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Political Support and Financial Mechanisms for Urban Surface Transportation Mega-Projects: The Case of the United States

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Abstract:

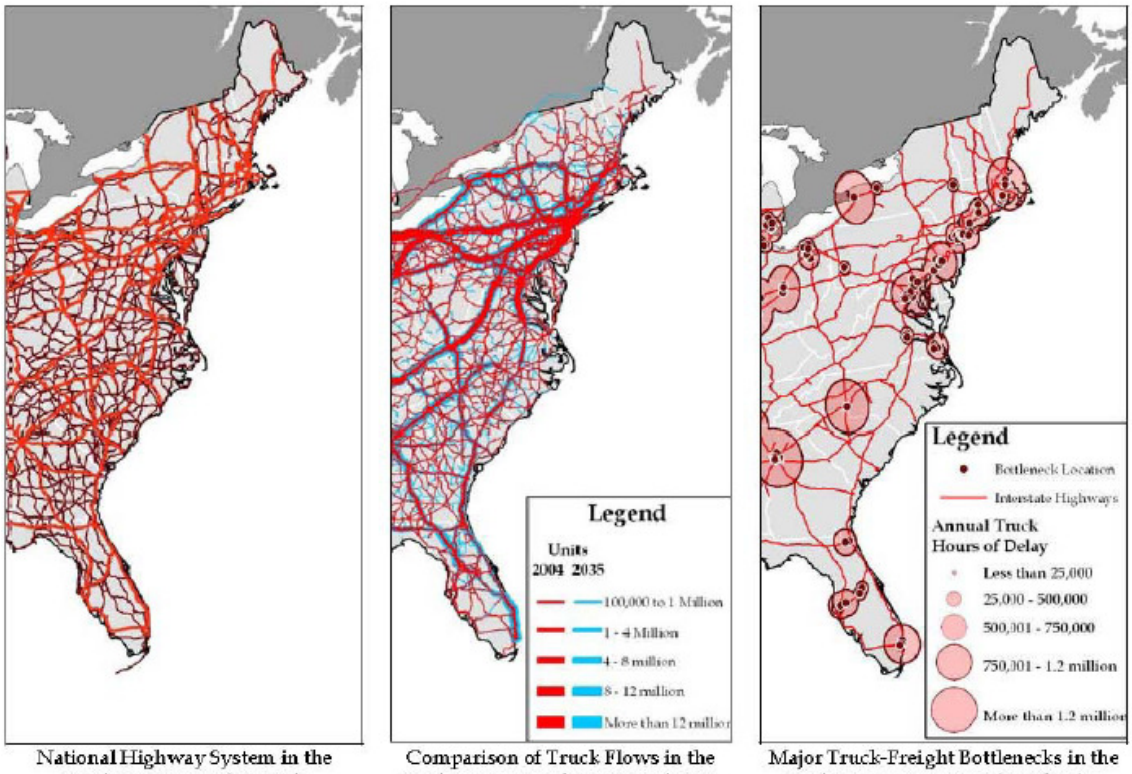
Across the United States, urban areas are experiencing significant increases in the levels of traffic congestion. While urban areas have sought to make changes in operations and to implement transportation demand management strategies to help mitigate congestion, they still cannot keep pace with the continuing increases in demand. Urban surface transportation mega-projects (USTMPs) are one important means for providing new capacity that can help address the ongoing congestion challenge. The political support and the availability of financial mechanisms for USTMPs have varied significantly over time and across regions in the United States. This paper provides an historical overview of the central policy, planning, funding, and legislative frameworks within which U.S. urban surface transportation mega-projects have been planned, programmed, and built. It is hoped that by providing this overview, experience within the United States may then be compared and contrasted with USTMP development in other countries around the world.

Introduction

Across the United States, urban areas (whether they are relatively small, with populations of less than 500,000, or very large central cities, with populations of over 300 million) are experiencing significant increases in the levels of congestion, be it on highways, on their transit systems, in the air and at the ports, or even along the sidewalks (Pederson, 2007; USDOT, FAA, 2007b and 2007c). Indeed, the Texas Transportation Institute's *2005 Urban Mobility Report* noted that urban areas with more than 20 hours of delay per peak traveler on roadways grew from only 5 in 1982 to 51 in 2003 (Schrank and Lomax, May 2005, p. 1). The resulting estimated costs resulting from this congestion (including loss of productivity resulting from delays and increased fuel usage), increased more than five-fold during that same period, from $12.5 billion to $63.1 billion (Schrank and Lomax, 2005, p. 1).

In some cities, and indeed, along some major transportation corridors, congestion levels have reached crisis proportion. Figure 1, for example, provides a pictorial of the overall system of major highways along one of the most urbanized regions in the United States – the Northeast Corridor, extending from Boston, MA to Washington, DC, and including Wilmington, DE, Baltimore, MD, Philadelphia, PA, New York City, and Providence, RI. Just looking at truck flow volumes along the major highways in this corridor (both current and projected), reveals serious bottlenecks that run along

Figure 1. Major Highways, Truck Flows, and Bottlenecks on the East Coast



National Highway System in the Coalition Region (FHWA)

Comparison of Truck Flows in the Coalition Region for 2005 and 2035, Trucks Per Year (Global Insight for AASHTO)

Major Truck-Freight Bottlenecks in the Coalition Region, 2004 (Cambridge Systematics for FHWA)

From: Neil J. Pedersen, "Rail Infrastructure Requirements" (April 11, 2007), p. 4.

the entire corridor and cause serious delays in every major metropolitan area along the route.

While urban areas have sought to make changes in operations and to implement transportation demand management strategies to help mitigate congestion, they still cannot keep pace with the continuing increases in demand. Urban surface transportation mega-projects (USTMPs) are one important means for providing new capacity that can help address the ongoing congestion challenge. Moreover, USTMPs also have the potential to help address other challenges like mitigating negative environmental impacts of transportation, enhancing quality of life, and increasing economic

competitiveness.[1] Yet, political support and the availability of financial mechanisms for USTMPs have varied significantly over time and across regions in the United States.

The purpose of this paper is to provide an historical overview of the central policy, planning, funding, and legislative frameworks within which U.S. urban surface transportation mega-projects have been planned, programmed, and built. U.S. cities are much more self-reliant than many counterparts in other parts of the world, notably Europe and Asia, and also differ with respect to their emphasis on growth and competition with each other (Altshuler and Luberoff, 2003). Nevertheless, it is hoped that by providing this overview, experience within the United States may then be compared and contrasted with USTMP development in other countries around the world. In this way, key similarities as well as important context-specific variations may be discerned.

Contextual History

To fully understand the framework within which policies and decisions have been made affecting surface USTMPs, it is important to first understand the context within which broader transportation policy and decision-making have evolved, as well as the funding mechanisms that have been used. A helpful classification is provided by Altshuler and Luberoff (2003) in their discussion of the four eras in the history of urban mega-projects in the United States.[2] Thus, the following paragraphs use their categories, with additional description added as relevant.

Pre-1950s
Throughout the 1700s and early 1800s, responsibility for major transportation infrastructure in the United States fell primarily to the state and local governments, and was predominantly financed by private sector sources. The federal government's role was limited to such tasks as provision of exclusive franchises, land grants, and loan guarantees (C. de Cerreño, 2006; Altshuler and Luberoff, 2003). This division of responsibilities slowly began to shift in the late 1800s, when the federal government began providing some federal aid for highways, but such aid was not uniformly provided to all states, nor was there a formal plan to integrate the network of roadways throughout the country until 1916, with the passing of the Federal-Aid Road Act. Even then, available funding was minimal. Moreover, no highway policies or financing were directed at urban areas; instead, what roles the federal government took were aimed at rural roadways. Indeed, it would be another three decades before the federal government would begin to direct federal aid toward highways within urban areas in a more consistent manner.

While some federal aid for highways began to flow toward urban areas in the 1930s, most of the funding was directed toward maintenance and repair, rather than expansion of facilities (Altshuler and Luberoff, 2003). States continued to lead efforts aimed at building new roadways, but often stopped at the border of incorporated jurisdictions (cities, towns, villages). Thus, cities like New York, Boston, and Chicago, which could build their own facilities, often did so. (In fact, by 1956, more than half the mileage of the urban freeways in the twenty-five largest U.S. cities, were located in New York, Chicago, and Los Angeles; and the vast majority of these miles were built without federal funding.) This lack of focus by the federal government on urban areas would begin to change by the middle of the next decade.

In 1944, Congress authorized the Federal-Aid Highway Act, which designated a National System of Interstate Highways that would be "... so located, to connect by routes, as direct as practicable, the principal metropolitan areas, cities, and industrial centers, to serve the National Defense, and to connect at suitable border points routes of continental importance in the Dominion of Canada and the Republic of Mexico" (78 HR 4915, p. 10). The Act also distinguished between the Federal-Aid Primary System (the system established in 1916), the Federal-Aid Secondary system (in essence, farm-to-market roads), and for the first time, a system of urban extensions of the Primary and Secondary

[1] In the United States, the definition of a transportation mega-project has changed over time. Initially, when the phrase began to be used in government-circles, it referred to projects with costs of over $1 billion "or projects of a significant cost that attract a high level of public attention or political interest because of substantial direct and indirect impacts on the community, environment, and State budgets" (Capka, 2004). More recently, transportation mega-projects have been defined as projects with costs of over $500 million.
[2] Note that Altshuler and Luberoff wrote of mega-projects more broadly, including surface transportation, but also aviation and large-scale building projects like convention centers and stadiums.

systems (78 HR 4915). However, while urban areas now had a new source of federal financing for urban highway projects, few cities had sufficient data on travel patterns needed to make informed decisions regarding the placement of new highways.

1950s – Early 1960s

As World War II drew to a close, urban areas – and particularly, the older central cities – were facing tremendous challenges, particularly in the area of transportation. Traffic congestion and accidents were common occurrences, and confusion abounded on the tangle of roadways in urban areas in which investments had lagged behind demand for many years (National Committee on Urban Transportation (NCUT), 1958). Transit ridership, which had increased by roughly 65 percent between 1941 and 1946, now saw declines of almost the same degree, in part because of poor service, also resulting from years of deferred maintenance (Weiner, 1997, pp. 10-11).

Recognizing the tremendous need for urban data and for more comprehensive transportation planning to meet the challenges posed by the deteriorating urban infrastructure, city officials from across the United States formed the National Committee on Urban Transportation (NCUT) in 1956. Yet, most cities were largely unprepared to meet these tasks. In fact, by 1954 only 11 U.S. cities had agencies that were directly charged with comprehensive planning (Meyer and Miller, 2001). Thus, the Committee immediately began work on developing a guide, which they published in 1958, for how to collect useful data and conduct effective transportation planning within cities (NCUT, 1958). Even as the NCUT was working on its guide, a series of urban transportation studies, primarily focused on roadways, were begun in several large cities, including the Chicago Area Transportation Study in 1955, the Washington Area Traffic Study that same year, the Baltimore Transportation Study in 1957, and the Pittsburgh Area Transportation Study in 1958, among others (Meyer and Miller, 2001; Weiner, 1997).

While local officials were joining across the nation to highlight the needs of the urban areas, the federal government was developing the next Federal-Aid Highway Act, with an emphasis on the Interstate Highway System. Though the 1944 Act has stressed the need to *connect* large U.S. cities, a number of policymakers in Washington were particularly concerned about the sections of the system running through urban areas. Indeed, a report issued by the Clay Committee (an Advisory Committee, appointed by President Eisenhower and Chaired by General Lucius Clay, and charged with developing a finance mechanism for building of the Interstate Highway System), drew attention to the urban areas, noting that while they only accounted for "…15% of the interstate system mileage, [they] would carry about half its traffic and account for roughly half its construction cost…" (cited in Altshuler and Luberoff 2003; Weingroff, 1996b).

In 1956, Congress authorized a new Federal-Aid Highway Act and the resulting Highway Revenue Act, which created the Highway Trust Fund (HTF). Rather than being directed to the General Fund as they had been previously, motor fuel and vehicle taxes would now be explicitly linked to transportation financing, and in particular to the building of the re-named "National System of Interstate and Defense Highways." Indeed, 1956 marked the beginning of an accelerated highway program. With the passage of the two Acts, annual federal funding for highways rose from only $175 million to roughly $1.2 billion within one year (C. de Cerreño, 2006). The Acts also represented a fundamental shift in investment strategies as the federal government's share of the project costs associated with the Interstate would now be as high as 90 percent, compared with 50 percent in previous years (USDOT, FHWA, 2007b).

The next decade would be marked by a dramatic increase in the number of highway projects around the country, and unprecedented levels of federal investment in them. According to Altshuler and Luberoff, highway mega-projects were "unassailable" during this period, even though they often led to wide-scale community upheaval. This disruption was especially felt in urban areas where, in some cases, entire communities were split by new highway projects, and residents (often poor and/or minorities) were displaced (2003).

Mid-1960s – Early 1970s

As with highways, the early years of transit in the United States were also characterized by private investment, with government's role primarily limited to granting permit approvals or franchise licenses. Indeed, in New York City, the Husted Act of 1875 explicitly limited the role of the municipal government in providing financing for the building of transit; instead it limited the city's role to one of

granting or denying approval of private-sector proposals (Hood, 1993). In the late 1940s and early 1950s, the four largest transit systems (Boston, Chicago, New York City, and Philadelphia) were turned over to public authorities, but other rail systems and smaller transit entities remained in private hands, with very little or no public funding. However, this would soon change, in part bolstered by a backlash against the multitude of large highway projects. This increasing skepticism and, at times, distrust, grew out of a combination of several social and cultural movements of the period, in particular, the civil rights movement, increased calls for citizen participation in government decisions, and increased interest in the need for environmental protection (Altshuler and Luberoff, 2003).

In 1961, Congress passed the Housing Act, marking for the first time a formal federal interest in urban transit (Weiner, 1997). Three years earlier, railroads around the country had begun to abandon passenger services on their lines, and the 1961 Act was partly a response to this. The Act authorized a new program that allowed low-interest loans for acquisitions and capital improvements on transit systems, and provided federal assistance for studies to address urban congestion, and facilitate the mobility of passengers and goods (Weiner, 1997).

One year later, the new Federal-Aid Highway Act of 1962 would focus even more on urban areas, requiring for the first time that urban transportation plans be developed as a requirement for federal funding. More importantly, perhaps, in terms of the context within which to understand the history related to USTMPs, the 1962 Act defined the scale for this planning as the metropolitan regional area, rather than the cities themselves, and called for a process that involved cooperation between state and local communities (Weiner, 1997). Those urban areas that did not yet have organizations capable of providing this type of planning began developing them and, where only 11 cities had had such organizations in 1954, by 1970, there were 276 metropolitan areas with organizations capable of such planning and coordination (Meyer and Miller, 2001, p. 43).

A tremendous boost to mass transit projects came with the signing of the 1964 Urban Mass Transportation Act, which for the first time established a formal federal matching program for the construction of transit facilities, and established programs for research into mass transportation. The amount of funding was raised in a subsequent Act in 1966, which also allowed monies to be used for planning and training. While this federal funding was a welcome change from earlier years, it still fell short in the eyes of many transit advocates, particularly when compared to the amounts of federal aid being provided to highways. Moreover, since there was a great deal of uncertainty of the funding streams from year to year, planning for mega-projects which necessitated multiple-year investments was very difficult. These challenges prompted the US Conference of Mayors and the National League of Cities to agree to make increased transit aid one of their highest priorities in 1969 (Altshuler and Luberoff, 2003). In response, Congress passed the 1970 Urban Mass Transportation Assistance Act, which provided a long-term commitment to transit funding, reducing the uncertainty of the earlier 1964 Act and making it easier for communities to plan their transit projects (Weiner, 1997).

As the decade drew to a close, the initial consensus around the building of the Interstate system was failing. While San Francisco city officials had vetoed much of the planned construction for expressways as early as 1959, other cities began challenging the focus on the Interstates by the mid-1960s (Altshuler and Luberoff, 2003). Increasing calls were made for better oversight of large-scale transportation projects, more understanding of their potential for negative community and environmental impacts, and for more attention to the preservation of communities and historic sites. Indeed, in 1969, Congress passed the National Environmental Policy Act (NEPA), which required the preparation of environmental impact statements (EISs) for all transit and highway projects using federal funds. This was followed by the 1970 Amendment to the Clean Air Act, which created the Environmental Protection Agency, required the development of state implementation plans to meet new air-quality standards, and set deadlines for nonattainment areas to meet those deadlines. For USTMPs, the result was that many projects suddenly became more controversial, while others were abandoned altogether (Altshuler and Luberoff, 2003).

At the same time, the broader urban transportation planning process was also coming under fire as a number of shortcomings emerged, including inadequate consideration social and environmental impacts of transportation, long time delays, lack of attention to non-highway alternatives, and poor models which were difficult to implement and inflexible in their response to changing trends (Weiner, 1997).

Mid-1970s – 1990[3]
During the ensuing decades, USTMPs would now be viewed in a different manner than during previous decades. Now project proponents would have to demonstrate not only the need for the projects, but also how they planned to mitigate or avoid altogether the adverse effects on local communities, their economies, natural environments, and historic sites (Altshuler and Luberoff, 2003; Capka, 2004).

Ironically, just as urban highway projects were falling out of favor, transit was picking up support – from cities which saw it as a means for curbing roadway congestion, and from policymakers who saw opportunity in the broad-based support for transit. In fact, according to Altshuler and Luberoff, "transit spending grew faster than virtually any other federal budget category during the 1970s – rising in constant (2002) dollars from about $400 million in 1970 to about $6 billion in 1980," (2003, pp. 188-189).

In addition, during this period a number of transit advocates around the country began arguing for more flexibility in using the federal aid aimed at urban interstate highways, suggesting that they should be used instead on transit where appropriate. The 1973 Federal-Aid Highway Act responded by allowing the use of Federal-Aid Urban System monies for mass transportation projects. The Act also provided for a separate urban transportation planning program with funds made available through the MPOs. The Act was followed by the 1974 National Mass Transportation Assistance Act which authorized federal operating assistance for urban transit systems, requiring a 20% match for capital projects and a 50% match for operating assistance (Pub. L. 93-503).

Less than a decade later, the policy arena shifted again as President Ronald Regan assumed office and began to undercut both rail and transit financing, though a Democratically-controlled Congress helped provide some checks. The reauthorization of federal funding in 1982 (the Surface Transportation Act), in fact, established a separate mass transit account in the Highway Trust Fund to support capital investments in transit. Nevertheless, the Reagan administration still succeeded in reducing federal transit aid by 23 percent between 1980 and 1990 (Altshuler and Luberoff, 2003, p. 204).

With respect to broader metropolitan planning, another important change of relevance to USTMPs was witnessed during this period. In 1975, the Federal Highway Administration and the Urban Mass Transit Administration (first created in 1968), issued joint regulations on urban transportation planning that required the designation of a metropolitan planning organization (MPO) in each urban area with a population of over 50,000. These MPOs would need to develop a unified planning program and transportation improvement programs in order to be eligible for federal aid.

1990 – Present
During the last twenty years, support (both financially and politically) for USTMPs has varied by locale in the United States. In Los Angeles and Long Beach, California, for example, the $2.4 billion Alameda Corridor, an express rail freight line linking the Ports of Los Angeles and Long Beach, was constructed and placed in operation during this time, as was the Central Artery/Tunnel Project ("Big Dig") in Boston, Massachusetts ($14.6 billion). Salt Lake City, Utah, reconstructed 17 miles of Interstate-15 in preparation for the 2002 Olympics at a cost of $1.6 billion. And, Denver, Colorado completed T-Rex, a reconstruction of 18 miles of I-25 and I-225, along with construction of a new 19-mile light rail transit system, with 13 new stations ($1.75 billion).

Currently, California is constructing the Foothill Freeway ($1.1 billion) between Los Angeles and San Bernardino Counties, Houston is re-constructing the Katy Freeway (Interstate-10) (total $1.45 billion, though each segment is between $83 million and $263 million) (TxDOT, 2007). Indeed, by the end of 2005, there were twenty-one surface transportation mega-projects receiving federal funding that were well beyond the planning phase (Capka, 2006).[4]

[3] Altshuler and Luberoff end their discussion of various eras related to mega-projects in 2001. Because the reauthorization of federal transportation funding beginning in 1991 marked such a critical departure from earlier years, the author has chosen a slightly different break here to provide for a better flow of information leading up to the present.
[4] Generally, there are four stages for most construction or re-construction projects in the United States: (1) planning; (2) environmental review; (3) design and property acquisition; and, (4) construction (USGAO, 2002). Those mentioned by Capka here are at least at the end of the environmental review process.

This diversity of projects around the country contrasts sharply with the experience of other locations, and, in particular, New York City where there are a multitude of USTMPs needed, but until only recently was there any movement beyond the planning phase on even a few of these. Figure 2 illustrates the diversity and distribution of highway and bridge mega-projects around the United States.

Figure 2. List of Cities, by State, with Highway and/or Bridge Mega-Projects Currently in Progress in the United States, 2007

California
Los Angeles
San Bernardino
San Diego (2 projects)
San Francisco (2 projects)

Connecticut
New Haven

Florida
Ft. Lauderdale
Orlando
Miami
Tampa

Indiana
Indianapolis

Kentucky
Louisville

Louisiana
Shreveport
Slidell

Massachusetts
Boston

Michigan
Detroit
Oakland City

Missouri
St. Louis

Nevada
Boulder City

New York
New York City

Ohio
Dayton

Oklahoma
Oklahoma City

Pennsylvania
Pittsburgh

Texas
Austin
Fort Worth
Houston

Virginia
Springfield

Washington
Seattle

Source: USDOT, FHWA, "Active Major Projects Report: Active Project Status Report."

Principal Legislative Initiatives

A number of important pieces of legislation prior to the 1990s were described in the previous section. However, three more recent pieces of transportation legislation are particularly central to USTMPs, and to potential sources of funding for them. Furthermore, for a variety of reasons which will be described, they represent a departure from transportation authorizing legislation prior to this period. Thus, these pieces of legislation are accorded their own section and are described in the following paragraphs.

Intermodal Surface Transportation Efficiency Act (ISTEA)
By 1990 most urban highways were already built, as was the vast majority of the Interstate System. However, the growth in vehicle miles traveled continued upward with no sign of stopping and many highways and transit systems in urban areas were in states of disrepair as a result of years of deferred maintenance. In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act, a landmark piece of transportation legislation that revolutionized the role of the federal government in transportation, even as it formally recognized that the Interstate Highway System was mostly complete and that system preservation now needed to become a higher priority.

ISTEA focused on multiple modes, established new sets of priorities for the system, and significantly increased federal funding levels for transportation. ISTEA also incorporated other values first expressed in the 1960s and 1970s, by creating new sources of funding like the Congestion Mitigation and Air Quality Improvement Program (CMAQ), and encouraging stakeholder participation.

In recognition of the growing belief that different problems needed different solutions and that what might work in one location might not work in another, ISTEA also allowed more flexibility in how

federal funds could be spent on surface transportation, expanding the types of projects eligible for funding under various programs and, of particular importance for USTMPs, relaxing earlier restrictions on private investment. In particular, Section 1012(a) allowed for some co-mingling of federal funds with state and private monies. In this way, ISTEA provided incentives for project implementation through less restrictive cost-sharing (C. de Cerreño, 2006; USDOT, FHWA, 2005). Section 1044 of ISTEA focused primarily on highways and removed a key disincentive to the creation of new toll roads by allowing states to earn credit from toll revenue expenditures and then apply it toward their non-Federal matching share of new projects (C. de Cerreño, 2006; USDOT, FHWA, 1996).

Finally, with respect to USTMPs, in addition to the other concerns that had developed during the 1960s and 1970s, the cost of mega-projects had increasingly come under review. For the first time in transportation legislation, ISTEA instituted a requirement for fiscal constraint on large transportation projects. Specifically, "…the total estimated costs of projects included in a plan cannot exceed estimated revenues and the estimated cost of constructing, operating, and maintaining the total (existing plus planned) transportation system over the period of the plan (USDOT FHWA/FTA, 1995). This did not mean that uncertain projects could not be pursued, but alternate sources of funding needed to be identified prior to approval.

Transportation Equity Act for the 21st Century (TEA-21)
In 1998, the Transportation Equity Act for the 21st Century was authorized, continuing to a large degree, the earlier programs identified under ISTEA. However, here were some key differences. First, "firewalls" were instituted in the Highway Trust Fund. Previously, because overall federal domestic funding was capped, an increase in one program necessitated a decrease in another. The firewalls that were instituted ensured that transportation monies would not have to compete with other funds in the annual budget process.

TEA-21 also expanded the flexibility of ISTEA in terms of applying federal funds (up to half of the National Highway System apportionments could now be transferred to other categories of projects (Meyer and Miller, 2001), and added several new features to further encourage private investment. It also established the Transportation Infrastructure Finance and Innovation Act (TIFIA) to provide federal credit assistance to projects of national significance (C. de Cerreño, 2006).

Before the drafting of TEA-21, there had been concerns raised by the US Government Accountability Office (GAO) regarding the lack of cost containment and oversight of major highway and bridge projects (defined as any project costing between $10 million and $1 billion) (USGAO, 2002). While ISTEA had required fiscal constraint on large transportation projects, TEA-21 (§ 1305b) took this point further by implementing a legislative requirement that projects with costs of equal to or more than $1 billion would need to submit annual finance plans, including cost estimates. However, according to testimony in 2002 by JayEtta Hecker of the US Government Accountability Office (GAO), there were several loopholes to this section. In particular, if projects were constructed in pieces (as is often the case with mega-projects), with each piece costing less than $1 billion, even if the total project was $1 billion or more, the project was exempt from this requirement. Also, projects that were deemed to have particular "national or regional significance" could also be exempted. (USGAO, 2002).

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
Passed in 2005, SAFETEA-LU has continued the trend in transportation authorizing legislation toward increased flexibility in funding and additional incentives for private sector investment. With respect to USTMPs, SAFETEA-LU includes a specific provision (§ 1301) and funding ($1.8 billion authorized over 5 years) for "Projects of National and Regional Significance." Such projects are defined as those which are: (a) eligible for funding under 23 USC (the Highways provision of US Code), including freight rail projects that have been deemed eligible; and, (b) which have a "total eligible cost greater than or equal to the lesser of (1) $500,000,000 or (2) 75 percent of the amount of Federal highway funds apportioned to the State in which the project is located for the most recently completed fiscal year" (USDOT, FHWA, 2005b). Funding is provided with an expectation of a 20% non-federal match (except for projects in Alabama, Montana, Nebraska, Oregon, and South Dakota, for which the match is determined by a sliding scale).

In evaluating proposals for the program, the ability of the project to meet the following elements is considered:

- Generation of economic benefits
- Reduction of congestion
- Increase of transportation safety
- Enhancement of the national transportation system
- Garner support from non-federal commitments and the degree to which federal monies are leveraged
- Provide evidence of stable and dependable financing for construction, maintenance, and operation of the facility
- Use of new technologies that enhance project efficiency
- Help monitor or protect the environment (USDOT, FHWA, 2005b).

With respect to financial reporting on USTMPs, § 1904(9)(2) of SAFETEA-LU lowered the threshold for annual financial reporting on large projects to $500 million or more. It also included wording to suggest that other projects of lesser economic scale could be identified as "major projects" by the Federal Highway Administration if they required substantial programmatic resources from their state transportation agencies, if they had high levels of public or congressional attention, or if they might result in extraordinary implications for the national transportation system (USDOT, FHWA, 2007c).

For any projects that fit the definition of a "major project," initial financial plans must be developed that provide information on "the immediate and longer-term financial implications resulting from project initiation." Then, annual updates of the financial plan must be provided, showing actual costs and expenditures, as well as revenue performance in relation to initial estimates. These annual updates are also required to identify cost and revenue trends, funding shortfalls and any financial adjustments that will be necessary to complete the project (USDOT, FHWA, 2007c).

Specifically on the transit side, $7.4 billion was authorized for the Federal Transit Administration's "New Starts Program," where most transit-related USTMPs would find funding. More importantly, a cost control incentive was added so that grantees may keep a portion of the amount saved when under-runs occur (USDOT, FTA, 2005).

Observations

Perhaps the single-most important point to keep in mind when thinking about political support and financial mechanisms for USTMPs in the United States is that while many USTMPs receive federal funding, most of the political and institutional support for them is derived from local constituencies. Moreover, even though by their very nature USTMPs have impacts (both positive and at times negative) well beyond their immediate locations, those supporting them are often interested primarily in meeting local needs and interests, something that Altshuler and Luberoff refer to as "bottom-up federalism" (2003).

The roots of this "bottom-up federalism" are found in the legislative history of U.S. transportation. The Federal-Aid Highway Program is formally described in Title 23 of the US Code as a "federally assisted state program" that "shall not infringe on the state's sovereign right to determine the projects to be federally financed" (§ 145). As a result, the responsibility for choosing projects rests primarily with the state Departments of Transportation and the local planning organizations, which in urban areas, must now work together through their MPOs to pursue USTMPs.

The result of this bottom-up process is that unless there are obvious local interests for USTMPs (as opposed to more regional or national reasons for their construction), they are often stymied, particularly since federal funding cannot pay the entire cost, so other revenues (state, local, taxes, fees, private equity) are necessary, and many communities are unwilling to support such measures. This has certainly been the case with the multiple high-speed rail projects around the United States, some of which have never made it past the planning phase even after decades of pursuit (e.g., Ohio, Chicago Hub), and others which made it as far as the design phase, but were then undermined or tabled indefinitely (e.g., Florida, California) (C. de Cerreño, et al, 2005; C. de Cerreño and Mathur, 2006). Moreover, because local interests are critical, some areas of the United States (notably, California and Texas) have been much more successful in pursuing USTMPs than other areas

(notably, New York). Perhaps equally important, however, is that because USTMPs tend to result from a bottom-up process, there is often little understanding of how they might relate to other USTMPs beyond their immediate locations.

The MPOs and the process that must now be adhered to in order to obtain federal aid, were themselves in large part a result of the concerns and skepticism regarding transportation projects in the 1960s and early 1970s. However, while the vision of stakeholder involvement and coordination among agencies to prioritize projects in determining where to place scare resources made sense, the reality of how this has been instituted in practice has often been far from perfect.

If one looks to New York, for example, there have been several key obstacles to moving ahead beyond the planning phase for USTMPs for many years. According to Munoz-Rasing and Lapp, there are four groups of obstacles to successfully pursuing USTMPs in the New York area. First, there is an institutional obstacle in that there is no effective interagency coordination. Second, there are methodological obstacles, meaning that there are projects with no plans, no sense of priorities, and no criteria for judging one project over another. Further, while public involvement is desired, there is a tendency to look for consensus (indeed, the regional MPO in the New York metropolitan area makes decisions through consensus among the member agencies – the result is often a listing of important projects rather than true prioritization). Third, there are financial obstacles with respect to continuous underestimation of costs and a lack of innovation in trying to leverage monies. Finally, there are a set of cultural and political obstacles in terms of lacking leadership, political commitment, and a sense of societal importance accorded to such projects (2007). Some of this may be shifting in New York City, as evidenced by the recent groundbreaking for the Second Avenue Subway (in planning since 1927) and the moving ahead on the Trans-Hudson Express (THE) Tunnel. How far New York will move with respect to constructing its much-needed USTMPs remains to be seen.

In the meantime, across the country, USTMP cost continues to be the most divisive issue. Even as proponents of USTMPs continue to explore alternative financing mechanisms because the cost of USTMPs makes it difficult to use traditional financing mechanisms, opponents are using cost as a reason for not pursuing them.

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