use of a different methodology that extrapolates information from outside the transportation community.
- ***Broad Jurisdictional (Multi-State and Multi-MPO) Transportation Planning.*** In metropolitan areas, it is particularly crucial for the MPO(s) to be engaged at the outset, since the MPO is the regional forum for transportation decision-making (via the Transportation Improvement Program). However, certain corridors and projects may require, as well as benefit from, multi-State and/or multi-MPO transportation planning efforts.

The potential list of cooperative partners on these corridors and projects may be extensive. A good example is the FAST Corridor (see previous section). As a result, this level of coordination can be very time- and labor-intensive. Currently, beyond funding “earmarks” for specific corridors and projects, there are not identifiable “set-aside” sources of funding for this level of multi-State planning activity, even though State DOTs

and MPOs may pool their existing Federal planning and program funds to foster this type of planning effort.

- ***Surface Transportation, Beyond Highways.*** The future of corridor-level plans to move people and goods faster and safer will be multi-faceted and multi-modal, not just focused on the highway system. A current example is the Trans-Texas Corridor (see previous section).

Along these lines, the U. S. Department of Transportation issued its “National Strategy to Reduce Congestion on America’s Transportation Network” on May 16, 2006. This national strategy outlines six areas of emphasis, intended to show potential to both reducing congestion in the short term and building the foundation for successful longer-term congestion-reduction efforts. In particular, the strategy “Establish a Corridors of the Future Competition” is aimed at accelerating the development of multi-State, multi-use transportation corridors by: (a) running a competition to select 3-5 major growth corridors in need of long-term investment; (b) convening a multi-State process to advance project development and seek alternative financial opportunities; and (c) fast-tracking major congestion reducing corridor projects that received funding in SAFETEA-LU.

- ***Implementing the “Vision” Via Projects.*** The metropolitan and statewide transportation planning processes define goals and objectives for the region over a minimum “planning horizon” of 20 years. Ideally, this “vision” subsequently translates into prioritized transportation investments for the region. Since ISTEA, projects and strategies included in metropolitan long-range transportation plans and short-range programs must be based on funding sources that are “reasonably expected to be available,” thereby instilling a sense of fiscal accountability to transportation planning, programming, and decision-making.

Furthermore, metropolitan and statewide transportation planning, particularly since ISTEA, is expected to function as a “bottom-up,” inclusive decision-making process. However, projects with “national” transportation benefits can be perceived as being generated from “higher-level” sources may not be tightly connected to MPO and/or State DOT planning efforts. As mentioned earlier, State DOTs and MPOs typically develop and use various factors and performance measures to define, prioritize, and advance transportation projects. However, a potential issue or conflict could arise when a “national project” does not comparably match with those of the MPO(s) and/or State DOT(s). In such a scenario, a key consideration is whether State and MPO transportation planning and programming processes should defer to “national priority projects” (see following item).

- ***Balancing “Local Planning” with “National Priorities” to Make Funding Decisions.*** Similar to the previous issue, challenges also are likely to arise on funding “national priority projects” within the context of metropolitan and statewide transportation planning processes. Currently, larger-scale projects typically are funded through a combination of funding sources that may include Congressional “earmarks” and Federal-aid Highway Program funds administered by the respective State(s). In advancing

“national priority projects,” the MPO(s) and State(s) anticipate that their regions will benefit from the project in some regard. However, the possibility exists for the MPO(s) and State(s) to bear the burden of the project cost, particularly if the project negatively impacts (or does not generate direct benefits to) the immediate localities. The *Phase II Final Report* from the study conducted by the Western Transportation Trade Network discusses the concept of “bridge States,” describing States “...where trade merely pass through, but nonetheless maintenance and operation impact and costs are incurred by the bridge State, with no or little economic benefits.” A key question to ask is whether the existing metropolitan and statewide transportation planning processes sufficient for addressing these larger-scale issues/projects or should other mechanisms/processes be established.

### Supplemental Readings

The following resources and reference materials were used in developing this paper:

American Association of State Highway and Transportation Officials (AASHTO). *AASHTO Freight Transportation Network*. Available at [http://freight.transportation.org/highway\\_corridors.html](http://freight.transportation.org/highway_corridors.html).

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U. S. General Accountability Office. 2003. *Freight Transportation: Strategies Needed to Address Planning and Financing Limitations* (Report GAO-04-165). Available at <http://www.gao.gov/new.items/d04165.pdf>.

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#### **CONSOLIDATED COMMENTS FROM MEMBERS OF THE BLUE RIBBON PANEL OF TRANSPORTATION EXPERTS - PAPER 4K-03**

One reviewer commented as follows:

Most of the federal innovative finance activities are debt driven. Some such as FRA's RRIF programs are not supported by the Class 1 railroads or the past two administrations. Programs such as TIFIA have so burdened with public risk aversion procedures that states such as Florida (Miami Rail Tunnel) have opted out of participating in the program because of the delays and procedures. We need to stream these types of programs that were created to accept risk. In addition, user fee based project finance (container charges) should be part of a more comprehensive program that uses tax credit finance for critical regional public-private-partnerships.

Another reviewer commented as follows:

On page three; paragraph three: "projects are likely to combine existing or modified Federal-aid programs and public/private partnerships through an innovative finance program underpinned by user fees..." This reviewer suggests that in some cases, railroads might prefer to make their contribution up front.