

*Transportation Planning and Development
in Massachusetts:
Recommended Changes for the New Millennium*

Prepared for

MBR

MASSACHUSETTS BUSINESS ROUNDTABLE

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Introduction

The Massachusetts Business Roundtable, through its Infrastructure Task Force, has worked on issues of transportation and infrastructure for many years. Transportation planning and policy has a significant impact on economic development in Massachusetts because it directly affects the movement of goods, consumers and workers.

In 1999, the Massachusetts Business Roundtable's Infrastructure Task Force commissioned a study by PricewaterhouseCoopers that researched the Commonwealth of Massachusetts' ability to increase the state's self-imposed \$1 billion bond cap for infrastructure spending. While the state's budget had grown, the amount spent on transportation had not. The study demonstrated that the state could raise its borrowing limit for infrastructure investment up to \$600 million higher without hurting its Wall Street ratings. After sharing research with Governor Jane Swift's administration, the Secretary of Administration and Finance raised the bond cap to \$1.2 billion.

The Roundtable felt that increasing the amount of money available for transportation alone was only phase one of the task. The next was to find ways to prioritize projects that had the most positive economic development impact and ensure that the money was spent in the most efficient and effective manner. Further, the Roundtable sought ways to account for the statewide economic development impact of projects in different regions of the state.

This study begins the next phase. The Roundtable's Infrastructure Task Force commissioned researchers from the University of Massachusetts's McCormack Institute of Public Policy to research how the Commonwealth of Massachusetts utilizes positive economic impact factors in the decision-making

process that selects which transportation projects receive state funding. Additionally, this project includes reviewing 17 other states and how those states factor economic development into state transportation planning and project selection.

Transportation Planning and Development in Massachusetts: Recommended Changes for the New Millennium

This report examines the transportation infrastructure decision process and selection criteria for Massachusetts as well as 17 other states. Its primary purpose is to highlight the current procedures in Massachusetts used for making decisions about where monies for highways and public transportation will be invested and to suggest how these procedures can be improved, based on recommendations in the literature and the current practices used in other states. The primary take away message from this report is that Massachusetts is falling considerably behind competitor states in transportation planning and development. It needs to substantially improve its procedures to more clearly delineate the factors that are used in making transportation expenditure decisions and to ensure that a much broader set of factors is considered in the decision process.

The states selected for closer examination of their transportation decision processes were chosen for their geographic location (all New England states) and the likelihood that they faced a similar mix of urban and rural transportation issues confronted by Massachusetts. This motivated our selection of most of the northern tier industrial states, many of which Massachusetts often measures itself against, as well as the two largest continental states (Texas and California). In addition, we looked at two southern states (Virginia and Florida) that also have large urban centers as well as substantial rural areas.

This is only a first step in terms of examining the Massachusetts transportation decision-making process. We did not have the resources to enable us to examine any particular projects in any of the states or to evaluate past projects in terms of their success. Nor, are we able to determine unequivocally that any particular state's procedures necessarily result in more productive projects on average than any other. However, we are able to show that Massachusetts is an outlier in particular areas that most analysts a priori would feel are important to ensuring that transportation monies are being put to their best possible use. It is also worth noting, that in two aspects of transportation infrastructure, for which we have national data, Massachusetts ranks near the bottom of all states. It had the lowest percentage of roads classified as being in good condition (8% in 2000) and the second highest percentage of roads ranked in substandard condition (32%) [TRIP analysis, Federal Highway Administration, 2000]. It also has the third highest percentage of bridges in substandard condition (50%) [U.S. Census Bureau, Statistical Abstract of the United States, 2001].

Existing Literature

The existing literature on transportation project decision-making is extremely thin, as shown in the literature summary in Appendix A. Turochy, 2001 is the only article to directly address how states prioritize their transportation process. However, he only

examines two states (Ohio and Delaware) and two local areas (Sacramento, CA and Hampton Roads, VA). Thus, as far as we are aware, ours is the only study to date to have examined the transportation processes in a relatively large number of states.

There are several key points, which Turochy raises that coincide with our findings across the states. First, the pressures to create transportation programming processes are quite recent, and discussions of these processes have been the subject of workshops at transportation conferences in the last two years. Second, he notes that there are a variety of “rational” methods in effect for evaluating transportation projects, ranging from relatively objective, largely quantitative procedures to more subjective rank-ordering processes. Also, the evaluation frameworks used are often applied to particular types, or groups of projects, such as bridge replacements, widening of roads, public transportation, bikeways, or new interchanges. Third, he points out that most of the current evaluation criteria do not adequately examine the external affects of projects, particularly in terms of their “network” affects -- how they interact with existing infrastructure. Finally, he argues that political factors cannot be totally ignored, regardless of how quantitative the performance measures and therefore that any evaluation measure should be used as a tool for analysis and not the sole basis for the decision.

Because of the dearth of literature in this area, we include in the literature summary a description of two methodological frameworks for evaluating transportation projects. The New Jersey Institute of Technology distributed the TELUS software product to all Metropolitan Planning Organizations and state departments of transportation in the summer of 2000. The model is based on federal requirements to consider various criteria when evaluating projects involving federal money and is designed as “user friendly” software to allow for the incorporation and analysis of a large number of criteria. Interestingly, we found very few states had adopted this software, although some were experimenting with similar systems, while others were still deciding whether and or how to implement TELUS. We also note the recent recommendations of the Virginia Transportation Research Council to the Virginia Department of Transportation, listing a number of proposed criteria for decision-making. These have not been adopted as of yet.

Given the lack of research in this area, it is worth noting that the economics discipline would have a generic methodological recommendation concerning the analysis of any public project, including transportation projects. In theory, all expenditures of public monies would undergo some form of cost-benefit analysis to help decide which projects can deliver the largest increase in resources per dollar of expenditure. This would imply that major highway projects, for example, should undergo scrutiny in terms of their costs, which would include materials and labor as well as any environmental damages caused by the project. These costs would then be compared to the benefits of the project in terms of reduced congestion, increased value of land (due to enhanced economic development), reduced transportation costs to businesses (if not included in the congestion reduction), to name a few. This would allow for the comparison across different projects of their ability to add to the value of the economy’s resource base.

Realistically, conducting these analyses correctly requires far more resources and time than most departments or agencies making these decisions have available to them.

However, the largest projects could be singled out for more careful scrutiny and the analytical framework of cost-benefit analysis can still be useful for analyzing proposed transportation projects even if the full analysis cannot be conducted. As we argue in this report, some analytical framework, readily transparent to all parties, is an important component of a good transportation decision-making procedure.

However, such economic efficiency analysis would only be one tool in the decision process. Distributional affects of projects should also be considered – which groups benefit from the project and how the costs of the project are distributed. The range of distributional issues would include concerns already listed in federal guidelines, such as environmental justice, as well as most political concerns, which tend to focus around distributional impacts.

Much more could be written on these topics, but it would detract from the primary purpose of this study. We simply want to alert the reader to the lack of readily available literature on transportation decision-making processes and that, at least in the case of the economics discipline, there are volumes of literature on how to evaluate the allocation of public funds, much of which is applicable to the transportation field, even if it has not been written with this context in mind.

The Context for U.S. Transportation Planning

Because most highway expenditures are federally funded, the federal government has had considerable influence in setting common guidelines for state transportation planning. What follows is a brief summary of the current regulations governing federal transportation expenditures.

Transportation planning in the United States occurs on several levels of government. The US Department of Transportation (USDOT) provides guidelines that the states must follow to receive transportation revenue in the form of a matching grant of 80% federal 20% state. The states implement the actual transportation planning and construction with help from county, metropolitan, and city or town governments.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), as written in its statement of policy, attempts "to develop a national intermodal transportation system that is economically efficient, environmentally sound, provides the foundation for the nation to compete in the global economy and will move people and goods in an energy efficient manner." The Act provided stable funding through 1997, gave state and local governments more flexibility in determining transportation solutions, encouraged protection of the environment, and encouraged public transit, bicycle paths and other forms of intermodal transportation. ISTEA placed a strong emphasis on planning and strengthened the Metropolitan Planning Organization (MPO) role in the planning process in order to make the planning process more transparent. MPOs are required in all urbanized areas with populations over 50,000.

Building on the success of ISTEA, Congress passed the Transportation Equity Act for the 21st Century (TEA-21) in 1998. It guarantees level funding through 2003 and must be reauthorized next year to ensure future funding. It identifies seven objectives:

- Support the economic vitality of metropolitan areas
- Increase safety and security of the transportation system
- Increase accessibility and mobility options
- Protect and enhance the environment
- Strengthen the intermodal aspect of transportation
- Promote efficient system management
- Emphasize the preservation of existing infrastructure

ISTEA forced state DOTs to work with MPOs at a time when many states did not work well with their MPOs. Because of a lack of funding, some MPOs initially were not up to the challenge. ISTEA increased funding for MPOs with the mandate to improve transportation planning by making the process more inclusive and responsive to the needs of increased use. MPOs attempt to represent the many facets of local government in the planning process and are made up of directors and staff. The directors are responsible for representing local government in the transportation planning process, while the staff carries out all aspects of the plan

In particular, the MPOs develop a Transportation Improvement Plan (TIP) that is used by the state to prioritize transportation projects. Each MPO develops a TIP that includes all projects that have moved through the transportation planning process. The TIP is adopted by the state DOT and depending on funding becomes a part of the Statewide Transportation Improvement Plan (STIP) to guide transportation planning for the time period of the STIP, usually three to six years.

Summary of State Practices

We contacted officials in 17 states, in addition to Massachusetts, in order to determine the standard procedure used in identifying transportation projects and the criteria used for selecting particular projects. Most of the interviews were conducted with state level officials (often engineers or planners), as we did not have enough resources to investigate several MPOs in each state. However, in some cases we were able to contact MPO staff and this is noted in some of the state summaries provided in Appendix B.

In addition, we examined state web pages, as well as federal web pages for supplemental information, where relevant, reviewing a number of public documents related to transportation issues. In some cases, state officials interviewed over the phone sent us relevant public documents. Because we were focusing on Massachusetts, we met and interviewed several people involved in transportation project development at both the state and local level in order to develop a more detailed picture of the highway planning process in the Commonwealth.

Finally, as a spot check on the accuracy of our impressions we were gathering from interviews with various state transportation officials, we interviewed journalists in several states (Ohio, Florida, and Oregon) who specialized in transportation related

stories. In all cases, these interviews confirmed our analysis of the relevant state's transportation planning policies.

Our general approach to all of the state summaries was to divide the transportation decision process into two categories: procedural issues and evaluation criteria. Detailed information on each state is provided in Appendix B. Based on these sources of information, the following tables were developed to summarize particular characteristics associated with each state, divided by those associated with the process of project selection and those associated with selection criteria. While the meanings of some of the characteristics listed are obvious, most require further explanation.

Under "Process" characteristics, "Legislative/Governor Role" (classified as strong, moderate, or weak) describes the extent to which the governor and/or members of the state legislature take a direct role in allocating resources to specific transportation infrastructure projects. "Intermodal Planning" is required by TEA-21. Here we are concerned with whether intermodal planning is clearly integrated into the transportation decision process, as described by the people we interviewed. Likewise, "Land Use Planning" refers to whether or not the analytic framework exists for explicitly taking this into account in transportation infrastructure planning. "Alternative Funds" refers to whether or not the state provides supplemental transportation funds, often targeted to particular uses not likely to qualify for federal monies, such as small projects in municipalities, or sometimes to meet particular economic development goals. This category simply indicates whether such funds are available, although the size of the monies can vary from year to year and varies considerably across states. The "State Looking to Change" category indicates whether or not the transportation department and/or MPOs in the state are looking to change the way in which transportation infrastructure decisions are made.

The first characteristic under "Criteria," "Level with Most Influence," describes whether the state tends to override the authority given to the MPOs under federal legislation by dominating key points in the project selection/funding decision process. The "Dollar Allocation Process" describes whether dollars are divided among the state's MPOs and non-MPO regions by formula, or by some other process. "Quantitative Criteria" refers to whether the selection process is quantified, and if so, whether this takes place at the regional (MPO) level, the state level, or at both levels. Finally, the last characteristic indicates whether or not some measure of economic development is considered as a critical variable in deciding on which of a menu of infrastructure projects are carried out.

The interstate comparison reveals several interesting patterns and also indicates that in a couple of key areas, Massachusetts is an outlier. In the "Process" area, MPO composition tends to be similar across the states, largely because the general make-up of these bodies is dictated by federal legislation. However, explicit involvement in the transportation planning process by the governor and legislators is quite varied across our sample of states. This involvement is weak in about half the states, with state bureaucrats and MPOs given a somewhat unfettered hand in transportation planning.

In one third of the states, this involvement is quite strong. Ohio is rated as having high involvement because the Transportation Review Advisory Council, which has final

approval over all new projects, consists of legislative and governor appointees. However, the evaluation process is highly quantitative, leaving little room for this group to influence the process, so that in fact the actual involvement of the legislature and governor is quite limited. This is in sharp contrast to the other three states (Vermont, Florida, and Illinois) where direct political involvement is quite frequent and explicit. Delaware, Massachusetts, Michigan, Pennsylvania, and Virginia have a mixed record in this area – with some legislative/executive branch involvement, but also cases where some autonomy is granted to MPOs.

Two thirds of our sample has a statewide transportation commission or board involved in the decision process and all states, except Massachusetts have a strong centralized department of transportation. This requires some clarification. While Massachusetts has the Executive Office of Transportation and Construction, which looks on the surface like a state department of transportation, it has far less power than any of the other state transportation departments we examined. This is detailed later in the report.

There are only five states, which do not have clear places in the decision process where either intermodal planning or land use planning contribute substantial input, and Massachusetts is one of these. Sixty percent of the states, including Massachusetts, have designated monies that are provided for supplementing the federal transportation funding process. Some states, such as Illinois, Pennsylvania, and Wisconsin, have significant monies designated for highway projects that enhance economic development goals.

Finally, there are only six states that seem to be in the process of examining their transportation decision process or already undergoing revisions in the process. Interestingly, four of them, including Massachusetts, are in New England. Of these states, only Maine is explicit about a goal of moving toward a more quantitative set of criteria for transportation decisions.

In the “Criteria” area, sixty percent of the states, including Massachusetts, tend to dominate the transportation decision process, while in a little less than one fourth of the states the MPOs had relatively free rein and in the rest the power was split somewhat equally. Almost all of the states use an agreed upon formula to distribute transportation monies among their MPOs and other transportation regions. This means that transportation projects are judged within the MPO allocation and seldom if ever compared across MPOs. Therefore, it could be possible for a project that looks more valuable by some set of criteria compared to all other projects in different regions in a state not to be funded because the region it happens to be located in has exhausted its pre-arranged share of transportation monies. Ohio, Delaware, and Wisconsin are particularly notable exceptions as they have processes for comparing projects across different regions of the state and thus do not guarantee particular percentages of funding to specified regions.

Half of the states use quantitative criteria somewhere in the process, with six using them at the state and local levels, two at only the local level and one at just the state level. Also, half of the states use selection criteria that involve explicit recognition of the economic development impact of the proposed project. In about half these cases, this measurement enters at the regional level, while in the rest it enters at the state and

regional level, with the exception of one state, where economic development is considered at the state level only. Neither quantitative criteria nor economic development considerations appear to play a significant role in most Massachusetts transportation project funding decisions.

PROCESS	Massachusetts	California	Connecticut	Delaware	Florida	Illinois
MPO Composition	<ul style="list-style-type: none"> • Local officials • Transit agencies • State 	<ul style="list-style-type: none"> • City and county reps • State 	<ul style="list-style-type: none"> • Local officials • Transit agencies • State 	<ul style="list-style-type: none"> • Local officials • Transit agencies 	<ul style="list-style-type: none"> • Local elected officials 	<ul style="list-style-type: none"> • Local officials • Transit agencies
Role of Legislature and Governor	Moderate	Weak	Weak	Strong	Strong	Strong
State Transportation Commission?	No	Yes	No, but Board	Yes	Yes	No
State Transportation Dept?	No	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	No	Yes	Yes	Yes	No	No
Land Use Planning?	No	Yes	Yes	Yes	No	No
Alternative Funds?	Yes	Yes	No	No	Yes	Yes, Economic Development
State Looking to Change Process?	Yes	No	Yes	No	No	No
CRITERIA						
Level with most influence	State	MPO	50/50	State	MPO	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	Yes	No	Yes	Yes
Other				State Legislature		
Quantitative Criteria Used?	No	Yes, on regional level	No	Yes, on both state and regional levels	No	No
Economic Development Criteria?	No	Yes, on regional level	No	Yes, on both state and regional levels	No	No

<i>PROCESS</i>	Maine	Michigan	New Hampshire	New Jersey	Ohio	Oregon
MPO Composition	<ul style="list-style-type: none"> Local officials Citizens Interest groups State 	<ul style="list-style-type: none"> State DOT City and county elected officials Transit reps 	<ul style="list-style-type: none"> Local officials Citizens State 	<ul style="list-style-type: none"> Governor's appointees State DOT staff City and county officials 	<ul style="list-style-type: none"> City and county officials State transit agencies 	<ul style="list-style-type: none"> Local officials Citizens Interest groups State
Role of Legislature and Governor	Weak	Strong	Weak	Weak	Strong	Weak
State Transportation Commission?	No	Yes	No	No	Yes	Yes
State Transportation Dept?	Yes	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	Yes	Yes	No	Yes	Yes	Yes
Land Use Planning?	No	Yes	Yes	Yes	No	No
Alternative Funds?	No	Yes	Small amounts for rural areas	Yes	No	No
State Looking to Change Process?	Yes	No	No	No	No	No
CRITERIA						
Level with most influence	MPO	State	50/50	State	State	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	No	Yes	No	No
Other			State DOT		State DOT	State DOT
Quantitative Criteria Used?	Yes, on both state and regional levels	No	Yes, on regional level	No	Yes, on state level	Yes, on both state and regional levels
Economic Development Criteria?	No	Yes, on regional level	Yes, on regional level	No	Yes, on state level	Yes, on regional level

PROCESS	Pennsylvania	Rhode Island	Texas	Virginia	Vermont	Wisconsin
MPO Composition	<ul style="list-style-type: none"> Local Interest Groups State 	<ul style="list-style-type: none"> Governor and legislative appointees City and state reps 	<ul style="list-style-type: none"> Local officials 	<ul style="list-style-type: none"> State and Local officials Transit agencies 	<ul style="list-style-type: none"> Local officials 	<ul style="list-style-type: none"> Governor's appointees County representatives
Role of Legislature and Governor	Moderate	Weak	Weak	Moderate	Strong	Weak
State Transportation Commission?	Yes	Yes	Yes	Yes	No	Yes
State Transportation Dept?	Yes	Yes	Yes	Yes	Yes	Yes
Intermodal Planning?	No	Yes	Yes	No	No	Yes
Land Use Planning?	Some	Yes	Yes	No	Some	Potential
Alternative Funds?	Yes, Economic Development	Yes	No	No	No	Yes, Economic Development
State Looking to Change Process?	No	No	Yes	Yes	Yes	No
CRITERIA						
Level with most influence	State	MPO	State	State	50/50	State
<i>Funds Allocation Process</i>						
Formulas to MPOs?	Yes	Yes	Yes	No	No	No
Other				Commission, DOT	Legislature, DOT	META system planning
Quantitative Criteria Used?	No	Yes, on both state and regional levels	Yes, on both state and regional levels	No	No	Yes, on both state and regional levels
Economic Development Criteria?	No	Yes, on both state and regional levels	Yes, on both state and regional levels	No	No	Yes, on both state and regional levels

A Closer Look at Massachusetts

Massachusetts appears to have the most fragmented transportation decision-making processes of any of the states by far. Part of this is due to the lack of a strong central Department of Transportation and part due to the existence of separate transportation authorities, such as the Massachusetts Turnpike Authority, the MBTA, and Massport, that each has control over various transportation areas. While on the surface the Executive Office of Transportation and Construction (EOTC) oversees statewide planning processes, most of the planning staff is in the MassHighway Department, which although under the EOTC on an organizational chart, in reality appears to function as a separate entity. This structure of highway authorities severely impacts the ability to evaluate intermodal transportation needs and thoroughly analyze whether train, road, or even bike path expansion can work together to meet statewide and/or regional transportation needs.

The Massachusetts process is also in a state of flux. MPOs are still making changes in response to TEA-21, which resulted in a 42% reduction in federal transportation funds for the state, and adjusting to changes in Central Artery funding and the eventual winding down of the Artery process. Unfortunately, federal transportation money for Massachusetts is expected to decline again when TEA-21 is due to be reauthorized next year, so most involved in state transportation do not expect a big increase in available federal monies for non-Central Artery projects in the next five years.

Process

Projects are proposed to a MassHighway District Office by the cities and towns. From there it goes to the Project Review Committee (PRC). PRC is a group of engineers and managers from MassHighway. Projects are ranked by priority as high, low, or urgent. If a project is judged to be needed and technically feasible, it gains PRC approval, is given a project number, and a MassHighway project manager is assigned. This is considered a key milestone. From this point, it goes through the process of project design. MassHighway often tries to get the municipalities to do the design process because if they have their own money in the project they are less likely to walk away from it. The projects then have to get on the MPOs' (or equivalent for the western rural areas of the state) TIPs.

There are no clear, publicly available criteria supporting this ranking process and many MPOs feel that their control over transportation expenditures is much less in practice than the federal guidelines advocate. Most find that they are outnumbered or dominated by representatives from state transportation agencies (MassHighway, EOTC, MBTA, etc.) and that most expenditures are governed by MassHighway approval as opposed to a bottom up planning approach from the MPO level. This is in contrast to many other states. Even in Ohio, where the decision-making process is concentrated at the state level, at least the criteria involved and the weighting processes are transparent and readily available for public scrutiny.

Massachusetts received approximately \$500 million in federal highway funds in 2002. After the 50% of federal highway funding (previously 70%) that goes to the Central Artery is deducted, additional funding is taken off the top for MassHighway to provide for statewide needs such as guard rails, etc. This amount is determined after several joint sessions with the MPOs, but MassHighway has the final say. The remainder is distributed to the MPOs based on a formula that takes into account population and road mileage. This formula is being reopened for negotiation as a result of the 2000 Census and that is starting to generate considerable maneuvering on the part of MPOs to expand their shares. Currently, Boston gets about 42%, with other areas of the state dividing up the rest (note this is similar to the way Illinois carves out a large chunk of transportation money for Chicago). The state chairs the MPOs through the Secretary of the EOTC.

In addition to the federal monies, as noted in the state summary table, Massachusetts has alternative funds available for transportation projects. Transportation infrastructure projects can also be funded by Chapter 90 monies, the legislative transportation bond bill (\$400 million, 200-300 of which is earmarked by the state), Public Works Economic Development (PWED) funds, and most recently through Design/Build programs. Chapter 90 funds (currently approximately \$150 million per year) are allocated to the highway department for municipal projects. These funds come under the bond cap, about \$500 million of which is set aside for transportation projects. The Chapter 90 funds are aid for cities and towns to maintain local roads and bridges that cannot go on the TIP or receive federal funds. They are dispersed based on a formula that considers population and road size. The municipalities propose uses of these funds directly to MassHighway district offices.

The legislative transportation bond bill gives legislators the opportunity to earmark projects in their districts. However, this is not an appropriation of funds, so the highway department does not have to spend it. Until recently, around \$18 million of what was left after the Artery went to the regions. This was in sharp contrast to the pre-Artery period. For example, the Pioneer Valley received \$45 million in highway funds in 1991, but this had dropped to \$1.7 million by 1998. USDOT forced MassHighway to work with the MPOs on the distribution of state funds and including state funded projects in their TIP. Now, \$400-\$500 million annually is required to be spent on non-artery projects statewide (by agreement with the Regional Planning Authorities, which currently runs through 2005). Of this, approximately \$50-100 million per year in state funds is programmed by the MPOs. As a result, Pioneer Valley received \$10 million in highway funds this year. The balance helps support MassHighway's operating budget, as well as other capital projects, some of which are earmarked by the legislature. Some of these projects are budgeted for, but some are not.

Public Works Economic Development (PWED) funds are less than \$10 million per year. These are grants that are managed by EOTC and the Secretary makes the decision. These funds go to local government to benefit projects that will have a positive economic impact on the municipality. Some feel these often are allocated arbitrarily, depending on political influence, developer involved, etc.

Finally, the newest highway funding mechanism involves the private sector and is referred to as "Design/Build". Route 3 North is an example of a Design/Build that has

awarded the project money to a private contractor, who has taken on all the risk of the project – i.e. it is a fixed price contract. Bond money has been raised through the Route 3 Association. This money does not count against the bond cap because the state has not sold the bonds; the Association has. However, once construction is over, the Commonwealth is obligated to take over payback of the bonds. The company has a twenty-year maintenance agreement as well the rights to development opportunities. Of course, this highway decision was generated outside the normal mechanisms, largely through the legislature, and thus not subject to evaluative comparisons with alternative choices of highway placement or priorities.

The Design/Build process is being used on the Greenbush and Fall River commuter rail projects but the state legislature has added project labor agreements that will differ, possibly significantly, with the Route 3 Association project.

Criteria

The MPOs use widely varying processes for selecting and prioritizing projects. Historically, this has taken place largely through negotiation around the table. Boston is trying to begin implementing a system that also uses objective/quantitative criteria. One problem with moving to a more objective system is that projects that are currently on TIPs may be bumped based on criteria that did not exist when they were placed on the TIP, causing some political fallout. Thus, Boston is having a difficult time instituting this system and it is not clear at this point when it will begin or what criteria will be used.

It should be noted that one of the prime motivations for doing this, was a highly critical review of the Boston MPO by the Federal Transit Administration as part of the certification of the transportation planning process. The final draft report, released in January 2001, “strongly recommended that the MPO develop a process for prioritizing projects.” Many other recommendations for process changes were made, including expanding the involvement of business leaders in the planning process. The fact that as of last year, the largest MPO in the Commonwealth did not have a clear process for prioritizing transportation projects is indicative of the current problems Massachusetts is facing in terms of its transportation decision-making procedures.

Thus, there are currently no uniform statewide evaluation processes for federally funded transportation projects, as the monies are given out to regional bodies, such as MPOs, by formula and within these bodies, no formal evaluation process is used. While many of these projects are examined at MassHighway, the chief criteria at this level, while not obvious, appear to be engineering and/or technical, with no formal concerns about economic development potential or overall benefit-cost analysis comparisons of alternative highway projects.

Furthermore, there is no statewide planning process that includes the examination of economic development issues, smart growth, etc. or any benefit-cost evaluation of projects within an intermodal framework, where alternative modes of transportation and alternative expenditures to support some of these modes can be weighed against highway expansion, maintenance, or infrastructure support.

Recommendations

The Massachusetts transportation decision-making process is already in a state of flux. Several aspects have been improved, particularly in improving communication between the MPOs and the state agencies in the last several years and the MPOs, particularly Boston, are trying to begin to phase in some sort of formalized prioritization process for highway projects. At the same time, the Central Artery project is coming to a close, which may free up some federal monies for more widespread use around the Commonwealth, although this is dependant on being able to hold off a sharp decline in federal transportation funds coming to the state. Governor-elect Romney has advocated bringing the Massachusetts Turnpike Authority under the EOTC. Given a new administration is taking over in January and the current state of flux, this seems like an opportune time to implement substantial improvements in state transportation planning and project selection.

Based on our examination of other states, the literature, and the more detailed examination of the Commonwealth's transportation procedures, we have six basic recommendations, which we feel will increase the likelihood that transportation projects will be prioritized and funded in a way that ensures those projects that benefit the Commonwealth the most will receive support.

I. Improve Transparency

Currently, the process by which a highway project moves from the proposal stage to being selected for funding is too muddled. Unlike many other states, the role of the MPOs versus MassHighway versus the EOTC in its planning role is unclear. There should be a regular set of procedures agreed upon by all parties for evaluating highway projects and this should be accessible to the public. At the current time, the web pages for MassHighway and EOTC give no guidance whatsoever on the basis for project selection or the criteria used, if any, at different stages in the process. This is not the case in many other states. Opening the process is important for dispelling the current perception of many we talked to that the selection project is subject to an unusually large amount of political and bureaucratic manipulation.

II. Reorganize

We believe the Commonwealth needs a strong department of transportation. Ideally, the EOTC would have far more control than it currently seems to have of the overall planning processes for transportation. Although, on the surface, it appears that this is the primary responsibility of the agency, the current disconnect between MassHighway, which houses most of the transportation planners, and the executive office seems unproductive. Moreover, the separation of MassHighway's budget from that of the EOTC gives the power mostly to where the money flows, and this seems to be MassHighway.

In other words, the current structure has the agency with the primary charge of thinking about state transportation policy with very little real resources, and thus authority, to implement such planning. This is made worse by the other separate agencies, such as MassPort, the Turnpike Authority, and the MBTA, each of which controls a piece of the transportation pie. Without true central control of transportation planning, it is not likely that the state is always making the best transportation decisions for the benefit of the Commonwealth as a whole.

The scope of this project is too limited to have conducted an in-depth analysis of this structural issue, and thus we cannot make specific recommendations in this area. However, we feel we heard and read enough about the current procedures to at least advocate that this issue should be seriously examined by the new administration.

III. Establish Criteria for Project Selection

It should be clear from this report that the Commonwealth does not have a clearly delineated set of criteria for project selection at any of the levels of decision-making. We applaud the efforts of the Boston MPO to begin to develop these, but these efforts need to move forward quickly. Also, given the current dominance of the state in most highway decision-making, instituting selection criteria at the MPO level should only be considered a first step.

Ideally, transportation projects decisions within the same category (bridges, road expansion/interchanges, road widening, intermodal) would be made by measuring all possible projects against an agreed upon set of criteria. These criteria would be well known to all the parties involved and could be revisited from time to time to be sure they still encompass all of the issues involved. Just beginning to list a number of criteria can open a healthy debate about the proper weighting of different criteria and the room for subjective interpretation of particular criteria.

As noted in the state summaries, there are many types of criteria to choose from ranging from the software friendly TELUS model to less generic criteria, more applicable to the particular state. We have attached a number of these criteria in Appendix C, as we do not have electronic versions of these.

We would recommend that Massachusetts take a close look at some of the more quantitative criteria, best illustrated by Ohio and Rhode Island (see Appendix B). Although it would probably be too large a leap to move to the full model used in Ohio where almost all decisions are governed by this quantitative model, it would be a big step for Massachusetts to at least consider using these models as tools in highway project selection and planning, still leaving room for other criteria to weigh in the final decision process. However, all criteria, whether quantitative or more subjective, should be specified in writing and publicly available.

To be more specific, in Ohio, there are four major categories for evaluation, each carrying a specified weight: Safety (12%), Transportation efficiency (42%), economic development (23%), and other factors (23%). Safety is measured by reduction in accident rate. Transportation efficiency includes improvements in daily traffic flow and

contribution to state corridor plans. The consideration of corridor planning is notable as this shows the ability to measure highway projects according to an overall grand scheme. Texas also gives corridor contribution heavy weight in its transportation decision-making process.

Economic development is given prominence in this system, accounting for almost one fourth of the weight. This is further broken down into categories, such as job creation, job retention, economic distress, cost effectiveness, and level of investment. As far as we can see, the Commonwealth does not formally consider economic development factors at all in its major highway project selection decisions.

Within the “other factors” category, funding gets the most consideration, followed by urban revitalization and multi-modal impacts. Again, while they do not carry much weight, at least intermodal impacts are explicitly brought into the evaluation process in order that all can see what relative weight they are being given.

The Rhode Island evaluation system is quite similar (see summary in Appendix B) but gives more explicit recognition to environmental impacts, intermodal benefits, and political acceptability. Five major categories are delineated, with each category able to count for as much as 20% of the overall weight. One category is mobility benefits, similar to transportation efficiency in Ohio, but defined more broadly to include criteria such as “number of modes provided for” and “linkages among different transportation modes.” Another category is “cost effectiveness”, which measures the capital cost in proportion to travel benefit as well as the leveraging of federal transportation funds.

Economic development is a separate category including measures of contributions to tourism, job retention and creation, and benefits to disadvantaged populations. Environmental impact is given prominence with its own category measuring traditional impacts on air and water quality, but also less traditional criteria such as “prevention of urban sprawl,” “greenway contribution”, and “maintenance of integrity of neighborhoods”. The final category measures the degree of public and local and state support in terms of planning and political support. This is an interesting category as it gives explicit weight to political interests rather than leaving this ambiguous and as a consequence often allowing political influence to pervade many of the other categories.

These examples illustrate how far behind Massachusetts is in opening up its project selection process and being explicit about the relative weight of particular criteria in decision-making.

IV. More Explicit Recognition of Intermodal and Land Use Planning

As the previous section indicates, there are methods for integrating highway project decision-making with intermodal transportation options and land use planning. Massachusetts does not explicitly do this now in its transportation selection process. Through the reorganization recommended and the establishment of explicit criteria for project selection, this can be remedied and should have substantial benefits to the Commonwealth. Many local areas are exploring smart growth and dealing with the costs of not sufficiently planning for rapid residential development and population growth.

A statewide planning apparatus that directly links highway investments with well thought out growth and land use plans and thoroughly examined alternative modes for achieving transportation goals could provide much needed support to local communities, particularly in the fast-growing suburban towns currently dealing with severe highway congestion. In other words, strong linkages among local, regional, and statewide economic development planning and transportation need to be established and nourished.

V. Expand Alternative Funding Options in the Short-term

One way to deal help move along projects that are likely to have particularly high environmental justice or other environmental benefits or substantial economic development benefits at the local level is to have specially designated funds for promoting projects in these categories. Several states, including Massachusetts, have these programs in place, but funding is often extremely limited. In the short-term, while Massachusetts is revamping its transportation decision-making procedure to better take account of these criteria in project selection, funding expansion in these areas can help particularly worthy projects get started. Of course, if the Commonwealth does not expand the weight of these criteria in project selection, such programs become all the more important in seeing that some funds are directed toward projects likely to enhance these areas.

In the case of environmental justice, the Federal Transit Administration was quite critical of the current status of this criterion in the Boston MPO decision process. While recognizing “the Boston MPO’s positive strategy and initial efforts to address Environmental Justice,” it noted that “final certification will be based on measurable accomplishments.” The review goes on to recommend that a definition of environmental justice be specified and measures to test its achievement defined.

VI. Think Carefully about Design/Build

Finally, we recommend that the Commonwealth do a more thorough analysis of the implications of the design/build approach to highway and public transportation funding and development. The Route 3 expansion project is the “poster child” for this approach and is due for completion in a little over a year. Therefore, this would be a good time to seriously evaluate the approach and its implications for transportation planning and development in the Commonwealth.

While the financing concept is innovative, we are concerned that this pulls such funded projects out of the traditional evaluation framework for transportation projects, as inadequate as that currently seems to be. This is not a good precedent to set and we feel strongly that all projects, whether financed through the design/build framework or any other innovative private/public financing scheme should be evaluated no differently than traditionally funded projects. Once firm criteria are in place, all projects should be assessed relative to these criteria.

In addition, the financing concept itself is somewhat of a “smoke and mirrors” attempt to get around the state’s self-imposed bond cap restrictions. The bonds issued for

Route 3 are not counted against the state's bond cap because a quasi-public "association" as opposed to the state issues them. However, the state backs the bonds and is obligated to pay them back whether it is called a "lease payment stream" or traditional bond retirement. Therefore, the state is still incurring bond debt and all bond debt should be treated the same.

In conclusion, Massachusetts appears to be lagging considerably behind other states in terms of the innovativeness and openness of its transportation infrastructure planning and development. We have tried to highlight some of the key areas where significant changes should be considered and hope that the next administration will give serious thought to trying to bring Massachusetts up to the level of transportation planning that exists in the other industrial states that it often competes with for businesses and jobs.

Appendix A

Annotated Literature Review

**A Guidebook for Performance-Based Transportation Planning
Cambridge Systematics, 2000
Transportation Research Board
NCHRP Report 446**

This guidebook gives a structured approach to monitoring, evaluating, and considering the transportation planning process. It suggests a how-to approach for developing an efficient planning process for any type of transportation planning agency.

The guidebook first gives basic principles of performance measurements that establish a framework for performance-based planning. Next, a step-by-step generalized process is introduced. One of these steps is a list of eight categories with suggested goals and objectives for each category. The categories are as follows: Accessibility, Mobility, Economic Development, Quality of Life, Environmental and Resource Conservation, Safety, Operational Efficiency, and System Condition and Performance.

Appendix B, the more informative of the appendices, provides examples of performance-based criteria to evaluate these categories. It consists of a collection of non-weighted performance-based criteria that are presently used around the United States. Data sources are also examined to assist planners in becoming equipped with the best possible information to drive the planning process and to assist in evaluation. This is a fairly thorough compilation of performance measures and is a valuable resource. However, not having references to the source of these criteria is a weakness because the reader cannot contact the users of these criteria to understand their strengths and weaknesses. It also should be noted that the economic criteria are the least developed of the eight categories.

Appendix A is merely a summary of a number of short case studies from a variety of transportation planning organizations including state DOTs and local MPOs. These are superficial examinations of transportation planning agencies and lack detail to assist the reader in thoroughly evaluating the implementation of the performance-based measure.

Considerations in Development of Procedures for Prioritizing Transportation Improvement Projects in Virginia

John S. Miller

Rod Turochy

James H. Lambert

An unpublished paper by the Virginia Transportation Research Council

Found at www.virginiadot.org/vtrc/main/online_reports/pdf/02-r6.pdf

In an effort to make the transportation planning process more transparent and data driven as a result of TEA-21 legislation, the Virginia Department of Transportation requested that the Virginia Transportation Research Council develop this paper to assist them in developing a mechanism to prioritize capital improvement projects.

A scoring template is developed based on a point scale that assigns weights of 0 to 10 to the following criteria. As a result the highest score any project can receive is 140 points. These criteria are then applied to two projects in Virginia to demonstrate how the measure is used.

1. **Intermodal connectivity.** Projects that favor multiple modes score better.
2. **Freight mobility.** Projects that include freight movement score better. This criteria would favor a project that involves a freight transfer station or a heavy truck volume.

3. **Relative unemployment rate.** A county's unemployment rate is related to the statewide rate. A project in an economically disadvantaged area scores higher.
4. **Average annual daily traffic.** Roads with highest volume are favored regardless of congestion.
5. **Relative priority in the local, MPO or PDC plan or TIP(Transportation Improvement Plan).** Projects with the greatest local community support are favored.
6. **Community support/consistency with local and MPO plans.** Community land uses priorities are a factor along with community support with the plan.
7. **Environmental approval readiness.** Projects with approved Environmental Impact Statements are favored.
8. **Growth management.** Projects that support access management, travel demand management, and specific land use practices are supported.
9. **Volume-to-capacity ratio.** Highways with higher congestion levels are favored.
10. **Accident rate.** This is a controversial criterion because it does not use an absolute number of accidents for a measure. Urban areas with heavy traffic volume have a higher number of accidents, but often a lower accident rate because of this higher volume and thus score lower.
11. **Geometric deficiencies.** Safety should not be measured only through accident rate. Existing roads with substandard lane widths, grades and alignments are favored.
12. **Bridge deficiencies.** Major bridge improvements should be construed as a construction improvement and not solely a maintenance improvement.
13. **Surface rehabilitation.** Pavement rehabilitation is a construction need not just a maintenance need. (In criteria 12 and 13, bridge and pavement needs as determined through the management systems will enhance a construction project.)
14. **Total estimate cost.** Lower cost projects are favored.

**Highway Finance and the Private Sector:
Issues and Alternatives
C. Michael Walton and Mark A. Euritt
Transportation Research A
Volume 24 A Number 4 1990**

The authors examine the use of public-private partnerships in the United States. They provide a historical perspective of how private participation has existed in the United States. The turnpike is the most popular form of this participation. Private efforts like this date back to the 1820's when private efforts developed the Catskill Turnpike. With this historical perspective the authors focus on development in the 1980's in which private interests participate in solving transportation needs. This usually focuses on financing methods. Alternative methods include special financing districts, impact fees, tax increment financing, and toll financing. In these methods the private sector is coerced to participate in paying some type of fees. By using private sector financing, joint development and cooperation between government and private enterprise reportedly exists. This occurs through negotiated agreements that allow a private developer to contribute funds for specific projects in exchange for zoning, building regulations, or building permits from government. One example given is of developer in New York City providing \$31 million for a rail system development in exchange for zoning changes to build a housing and commercial project on a commercial site. The authors note that public private partnerships are not a reliable or predictable source of revenue, but should be seen as an attractive option worthy of consideration. This will require addressing equality, legal, and logistical issues.

**Prioritizing Proposed Transportation Improvements:
Methods, Evaluation, and Research Needs**

Rod E. Turochy

Transportation Research Record 1777

Paper No 01-2197

2001

Because transportation improvement projects can cause controversy in the public and political realms, a response has been to develop a rational tool to measure the criteria that influenced the decision process. Often the decision process is controlled by strong political forces that garner the support necessary to win approval for a project regardless whether it is the best uses of transportation funds for the entire state. Turochy examines five criteria based programs to determine the extent to which they assist the prioritization process. He examines Ohio's Transportation Review Advisory Council, Delaware's Prioritization Process, Sacramento's Transportation Programming Guide, Hampton Roads Project selection Process, and Virginia Chamber of Commerce's "Taking the Politics Out of Planning." The methods attempt to combine quantifiable data from management systems and subjective data from experts in the field to develop a scoring mechanism. As a result, they vary in their objectivity with Ohio's being highly number's driven and Virginia Chamber of Commerce's having low objectivity.

Turochy concludes that developing any method must consider political factors in determining performance measures. This weakens the method's objectivity and can lead to manipulation of the results to support a particular project. No universal ideal method exists, and therefore a method serves best as a tool to codify and objectify the decision-making process and not a rule to be strictly adhered to.

The TELUS Story:

Information Tool for Transportation Planning Makes its Debut

Louis J. Pignataro and John W. Epling

TR News 210

September -October 2000

In June of 2000, the New Jersey Institute of Technology distributed the TELUS software to all Metropolitan Planning Organizations and state Departments of Transportation. The software was developed from a grant from the US Department of Transportation's TEA-21 funding. The software allows for Automation of a Transportation Improvement Program, improved scoring techniques, analysis of project interrelationships, improved project tracking, economic and land use impact analysis, and handling freight issues.

TELUS has been revised and version 3.2 is now available. The new versions have added an economic and land use component. The economic component includes a regional input-output model for measuring the impact of both construction and total system operation and maintenance. These data can be used to calculate the direct and indirect economic impacts on the county, the neighboring counties, the MPO region and the state. The land use component uses existing land use models to satisfy TEA-21 requirements that allow for "smart growth."

TELUS is designed to prepare users to meet federal objectives in order to be in compliance with the Transportation Equity Act for the 21st Century (TEA-21). The objectives of TEA-21 are to support economic vitality, increase safety, increase accessibility, protect and enhance the environment, enhance the integration and connectivity of transportation systems, promote efficient system management, and emphasize the preservation of the existing transportation system. The legislation was designed to give state Departments of Transportations the flexibility to make effective decisions with respect to potential transportation projects and to implement these objectives in the manner that best fits each state.

The default scoring system consists of eight categories as described in the TELUS users manual for version 2.0, March 2001. The first seven are based on the objectives of TEA-21 legislation with the eighth category added to allow the local agency to add factors of local importance. The scoring system has a maximum number of 800 points. The system is broken down into categories that represent the goal statements. The categories are weighted and each category has a maximum number of points. Within each category are several factors. Factors are the specific measures on which the projects are scored. Each factor is then rated with 0 for no effect (receiving no points), 1 for minor effect (receiving 1/3 of the factor's points), 2 for moderate effect (receiving 2/3 of the factor's points) and 3 for major effect (receiving all the factor's points).

The first category is Economic Vitality, which includes data on characteristics that support the economic vitality of the metropolitan area especially by enabling global competitiveness, productivity, and efficiency.

- Promotes general economic development
- Specifically improves or enhances tourism
- Specifically improves or enhances the movement of freight and services
- Improves or enhances the movement of workers
- Provides new access to jobs and opportunities
- Improves the value of residential or nonresidential properties
- Enhances welfare to work trips
- Improves access to terminal (sea, air, multimodal)
- Enhances the ability of the freight system to support product exports/imports

The second category is Safety and Security, which includes data on factors that increase the safety and security of the transportation system for motorized and nonmotorized use.

- Reduces vehicular accidents
- Denies unauthorized access to the system
- Assists the monitoring or patrolling of the system
- Increases access to accident incidences and or disabled motorists
- Enhances the public safety of pedestrians
- Enhances or adds the system of bike lanes and sidewalks
- Contributes to a reduction in traffic volume
- Improves the handling of hazardous material movement

The third category is Accessibility and Mobility, which includes data on areas that increase the accessibility and mobility options for people and freight.

- Provides enhanced or new capacity or mobility to the transportation system to move people
- Provides enhanced or new accessibility to the transportation system to move people
- Provides enhanced or new capacity or mobility to the transportation system to move freight
- Provides enhanced or new accessibility to the transportation system to move freight
- Enhances the range of freight service options available to local business
- Ameliorates size and weight restrictions for freight or freight vehicles

The fourth category is Environmental/Energy/QOL, which includes data on aspects that protect and enhance the environment, promote energy conservation, and improve the quality of life.

- Reduces vehicle emissions
- Reduces vehicle noise
- Decreases fuel consumption
- Adds to the convenience or efficiency of the system

- Specifically protects wetlands or other natural habitats
- Decreases air or water pollution
- Promotes nonmotorized travel
- Promotes traffic calming
- Supports cultural and or historic property retention or development
- Supports community cohesion and design
- Promotes environmental equity
- Enhances development of brownfields

The fifth category is Integration and Connectivity, which includes data on factors that enhance the integration and connectivity of the transportation system across and between modes for people and freight.

- Improves intermodal connectivity for people
- Improves the integration/connectivity within people serving mode
- Improves intermodal connectivity freight
- Improves the integration/connectivity within freight serving mode
- Enhances the information/telecommunications network that integrate freight serving modes
- Enhances the information/telecommunications network that integrate people serving modes

The sixth category is Efficient System Management, which includes data on factors that promote efficient system management and operation.

- Uses ITS technology
- Reduces transportation system costs
- Offers value (congestion) pricing
- Contributes to better vehicle tracking
- Enhances administrative productivity/efficiency
- Enhances electronic processing of vehicle information

The seventh category is System Preservation, which includes data on areas that emphasize the preservation of the existing transportation system.

- Contributes to better system maintenance
- Emphasizes system rehabilitation rather than expansion
- Incorporates new technologies
- Maximizes existing capacity
- Provides technologies to alert traffic to road-conditions/alternative-routing

The eighth category is MPO Defined Factors, which include factors of local importance.

- Conformance with regional or state plan
- Project readiness for implementation
- Provides benefits for multiple jurisdictions
- Advances “smart growth” objectives

Traffic And Transport Planning in German Cities

Uwe Kohler

Transportation Research A

Volume 29A Number 4, 1995

Kohler examines how three German cities were rebuilt after World War II to describe how traffic and transport planning strategies differed in Germany. Some cities rebuilt their cities as they were before the war and others made substantial changes to their cities. Munich is an example of a city that invested in public transit including commuter rails to the suburbs and this has influenced their transportation development. The three cities described are Frankfurt with a population of 650,000 Freiburg with a population of 194,000 and Konigstein with a population of 17,000.

German transportation policy is similar to that in the United States. Its some of its goals include: to have more planning on a local level of a city or region, improvement of traffic safety, decrease of noise and emissions, improved mobility of the population with ability to reach sites with more than one form of transportation. Frankfurt, the largest city cited, addressed its major issues with an expanded public transit system which included suburban railway, underground, tram, and bus to decrease the number of cars on the roads. They expanded park and ride facilities to assist suburban commuters. Instead of substantially expanding the subway system, they expanded their tram network. One of the problems policy direction has caused is that the rapid increase in urban freight and business transport is causing increased traffic problems. Frieburg is a city with large amounts of tourists and students from its universities. In order to decrease auto use, the city closed the inner city to auto use in 1973. To keep businesses in the city center and not moving to the suburbs, public transit was increased, a monthly pass program started, increased park and ride facilities were built, and a bicycle network was expanded. In Konigstein, the smallest city cited, the population is much more dependent on the automobile, over 60% of the population uses cars for their primary transportation. It is located thirteen miles from Frankfurt and it hosts the intersection of two heavily used federal roads. As of 1992 a bypass road was planned to help alleviate the traffic congestion, but political reasons are attributed for keeping the bypass form being built.

Appendix B

State Summaries¹

¹ The overviews for each state are from Census data compiled by NADO (National Association of Development Organizations); web site at <http://www.nado.org/rtoc/library/states.html>.

California

Overview

California is a very large state in terms of both land area (3rd largest) and population density (12th largest). Approximately 75% of its roads and 96% of its land are non-urban. The Federal government owns 47% of the land area in California. The state is growing modestly in terms of population and slowly in terms of employment.

Governmentally, California has 57 counties, 472 municipalities, and 136 special purpose governments with transportation responsibilities, a very large number compared to other states. California has 136 independent special purpose governments with transportation responsibilities. California has fifteen MPOs and 22 Rural Planning Agencies. There are also 29 Regional Transportation Planning Agencies (RTPAs) some of which are concurrent with the MPOs and these are the agencies charged with coordination between county transportation commissions and other partners in agreeing on regional transportation priorities.

Process

By July 15 of odd numbered years, the California Department of Transportation (Caltrans) produces an estimate of STIP funds (both federal and state) that will be available for the next two-year cycle. The California Transportation Commission (CTC) formalizes this amount by August 15. Off the top of this amount comes funds in three categories: Caltrans maintenance, administration, and operations; Safety Rehab and Operational Projects on State Highways, and Local Assistance Funding. Of the remaining STIP funds, 25% are for projects nominated by Caltrans for the Interregional Transportation Improvement Program (ITIP) and 75% are for projects decided upon by the Regional Transportation Planning Agencies and MPOs.

All transportation funds sub-allocated to MPOs and RTPAs are subject to a requirement that funds in each category are split 40% to the northern part of the state and 60% to the southern part of the state. Funds subject to this division include Statewide Transportation Planning, Congestion Mitigation and Air Quality (CMAQ), and Traffic Enhancement Activity (TEA) funds. Amounts of funds available are further sub-divided to the RTPAs and MPOs based on population, road mileage, and, for CMAQ funds, levels of pollution. Each RTPA and MPO knows the amount of funds they should expect for each two-year cycle early on in the process so they can produce the required fiscally constrained TIP.

Once projects are developed and programmed into the local TIPs (in California they are called RTPs, Regional Transportation Programs), they are referred to the CTC. The CTC holds public hearings in the northern and southern parts of the state in January and February of even numbered years. In concert with California's policy of devolving decision-making authority to the MPOs, the CTC can only accept or reject the RTP in its entirety. If it is rejected, the CTC must hold public hearings in the effected region to explain its rejection and gather public input. In practice, this very rarely happens. The STIP must then be formally adopted by the CTC no later than April 1 of each even numbered year.

The 25% of funds distributed through the ITIP is where there is competition for resources. RTPAs and MPOs work with their local CalTrans offices to submit applications to the CalTrans state headquarters for these resources. This is one area where political tug of wars may take place, particularly since this is a relatively new process (since 1998) and some of the issues are still being ironed out.

The boards of the MPOs and the RTPAs are made up of local elected officials and the CalTrans District Director.

Evaluation

California is currently in the process of considering the development of statewide performance measurement and the development of statewide priorities for transportation planning but this has not been done to date. How this will interface with the current allocation of 75% of funds to regional entities has still not been decided.

Individual MPOs and RTPAs are primarily responsible for evaluating projects and their capacities for doing so vary widely. Larger areas such as the MPOs for San Diego, Los Angeles, and San Francisco Bay have significant staff capacities and are able to produce excellent technical evaluations of the needs for and merits of specific projects. Smaller MPOs have far fewer resources and are less able to produce detailed technical evaluations. Regardless of size, however, the fact that the boards are primarily made up of local elected officials (or their designees) means that political considerations will play an important part. Some MPOs have an informal tradition of “taking turns” when it comes to larger projects so that each city or county receives major improvements in turn, rather than based on specific merits of the projects.

There is a formal scoring mechanism for projects nominated for Transportation Enhancement Activities (TEA) funding. Scoring is on a 100-point scale with 60 points dedicated to general merit (50 points regional and community enhancement and 10 points cost effectiveness/reasonable cost) and 40 points based on the specific type of project. While this formal scoring mechanism is interesting, it is important to note that it is used for only a small portion of the total transportation funding in California.

Local Transportation Funds are made available to each county in the amount of 0.25% of the general sales tax from that county for transit programs.

Key Learning Points

- ◆ California seems to be operating more efficiently under its recent process of moving the decision-making process primarily to the regional (MPO and RTPA) level than it did when CalTrans was dictating more of the decisions.
- ◆ For transportation decisions made at the state level, lack of transparency and clear objective criteria appear to be the biggest issues.
- ◆ The requirement that the California Transportation Commission accepts or rejects Regional Transportation Programs in their entirety provides protection for the regional entities from the state bureaucracy, which might otherwise wish to intervene for or against certain projects.

Connecticut

Overview

Connecticut is the third smallest state in terms of land area, 29th in terms of population, and the fourth most densely populated state. The population of Connecticut is stable and employment is growing moderately.

Connecticut is one of two states in the country that do not have county governments. It does have 30 municipalities and 149 towns, for a total of 179 sub-county divisions. This is the 11th lowest number of sub-county governments. Connecticut has 49 special purpose governments with transportation responsibilities, fewer than many other states. Connecticut has 15 regional councils and ten MPOs

Process

Transportation planning varies according to the source of funds and the statutory requirements attached to each. For STP-Urban funds, MPOs make the decisions themselves. The methods they use vary considerably across MPOs. For STP-Enhancement activities, the MPOs make recommendations to Connecticut Department of Transportation (CDOT), which has the final say. Both MPOs and CDOT staff say that CDOT usually follows the recommendations made by the MPOs.

For the majority of funded projects that enter the STIP, the process works as follows. The regional planning agencies and MPOs are informed of the anticipated availability of funds for the upcoming year and of projects that CDOT considers important, based upon technical criteria, in the region. In rural areas, towns apply to the RPAs. Larger cities and towns apply to the MPOs for smaller projects. Larger projects are considered as discussed below. Once projects are prioritized by the RPA or MPO, they go to CDOT for final approval. CDOT relies upon the RPAs and MPOs to adhere fairly closely to the estimated available fund amounts that they were given. CDOT has the final approval of the projects but because they know the amount of funds available, there is generally little need to dramatically cut the lists submitted by the MPOs and RPAs. Once approved, projects are put into the end of the queue for implementation.

Approximately 1/3 of all dollars go to very large projects, called “projects of statewide need.” These projects are generally identified by CDOT and are evaluated by the technical criteria that were contained in the old Federal Highway Administration mandates. These projects are put into the local TIPs for regions with MPOs, and then into the STIP.

MPOs are made up of the chief elected official of each town in the represented area and a representative of each transit agency operating in the area. Most MPOs and RPAs have an associated Transportation Technical Advisory Group made up of CDOT staff, city and town public works engineers, and regional planners. The general sense of people interviewed is that most MPOs and RPAs rely upon this group to prioritize projects so that those with the greatest technical need receive the highest priority.

Transportation infrastructure funds are provided to the regional planning council to provide them with funds for administration and to support the planning and technical assistance they provide to rural towns and areas.

In addition to the regular process, Connecticut recently developed a Transportation Strategy Board (TSB) to look at developing a 10-20 year strategy for all transportation modes in the state. The TSB is made up of 15 members, 5 from the business community, 5 state agency members, and 5 members from the Transportation Investment Areas (discussed below). The TSB has the following working groups: movement of people, movement of goods, land use and economic development, funding and finance, and evaluation.

As part of the legislation, five Transportation Investment Areas were created for the five major transportation corridors in the state: I-84, I-91, I-395, Coastal corridor, and the Southeast corridor. These

areas are critical both in terms of the number of residents they contain and also in terms of their importance in moving freight and other business related concerns. They each contain multiple MPOs and RPAs so they have the potential to act as wider regional planning efforts for transportation.

Connecticut does not currently have Transportation Commission, but the development of one is being considered in the work of the Transportation Strategy Board.

Evaluation

Because CDOT controls most of the evaluation process, at least from a practical standpoint, the evaluation process focuses primarily on technical and demographic criteria. These include lanes miles, population, accidents per lane mile, and the structural condition of the current infrastructure. A criticism that has been raised in the TIA process is that economic development and the needs of business are not sufficiently taken into account in the process.²

[Note: I have been told by several sources that the Capital Region Council of Governments has a good planning process, using some sort of objective criteria. However, after a month of calling and emailing I cannot get the person to call back so I don't think we will be able to get this information. The MPO person I did manage to talk to wasn't using any sort of objective criteria but was following the projects outlined by CDOT as discussed above.]

The legislature occasionally provides earmark appropriations to fund studies and very rarely to fund projects. The Transportation Strategy Board described above was funded by a legislative earmark, as were 15 additional projects funded in the same legislation.

In 1985, a Special Transportation Fund was created using gasoline tax revenues. This fund is used, along with bonds, to provide the 20% state match required to access federal funds.

Connecticut and its MPOs have been successful in obtaining both federal transportation earmarks and in winning competitive grant competitions for funding in areas such as environmental justice and transportation, and intelligent transportation systems.

Key Learning Points

- ◆ Use of transportation investment areas to target resources to areas of critical need, affecting both residential commuting and business needs, is an innovation.

² MPO Testimony on The Connecticut Department of Transportation's Southwest Corridor Implementation Plan-Year 2 Report - February 14, 2000. South Western Regional Planning Agency.

Delaware

Overview

Delaware is a moderately growing state in terms of population, and it has moderate growth in employment. 89% of Delaware's land and 69% of its total roads are non-urban. In 1997, Delaware was one of six states that had no independent special purpose governments with transportation responsibilities. Delaware is composed of three counties and 57 municipalities.

The State of Delaware has one regional planning commission that covers 75% of the state and two Metropolitan Planning Organizations as required under federal law that cover two urban counties. Delaware has one rural county.

Process

Delaware Department of Transportation (DelDOT) develops a six-year transportation plan that is updated annually. Delaware has a system of prioritizations that categorizes projects into "pools". These pools are set-up for similar type projects such as: bridges for painting, reconstruction and rehabilitation; intersections, bicycle, pedestrians, transit access, roadway reconstruction, expansion, pavement rehabilitation and corridor capacity preservation. Each one of the pools has a different prioritization selection criteria to rank projects on a statewide basis. Once all the projects have been prioritized in their individual pools, they are selected for inclusion into the Capital Transportation Program (CTP), a six-year plan and enacted on the basis of funding availability.

The Council on Transportation (COT) is composed of citizen representatives from every county in the state. It consists of business and community leaders who are appointed by the Governor. Each county has a minimum of two members. The COT is bipartisan with the difference in members' political parties being only one identifying factor. The COT has final approval on the planning process, but this is more of a formality in the planning process.

The DelDOT has developed its Pipeline Process to make clear all the stages in the planning process. The first step is the idea stage. Transportation projects are nominated by individuals, legislators, civic associations, local governments, MPOs and DelDOT staff. This process requires that a Pipeline Nomination Form be completed. A proposed project is assigned a Pipeline Manager who shepherds the project through the planning process. The manager takes the project to the Project Development Committee that is made up of engineers and other staff, who make a preliminary evaluation for immediate action for small projects, return the nomination to the sender for revision, or move it into the pipeline for project development. If a program was returned, the MPO or DelDOT staff should assist in further developing the proposed project. If a project moves forward several alternative solutions are developed and the best one moves forward taking into account its effectiveness, cost-efficiency, practicality, and potential impacts. Plans are developed to the 20% stage for budget development. The MPO and the COT hold public meetings and a project is included in the TIP and the Capital Improvement Program. When the CIP is approved by the COT and Governor, it is authorized by the General Assembly. This leads to the final design before construction.

The two MPOs for the state develop a proposed three year TIP annually that is used to coordinate transportation planning for the local governments in their urban areas. They consist of a nine-member council that is made up of state, county, and municipal representatives. Two committees advise the Council: the technical advisory council and the public advisory council.

The MPO agreed to give up control of its Metropolitan Mobility (MM) and Congestion Mitigation and Air Quality (CMAQ) funding in order to have a larger role in the allocation of federal transportation funding. The MPOs do not always feel as if this has been beneficial. When their projects are not approved, they

never receive an explanation as to why their project did not move forward. From the MPO perspective, this is the place where the planning process does not work well and DeIDOT does not receive high marks.

The state legislature does play a significant role in transportation planning. The legislature passes an annual bond bill that is used to guide DeIDOT to allocate funding to its different categories. The legislature also makes project specific recommendations with the bond bill, usually for larger capital projects. This hampers the planning process from the MPO level because they have to wait for the bond bill to pass before they can move forward with the development of the TIP.

DeIDOT has made a strong effort to increase public involvement in the transportation planning process. It has developed a series of public information materials (DeIDOT FYI) in order to make the transportation planning process as transparent as possible. This series along with its web page demonstrates that DeIDOT has made increasing awareness of the planning process and public participation a priority.

Evaluation

DeIDOT is in the process of updating its criteria for capital improvement projects. The previous criteria were developed in 1996 and are as follows. It is scored by the scale of +5, +3, 0, -3, or -5 for each criterion and averaged for each factor from their long-range plan. A project is measured by its total score of the averaged factors.

Long Range Plan Goal #1: "Provide a Safe Transportation System Supplying Access & Mobility that Sustains or Improves 1996 Levels."

Factor # 1: Safety

- High Accident Locations – Severity of Existing Conditions
- Project Scope – Extent or Comprehensiveness of Project on Safety

Factor # 2: Mobility

- Travel Flow – Degree to Which Traffic Travels at Near Posted Speeds
- Access Management – Extent Access Management Policy Addressed

Factor #3: Transit

- Location – Type of Investment Area Designation
- Service Level – Number & Variety of Transit and Support Amenities

Factor #4: Bike

- Location – Type of Investment Area Designation
- Type – Type of Bikeway Improvement
- Access/Connections – Extent of Bike Connections

Factor #5: Pedestrian

- Location – Type of Investment Area Designation
- Effective Length – Extent of Pedestrian Connections
- Access Connections – Types of Land Uses Interconnected

Long Range Plan Goal #2: "Support the State's Economic Well-Being While Remaining Sensitive to Environmental Needs and Issues."

Factor # 6: Support for Existing Communities

- Plan consistency – State, County, MPO, and Local Plans
- Right of Way – Existing vs. New R/W
- Traffic Volumes – Increase vs. Decrease of Traffic

Factor #7: Other Community/Environmental Impacts

- Right of Way Category – Type of R/W Utilized
- Travel Patterns – Diversion of "Thru Traffic"
- Summary of Location & Environmental impacts

Factor # 8: Other Economic Impacts

- Freight Mobility – Commercial issues Passenger

Mobility – Commuter issues
Economic Benefits

Long Range Plan #3: "Achieve Efficiency in Operation and Improvements on the Transportation System."

Factor # 9: Sustainability

Project Duration – Years Before Additional Investment Required
Intermodal Support – Number of Modes Access by Project

Factor # 10: Mitigation

Project Source – Consistent with Other Plans
Intersection Level of service – Locational ("Hot Spot") Congestion
Corridor Delay – Corridor or Areawide Congestion

Key Learning Points

- ◆ Delaware has made strong efforts to inform and involve the public in transportation planning.
- ◆ MPOs have given up some control over Metropolitan Mobility (MM) and Congestion Mitigation and Air Quality (CMAQ) funding in order to have a larger role in the allocation of federal transportation funding.
- ◆ DelDOT's use of criteria for transportation planning decisions does not satisfy the MPO's need for transparency.

Florida

Overview

Florida is a highly urbanized state, with 85% of its population residing in urbanized areas while 58% of its roads are located in rural areas. Florida has the nation's fourth largest population and is growing rapidly in terms of both population and employment. Florida has 67 counties and 400 municipalities (ranking in the middle of state's for number of sub-state governments) and five federally recognized Native American tribes.

Florida has 25 Metropolitan Planning Organizations (MPO), 11 rural regional planning councils, and 23 independent special-purpose governments with transportation responsibilities.

Process

Florida, like most states, has multiple funding sources for transportation improvement projects. Federal funds are available for both transportation improvement (infrastructure) and transportation enhancement (environmental and alternative usage projects). The usual federal rules apply, including the requirement that MPOs develop a Transportation Infrastructure Program (TIP), which includes a list of prioritized projects, which is sent to the Florida Department of Transportation (FDOT). Projects must be included in the MPO's regional TIP to be eligible for federal funding. Florida has chosen to use this process for state-funded projects as well.

Florida's MPOs have several distinct features that impact the transportation planning process. Florida statutes require that MPOs are comprised of solely of local elected officials. Because the MPO has the final discretion, as defined under federal legislation, on whether to include a project in its TIP, these officials can block projects from receiving federal funding, which in a number of cases has made them unfundable. A recent KPMG review of FDOT operations and organization pointed to this fact as an impediment to effective regional planning and recommended the inclusion of other stakeholders on the MPOs. The report found that "regional planning and coordination with and through the Metropolitan Planning Organizations (MPOs) is complex, inconsistent, and parochial, adding effort, time and cost to planning projects."³

Money is allocated to each of the seven FDOT districts based two sets of criteria. For capacity building projects, money is made available to the districts based on each district's percentage of gas tax generated and the population of the district. The district FDOT staff then work with the MPOs and county governments to select projects. For preservation and safety-related projects, the money is divided between districts based on the percentage of lane-miles of highway that are deficient.

An additional part of the planning process comes for transportation projects that involve the transportation needs of Indian Tribes. The Federal Highway Administration (FHWA) provides FDOT with a list of projects that must be funded from the Indian Reservation Road Transportation Improvement Program and the Public Lands Improvement Program. These projects are included in the annually developed Statewide Transportation Improvement Program (STIP).

The Florida Transportation Commission (FTC) has very different roles and responsibilities than transportation commissions in other states. The FTC's roles are oversight of the FDOT and providing transportation policy recommendations to the governor. It was created in 1987 in response to fiscal problems at FDOT and was designed specifically not to be a politicized entity. FTC plays no role in

³ "Organizational and Operational Review of the Florida Department of Transportation." Prepared for and in consultation with the Florida Transportation Commission by KPMG Peat Marwick LLC, January 12, 2001.

selection of projects; it only reviews the final FDOT workplan to ensure that it complies with Florida statutory requirements.

Evaluation

At the MPO level, the board of the MPO does evaluation and prioritization of projects. While some MPOs do have staff produce a prioritized list of proposed projects using nominally objective criteria, all MPO staff that I spoke to, as well as the FDOT MPO liaison staff person, acknowledged that final prioritization of projects was an essentially political process. We have the Orlando MPO prioritization policies and criteria and they are written so broadly as to be unusable for providing an objective basis for decision-making. In large part this is to be expected given the legislative mandate for the composition of the MPO boards to be made up solely of elected officials.

In addition to state and federal transportation funding, Florida also has two other sources of funding to the districts. Counties may levy a gasoline tax of up to 12 cents per gallon, on top of federal and state gasoline taxes, which stay in the county they originate in. A portion of the state transportation funds is made available to regions as District Dedicated Funds. These funds go to the seven regional FDOT districts to fund local projects, generally of fairly small scope. These projects are selected by FDOT district staff.

In addition to these funds, the state legislature each year approves approximately \$100 million in specific project funding through the Transportation Outreach Program (TOP). The TOP program allows the legislature to program specific projects in legislators' districts based on the desires of the members of the legislature and is seen by FDOT staff as circumventing the planning process. The TOP program was initiated because members of the legislature felt their input was not being given sufficient weight in the development of projects.

Key Learning Points

- ◆ MPO membership, particularly the predominance of elected officials, biases project selection away from critical regional transportation issues and toward local projects.
- ◆ A more objective set of standards on which projects can be based and the results of the process evaluated has been recommended.
- ◆ A comprehensive planning process can be circumvented by a state's political leadership when they feel the process is unresponsive to them.

Illinois

Overview

Illinois is the 23rd largest state in the U. S. in terms of land area, 5th largest in terms of population and 11th most densely populated. Illinois is a slow growth state in terms of population, with moderate levels of employment growth. Approximately 73% of Illinois roads and 26% of its population are rural.

Governmentally, Illinois is complex, with 102 counties, 1,288 municipalities and 1,433 towns or townships, for a total of 2,721 sub-county governments. This is the largest number of sub-county governments in any state in the country. In addition, Illinois has 83 special-purpose governments with responsibility for transportation issues, a higher number than in many other states. Illinois has 25 regional councils and nine Metropolitan Planning Organizations (MPOs).

Process

Federal transportation infrastructure funds are distributed according to state and local needs. Projects are primarily identified by Illinois Department of Transportation (IDOT) district staff. There are nine districts in the state. The districts do bridge and highway assessments based on technical criteria.

The IDOT district offices coordinate the regional planning council and MPO planning processes. Each regional entity and each IDOT district office produces a prioritized list, listing projects in the following categories: Resurfacing/Widening, Bridge Replacement/Rehabilitation, Interstate Maintenance, Safety or Other Traffic Improvement, Capacity Improvements, Principal Arterials, and Local Programs.

Chicago receives 45% of all STIP funding by an agreement that IDOT made with state legislators and the governor. The Chicago MPO prioritizes and oversees the expenditure of these funds, in consultation with IDOT district and headquarters staff. The remaining 55% of funds is split among the remaining districts on a competitive basis, overseen by IDOT headquarters staff. In theory, this is a competitive process among the districts to bring forward the best projects. However, IDOT tries not to deviate too far from the historical trends in terms of dollars provided to each district.

IDOT district staff control the process of prioritization and selection of projects. The MPO boards are comprised of local elected officials or their designees, representatives of transit agencies operating in their area, and IDOT staff. As a practical matter, the MPO role is primarily relegated to rubberstamping the selections that the IDOT district staff have made. The perception is that if one doesn't put a project on your local TIP that IDOT has selected, the money will go to another district.

Evaluation

IDOT does not use an analytical tool to prioritize projects. Each local IDOT district has a person who is responsible for prioritizing projects in the district and for ensuring that these projects are placed on the regional TIPs by the MPOs. Selection of projects appears to be based primarily on technical criteria, supplemented by a desire not to deviate too far from past funding levels. There is also an extensive political component to the process, both with IDOT and through legislators and the governor's office.

Illinois is primarily a state funded transportation system. Approximately 65% of total transportation funds spent in Illinois are from state sources. Compared to other states we have examined, this is unusual. The state fuel tax is split 54% to local needs and 46% to statewide needs. The local component is split between counties based on the amount contributed to the fund.

The state claims to pursue economic development related transportation improvements aggressively. New or expanding businesses apply directly to the MPOs to access economic development resources set aside

for transportation infrastructure development and improvement. STP-Urban funds, which are programmed by the MPOs, can be used to support economic development.

Extensive earmarks, both state and federal, help to fund transportation in Illinois. This may contribute to the fact that one respondent referred to the process “essentially political.”

Interestingly, the IDOT central office official that I spoke to was the only person I have spoken to on this project who expected to see additional federal transportation resources in the TEA-21 reauthorization.

Key Learning Points

- ◆ Similar to Massachusetts, Illinois has divided off the largest share of its transportation pie to its main metropolitan area, Chicago.

Maine

Overview

Maine is the 12th smallest state in both land area and population. It is primarily rural, with 91% of roads, 99% of land, and approximately 80% of both population and jobs being non-urban. Maine is a slowly growing state in terms of population and moderately growing in terms of employment.

Maine has 16 counties, 22 cities, and 467 towns or townships, a moderate number of governmental jurisdictions for its geographic size. In addition, Maine has 6 independent special-purpose governments with transportation responsibilities.

Maine has four MPOs and 9 regional councils that cover the remaining non-urbanized areas of the state.

Process

Maine's primary funding mechanism for transportation projects is the Biennial Transportation Improvement Program (BTIP). The process for placing projects on the BTIP differs for projects in MPOs and outside of MPOs. For areas covered by an MPO, the MPO knows how much money it will receive in advance. The MPO then prioritizes projects, up to the total amount that it will receive, and forwards that list to the MDOT and the legislature for formal approval. This approval is a formality only since it is viewed that the money given to the MPO is theirs to spend as they see fit at the local level. The membership of the MPOs is diverse, including some, but not a majority, of elected officials, citizens, and representatives of other interested groups including Maine Department of Transportation (MDOT).

For areas not covered by an MPO, the MDOT requests municipalities to provide requests for projects within their jurisdictions. These requests are accumulated and prioritized by MDOT staff and forwarded to the legislature for approval and funding. The list includes projects up to a preliminary limit that the legislature gives MDOT early in the process and a list of other projects that need additional funding in order to be implemented. MDOT staff indicate that the legislature has been very cooperative in finding additional funds in the past although they are worried that this will not continue in the current economic climate. Also, since a part of the funding for transportation comes from the state portion of the gasoline tax, more fuel efficient vehicles have been causing reduced revenues in that area for some time.

Evaluation

Each MPO has its own process of evaluation of projects and, because they each know how much money they will get and are generally independent, this evaluation process determines in real ways which projects will be done. Generally, a municipality proposing a project must provide a study or other type of needs analysis to the MPO, focusing first on safety issues, followed by maintenance of current system, and then new additions to the transportation system. The Portland MPO, the largest and the one perceived by MDOT as being the most progressive, uses a formal scoring mechanism of nine different factors: traffic volume, future growth, pavement condition, road geometrics, safety, volume-to-capacity, multi-modal, cost per lane mile, and access management. They are currently engaged in a major revamping of their evaluation system and are looking into using TELUS. While acknowledging that sometimes outside (political) factors enter into the decision making process, they are committed to using the system and an objective process for prioritizing as much as possible.

At the state level, MDOT staff have to evaluate projects from all municipalities not located in MPO-served areas and develop a single prioritized list for legislative action. They also use a formal evaluation tool, which they are sending. They claim to stick to the results of this tool pretty closely, although part of the reason they have been able to do this to date may be the legislature's willingness to provide additional transportation funding.

Key Learning Points

- ◆ Providing a lump sum of resources to MPOs, rather than putting together a statewide list that requires projects from other MPOs to compete for one pool of resources.

Michigan

Overview

Michigan is the 22nd largest state in the US in terms of land area, 8th largest in terms of population and the 14th most densely populated. Approximately 38% of Michigan's population and 79% of its roads are rural. Michigan is a slowly growing state in terms of population and has the fastest growing rate of employment.

Michigan has 83 counties, 534 municipalities and 1,242 towns or townships, for a total of 1,776 sub-county governmental units. This is the 7th largest number of all the states. Michigan has forty independent special purpose governments with transportation responsibilities, more than most states.

Michigan also has 12 Metropolitan Planning Organizations (MPOs) and 14 regional councils. The regional councils cover the entire state and may be coterminous with the MPO in heavily urbanized areas.

Process

Michigan's transportation planning has a two-tier structure, with a lot of overlap between the layers. The MPOs govern urbanized areas. The regional councils cover the entire state. In heavily urbanized areas, the two entities may be housed in the same agency, often the local Council of Governments (COG). Transportation projects developed at a number of levels, including counties, cities and towns, the Michigan Department of Transportation (MDOT) and regional transit authorities, are passed to the regional council for prioritization and decision-making.

The Michigan Department of Transportation (MDOT), however, appears to retain a high level of control over the process. Since MDOT provides planning funds to the MPOs and regional councils, those that prioritize projects that MDOT does not agree with have to fear potential funding cuts. However, MDOT appears to do a good job of reaching out to local officials in their development of priorities. MDOT, in addition to its regional offices, has developed Transportation Service Centers throughout the state to help MDOT maintain closer contact with local communities and their needs.

Michigan's MPOs have a voting majority of members who are local elected officials. Other members of the MPOs include MDOT staff members, representatives of special interest groups and local citizens. Not all MPOs have members besides local elected officials and MDOT on their boards, but it is an option that some MPOs have availed themselves of.

The Michigan State Transportation Commission (MSTC) is the policy making body for all Michigan transportation programs. It has six members, appointed by the governor, with the advice and consent of the state senate. Commissioners serve three-year terms, which are staggered so that two commissioners' terms expire each year. By the state constitution, no more than three commissioners can be of the same political party.

Evaluation

Projects are primarily evaluated at the MDOT level on technical criteria. This level of evaluation predominates throughout the process as MDOT maintains quite a significant level of control. At the MPO level, some MPOs may put proposed projects through locally developed evaluation schemes using various criteria. However, these efforts are not widespread and rarely form the basis for final decisions.

Funding Sources and Other Innovations

Michigan state law requires that federal aid be split 75% to the state and 25% to local units of governments. A portion of the 75% that goes to the state is then passed down to the MPOs and regional councils.

Michigan also funds transportation infrastructure projects through state generated taxes. These funds are distributed, again according to statute, 39.1% to the state, 39.1% to the counties, and 21.8% to the cities. These funds by-pass the MPO process except when the recipients elect to use a portion of these funds as matching funds for federal grant programs.

Counties and cities in Michigan are seen as being very active in seeking and receiving both competitive and earmarked federal transportation funds for engineering and construction of specific projects.

Key Learning Points

- ◆ The fact that Michigan's statutes have governed the division of resources so specifically means that it is not necessary to have a major debate each year over how the resources should be divided and the various units of government can plan more effectively than would be the case if the funding levels were constantly shifting.

New Hampshire

Overview

New Hampshire is a relatively slow growing, rural state in terms of population, although it does have a rapidly growing rate of employment. 97% of New Hampshire's land and 90% of its total road mileage are non-urban. In 1997, New Hampshire had 8 independent special purpose governments with transportation responsibilities, far lower than many other states.⁴

The state of New Hampshire has nine regional planning commissions, four of which cover urbanized areas and so are the designated Metropolitan Planning Organizations required under federal law, and five that cover the remaining non-urbanized areas of the state.

Process

The planning process for transportation infrastructure is biannual and begins in even numbered years. The planning process that will begin in fall 2002 is described below.⁵ This planning process is iterative with the ten-year state transportation infrastructure plan. This process has been in place for approximately eight years.

- In the fall of 2002, the New Hampshire Department of Transportation (NHDOT) provides information to the regional planning commissions on its ideas of transportation infrastructure priorities.
- The regional planning commissions each take the input from NHDOT and develop a two-year plan of funding needs that are in line with the 10-year statewide transportation plan. The development of this plan of funding needs involves public processes. The regional planning commission lists of transportation projects are required to be prioritized but this means different things to different commissions. For some, it is a list of 1-n projects in priority order; others provide lists of high, medium, and low priority projects. The NHDOT would like to be able to standardize this process, but has not been able to do so to date.
- By April 2003, the regional planning commissions submit their prioritized lists to the DOT. The DOT receives the nine lists and compiles them into one master list of state priorities. This list is sent to the Governor's Advisory Commission on Inter-modal Transportation (GACIT).
- GACIT is comprised of five Executive Councilors elected by the voters (similar to the Massachusetts Governor's Council) and the Executive Director of the DOT. They take the DOT prioritized list and present it at 16-20 public hearings around the state. Based on hearing feedback and their own internal discussions, they develop their own prioritized list and submit it to the Governor by January 2004.
- The governor then submits a proposal to the state legislature that goes through the legislative process and is enacted by June 2004. Projects that gain final approval are added to the end of the rolling ten-year plan, so projects that are approved in 2004 will not be constructed until approximately 2010-2012. Exceptions are made if safety needs dictate.

⁴ National Association of Development Organizations, "New Hampshire: The rural context for transportation consultations," <http://www.nado.org/rtoc/library/nh.html>

⁵ Information provided by Ansel Sanborn, New Hampshire Department of Transportation, July 2, 2002.

Evaluation

There are three separate places where evaluation and prioritization of projects occurs: first at the regional planning commissions when they develop their lists of priorities, second at the Department of Transportation when they take the nine region planning commission lists and combine them into one document, and at the GACIT process where they produce the final list that is submitted to the governor.

There is variation in the ways in which the regional planning commissions determine their priority lists of transportation projects. In general it seems that the metropolitan planning organizations are more likely to have more formal processes, while the rural regional planning commissions are more likely to use qualitative procedures. I interviewed a staff person at one of each type of organization. Their planning processes are described below.

The Rockingham Planning Commission is a metropolitan planning organization. To develop their prioritized list of projects, they have a formal application process whereby municipalities, residents, and other stakeholders can submit projects for consideration. Once these are received, staff use the Telus computer program, slightly modified for their needs, to score each proposal. They use an 800 point scale, the percentage breakdowns are as follows: 10% economic vitality, 12.5% capacity enhancement, 15% environmental considerations, 20% regional significance, 10% integration and connectivity, 12.5% safety and security, 10% system preservation, and 10% miscellaneous factors. Following the staff scoring, the commission's technical advisory committee takes a look at the results and may make changes based on more qualitative factors such as how often the project has been proposed, equity among the municipalities in the region, etc. From there it goes to the policy committee for final approval and submission to NHDOT.

The Lakes Region Planning Commission is a rural regional planning commission. They concentrate on outreach and technical issues in the prioritization of their projects. After proposals are made, the proposal proponents are brought in to address the technical advisory committee and basically make a pitch for why their proposal should be prioritized. The committee often goes out and visits proposed project sites. Qualitative factors are more important in determining which projects get prioritized. The Commission's board of commissioners votes on the final prioritized list.

At the state DOT level, there is not a formal or quantitative process for taking the nine regional planning commission lists and combining them into one statewide list that reflects all of the proposed state transportation infrastructure projects to be funded for the next two years. The prioritized list produced by NHDOT is arrived at through a qualitative process of give and take between NHDOT staff, with informal input from GACIT and the regional planning commissions. In particular, NHDOT staff have been paying more attention over the past two cycles on explaining their rationale to the regional planning commissions when they make changes. One of the reasons cited for this is that the head of DOT, who recently retired, had been on the job for more than 10 years and had developed a wealth of knowledge about what was needed. It is an open question as to whether the process will become more formalized in the future because of the knowledge that was lost.

The perception of all people interviewed is that, under the current system, there is very little change at the GACIT and legislative levels.

It is worth noting that the Governor is under no obligation to submit legislation that reflects the prioritized list received from GACIT but it is the sense of the people that I interviewed that this is not a problem and that the legislation submitted by the governor is almost always reflective of the prioritized list finally produced by GACIT. The legislature did not always do this and often added in projects via specific bills. Recently NHDOT has convinced them not to do this and rather to go with the prioritized list developed between NHDOT and the regional planning commissions.

There has also been developed a process, outside of the TIP process, to fund small (less than \$200,000) betterment projects that were not scoring well because of their lack of sufficient regional impact. However,

these projects are often important to small, rural municipalities and funding them is also important in ensuring that local leaders participate in the required public process. The legislature provides a set amount of funding to the NHDOT for these projects which the regional planning commissions can then submit proposals for.

Key Learning Points

- ◆ The fact that the political leadership has been convinced to follow an objective process overseen primarily by transportation professionals and to not legislate around the process.
- ◆ The differences between the rural and urban area planning commissions and the way in which the disparate parts are put together.
- ◆ The development of the small grant process in response to an identified need that the larger process did not serve.

New Jersey

Overview

New Jersey is experiencing strong growth in terms of population but has slow growth in employment. 65% of New Jersey's land and 38% of its roads are non-urban. In 1997, New Jersey had three independent special purpose governments with transportation responsibilities. This number is lower than that other states.

The State of New Jersey has two regional councils that cover half of the state, and three designated Metropolitan Planning Organizations required under federal law.

Process

The planning process for transportation infrastructure follows a three-year cycle presented in the 2003-2005 STIP. The current planning process is described below. New Jersey Department of Transportation (NJDOT) New Jersey Transit Corporation (N J Transit) county and municipal planners and elected officials contribute to this planning process.

The 2002-2004 STIP differs from previous ones by trying to identify future transportation needs and offer strategic direction on a systems level based on technical analysis and extensive public involvement. This STIP contained 5, 10, and 25-year elements setting the investment agenda for the state.

The NJDOT scoping of projects occurs in the Study and Development Program. This program has three distinct phases: concept development, feasibility assessment and final scope development. Not until it clears the environmental approvals does NJDOT consider a project one that can move forward. People interviewed have different opinions about the effectiveness of Study and Development in moving a project forward. Some see it as a way to slow up a project and others see it as an effective way to move projects forward.

The state allocates funding by a formula that drives the planning process. The formula allocates money to different regions of the state and to the different types of work to be done. These projects fall under the categories of maintenance and rehabilitation, mobility, and large mobility projects.

Evaluation

The MPOs at one time used a scoring mechanism for the development of projects on their Transportation Improvement Plans. The state does not have any scoring mechanisms for ranking projects. Their rationale for not using any scoring mechanism is that 70% of the projects remain in the three planning process from year to year and the scoring process confused the rationale for decisions from one year to the next. Instead the planning process attempts to build a regional consensus on new projects based on information from their management systems.

Project schedules largely dictate what gets programmed in a given year. There are not a large number of projects ready for funding in excess of available funds. Fiscal constraint can push a project to a later year or a project can remain an unfunded priority with the expectation that money will be made available during the first year through schedule slippages of other projects, funds released from project closeouts, and revisions of project cost estimates.

NJDOT staff believes that the three MPOs priorities are a major determinant of what NJDOT projects are developed. Thus there are not a lot of hard negotiations. NJDOT tries, and is generally successful, in funding MPO priorities and any project that has advanced to the point of needing funds. However, because NJDOT seems to control projects moving through the development and implementation process by using

the Study and Development Program's environmental review process as a gatekeeper, they control new projects that become available. For each new STIP they then attempt to match projects to funding sources. The MPOs and NJDOT develop a project pool and negotiate which project make the next STIP. If a project does not make a plan, it is a high priority for the following year's STIP.

NJDOT has some flexibility in its funding of projects. Because the state has revenue from its toll roads they have a "soft match" that enables them to use Federal funds. NJDOT is given credit for what the toll roads spend on their facilities that are on the federal-aid system. There is no direct connection to their projects. The credit is enough to cover the local match for the entire federal aid program. Thus all federal funding is in effect 100% federal. This causes some frustration on the MPO level because they are told not to worry about the funding source, but NJDOT has room to shift funding sources around. As a result the MPOs can be skeptical of the funding process.

The lack of criteria for project selection can even frustrate the NJDOT staff. In the absence of articulated criteria, a political pressure fills the void. NJDOT staff cited the example of one municipality with political clout is able to keep a project that has the support of the municipality where it is located. Because the other municipality believes that it will cause problems for them, they are able to use their political muscle to stop a project in the view of NJDOT that should be developed. No one has the desire to confront this situation, and the municipality that needs the project is unable to get NJDOT to move on it.

Key Learning Points

- ◆ Environment approvals are key to moving a project beyond study and development
- ◆ A credit because of its toll revenue allows NJDOT to cover the state match
- ◆ A lack of planning criteria can frustrate NJDOT staff at times

Ohio

Overview

Ohio is a slowly growing state in terms of population, even though it has moderate growth in employment. 91% of Ohio's land and 79% of its total road population is non-urban. In 1997, Ohio had 81 independent special purpose governments with transportation responsibilities, higher than other states.

Process

The State of Ohio has sixteen regional planning commissions, thirteen of which cover urbanized areas and so are the designated Metropolitan Planning Organizations required under federal law, and three that cover the remaining non-urbanized areas of the state.

The planning process for transportation infrastructure follows a four-year process. Every year a new fourth year is added to the plan. The current planning process is described below. The planning process is iterative of the ten-year plan that was adopted in 1999.

The Ohio Department of Transportation (ODOT) has created the Transportation Review Advisory Council (TRAC) that develops and modifies a project selection process and which approves major new project funding. The state director of transportation provides the TRAC with a report of funds available for the next four years. New projects (those over \$5 million) can only be developed after assessing that preservation projects have been met. The TRAC has \$300 million available of the \$1.1 billion transportation budget. The TRAC has responsibility over which projects receive this funding. This selection process is based on a point scale and projects that fit under the available funding move forward. This process is highly structured and fairly well held to.

New projects can be nominated by ODOT, MPO's county engineers, transit authorities, county commissions, municipalities, and port authorities. The general public is discouraged from making recommendations, but can seek sponsorship for a project through their local government. The TRAC is responsible for publishing a selection process and explaining it's rationale for priorities.

The TRAC consists of eight appointed members. The house speaker and senate president each appoint one member. The governor appoints the other six members who geographically represent the state.

Evaluation

The TRAC has 16 policies and principles.

1. Open, Fair, Criteria-driven Process

Major new projects are based on criteria developed to promote state, regional, and local transportation and economic development goals.

2. Long Range, Statewide Planning with Local Approval

The TRAC follows ACCESS OHIO; the state long-range planning document that shapes transportation decisions and works closely with MPO's to develop projects.

3. Preservation First

Preservation, maintenance and management have the greatest weight in allocating funds.

4. Transportation and Development Factors

Transportation efficiency and effectiveness factors account for 70% and economic development factors 30% of the total score in the selection process.

5. Transportation Efficiency Criteria

This includes the project's average daily traffic, volume-to-capacity ratio, roadway classification, and macro corridor completion.

6. Safety Criterion

In order to increase safety by reducing accidents that will benefit all citizens and help control accident costs, the project's current accident rate as a selection criterion.

7. Non-ODOT Participation

Leveraging local and private funds will help a project receive a higher score.

8. Interchange Participation

50% of the cost of a new interchange must come from private, local or non-ODOT funds.

9. Intermodal Connectivity

Projects that expand connections to water ports, airports, rail facilities, or transit facilities receive additional points.

10. Economic Development Criteria

Job creation, job retention, level of investment, cost effectiveness, and economic distress documented by the Ohio Department of Development impact this score.

11. Retail and Tourism

Tourism-related projects are pro-rated over the length of the tourist season. No points are awarded for retail development.

12. Fixed Transit Line Evaluation

TRAC will attempt to develop surrogate criteria to compare public transit projects on a case-by-case basis.

13. Non-traditional Projects

TRAC will consider projects like high-occupancy lanes, shared ride facilities and freight rail infrastructure acquisition if they improve the movement of the state's major corridors.

14. Bypass Projects

Bypass projects are scored differently. They are scored by average daily traffic, the percentage of vehicles projected to divert from the current facility to the bypass, volume-to-capacity ratio on the current facility, number of impediments avoided by the bypass, size of the community and macro corridor completion. The criteria under economic development, non-ODOT participation, intermodal connectivity and Urban Revitalization remain the same.

15. Urban Revitalization

The TRAC awards extra points for projects that support re-investment in an urban core or helping a city retain existing jobs.

16. Intelligent Transportation System

ITS are eligible for federal and state highway projects. TRAC considers ODOT sponsored projects through the deputy district director and follow three principles:

- Incident management receives primary focus
- Attention is given to traffic management/control through ramp metering, lane control, and freeway-to-freeway routed diversion via dynamic message signs.
- Minimize maintenance and operation costs.

A project can score a maximum of 130 points. The division of points is as follows:

Transportation Efficiency	
Average Daily Traffic	20
Volume to Capacity Ratio	20
Roadway Classification	5
Macro Corridor Completion	10
Safety	
Accident Rate	15
Economic Development	
Job Creation	10
Job Retention	5
Economic Distress	5
Cost Effectiveness of Investment	5
Level of Investment	5
Additional Points	
Funding	15
Unique Multi-Modal Impacts	5
Urban Revitalization	10

Key Learning Points

- ◆ ODOT has developed a clear and transparent planning process
- ◆ Point system is used to rank projects
- ◆ TRAC funding clearly identified in ODOT budget

Oregon

Overview

Oregon is a moderately growing state in terms of population, even though it has slow growth in employment. 99% of Oregon's land and 90% of its total roads are non-urban. In 1997, Oregon had 104 independent special purpose governments with transportation responsibilities, far greater than other states.

Process

The State of Oregon has ten regional planning commissions, four of which cover urbanized areas and so are the designated Metropolitan Planning Organizations required under federal law, and six that cover the remaining non-urbanized areas of the state.

The planning process for transportation infrastructure follows a four-year process that allows for modification every two years. The current planning process is described below. The planning process is iterative of the ten-year plan that was adopted in 1999.

The Oregon Department of Transportation (ODOT) has created the Statewide Transportation Improvement Program (STIP) that allows ODOT to prioritize according to information from its management system, schedule and fund transportation projects. These include interstate, federal, state, city, and county transportation systems. The STIP addresses highway, passenger rail, public transportation, bicycle, and pedestrian projects. The 2006-2007 STIP is presently being developed.

The ODOT seeks citizen input through outreach to the public via meetings facilitated by the Area Commissions on Transportation (ACT). The first ACT was formed in 1996, and as of July 2002 nine of the twelve areas of the state have a functioning ACT. Monthly meetings are held and the public is notified through media announcements. An ACT makes recommendation to Oregon Transportation Commission (OTC).

The OTC is a five-member body appointed by the governor for three-year terms. The OTC determines the level of funding that will go to the different type of STIP projects. The major types of projects are modernization, safety, pavement and bridge preservation, and public transit, but also include smaller programs like a bicycle and pedestrian program and a railroad crossing safety improvement program. The current four-year STIP cycle (2001-05) has approximately allocated \$1.1 billion in funding for projects.

The ODOT has developed many transportation plans—corridor, region, and system plans—that at various stages have received citizen local government input. These plans are for much longer time periods than the STIP and are used to guide the planning process but not shape it. ODOT uses its own management system that is data driven to assist in developing these plans. They prefer their system to the TELUS system.

Projects are prioritized to match funding levels. After the OTC has set the level of funding for different types of projects, the selection process is fiscally driven. Each of the five areas knows its dollar amount allotted to the five project categories: Modernization, Preservation Safety, Bridges, and Operations. The funding clearly gives a cut line, and if funding for one of the areas does not match the project it does not move forward. The ACTs within each region meet to determine which projects move forward. When a management system prioritizes a project to be the decision is easily made. When new projects are discussed the ACTs may not have their first priority funded, and have to wait until the next STIP cycle to move their project forward.

This process does not eliminate political pressure to move projects forward. When the regions make their decisions, political pressure can be exerted. However the OTC makes final decisions and if an ACT's

project did not warrant being recommended over another's, the OTC has the ability to change a recommendation if the situation warranted. The OTC may reject a project because it does not match the priorities of the Oregon Transportation Plan or a corridor plan. Once OTC approval takes place the project is implemented within the STIP timeline.

The STIP is cost driven and does not require the state legislature's approval. The Oregon Transportation Commission approval is contingent on available funding, which has driven the planning process. Most of the projects in the STIP get completed within 4 years. Large Modernization projects can take longer to bring to contract, sometimes 6 to 8 years.

Evaluation and prioritization of projects can occur on three levels. The ODOT develops long-range transportation plans that help shape transportation development. This development is data driven through its management system. Another key part of the process is that the OTC decides how the transportation funds will be divided before the planning process starts. The ACTs allow for direct citizen involvement in the planning process. The ACT is designed to pick up what the ODOT and its management system miss.

Because Oregon is the 10th largest state in area but the 28th in population a tension exists in funding of urban and non-urban transportation projects. For example, the South East ACT is the states largest and has a population average of one person per square mile. As a result, a tension exists in the allocation of transportation funds in the state. ACTs have been given the flexibility to develop differently depending on the needs of an area. The urban areas have a more defined and professional presence, while the non-urban ACTs are somewhat more loosely formed and more open to direct citizen involvement. The following two examples of ACTs demonstrate how they differ in their functions.

The Cascades West ACT encompasses Lincoln, Benton, and Linn counties and is chaired by the Lincoln County Commissioner. Its largest city is Corvallis with a population of 55,000. This ACT has been organized for four years. There are thirty seats that are filled by local government officials and business executives. They consist of county commissioners, city councilors from three major cities, representatives from the port district, Indian tribes, and local business. They work closely with the Technical Assistance Committee that has representatives from public institutions like public works departments and advocacy groups. The ACT first identifies a project and relies on the technical assistance committee to get a good understanding of the scope and cost of a project. They then use criteria that are more encompassing than ODOT's management system and include the social, economic and environmental impact of a proposed project. An executive committee then reviews the proposal and brings it to the full ACT who uses a consensus model of decision-making. If this process breaks down, a project needs three quarters majority to move forward. These recommendations then are taken to their region for another round of cuts. There are five regions in the state. This process is not as well defined. Region 2, to which Cascades West belongs, consists of nine counties. In a day long meeting chaired by the Regional ODOT Director, another round of cuts are made before inclusion in the STIP. By this time, discussion has already occurred between the ACT chairs attending the meeting, as they try to recommend the best projects. As a result, ACT chairs within a region must develop strong trusting relationships.

The South East ACT encompasses Grant, Harney, and Malheur counties. This ACT makes up all of Region 5 and averages less than one person per square mile. The ACT chair believes that he has a good relationship with the ODOT, but because of distance, communication can be a problem. The chair strongly believes that the ACT allows for better representation of his area. Even though he is reminded that non-urban transportation projects are funded by urban transportation money, the process allows the region's representatives to promote safety and maintenance projects. He chairs a monthly meeting in which attendance varies. He believes that a quarterly meeting might be sufficient. The ACT structure is developing. Discussions with other ACTs are ongoing and attempts are being made to give the ACT more structure. For example he was elected chair but his term has not been defined.

Both ACT chairs believe that the ACT structure makes the ODOT more accountable. ODOT did not initially embrace the new structure, but has come to appreciate the benefits that it creates. Local government has been empowered to make decisions that better influence their communities. The ACT now

is seen as being responsible for the transportation decisions and ODOT has held them accountable for decisions that have not worked well. Because the ACT can take the heat for bad decisions, the ODOT has developed a more trusting relationship with the ACT.

A weakness that the ACTs need to address is the complexity of the transportation issues involved. Members might initially participate to help their local interest become a part of the STIP, but soon are called upon to make recommendations about surface, marine, air and transportation safety. As a result training has become a part of meetings in order to help ACT members become knowledgeable of all transportation issues.

Along with the ACTs the OTC also plays a key role in determining funding for transportation projects. The commission incorporates recommendations from the ODOT, the ACTs, and local government to make final decisions about available revenues for the different programs and regions of the state. They do give a priority to safety and the preservation and management of existing. The key issue of funding controls the decision process. The bottom line is that fiscal constraints are cut lines for proposed transportation projects. If a project costs too much, it will not fit into OTC's approved STIP.

Evaluation

The OTC has developed the following Project Eligibility Criteria and Prioritizing Factors. They rely on advice and recommendations from the ACTS and regional advisory groups.

These groups use the following criteria when developing their plans.

1. Project readiness is the first criteria. The timeliness of construction is an important factor. If too many factors like environmental and land use requirements, purchase of right of way, or final construction and traffic flow management plans are not in place, this can be detrimental for a project to be approved by the OTC.
2. Modernization projects must meet certain criteria. The following are examples: partnerships, traffic safety, rail and highway compatibility, interchange and access management areas, alternative passenger modes, efficiency of freight movement, and environmental resources.
3. Preservation projects are based on certain criteria. The following are examples that are used: major improvements, partnerships, traffic safety efficiency of freight movement, and environmental resources.
4. Bridge prioritization uses the following criteria. All bridges are inspected every two years. A Bridge Management System (BMS) uses this information to identify, prioritize, and develop bridge improvements. Through a formula distribution 27% of the federal Highway Bridge Replacement and Rehabilitation Project funds go to local bridges. This criterion is based on the desire to maintain and improve transportation's role in Oregon's economy. The interstate Highway and Freight Route System considers bridges that are load restricted, that need temporary repair but still have some load restrictions, and that have deterioration that will cause load restrictions in the near future.
5. Leverage and public benefit are used to select projects. The ACTs are advised to consider how the project might leverage additional funding.
6. A recommendation must be consistent with comprehensive plans and transportation system plans developed by ODOT.

Key Learning Points

- ◆ The Area Commissions on Transportation are a strong effort to increase participation in transportation planning. They are given flexibility to determine their structure.
- ◆ Equity in funding to different regions of the state is a big concern that is improving but still is not resolved.
- ◆ Oregon Transportation Commission sets funding priorities.

Pennsylvania

Overview

Pennsylvania is the 33rd largest state in land area and has the 6th largest population. It is the 10th most densely populated. Approximately 40% of Pennsylvania's population and 71% of its roads are not urban. Pennsylvania is a slow growing state in terms of both population and employment.

Pennsylvania's government includes 67 counties, 56 cities and a total of 2,655 local governments. This is the largest number of government units in any state in the union. Pennsylvania also has 148 special-purpose districts with transportation responsibilities, larger than in many other states. Pennsylvania has 10 regional councils, covering the state's rural areas, and 15 Metropolitan Planning Organizations (MPOs), which cover the state's urbanized areas. There are also five counties that are not included in any of the regional council or MPO service areas.

Process

The Transportation Improvement Program (TIP) in Pennsylvania consists of four years of projects and is updated every other year. Projects that are developed at the local level by counties or municipalities are forwarded to the Pennsylvania Department of Transportation (PennDOT) local district office. In addition, PennDOT brings bridge and pavement projects, identified by technical criteria, to the TIP. PennDOT also has contracts with two of the five independent counties to prioritize planning projects for them and get their projects on the STIP.

PennDOT provides regular fiscal guidance to the MPOs and regional councils. Distribution is based on a formula, with a number of exceptions discussed below.

The MPO and regional council board of directors include representatives from all PennDOT districts in the service area, a representative from PennDOT central office, representatives of special interest groups including economic development and environmental groups, and representatives of counties and/or cities and towns in the region.

Pennsylvania has both a state transportation commission and a state transportation advisory committee. The state transportation commission has fifteen members. Ten members are private citizens appointed by the governor to six-year terms. The Secretary of Transportation chairs the commission. The remaining members are the chairman and minority chairman of the state senate and house committees of transportation. The commission's charter is to review and approve for submission to the governor and the legislature the Twelve-Year Transportation Program every two years. The commission also reviews and updates project category priorities on a regular basis. The state transportation advisory committee consists of the Secretary of Transportation, the Executive Director of the Governor's Policy Office, the Chairman of the Public Utility Commission, the Secretaries of Community and Economic Development, Education, Environmental Protection, and Agriculture, two members each from the state House and Senate, and nineteen additional public members. The Governor appoints seven of the public members, the Speaker of the House and President Pro Tempore of the Senate appoint six each. The committee meets quarterly and provides input into planning for all transportation modes, but it has no statutory authority with regard to the STIP process.

Pennsylvania Department of Transportation staff describe the process of working with the MPOs and regional planning agencies as collaborative. However, MPO and regional council staff, particularly at smaller agencies, described the process as fairly directive, with PennDOT staff providing most of the projects to the MPOs and expecting them to see through the process of putting these projects on the TIP.

Evaluation

Most of the work of project evaluation goes on at the PennDOT district offices, with significant input from the PennDOT central office. The criteria used are primarily technical for the majority of projects that are funded in the traditional manner. However, as described below, there are several alternative funding mechanisms for programs that may not have a high level of technical need but that do have importance to support other priorities such as economic development. PennDOT has not added many new projects to its STIP over the past few years due to fiscal conditions.

Some MPOs and regional councils have developed methods of prioritizations, according to PennDOT staff. However, according to the MPO and regional council staff interviewed, these prioritization schemes are at a very rudimentary level, primarily because of PennDOT's primacy in the planning and prioritizing projects.

A small pot of money is also available to support economic development projects. Currently, this amount is approximately \$25 million per year. Federal funds may be included in this amount if individual projects meet the federal criteria. Businesses can access this fund through the Governor's Action Team, which acts to ease the way for business to locate or expand in Pennsylvania. This gives the governor and the secretary of transportation a way to directly impact the transportation planning and programming process without directly circumventing the federal process.

There is also a hold back of 20% of the transportation infrastructure funds. This hold back is spent at the discretion of the Secretary of Transportation and may include state and federal funds, depending on whether the individual projects meet the federal criteria.

Pennsylvania has, over the past two years, been attempting to link transportation planning with land use planning. PennDOT awards small competitive grants to municipalities, MPOs, and regional councils for studies that coordinate transportation and land use planning. In addition, a land use planning questionnaire is required as part of the highway occupancy permit application process.

Key Learning Points

- ◆ Pennsylvania is one of the few states to update its TIP every two years, rather than every year. What cost savings are associated with moving to every two years and what efficiencies are gained should be studied.
- ◆ The various pots of money that are held back for particular purposes may offer projects that would not be prioritized on technical need to be implemented due to their impact on economic development or the environment.

Rhode Island

Overview

Rhode Island is unique because of its geographic size. It is the smallest state and ranks 43rd in total population. As a result, the entire state is considered a MPO that has a state wide planning program. Rhode Island is divided into 39 municipalities, ranging in size from 1.3 to 64.8 square miles. There is no county government. Rhode Island is home to the Narragansett Tribe, and they are included in the planning process.

Process

The planning process for transportation infrastructure follows a two-year Transportation Improvement Plan (TIP) process. Every two years a new plan is developed. The draft of the current planning process for 2003-04 was presented in May 2002 and will be adopted in August 2002.

The Transportation Advisory Committee (TAC) advises the State Planning Council on transportation planning and encourages public involvement in the process. The TAC reviews and provides input into the transportation planning documents that are the responsibility of the State Planning Council. The Council established the TAC in 1994. The 26 members include four local officials, three state agencies plus the Rhode Island Public Transit Authority, organizations representing a variety of transportation interests, and citizens from different parts of the state. TAC members are appointed by the State Planning Council (also the MPO). They have a nominating committee that meets once a year to fill vacant positions.

New projects can be nominated by city and towns, neighborhood groups, non-government agencies, and the Narragansett Tribe. The RIDOT sponsors community meetings to assist people and organizations in developing a project. The current TIP received 170 project proposals. The state is divided into four regional areas and each area scores and then prioritizes development projects. The top three in each region usually move forward.

Projects are divided into three categories: Preservation, System Management and Expansion. The TAC sets guidelines for each TIP for the percentage of the budget that each category will receive. The new TIP has allocated 34% to Preservation, 46% to System Management, and 14% to Expansion.

Project proposals must pass through the Study and Development Program, which serves as the gatekeeper to the TIP process. It is here that RIDOT is able to determine the worthiness, feasibility and utility of proposals. Engineers make recommendations, propose alternatives, and send projects through the TIP process. The Study and Development Program takes project ideas (the highest scoring ones from the TAC regional subcommittees) and gets them to 30% design. At that point, the Study and Development subcommittee meets and makes a recommendation to the TAC (through the TIP process) as to whether projects should be programmed for final design and construction, or otherwise wait until the next TIP. A complaint from local government is that projects can bounce around the Study and Development Program for too long without much public awareness of a project's standing for further consideration.

After Study and Development releases a project, matching the project to the appropriate level of funding is important. Each region is able to recommend three projects in accordance with funding to the draft TIP. The executive committee of the MPO gives final approval to the TIP. By this time there are usually no surprises, but the board has refused a project because the proposed benefits did not match the costs of the project.

The state legislature last year appropriated \$42 million for local municipalities to spend on transportation projects. Each year \$6 million is available to municipalities for development of local projects. This money is outside of the TIP, and its distribution is intended to help elected officials secure money for small projects. No criteria exist for ranking these projects, and the selection can be very political.

Evaluation

The TAC has developed a Project Evaluation Criteria that the regional subcommittees use to scoring and rank its projects. A project can receive a maximum of 100 points. The projects are scored in the following manner. Each measure can receive up to five points, but each of the five categories can receive a maximum of twenty points.

I. Mobility Benefits.

1. numbers of travelers served, or volume of freight transport
2. correction of a high-priority safety program
3. level of service improved, congestion reduced, or efficiency of freight service improved
4. linkages among different transportation modes (intermodal)
5. number of modes provided for
6. regional scale impact
7. mobility provided to populations without vehicles
8. improvement of user comfort, convenience, or information

II. Cost-Effectiveness

1. capital cost proportion to travel benefit (time, distance or delay reduced) or economic benefit
2. improvement in pavement
3. utilization and preservation of existing infrastructure, consideration of future maintenance/operating costs
4. potential to leverage federal transportation funds with other public or private investment
5. small-scale, innovative, pilot projects to improve efficiency

III. Economic Development Impact

1. creation or retention of jobs, as by improving access to employment centers
2. facilitation the movement of goods
3. encouraging tourism
4. benefit to economically disadvantaged populations
5. support of state-designated enterprise zones

IV. Environmental Impact

1. air quality
2. energy conservation
3. water quality
4. protection and enhancement of environmental resources
5. preservation and enhancement of scenic and historical districts or viewscapes, or improvement of visual appeal
6. contribution to a greenways system
7. maintaining integrity of neighborhoods, retaining community and quality-of-life values
8. consistency with environmental justice of minority and low-income populations
9. prevention of urban sprawl

V. Degree of Support to Local and State Goals and Plans

1. priority given by local government compared to other projects
2. past commitment such as completion of studies or design
3. local funding share
4. linkage with other local projects

5. cooperation among two or more municipalities
6. contribution to achieving planned land use and other goals and policies of local comprehensive plans
7. contribution to achieving goals and policies of the state transportation and other State Guide Plan elements
8. degree of public support

Key Learning Points

- ◆ The division of funding allows for a more equitable distribution of funds.
- ◆ A clearly defined criteria is seen as making the planning process more transparent.
- ◆ A small amount of funding is set aside for “political projects.”

Texas

Overview

Texas is a fast growing state in terms of population, even though it has minimal growth in employment. 99% of Texas' land and 93% of its total roads are non-urban. In 1997, Texas had 29 independent special purpose governments with transportation responsibilities.

The State of Texas has twenty-five regional planning councils, and twenty-five MPOs. These organizations help coordinate the 254 county governments and 1205 incorporated cities.

Process

The three-member Texas Transportation Commission governs the Texas Department of Transportation (TxDOT), which is headed by an executive director selected by the commission. The governor, with the advice and consent of the Texas Senate, appoints commission members, serving overlapping six-year terms. The commission also finalizes the funding levels for the twelve categories of project funding based on criteria from TEA-21 guidelines and determined needs of the state.

Texas officially has developed its Unified Transportation Program (UTP) that represents a ten-year plan for transportation development and construction. It is updated annually and includes a list of projects with funding authorization, schedule of construction contracts to be awarded in FY 2002, and a list of projects scheduled to be awarded construction contracts over the next three fiscal years (FY 2003 through 2005). The plan also includes a listing of projects being developed for the following seven years.

Because the process has not been fully implemented, transportation is in a state of flux. As of October 2002, a 2003 planning document has not been implemented, and TxDOT will continue to work off the 2002 plan. Presently work groups are developing a criteria base for selection of projects. This process will not be completed by the end of the year.

TxDOT continues to work with the MPOs, which develop Transportation Improvement Plans (TIP). TxDOT also continues to develop a STIP that includes all projects. The UTP does not include rehabilitation projects.

The UTP was implemented to address problems of haphazard development. Prior to the UTP a cost effective index was used that did not adequately meet the prioritization process. The UTP is designed to assist Texas with corridor development. A problem in the past is that individual projects like an isolated interchange upgrade might score higher than parts of a corridor development. As a result of this new strategy, all projects along a corridor will receive a higher priority than individual projects.

The Trans Texas Corridor Plan is to assist TxDOT to envision what its highway corridors will look like at the end of the ten-year period. Because of the concern about haphazard planning, TxDOT is trying to develop effective, long-range transportation plans. The Trans Texas Corridor Plan was developed to incorporate toll and non-toll roads, high-speed freight and commuter rail, water lines, oil and gas pipelines, electric transmission lines, broadband and other telecommunications infrastructure in the same corridors.

The UTP has reduced the funding categories from 34 to 12. These categories are as follows:

1. Prevention and Maintenance
2. MPO Corridors
3. Urban Areas
4. Rural Projects
5. Congestion Mitigation and Air Quality Improvement (CMAQ)
6. Bridge Replacement
7. Mobility

8. Safety
9. Transportation Enhancement
10. State Park Roads
11. District Discretionary Funds
12. Strategic Priority

The UTP attempts to project funding up to ten years. Most project fall under the 20% state match of federal funds. The present year of the UTP has contracts awarded. Priority 1 projects are constrained to three years of funding. Construction plans and right of ways should be 75% complete to be considered Priority 1 projects. Priority 2 projects are constrained for seven years of anticipated funding and funding is not authorized. TxDOT is authorized to prepare construction plans and acquire the necessary right of way.

Projects are recommended to TxDOT and final selection is made through a consensus process on the district level that is driven by the corridor priority. This process is newly instituted and people interviewed are waiting to see how the process will play out.

Evaluation

In the past, TxDOT used a “Cost Effective Index” to rate projects but has now decided to discontinue its use because it is seen as not effective in rating projects in such a way to identify those that are most productive. As stated earlier, TxDOT is now in the process of developing criteria for project selection that should be approved in 2003. The MPO ranks projects for Metropolitan Mobility and the Congestion Mitigation and Air Quality Improvement Program (CMAQ). These programs are ranked on a point basis, which follows.

Metropolitan Mobility

Criteria	Points
Current cost –effectiveness (1995)	24
Future cost-effectiveness (2020)	18
Air quality/energy conservation (1995)	18
Local cost participation	24
Intermodal/multimodal social mobility	16
Total	100

CMAQ

Criteria	Points
Current cost –effectiveness (1995)	20
Air quality/energy conservation (1995)	20
Local cost participation	24
Intermodal/multimodal social mobility	20
Congestion Management System strategy/ Transportation Control Measure	20
Total	100

Key Learning Points

- ◆ TxDOT has recently reorganized its transportation planning to focus on corridor development.
- ◆ The Unified Transportation Plan (UTP) has been created to strengthen planning and projects planning out for ten years.
- ◆ The UTP has tried to clarify the funding mechanism for projects.
- ◆ TxDOT is attempting to develop regional consensus for corridor project selection.

Vermont

Overview

Vermont is a slowly growing state in terms of population, with a significant growing rate of employment. 98% of Vermont's land and 93% of its total roads are non-urban. In 1997, Vermont had only two independent special purpose governments with transportation responsibilities, far smaller than other states.

Approximately 20 percent of Vermont's roads are state controlled and less than one percent is federal. 78 percent of the roads are controlled by township and 2 percent are controlled by municipal and other government.

Process

The State of Vermont has thirteen regional planning commissions, one of which covers urbanized areas and so is the designated Metropolitan Planning Organization (MPO) required under federal law, and twelve that cover the remaining non-urbanized areas of the state.

The MPO consists of eighteen communities who have a vote on projects that are placed on the TIP. Each community has two hundred points to place on any project or divide in any way it wishes. A community usually divides the points on its own projects. This enables each community to rank its priorities as to the number of points it gives a project. Only when a project in another community will benefit a community will it give points to another community's project.

Vermont Agency of Transportation (VTTrans) is made up by the Departments of Highway, Motor Vehicles, Aeronautics and Public Transit. It created the Statewide Transportation Improvement Program (STIP) that allows the state to develop transportation projects. The STIP addresses highway, air, public transportation, bicycle, and pedestrian projects.

The 2003-2005 STIP was recently approved. The Vermont legislature must approve the STIP, and it must also be signed by the Governor. This year the process was more difficult than usual because there was disagreement between the MPO and the legislature. The MPO and the state legislature have a memorandum of understanding that if the legislature does not approve the MPO's Transportation Improvement Plan (TIP), the TIP is sent back to the MPO to address the legislature's concerns. The MPO threatened to hold out by not make any changes and force the legislature to come to the MPO to obtain their approval so that federal money could be appropriated to transportation projects. In the end the MPO made the changes that the legislature wanted. As a result of this situation, both the legislature and the MPO are working more closely in the development of next year's TIP.

Having a strong role for the legislature in transportation planning process becomes problematic when the executive and legislative bodies are not controlled by the same political party. This division allows for partisan politics to come to the top. This situation was cited as causing the problems in Vermont this year, and speaks to the dilemma that partisan politics can get in the way of good planning.

VTTrans attempts to involve the public and local government in the planning process and has varying success. Local government leaders are very involved in the planning process, but interest is harder to garner. For example the MPO is responsible for public participation in its area, and in the other areas of the state, local government has strong participation in the planning process. Public hearings are scheduled both by the state and the MPO, but they do not generate much public interest.

VTTrans has a Development and Evaluation component that appears to work well. They encourage the participation of their partners in local government to help move projects along. Because of the legislative control over the planning process, there is much discussion with the state legislators.

Vermont is a small state with a proportionate transportation budget. This gives the state flexibility in the way it implements its transportation goals. VTrans has a solid reputation of involving local government in both the planning process, and in the implementation process. In some cases, VTrans will channel money directly to local government to do the planning and implementation of projects. In other cases, VTrans does the engineering for a project, but turns the projects over to the local government for the construction of a project. VTrans will only do the planning and implementation for a project, if the local government does not want to take on the project.

Evaluation

Vermont does not appear to have strong criteria to guide their planning process. The state does not have any formula for allocating money for the different parts of the state for capital improvement projects. They have a “ready to go” system that matches funding to the next project that has cleared all the planning hurdles.

VTrans uses basic traffic information from its management systems to inform the planning process. They stress that local communities are included in all levels of the decision process, including engineering, and this helps build the consensus that determines the project selection.

The MPO does not use the TELUS system to develop criteria for project selection. Projects appear to be evaluated on an individual basis without much comparison to other projects. The MPO would like to see more projects identified to make the project selection process more competitive. They are in the process of developing a long-range plan to evaluate the criteria needed for project selection.

Key Learning Points

- ◆ The state legislature has been active in transportation planning.
- ◆ VTrans delegates planning to the local level whenever possible and at times channels funding directly to the local level for construction of projects.

Virginia

Overview

Virginia is a moderately growing state in terms of population and has moderate growth in employment. 93% of Virginia's land and 85% of its roads are non-urban. In 1997, Virginia had 33 independent special purpose governments with transportation responsibilities, about average among states.

Process

The Commonwealth of Virginia has twenty-one regional planning commissions, eleven of which cover urbanized areas and so are the designated Metropolitan Planning Organizations required under federal law, and ten that cover the remaining non-urbanized areas of the state.

The planning process for transportation infrastructure follows a six-year cycle. Every year a new sixth year is added to the plan. The current planning process is described below. Virginia Department of Transportation (VDOT) is responsible for interstate, primary, and secondary roads, but also works with cities to develop their transportation improvement projects.

The Commonwealth Transportation Board consists of seventeen members appointed by the governor. All projects must be approved by this board. The board is chaired by the Secretary of Transportation who only votes to break a tie. Two other non-voting members are the Commissioner of VDOT and the Director of Rail and Public Transit. The other fourteen members have full voting positions. The state is divided into nine geographic areas with one member each and there are five at large members three with an urban focus and two with a rural focus.

Virginia transportation policy has undergone several changes in the past five years. There is no consensus as to the cause of the problems that have led to the need for these changes. Problems areas have been having too many projects in the Transportation Improvement Program and unrealistic cost estimates that gave the public the impression that improvements would happen in the near future, but VDOT and MPO staff realized that the projects could not move forward without adequate funding. Both staff agrees that Virginia needs to raise taxes. The Hampton Roads area of the state has a ballot initiative to raise sales tax in their region 1% to directly fund transportation projects this fall. Without this money the Hampton Roads MPO does not believe it can adequately fund projects over the next six years.

Evaluation

A criteria system based on points does not exist for Virginia. The Virginia Transportation Research Council (a collaboration of VDOT and the University of Virginia) has produced a report that recommends a point system that should be adopted by December 2002. At the present time VDOT evaluates projects in the order of safety, congestion, mobility, and connectivity.

Each year the VDOT holds pre-allocation hearings around the state to involve the public and all forms of government to the upcoming planning process. MPO's independently work on their project development and may or may not participate in this process. But this process none-the-less allows for non-MPO areas to get involved in the transportation planning process.

The proposed projects are evaluated by VDOT staff as to their conformity to the Virginia Transportation Plan and to funding mechanisms. The VDOT planners realize the importance of negotiating between different municipalities along a transportation corridor. The more the buy-in the better the chances of a project moving along in the process with the Virginia Transportation Board. When VDOT makes recommendations to the Transportation Board Members, the projects are in various stages. Board members approve new projects that are to be included in the next year's plan, and then the funds that are allocated to the project. For example, to initiate the right of purchase for a new project, VDOT needs to demonstrate

that the project is the top priority for the funds. This is a key point in the planning process. If The Transportation Review Board fails to approve a VDOT project, then the project sits for another year. The Transportation Review Board does not have set criteria to rate each project. A VDOT urban planner who was interviewed believes that 95% of the time the technical merit of a project wins out over the political ramifications. He believes that the present Commonwealth Transportation Board members are well informed on transportation issues and realize the importance of safety issues when they are present.

The state legislature under the previous administration had been more involved in transportation project development. There is some disagreement regarding how effective this was. On the positive side it created greater oversight of VDOT and disclosed funding concerns. On the negative side this caused two problems. First, project costs were underestimated so that more projects could appear to be in the pipeline. Second bond bills were passed to fund specific projects independent to other VDOT funds. In the first instance, the state gave the illusion that more was being done in the area of transportation than could be accomplished with the funding that it had. And in the second instance, FRAN, Federal Revenue Anticipated Notes, allowed the commonwealth to spend bond proceeds on projects that were eligible for federal reimbursements. If this were allowed to continue, in the near future the state would only be servicing its transportation debt and developing no new projects. As a result, this year the new governor replaced all but three members of the Commonwealth Transportation Board and VDOT, with the board's approval, pulled 147 projects that had been approved by the Commonwealth Transportation Board and have placed them at the top of the list for new projects to consider.

Key Learning Points

- ◆ The Virginia legislature had been involved in the transportation planning process under a different administration and the new administration has limited the legislature's role.
- ◆ Criteria for project development have not been welcomed by VDOT.
- ◆ VDOT has attempted to limit bond funding for new projects and stay within the federal transportation allotment.

Wisconsin

Overview

Wisconsin is the 26th largest state in land area, the 18th largest in population, and 24th most densely populated. 52% of the population and 98% of the land is non-urban. Wisconsin is growing slowly in terms of both population and employment.

Wisconsin has 72 counties, 583 municipalities, and 1266 towns or townships. Wisconsin has the 6th largest number of sub-county governments of any state. However, Wisconsin is one of only six states that have no special purpose districts with transportation responsibilities.

Wisconsin has 10 Metropolitan Planning Organizations (MPOs) and 9 regional councils. MPOs and regional councils that have less than 200,000 in population are advisory only.

Process

The heart of the project development process for Wisconsin is driven by technical data collected by the Wisconsin Department of Transportation (WDOT) statewide through their Meta-Planning System (MPS). The MPS includes data on the 12,000 miles of state trunk highways in Wisconsin, including interstates and all major state highways. The MPS uses GIS and database technology to bring together information such as current and projected loads, safety records, and population change.

Projects are developed by the eight local WDOT district offices. Each of the district offices has a staff person who works with the local Metropolitan Planning Organizations (MPOs) or regional councils. However, most of the actual prioritization and programming of projects is done by the WDOT district staff and then the MPOs put these projects into their transportation plans. These plans are passed on to the state DOT level, where they are combined into the Statewide Transportation Infrastructure Program (STIP).

For most of the infrastructure funds, the districts are allocated money based on the technical need for improvement in the district using the criteria included in the MPS. There is also a fledgling movement to create district performance measures using the MPS criteria, which at some point would feed back into the resource allocation model.

The state transportation commission is made up of the governor and ten state legislators. The commission approves the WDOT biennial workplan and the projects approved by the commission go into the governor's budget proposal. There is not a lot of controversy around transportation issues in the state legislature. Occasionally, a project will be added to bring a needed legislator on board to approve the overall budget, but even this is relatively rare.

In addition to budgetary authority, the legislature must provide specific constructing authority for all major projects. However, this is seen as pretty much a formality and there is rarely if ever a problem getting the projects that are developed by WDOT through the state legislature.

There are basically three main legislative pots of money for WDOT. The main amount for infrastructure development is approximately \$250 million per year for improvements for major projects. This money is programmed along the processes described above. An additional \$650 million per year is provided in a rehab appropriation. Approximately 70% of these funds are sent to the districts and the remaining 30% are used centrally for major projects that cut across district boundaries. The third level of appropriation is for maintenance.

There is one pot of money for transportation infrastructure improvement that is outside of the processes described above. The Transportation Economic Assistance Program (TEAP) provides state grants for up to \$1 million for road and other transportation projects that either attract new employers or help retain business and industry. The grants must be matched 50:50 from other sources. Proposals are accepted

quarterly and rated according to cost per job developed or retained for four years (maximum of \$5000 per job), county unemployment rate, benefits to the regional transportation system, and proximity to previous TEAP projects. The program is designed to speed up the time to completion for projects that benefit Wisconsin's economic development. A total of \$7 million was provided in the last fiscal year for the TEAP program.

Evaluation

Since most of the transportation infrastructure expenditures are determined by the WDOT, the majority of the evaluative procedures are based on technical criteria. The level of specific conditions, such as pavement condition, vehicle usage, etc. that warrant improvement or other new infrastructure spending is predetermined. Since even by the technical criteria, there are more projects that meet the "go" threshold, additional prioritization is needed. This prioritization is done at the WDOT district level and how it is done varies from district to district. Each relies most heavily on the technical criteria and then other, "qualitative" data, such as impact on local economic development can be considered at the discretion of the district staff.

Some of Wisconsin's MPOs use objective criteria to prioritize the projects, which they have the authority to develop, which is only the STP urban funds portion. We have the criteria and score sheets from the East Central Wisconsin Regional Planning Commission. However, since the MPOs only have sufficient resources from the STP urban funds to program one project per workplan in their area, this assessment mechanism does not have a significant impact on the state transportation infrastructure programming process.

There has been a stated desire to link Wisconsin's transportation planning with its comprehensive land use planning, in which Wisconsin seems to be one of the national leaders. WDOT did develop an evaluation procedure for MPOs to use in ranking projects. The areas included are mobility, modal choice, safety, efficiency, connectivity, economic development, environmental responsibility, and livable communities. However, two factors seem to mitigate this potential. The first is that the MPOs are only able to program a limited number of projects, as discussed above. The second is that WDOT staff seem ambivalent about the planning process, preferring to rely on the technical criteria predominantly and they seem to be allowed to do this on an ongoing basis.

Key Learning Points

- ◆ The use of technical criteria to develop and program projects seems to have taken most of the politics out of the process. It is extremely rare to have the priorities developed by the technical criteria overridden by political leaders.
- ◆ The TEAP program provides a modest amount of funding to economic development projects that support business and industry in the state and may be a model for how to speed up the programming of critical projects.

Appendix C

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