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**Evolving Role of
Statewide Transportation
Planning in an Era
of Regional Funding
and Governance**

A Peer Exchange

**July 7–8, 2006
La Jolla, California**

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TRANSPORTATION RESEARCH CIRCULAR E-C125

The Evolving Role of Statewide Transportation Planning in an Era of Regional Funding and Governance

A Peer Exchange

**La Jolla, California
July 7–8, 2006**

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Georgia Institute of Technology

for the
Transportation Research Board
Multimodal Statewide Transportation Planning Committee

February 2008

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Overview

TRB's Statewide Multimodal Transportation Planning Committee (ADA10) has sponsored a peer exchange for the past several years as part of the committee's summer meetings. These annual peer exchanges are funded with the support of FHWA. The purpose of the peer exchanges is to bring together practitioners of statewide planning to discuss issues confronting the field in an informal setting over a period of a day and half. Peer exchange topics are discussed and determined by the committee during the TRB Annual Meeting in January, and an organizing committee is formed.

The 2006 summer peer exchange addressed the topic of the evolving role of statewide transportation planning in an era of regional funding and governance. Potential participants were identified by the organizing committee in the spring of 2006. Survey questions were sent out to participants before the exchange. This allowed the participants to become familiar with the topics for discussion at the exchange and make the best use of available time. In addition to the survey, the following three states were sent more detailed questions to provide formal presentations at the meeting: California, Texas, and Washington.

The first afternoon of the peer exchange was used for a roundtable discussion on three issues facing each of the participants' transportation agencies. These issues were defined by the three survey questions provided to all participants before the meeting (the first two were offered by FHWA and the third by the organizing committee):

1. How are planning-level goals (e.g., safety, mobility, systems management and operations, systems preservation, multimodal and intermodal linkages, and environment and economic development) factored into the state transportation improvement program (STIP)?
2. Considering the environmental consultation requirements of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), what types of conservation plans and maps and inventories of natural and historical resources have been (or will be) used in developing the long-range statewide transportation plan (STP)?
3. What new or innovative things are happening in your STP program that you would like to share with the broader statewide planning community?

This session of the exchange set the tone for open discourse that continued through the day and a half of events. At the end of the day, the first of three presentations on the peer exchange theme, the evolving role of STP in an era of regional funding and governance, was given by department of transportation (DOT) and metropolitan planning organization (MPO) representatives of the State of California. The presentation was developed around the following 10 questions that were provided by the organizing committee to the presenters before the meeting:

1. What regional funding and governance mechanisms have been put into place in your state?
2. What problems or issues led to the creation of a regional funding or governing entity?
3. What is the relationship between the state DOT and the regional entities?
4. What is the relationship between the MPO and the regional entities where they are not the same organization?

5. What types of projects are funded at the regional level?
6. How has the establishment of regional transportation funding entities affected project selection by the MPOs and state?
7. How is the regional entity governed?
8. What funding sources are raised at the regional level? Is a public vote required?
9. How has the existence of the regional funding and governance mechanism changed statewide planning? MPO planning?
10. What changes in MPO and state DOT roles do you foresee with the emergence of regional transportation funding authorities?

During the second day of the peer exchange, two presentations on the peer exchange theme were given by DOT and MPO representatives of the States of Washington and Texas. The roundtable discussion that began the previous day was concluded. At the end of the session, the participants had a general discussion on their observations during the day-and-a-half event and outlined some actions as next steps for the exchange.

Adjo A. Amekudzi of the Georgia Institute of Technology compiled the survey responses, documented the peer exchange discussion, and prepared this report. The contents of the report have been reviewed by the peer exchange participants to ensure accurate reporting of the material. The report is organized as follows. The first section presents material on how planning-level goals are being factored into the STIP. The next section outlines how states are considering the environmental consultation requirements of SAFETEA-LU, and the third section presents innovations in STP programs. The fourth section reports on the three presentations given on the peer exchange theme, and the fifth and final section summarizes observations and actions identified as next steps to the 2006 peer exchange meeting.

How Are Planning-Level Goals Factored into the State Transportation Improvement Plan?

The first question asked of the peer participants at the workshop was, How are planning-level goals (e.g., safety, mobility, systems management and operations, systems preservation, multi- and intermodal linkages, environment, and economic development) factored in the development of the STIP? The following sections summarize the range of responses obtained from participating MPOs and DOTs.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Transportation Plan (CTP) is a statewide, long-range transportation policy plan that provides for the movement of people, goods, services, and information. The CTP offers a blueprint to guide future transportation decisions and investments that will ensure California's ability to compete globally, provide safe and effective mobility for all persons, better link transportation and land use decisions, improve air quality, and reduce petroleum energy consumption (www.dot.ca.gov).

The goals of the statewide plan are embodied in the STIP. The California Transportation Commission requires performance measures for project selection. There must be consistency between regional plans and state plans. Regional planning agencies are required to submit reports on performance relative to statewide goals. The state must also report on investments and how they are aligned with performance.

IDAHO TRANSPORTATION DEPARTMENT

Idaho's transportation partners have created a long-range transportation plan, Idaho's Transportation Vision: Getting There Together. This document provides a future vision and long-range policy guidance framework for planning, developing, operating, and maintaining Idaho's transportation system to serve the needs of all Idahoans for work, shopping, medical care, recreation, emergency services, commerce, and other purposes (<http://itd.idaho.gov/planning/reports/idahofuturetravel/idahofuturetravel.pdf>).

The vision plan proposes an intermodal system that provides mobility while supporting economic and environmental goals. The document comprises a vision, goals, objectives, strategies, and recommendations for multimodal transportation both now and in the future. The goals and objectives are based on existing state policy, federal law, and input from public meetings held in various Idaho cities (itd.idaho.gov).

The intent of the vision plan is to guide future planning, funding, and decision making successfully for the local and statewide transportation system. The vision outlines guiding principles that define what the system is and under what values that system will operate. The principles for this vision address not only the fundamental questions related to mobility, but the community benefit and stewardship of the system as well.

Idaho’s Transportation Vision directs the Idaho Transportation Department (ITD) to follow the listed principles in developing a transportation system. The principles for Idaho’s transportation system of the future are shown in **Figure 1** and discussed below:

- **Meet the mobility need.** This principle addresses the issue of effectiveness of the transportation system from both financial and user perspectives. The financial perspective speaks to affordability and focus.
- **Compatibility with the environment.** This principle affirms that Idaho has a history that is strongly associated with its natural resources. The theme of respect and value for the natural environment continues today and into the future.
- **Preservation of community assets.** This principle affirms that each community is responsible for defining itself and what constitutes success for its transportation system. Idaho’s existing transportation infrastructure is a unique asset that will require continued operation, maintenance, and modification to serve future system needs. Modification or expansion to address system needs must be done within the scale and context of the community to maintain the asset value.
- **Flexibility and responsiveness.** This principle recognizes that many new needs, ideas, opportunities, and realities will arise in the next 30 years. Constant and committed efforts must be taken toward Idaho’s vision of a fully balanced transportation system. This means that the Vision must be open to options, opportunities, and community input as time passes.

Idaho’s STIP (<http://itd.idaho.gov/planning/reports/stip/stipfirst.htm>) is annually updated and provides for a fiscally sound, set (1 to 5 years) capital improvement plan for the state’s surface transportation program (**Figure 2**). The STIP provides an integrated transportation planning process for transportation planning and transportation project selection. The STIP is developed through a coordinated and cooperative process by the ITD involving citizens, elected officials, tribal governments, other state and federal agencies, each of Idaho’s six MPOs, the Local Highway Technical Assistance Council (LHTAC), and other interested organizations.

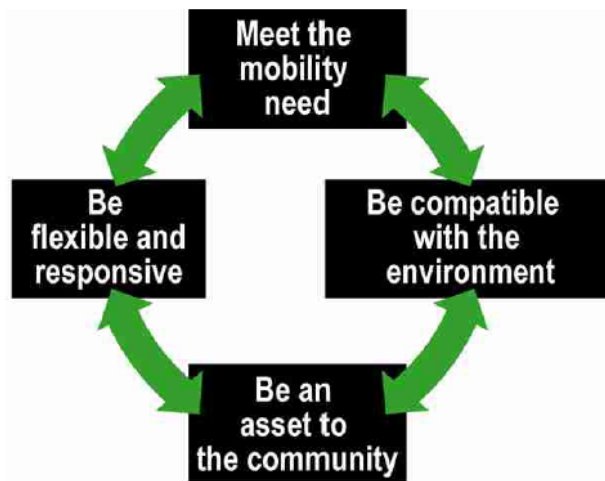


FIGURE 1 Principles for Idaho’s transportation systems.

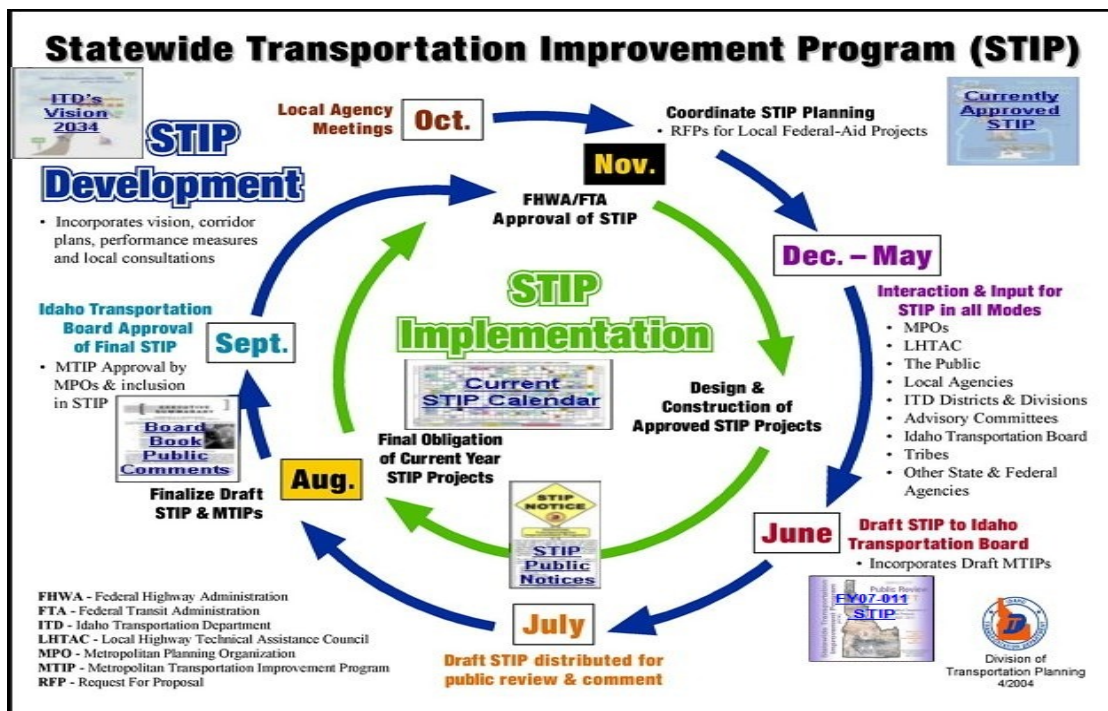


FIGURE 2 ITD’s STIP.

Strategic and performance goals for pavement, bridge, congestion, and safety guide project placement in the STIP. By federal law (ref. 23 C.F.R. 450.216), the STIP is required to be fiscally constrained and include at least 4 years of projects. The state, however, chooses to show a 5-year capital improvement program as its STIP.

MICHIGAN DEPARTMENT OF TRANSPORTATION

The state long-range plan (SLRP) for transportation provides the goals, objectives, strategies, and policies that govern program development. This is a policy plan with goals and objectives to provide guidance and direction for all transportation programs within the state. The Michigan DOT (MDOT) worked with the MPOs and local transportation providers to adapt the SLRP goals and objectives into companion and regional documents. This effort also helps to address public concerns seeking better coordination and communication between transportation providers at all levels of government.

MDOT’s transportation strategies are designed to address the statewide issues identified in the plan. They focus the direction for implementing the various features of the plan and for achieving plan goals. These strategies have been selected on the basis of such factors as input from customers, the agency’s knowledge of best practices, and flexibility—the ability to customize the strategy according to the varying needs that exist across Michigan. Figure 3 shows the planning framework for MDOT.

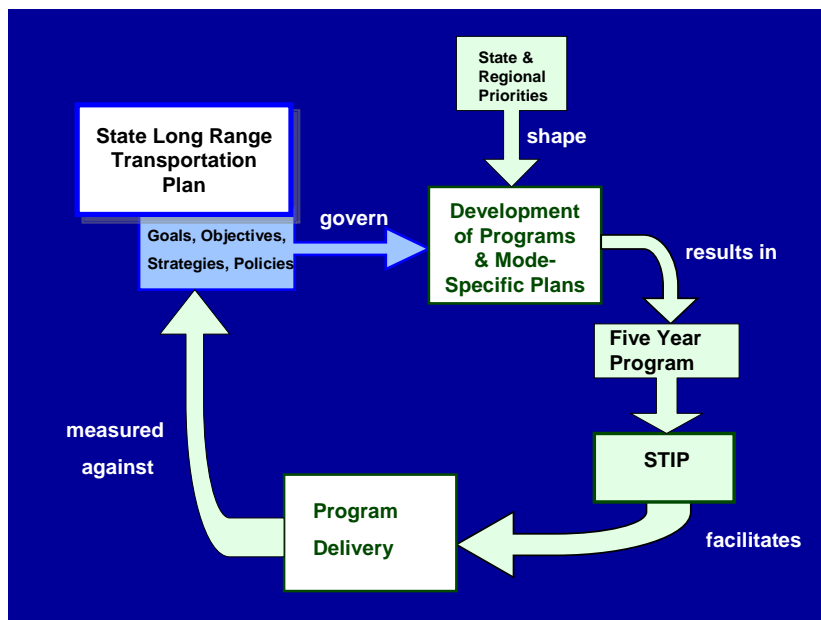


FIGURE 3 MDOT planning framework.

How are the planning level goals linked to the development of the STIP? MDOT's process begins with the integrated call for projects for the 5-year transportation program and is the interim step between the 20-year plan and the 3-year program. The call guides the program development process and links the plan with project selection.

The 5-year transportation program is an integrated program that includes highways, bridges, public transit, rail, aviation, marine, and nonmotorized transportation. The highway portion is a rolling 5-year program. Each year a new fifth year is added, and program–project adjustments are made to other years. This document pertains only to that portion of the programs that MDOT delivers and does not account for those portions that are delivered locally with state and federal funds that are directly controlled by local agencies, such as transit agencies and county road commissions.

An extensive amount of work for the development of the STIP is conducted through the development of the multimodal 5-year transportation program. In the development of both programs, MDOT staff works cooperatively with local officials, public and private transportation providers, and interested citizens.

The 5-year transportation program development process is a year-long, multistage process. The department issues a call for projects, which includes instructions related to achieving goals and implementing the strategies that support the goals based on near-term and long-term strategies, including updated investment strategies. The entire process is supported by continual monitoring and performance measurement, and the feedback is used to update each step in the following year.

The management systems are used as analytical tools to aid in the decision-making process. The results from the management systems are not used in place of professional expertise but to provide informational and technical support. Substantial added value is sustained because all management systems feed off the same database.

The 5-year transportation program is MDOT's public commitment document in advance of STIP development. Although projects that are not included in the initial call for projects may come forward, they go through the same type of screening process to ensure that they meet the department's goals and objectives.

Michigan uses an asset management process that guides reinvestment to ensure that funds are spent in the most cost-effective manner possible. Performance standards indicate the desired condition and service level of the different components. Targets are set on the basis of agreed on performance criteria and design standards. The key is the ability to create and evaluate alternatives.

The integrated call for projects details information covering 15 program areas. As part of the application and subsequent review and analysis, call participants must identify input received from MDOT partners and then describe how solutions were considered during project development. For instance, were multimodal solutions considered? How were nonmotorized solutions incorporated? Did the project address rail infrastructure needs? Is this a short-term or long-term strategy? Does the mix of fixes correspond well to the condition of the network? Were impacts to environmental justice groups considered and addressed? These are the same kinds of questions that are raised by all agencies during the STIP development process.

MDOT has an internal committee review. Candidate projects for the highway program are reviewed for consistency with region and statewide goals identified in the call instructions to ensure that all relevant elements are accounted for, that the proposed fixes are realistic, and that the budget estimates to accomplish the given projects are aligned with anticipated revenue. This review is conducted by an internal interdisciplinary team with expertise in various areas of program development. Review comments and feedback are submitted to the call participants. Any necessary adjustments are made to candidate projects.

Multimodal projects are also reviewed by MDOT staff. Factors in the review process include ensuring consistency with commission policy, compliance with standards, goal achievement, fulfillment of eligibility requirements, degree of readiness, and available funding. These factors ensure the selection of the most appropriate projects and strategies to meet transportation goals, objectives, and needs.

This overall process provides a mechanism for consistency in getting from a 20-year plan to a 3-year program. It keeps the agency focused and provides for early participation from customers and providers. It notifies the public well in advance of the anticipated program and project initiatives for the coming year for multimodal programs. It outlines the proposed program and investment strategies for utilizing the funding available. Agency officials also document previous year accomplishments and progress toward approved system program goals.

A safe, well-maintained, and efficient transportation system provides the backbone for all economic activity within the state of Michigan. MDOT's investments to maintain Michigan's complex infrastructure network result in benefits both for Michigan's overall economy and individual industry sectors.

MINNESOTA DEPARTMENT OF TRANSPORTATION

Minnesota's STP is a policy-based performance plan. The plan has 10 primary policies that incorporate the federal planning factors. Performance measures and targets have been established for each policy. For example, Policy 1 states "preserve essential elements of existing

transportation systems.” The measures associated with this policy address multiple modes and include the following:

- Customer ride quality: lane miles of highway management that have good and poor ride quality as measured by the present serviceability rating (PSR);
- Physical condition of airport pavements: percentage of airport runways that meet good and poor pavement condition index (PCI) targets;
- Physical condition of highway pavement: percentage of roadway miles that have high and low remaining service life (RSL);
- Physical condition of bridges: percentage of bridge area on trunk highway bridges 20 ft or longer that meet National Bridge Index (NBI) structural condition targets of good and poor; and
- Physical condition of transit fleet: percentage of transit fleet whole remaining life is within the minimum normal service life.

Each of Minnesota DOT’s (MnDOT’s) eight districts then developed 20-year plans (mostly highway plans) that identified (a) a performance-based investment plan, that is, all investments needed to meet all performance targets by the end of the plan, and (b) a fiscally constrained investment plan, that is, investment priorities for projected available revenues over the next 20 years. Department policy established that meeting system preservation targets was the top priority and should be fully funded before allocating funds to (stand alone) safety and mobility (both management and capacity expansion) projects. The fiscally constrained 20-year investment plan provides the framework for developing the 10-year program and the (now) 4-year STIP. The performance measure and target that triggers the need for each project in the STIP and 10-year program is identified. The general policy is that within the 10-year program, only 10% of the district’s investments should be expended on projects that are not performance-based needs. Current system condition, coupled with limited federal and state funding, has resulted in the 2007–2010 STIP being largely limited to preservation investments, with only about 25% of the funding available for capacity improvements to address congestion in the metro areas and mobility improvements on the statewide system of high-priority interregional corridors. The formula for distributing money to districts is aligned with the performance goals.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

The North Carolina DOT’s (NCDOT’s) decision-making ability is still largely controlled by historical legislative mandates and statutory formulas as opposed to adherence to higher, system planning-level goals and performance measures. In particular, legislation from 1989 obligates almost 47% of the department’s highway construction budget to complete a 3,600-mi system of four-lane highways and build 10 urban loops. This expansion-heavy policy, however, is changing. The adoption of the 2004 STP signaled a step in a different direction by recommending long-term investment target goals under three key areas of infrastructure improvement: (a) maintenance and preservation, (b) modernization, and (c) expansion. Dollar amounts under each target were constrained according to projected revenue and forced NCDOT, its stakeholders, and the public to prioritize investment independent of legislation and formulas. This first step in changing the way NCDOT aligns its long-term goals with its project selection

and STIP process has created momentum for other department-sponsored initiatives. NCDOT currently manages a 2-year STIP cycle with multiple opportunities for public involvement and MPO and rural planning organization (RPO) input. STIP staff also meets with these stakeholders in one-on-one meetings to consider which projects in local–regional unmet needs lists will be incorporated into the upcoming programming cycle. These projects are then subjected to a feasibility study to determine environmental and social impacts and to develop a cost estimate. Projects screened through these studies are added to the draft STIP and also set the stage for project scope and purpose and need requirements. Final project selection is also affected by the input of a 19-member governor-appointed Board of Transportation and other transportation-related criteria such as economic–industrial development. Because of a lack of visible, measurable systemwide goals, NCDOT has not historically committed itself to tracking project selection formally against such goals.

The current STIP document, however, does point to a series of funding commitments that address system safety, operational, management, and environmental improvements such as the following:

- Statewide traffic signal system modernization (includes new signal heads, replacement of old bulbs, vehicle detection systems), \$132 million;
- Statewide bridge repair and replacement and highway maintenance program, \$1 billion;
- Statewide advanced wetland and stream mitigation program, \$175 million; and
- Set aside of funds to boost industrial growth across the state (partner with Department of Commerce to disperse funds), \$140 million.

TEXAS DEPARTMENT OF TRANSPORTATION

A needs-based multimodal plan is developed at the state level. The STP consists of 49 plans in Texas (25 MPOs and 24 districts) and is financially constrained. The STP is focused on the following five goals:

- Reduce congestion,
- Enhance safety,
- Expand economic opportunity,
- Improve air quality, and
- Increase the value of transportation assets.

A proposal must be supported at the district level or by an MPO to compete with similar projects for funding. Project selection authority rests with the commission and local officials. The process empowers local and regional agency officials to address local and regional needs. MPOs develop joint criteria for allocating funds in the metropolitan areas.

Every year, a larger percentage of Texas DOT's (TxDOT's) budget funds projects through a comprehensive plan called the Unified Transportation Program (UTP). Though the UTP, the commission establishes criteria and standards for different kinds of projects that are used as a basis for project approval. Texas uses 12 categories to program its work. The 12 categories are combined into two programs: the Texas Mobility Program and the Texas

Preservation Program. As suggested by their names, this separates the mobility type projects from the preservation type projects. Each of the 12 categories of work has its individual project criteria. Examples are as follows (www.dot.state.tx.us):

Category 1. Preventative maintenance and rehabilitation. These projects are selected by the 25 individual TxDOT districts.

Category 2. Metropolitan area corridor projects. The commission approves projects in corridors, and the projects are scheduled by consensus of the districts. The individual MPOs have established their own project selection criteria and are responsible for transportation management area (TMA) metropolitan mobility and non-TMA urban mobility projects.

Category 3. Urban area corridor projects. The commission approves projects in corridors, and the projects are scheduled by the consensus of the districts.

Category 5. Congestion mitigation and air quality improvement. Projects are selected by MPOs in consultation with TxDOT and the Texas Commission on Environmental Air Quality, and they are funded by districts. The commission allocates money on the basis of population percentages within areas failing to meet air quality standards.

Category 8. Safety. Projects are selected statewide by federally mandated safety indices and prioritized listing. The commission allocates funds to districts. Projects selected are approved by the commission on a per project basis for the Federal Safety Routes to School Program.

Annual performance reports are produced to report on how well the state is achieving the goals in the STP.

VIRGINIA DEPARTMENT OF TRANSPORTATION

The current multimodal long-range plan (LRP) identified five performance areas:

- Safety,
- Mobility and accessibility,
- Preservation and management,
- Land use environment, and
- Environment, and quality of life, and economic development.

In the development of the LRP, policy goals were established for each of these areas, and strategies were identified. Each modal plan (except public transportation, which uses a formula to allocate funds) is consistent with these goals. In the highway plan, a project is evaluated with respect to whether it enhances access to ports, airports, and multimodal facilities, and additional points are given if a project benefits another mode or is part of the multimodal investment framework. The state's multimodal transportation goals, objectives, and performance measures are shown in [Table 1](#).

One year after the completion of the multimodal LRP, a report was provided to the governor and the General Assembly on the implementation status of the recommendations (and identified strategies).

TABLE 1 Virginia DOT: Multimodal Goals, Objectives, and Performance Measures

I. Safety and Security	
Objectives	<p>Improve safety within the system and at mode origin–destination (O-D). Increase security of the system and its users.</p>
Performance measures	<p>Number and rate of fatalities and crashes per 100,000 residents. Development of and compliance with emergency plans, safety plans, and programs and security.</p>
Acts	—
II. Mobility, Accessibility, and Connectivity	
Objectives	<p>Expand modal choices. Increase capacity. Reduce congestion. Ensure seamless connection between modes. Meet basic transportation needs for special-needs population.</p>
Performance measures	<p>Travel indicators:</p> <ul style="list-style-type: none"> • Transit ridership, • Amtrak and Virginia Railway Express (VRE) ridership, • Vehicle miles traveled (VMT), and • Air service volumes. <p>Congestion:</p> <ul style="list-style-type: none"> • Delay and • Travel time to work. <p>Connectivity:</p> <ul style="list-style-type: none"> • Number and usage of park-and-ride lot spaces and • Truck volumes at port. <p>Accessibility:</p> <ul style="list-style-type: none"> • Population with special needs, • Population within 30-min drive of general aviation airport or 45 min from commercial airport, • Port channel depths, • Transit access, • Percentage of park-and-ride stations that have transit access, and • Percentage of stations with bike lockers. <p>Capacity and supply:</p> <ul style="list-style-type: none"> • Lane miles, • Transit vehicle revenue miles, and • Miles of high-occupancy vehicle (HOV) facilities.

(continued on next page)

TABLE 1 (continued) Virginia DOT: Multimodal Goals, Objectives, and Performance Measures

III. Land Use and Quality of Life	
Objectives	Improve air quality. Ensure transportation facilities and services are compatible with the communities they serve. Better align transportation and land use.
Performance measures	Air quality. Acres of open space. Housing–job balance. Population density.
IV. Economic Vitality	
Objectives	Improve access to jobs and activities. Improve accessibility of goods to markets.
Performance measures	Number of planes based at Virginia airports. Growth in distribution centers. Growth in 20-ft equivalent units (TEUs) at the port. Change in tonnage by mode.
V. Preservation Management	
Objectives	Preserve the existing infrastructure. Increase system efficiency through technology and demand management. Increase system reliability.
Performance measures	Condition of assets. Reliability (incident duration, truck turn times). Maintenance (backlog and percentage of budget).

A report on the condition and the performance of transportation was expected to be published by the end of 2006. The performance report was to focus on the goals. Performance measures were refined (they were developed in the LRP), targets identified, and strategies outlined to meet those targets.

The next step will be to relate investments with changes in the performance and condition of the system.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

A brief overview of the Washington State DOT's (WSDOT's) past capacity project prioritization processes is provided below. While these processes were adopted, it has been important to implement other, more general approaches to meet emergent requests from the legislature and Washington Transportation Commission (WTC). These more general approaches categorized projects in groups such as A, B, and C. While these more general approaches appeared to be less rigorous, they provided results that met legislative needs for budget development and project selection.

Locations on the state highway system in need of capacity improvements are currently identified in accordance with the 2003–2022 Highway System Plan (HSP). The criteria used in

the HSP set a threshold for delay that coincides with Level of Service C for rural areas and D for urban areas. Locations that pass this threshold (either currently or within the 20-year planning horizon) are then ranked by hours of delay.

Solutions and projects are developed to address problems at the locations identified by the thresholds, and expected system performance changes are estimated. The system performance changes (reduction in the hours of delay and estimated reductions in collisions) are valued by using cost per hour per traveler and an estimated social cost per type of collision.

The performance data are combined with additional information about the project including environmental impacts.

Data provided from the above project analysis are summarized to prioritize proposed projects. The primary factor used in prioritization is benefit–cost (B/C), making up 65% of the weighting. The remaining 35% come from environmental impacts, community support, land use and support of multimodal transportation alternatives. The results of this approach generally follow the same ranking as a straight B/C approach except for where B/C ratios are similar. B/C can also be characterized as change in performance per unit cost to obtain the change.

Programming is the final step in putting together the proposed capacity list of projects. In the establishment of the program, projects may be selected out of priority order. This can happen for several reasons, such as alignment with other projects in the preservation program or implementation of incremented and sensible build out of a corridor and of the highway system. In addition, higher-priority projects may have a development schedule that is of longer duration due to environmental impacts and right of way acquisition. Lower-priority projects may be completed earlier and provide the impression that these projects were taken out of priority order.

How States Are Meeting the Environmental Consultation Requirements of SAFETEA-LU

The second question that the workshop participants were asked was, Considering the environmental consultation requirements of SAFETEA-LU, what types of conservation plans/maps and inventories of natural and historic resources have been (or will be) used in developing the long-range statewide transportation plan?

CALIFORNIA DEPARTMENT OF TRANSPORTATION

California Department of Transportation (Caltrans) is involved in the development of a statewide geographic information system (GIS) to inventory the state's environmental assets. The agency is also involved in the development of regional blueprints for alternative plan scenarios, an initiative supported by seven grantees around the state.

IDAHO TRANSPORTATION DEPARTMENT

Idaho's transportation vision directs ITD to follow selected principles in developing a transportation system. Compatibility with the environment affirms that Idaho has a history strongly associated with its natural resources and endeavors to respect and value the natural environment today and in the future.

The principles of Idaho's vision parallel and support a context-sensitive solutions (CSS) (http://itd.idaho.gov/manuals/Online_Manuals/Design/CSS/CSS_Guide.pdf) approach in ITD. The vision principles address the fundamental questions related to mobility, community benefit, and stewardship of the system along with exploring new methods to coordinate transportation planning and multimodal corridor preservation activities in the corridor planning process.

Central to this approach have been the recognition and adoption of a publicly enunciated and acknowledged environmental ethic for the policy and decision makers and the employees of ITD. Idaho Transportation Board Policy B-1307 establishes environmental stewardship as a programming factor in developing transportation projects.

ITD has adopted an environmental ethics statement to guide its work and accomplish its mission in a manner that employs a CSS approach. The ITD environmental ethic is as follows: the Idaho Transportation Department respects and values the many facets of Idaho's natural and human environment and will protect and enhance those assets while providing high-quality, fiscally responsible transportation systems for the citizens of Idaho. ITD contracts with federal resource agencies to provide services and consultation on transportation projects.

MICHIGAN DEPARTMENT OF TRANSPORTATION

MDOT is updating its SLRP by utilizing the resources of the department, its partners, and the Michigan Geographic Data Library. This library serves as the state's repository of digital geographic information. This site currently contains more than 60 unique statewide datasets

including the state's base map (Michigan Geographic Framework), aerial imagery, geology, hydrography, land ownership, topography, and wetland inventories.

MDOT is also preparing a series of technical reports, including an environmental report. This report will discuss the following areas:

- Michigan environmental resources and issues. A synopsis of existing sensitive environmental resources, challenges topics related to transportation policy decisions in Michigan at the state, federal, and local levels. This element will include state maps identifying sensitive environmental areas, as well as charts quantifying and illustrating key environmental trends relevant to transportation planning.
- Michigan environmental policies and procedures. A summary of relevant MDOT efforts to mitigate the environmental impacts of transportation investments, as well as policies of other state, local, and federal actors, currently are in place to support and promote sustainability with respect to transportation.
- Environmental goals and objectives of the SLRP. Derived from the SLRP vision, this element could document the broad-based citizen and stakeholder interests in sustainability as articulated in the first iteration of stakeholder and public meetings. This will highlight the changes, decisions, and actors in the overall state's transportation vision that pertain to environmental aspects of transportation.
- New environmental policies and procedures. This element will suggest policies from other states or national best practices to support the changes and decisions identified in the vision process to achieve the environmental goals and objectives of the SLRP.
- Identification of potential plan impacts on the environment. This element will identify potential positive and negative environmental issues raised by the changes and decisions in the state's transportation vision. It will identify opportunities for MDOT to work with other state, local, and federal agencies to implement the SLRP while also supporting other state, federal, and local environmental goals.

MINNESOTA DEPARTMENT OF TRANSPORTATION

MnDOT has developed the following resources to meet the environmental consultation requirements of SAFETEA-LU:

- Natural Heritage Database. This is a GIS-based inventory of unique habitats, known locations of endangered, threatened, or species of special concern. It contains the output of biological surveys as well as Department of Natural Resources (DNR) data.
- Strategic Conservation Plan. The plan is prepared by DNR in response to federal requirements.
- Minnesota Land Cover Classification System (MLCCS). This is a GIS mapping database of land cover-habitat that can be used to identify greenways, wildlife corridors, and potential impacts of projects. While it has extensive coverage, it is incomplete statewide.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

NCDOT is currently updating its 2004 Statewide Plan, referred to as the 2006 Mid-Cycle Update. The Mid-Cycle Update is much smaller in size and scope compared with the previous update and focuses solely on generating a new picture of 25-year multimodal transportation needs and revenue. This refreshing of data will not change the investment policy and investment goals recommended in the 2004 plan. The new plan forecast year will be 2030, and the update was expected to be complete by the end of 2006.

FHWA's interim guidance does not obligate state DOTs to fulfill SAFETEA-LU's new requirements if their current plan update is expected to be completed before July 2007. However, the guidance does encourage state DOTs to take advantage of these new provisions, and therefore NCDOT is gathering information to consider how best to meet the intent of these new planning requirements. Initiatives include

- Use of NC One Map, a statewide GIS platform that identifies key natural–historic resources. Transportation investment and ultimate impact can be viewed in light of this tool.
- Defining the relationship between transportation investment and advanced mitigation strategies. NCDOT has won numerous national awards for the creation of its Ecosystem Enhancement Program (EEP). The EEP will offset unavoidable impacts of highway construction on approximately 5,000 acres of wetlands and 900,000 ft of streams over a 7-year period. It will allow ecosystem teams to assess, restore, enhance, and preserve natural resources throughout the state. It is sponsored by three state agencies and backed by a network of local–regional conservation agencies.
- Input from an Intergovernmental Leadership Team. This team is made up of high-ranking officials from a number of state, federal, and local agencies vested in the environmental planning and mitigation process. This team can inform and help guide the way in which future transportation system investment and performance affects the state's conservation and natural–historic resource planning goals.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT is still exploring how to bring the state plan into compliance with SAFETEA-LU requirements. They will, however, look at the plans, maps, and inventories of conservation agencies, other natural resource agencies, and historical agencies at the state and federal level. The plan is a 30,000-ft–level look at the state, so the plans, maps, and inventories will be referenced in the plan but there probably will not be a detailed analysis on them relative to transportation. TxDOT will probably put in language to avoid conflict with different agency agendas to the extent practicable.

VIRGINIA DEPARTMENT OF TRANSPORTATION

The multimodal LRP was not project or location specific. For the update, Virginia DOT (VDOT) officials anticipate increased attention to such issues. The Environmental Division's GIS integrator which is part of the Comprehensive Environmental Data and Reporting

System (CEDAR), contains electronic maps and databases of the following resources: historic buildings, structures, districts (including battlefields), and objects as documented in inventory records at the Virginia Department of Historic Resources (VDHR); statewide coverage of archaeological sites as documented in inventory records at VDHR; agricultural and forest districts; state, federal, and private conservation lands (including U.S. Department of Agriculture National Forest Service property, U.S. National Park Service property, U.S. Fish and Wildlife Service property, Virginia Department of Forestry property, Virginia Department of Game and Inland Fisheries Wildlife Management Units, Virginia Department of Conservation and Recreation State Parks and Preserves, and the Nature Conservancy property); scenic rivers; Land and Water Conservation Fund 6(f) properties; boat ramps; riparian forest buffers; prime farmlands; Virginia Outdoors Foundation easement–open spaces that are reserved for conservation; national wetland inventory maps; and much more.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

WSDOT's Transportation Planning Office has begun to compile a listing of such sources of information for the transportation planning process and products. To date, officials have a good sense of the types of plans, maps, and inventories available from the 29 federally recognized tribes. The office is in discussions with the MPOs and WSDOT's Environmental Office to compile and use similar information resources from other state and federal agencies for both statewide and MPO planning. The STP is a policy plan. Habitat and species inventory mapping and cultural resource mapping will be more useful at the metropolitan planning level. At this level opportunities for landscape-scale mitigation or in lieu of mitigation addressing the cumulative impacts of land development and transportation system development can be identified.

Under Washington State's Growth Management Act (GMA), each county and city is required to identify natural resource lands of long-term commercial significance and critical areas (defined as fish and wildlife habitat conservation areas, wetlands, aquifer recharge areas, frequently flooded areas and geologically hazardous areas). Under the act, all jurisdictions must designate these areas and preserve (resource lands) or protect (critical areas) through local controls such as zoning and development regulations. Under the GMA the state must adhere to locally adopted rules. These areas are typically mapped and many are available by GIS. Some, such as flood zones, are mapped through the National Flood Insurance Rate maps. These mapped and designated resources are available for review and consideration, and the GMA process is referenced in the SLRP. Consultation between state and federal agencies will be increased and would potentially use existing groups such as the State Interagency Workgroup for GMA coordination, which includes statewide natural resource and land management agency coordination and consultation with local and regional entities. This effort will be expanded to include federal and tribal groups as well.

What Are the Innovations in Statewide Transportation Planning?

The third question posed to the workshop participants was, What new and innovative is happening in your statewide transportation planning program that you would like to share with the broader statewide planning community? Summaries of the answers given to this question are provided below.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Caltrans has been a key player in the development of the California Regional Blueprint Planning Program. The program makes \$5 million per year available to MPOs and councils of government (COGs) in grants for 2 years (2006 and 2007). This voluntary, competitive grant program will initiate or augment existing efforts of MPOs and COGs to conduct comprehensive scenario planning that results in consensus by regional leaders, local governments, and stakeholders on a preferred growth scenario (or blueprint) to achieve the objectives delineated for a 20-year planning horizon (through 2025).

The California Transportation Commission is working on guidelines for a bond to support the results of strategic road planning (i.e., performance and outcome-based planning).

IDAHO TRANSPORTATION DEPARTMENT

Forum on Transportation Investments

ITD has recently taken a proactive approach to determining additional funding–financing resources for continued development of their transportation system. The agency recently reviewed the current financing and funding options, assessed the demand for improving Idaho’s transportation system, and developed projected needs to assess innovative financing and other revenue options. New policy–revenue recommendations embrace public transportation as an integral part of Idaho’s transportation system by dedicating revenue mechanisms to address this mode; encourage improved freight mobility; provide local option taxing authority for transportation-related initiatives; establish index strategies for fuel taxes, vehicle registrations and other transportation-related taxes and fees; create a rental car fee to generate revenue for transportation initiatives; and assess new growth and development impact fees for transportation facilities for distribution to jurisdictions within the area of impact (http://itd.idaho.gov/info/ti_forum/).

Horizons in Transportation: Idaho’s Long-Range Capital Improvement and Preservation Program

ITD is constantly seeking processes that help to preserve and develop their statewide transportation system’s assets efficiently. To facilitate and help integrate these processes, ITD has developed a long-range capital improvement and preservation program (LRCIP) called Horizons in Transportation (<http://itd.idaho.gov/planning/reports/stip/Final%20Horizons.pdf>).

The LRCIP complements and provides the transition between the shorter-term 5-year project planning and implementation years of the STIP and the longer-term 2034 Idaho Transportation Vision.

Context-Sensitive Solutions

The ITD Context-Sensitive Solutions Guide has been developed to introduce and explain the ITD environmental ethic and an approach that embodies the principles of CSS (http://itd.idaho.gov/manuals/Online_Manuals/Design/CSS/CSS_Guide.pdf). This CSS approach should permeate all aspects of transportation including policy development, systems planning, and project development, as well as the design, construction, maintenance, and operations of the transportation system. The department has created a CSS Guide designed to educate and assist both internal and external users to understand better the considerations given to the environment and in the use of CSS approaches to implementing ITD's environmental ethic. The CSS approach is more than just processing environmental clearances and ensuring regulatory compliance for transportation projects. It embodies the notion of going beyond legal requirements and being responsive to community desires. A CSS approach means that ITD's employees must always be environmentally conscientious and strive to ensure that the statewide transportation system is constructed, operated, and maintained in an environmentally responsible, sustainable, and compliant manner consistent with the desires of the community.

ITD considers environmental and community factors to be an important part of every plan and decision in the same way that engineering, economic, social, and other factors are considered. ITD's environmental ethic establishes a foundation for environmental responsibility that helps guide policy and systems planning decisions. As the planning and decision-making process becomes more project oriented, this environmental ethic is realized through environmentally responsible engineering, context-sensitive design and implementation, and various best management practices.

Corridor Planning Guidebook

ITD has designed a Corridor Planning Guidebook for ITD staff and consultants to use when developing plans for transportation corridors. The LRP process described in the guidebook is intended to integrate transportation planning with land use planning, and to coordinate local and state transportation planning efforts. The corridor plans developed from the guidebook follow a uniform format, while the focus of each plan will be tailored to the specific corridor. Further guidance on the integration of corridor planning and the National Environmental Policy Act of 1969 (NEPA) environmental documentation is included as part of the overall planning process toolbox (<http://itd.idaho.gov/planning/reports/corrplan/corridorstart.html>). Existing state highways form the backbone of each corridor area. Although the guidebook has been created to be used for corridor planning by ITD or consultants under contract to ITD, it is not considered regulatory or mandated. It is assumed that the professionals using this guidebook will have some expertise in the field of transportation planning.

MICHIGAN DEPARTMENT OF TRANSPORTATION

Model Enhancement and Activity-Based Model Development

MDOT has entered into the third phase of a three-phase project to provide better support to MDOT's strategic planning process by improving the travel demand models (TDMs) used in Michigan at the state MPO level. Phase I identified an improved TDM structure and the data necessary to support the models. Phase II was the data collection effort study; travel activities were collected from 17,000 households in seven geographic stratifications in Michigan. Household travel data are the technical underpinning of TDMs. MDOT last collected household travel data in the 1960s through the mid-1970s. At that time, data were collected in metropolitan areas only—data have never been collected statewide.

The data collected in the 1960s and 1970s, though Michigan specific, were no longer valid because of changes in travel characteristics. Some changes in travel characteristics that have occurred since household travel data were last collected include the following: more than one worker in each household, decentralization of population and job centers, and an increasing percentage of single-occupancy vehicles.

The household travel characteristic data currently used are national default data from NCHRP. A good source, the NCHRP data does not allow MDOT to differentiate travel characteristics throughout the state. For example, MDOT is unable to differentiate travel behavior between Ionia and Chippewa counties.

Officials were aware that Michigan's travel patterns differ from national averages in the NCHRP, but it was the most up-to-date default information available. Officials developed seven sampling areas based on where there would be differences in travel characteristics. The seven sampling areas are Southeast Michigan COG, transportation management areas, small urban areas, small cities, rural Upper Peninsula, rural Northern Lower Peninsula, and the rural Southern Lower Peninsula. Figure 4 shows the Michigan travel count sample areas.

By understanding Michigan's transportation system users, planning officials have a basis for better understanding the needs of the transportation system in Michigan. An important construct for understanding travel characteristics is the linkage between travel and activities. Because travel is secondary in nature, undertaken to support ultimate activities at the trip

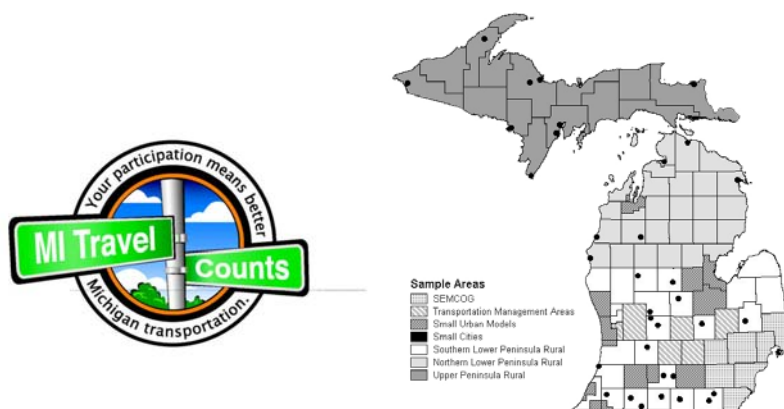


FIGURE 4 Michigan travel counts sample areas.

destination, activity patterns underlie personal and household trips. These activity patterns are often implicit in personal and household travel patterns. Activities (work, school, shopping, and so on) are important for understanding the demands on the transportation system because they create value in the state's economy and represent participation by Michigan's public in both the workforce and consumer markets. Personal and household characteristics offer insight into who is using Michigan's transportation system, where, and to what extent. These characteristics represent a broad view of system use and transportation needs based on today's travel behavior. Key findings included the following:

- Trip rates were highest in the small cities (8.3) and lowest in the Upper Peninsula (7.45) and the Southern Lower Peninsula (7.4) rural areas.
- Work trips had the highest reported frequency, followed by personal business trips, everyday shopping trips, and picking up or dropping off passengers.
- Average trips were highest for ages 35 to 54 for all sample areas.

Customer service has been additionally demonstrated during the Michigan travel counts contract. MDOT maintained a phone number and responded to a great number of phone calls from the public with questions or those needing assistance with filling out their travel diaries.

The Public Awareness Plan consisted of six key elements:

- Development of a name and logo for the data collection program that would be immediately identifiable as to the project's intent and legitimacy;
- Prenotification letters to legislators and affected state, regional, and local planning and transportation officials;
- Press releases to the media;
- A Michigan travel counts website (www.michigan.gov/mitravelcounts); and
- An 800 number in a manned phone room for respondent questions and follow-up.

The Michigan travel counts team did not subscribe to best guesses or good enough when it came to the geographic coding of the data collected. The team continuously checked and rechecked the interim data submissions for accuracy of coding. Because of the Michigan travel counts team's in-depth knowledge of geographic information tools, the quality review process implemented by the team, and dedication to having the best information possible for updating the TDMs, MDOT is the beneficiary of a high-quality dataset ready to be used in developing the next generation of TDMs at MDOT.

MDOT benefits, in particular, for the Bureau of Transportation Planning, Statewide Planning Division, include

1. Instilling the value of working as a team,
2. Reinforcing individual capabilities,
3. Creating participation and involvement,
4. Making better decisions,
5. Creating employee ownership, and
6. Generating a diversity of ideas.

The Michigan travel count team is a clear example of how effective teams can be for an organization, from forming personal bonds that are good for individual and workplace morale, to reviewing ideas and putting together a final solution that incorporates the best individual ideas. The skills developed and honed by this team to evaluate the complex issues of team project goals and to formulate appropriate solutions and plans will carry forward and are a major asset to MDOT and the individuals.

The benefits not only to the team but to the department include

1. Increased confidence and growth for individuals,
2. Better understanding of MDOT and its transportation partners,
3. Increased knowledge of what is needed to advance and succeed, and
4. The building of relationships and capabilities to attract and retain people with the best qualifications, skills, aptitudes, and attitudes that match our long-term requirements and work culture.

The benefits not only to MDOT but to MPO partners include the following: (a) with the early retirements and several new staff in place at MDOT and the MPOs, this team has become an important mechanism not only for providing technical knowledge development but also for making available opportunities to network on modeling issues statewide and (b) new processes, software, and technical tools continue to be introduced, and the need to have all technical staff on the same page and working at the same level is crucial.

Being able to improve forecasts will lead to better identification and prioritization of needs, whether for an MPO LRP, SLRP, or analysis of the impacts of different road alignments. Planning officials will be able to identify better the timing, location, and extent of improvement projects. Better travel and forecasts are available to MDOT customers so they can use the results to evaluate and develop a 21st-century transportation system that provides mobility to every Michigan citizen, community, and visitor. The study has received national attention, with the project manager being asked to serve on the committee and present at the Transportation Research Board's Innovations in Travel Demand Model Conference, May 21–23, 2006.

Phase III is the update of MDOT's current four-step models and the development of the next-generation TDMs.

Development of a Microsimulation Model for Southeast Michigan's Freeway Network

A growing number of transportation agencies and departments want to conduct the quantitative testing and evaluation of alternative transportation system plans through the development and application of travel simulation models. The simulation of existing and future travel demand through travel simulation models is a complex procedure requiring development and application of a variety of mathematical and statistical techniques. The Traffic Analysis Tools Program was formulated by FHWA to strike a balance between efforts to develop new, improved tools in support of traffic operations analysis and efforts to facilitate the deployment and use of existing tools.

MDOT has embarked on development of a systemwide operational and diagnostic tool for the greater Detroit metropolitan area freeway network. This pilot project is to look at how simulation tools may support MDOT's efforts to improve mobility on Southeast Michigan's metropolitan freeway system. This research project is intended to provide MDOT with a tool that

will be used for future operational and planning applications. If successfully developed, MDOT may consider using this tool–process as a template for modeling the entire freeway network of Southeast Michigan and implementation in other urbanized areas around the state.

MINNESOTA DEPARTMENT OF TRANSPORTATION

MnDOT has developed a new process to link its LRP to their STIP and 10-year capital program. Twice yearly, it convenes its eight districts, together with its various central expert offices and senior management, to review the draft STIP and 1-year program against its performance targets. Guidance regarding investment priorities (e.g., preservation of the existing system is the top priority) and funding–financing policy (e.g., projected revenues, use of advanced construction) is provided to the districts before the development of the draft STIP and program. At the check-in meeting, each district reports on its investment plan, including how and why it sets its investment priorities, and what issues were involved. Every project in the STIP and 10-year program is coded for its primary and secondary (if applicable) performance need. From this, planning officials are able to tally statewide planned investment by policy and performance targets as set forth in the STIP. They are also able to take the planned investments and forecast where we will be in terms of system performance, by district and statewide, for various performance measures, such as pavement condition and interregional corridor mobility. Two check-in meetings have been conducted thus far. The next one is scheduled for October. These meetings have provided an excellent forum to take the department’s pulse and discuss a wide range of technical issues related to operationalizing performance-based planning as well as financial issues such as revenue trends, inflation rates, and the impact of federal project earmarks on our program. The link between LRP and actual investments has been significantly strengthened through this new process:

- Development of cost estimating manuals based off the NCHRP project manual on cost estimation (NCHRP 8-49).
- Assessment of how to keep low-volume roads serviceable without significant expenditures for rebuilding.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

There are two primary areas of innovation in current practice or under development at NCDOT.

Implementation of a Comprehensive Transportation Planning Process (and New Mapping) to Improve Local–Regional Long-Range Planning

Since the 1960s, NCDOT has been the primary producer of LRTPs for rural communities and small urban and large (MPO) urbanized areas. Most plans focused on highway improvements and therefore were deemed thoroughfare plans. Roadway segments were characterized as either major thoroughfare or minor thoroughfare, depending on traffic volume and functional classification. Maps of thoroughfare plans did not always clearly indicate other types of highway improvements (shoulder widening, intersection or operational improvements) and did not list

other nonhighway mode improvements. Recently NCDOT has shifted to a more multimodal transportation planning approach, creating more expansive definitions for roadway function and operation and the inclusion of public transit, freight–passenger rail, and bicycle–pedestrian facilities. The comprehensive transportation planning process is built around five key steps and seeks to (a) identify all future transportation solutions for a community and (b) highlight locations where the interaction of two or more modes creates a more seamless transportation experience for the public.

Creation of a Highway Performance-Based Management Program

The primary objective of this new program is to establish, implement, document, and communicate a comprehensive statewide strategy for long-term preservation and efficient operation of the state highway system. The 2004 STP, an ongoing department business plan, and asset management philosophies will be used to develop system performance measures, levels of service, outcomes, and expectations for 78,000 mi of state-maintained roadways, 17,000 bridges, all intelligent transportation systems (ITS), other traffic–traveler-related infrastructure, and budgetary processes. The operations staff at NCDOT is working toward establishing detailed performance measures for systemwide assets under seven functional areas. To do this, condition inventory and rating are being performed on each asset, and future performance goals are being set on the basis of type, role, and function of transportation service that asset provides to the state. Each asset is divided into a statewide, regional, or subregional tier, and therefore future performance analyses will bear a fair comparison of how (for example) the pavement rating of an Interstate facility is viewed differently from the investment level needed to improve pavement conditions on a low-volume secondary road. The ultimate goal of this new program is (a) to provide decision makers and NCDOT’s stakeholders a clear picture of the performance of statewide system assets in quantifiable terms and (b) to link these new performance measures to a robust budgetary process that can show the consequences of shifting or reallocating various types and levels of transportation investment.

TEXAS DEPARTMENT OF TRANSPORTATION

Texas’ mobility system is significant. TxDOT continues to focus on preparation of a multimodal STP instead of concentrating only on the highway element. However, Texas has 300,000 mi of roads, streets, and highways and 48,000 bridges to address continuously in the planning process. In addition, there are 400 public use airports and 1,200 restricted airstrips. Dallas–Fort Worth International Airport is the fourth busiest airport in the nation, and Texas has four more airports in the top 50. There are 27 ports, with four of them among the 20 most active in the nation. The Port of Houston handles the second largest volume of freight in the nation. Texas also has the Gulf Intercoastal Waterway, which is the nation’s third busiest canal. The state’s rail yards and terminals are also among the largest, and the most extensive pipeline and distribution system is in Texas. Below are some highlights of innovations in transportation planning in Texas.

1994 Plan

The statewide plan published in 1994 was a goal-oriented plan that brought together government agencies, stakeholders, and the public. The plan evaluated the growing demand for transportation and prepared a forecast of growth. An update of the existing STP has continuously been in progress since 1994 with a legislative mandate to “simplify the project development process.” TxDOT responded with the formation of work groups to reduce the number of funding categories from 34 to 12.

Statewide Transportation Plans in Progress

A Texas Rail System Plan was published in 2005. The plan provides an analysis of the Texas rail system, identifies projects, determines infrastructure and capacity needs, outlines processes to address rail infrastructure improvements, and focuses on major rail relocations and rail system improvements. In 2005 the Texas legislature passed legislation enabling the expenditure of funds by TxDOT, which will allow targeted improvements to the Texas rail system. This certainly will increase TxDOT’s involvement in rail projects.

TxDOT has also initiated freight corridor studies to identify infrastructure needs. These studies consider alternative modes or alignments to improve freight efficiencies and encourage the use of rail to reduce highway congestion from trucks.

A number of plans are in continuous development and these plans are considered part of the statewide planning process as follows:

- The Texas Metropolitan Mobility Plan (TMMP) is a non-financially constrained plan of needs and formula-driven evaluation of congestion in each transportation management area (TMA).
- The Texas Urban Mobility Plan (TUMP) is non-financially constrained plan of needs and a formula-driven evaluation of congestion in each non-TMA.
- The Trans Texas Corridor Plan (TTC).
- The Texas Unified Transportation Program (UTP), a program unique to Texas, is an 11-year financially constrained plan. Three categories are defined: plan, develop, and construct.
- The Metropolitan Transportation Plan (MTP) is financially constrained. There are 25 MTPs in Texas.
- The STP is financially constrained. There are 49 STPs in Texas: 25 MPOs plus 24 Districts.
- The Transportation Improvement Program (TIP).
- The STIP.

Proposed TTC Plan

The TTC is the largest engineering project ever proposed for Texas. The concept for the TTC involves a statewide network of transportation routes connecting the entire state by a 4,000-mi network of corridors up to 1,200 ft wide with separate lanes for trucks (two in each direction) and passenger vehicles (three in each direction).

- The corridor would also include six rail lines (three in each direction), one for high-speed passenger rail between cities, one for high-speed freight, and one for conventional commuter and freight rail services.
- The third component of the corridor would include a 200-ft-wide dedicated utility zone of infrastructure for utilities including water lines, oil and gas pipelines, and transmission lines for electricity, broadband, and other telecommunications services
- Cost estimates for the entire 4,000-mi corridor range from \$145.2 billion to \$183.5 billion, including right-of-way and miscellaneous costs.
- Plans call for the TTC to be completed in phases over the next 50 years with routes prioritized according to Texas' transportation needs. TxDOT will oversee planning, construction and ongoing maintenance, although private vendors will be responsible for much of the daily operations.
- Four corridors have been identified as priority segments of the TTC. These corridors parallel I-35, I-37, and I-69 (proposed) from Denison to the Rio Grande Valley, I-69 (proposed) from Texarkana to Houston to Laredo, I-45 from Dallas–Fort Worth to Houston, and I-10 from El Paso to Orange.
- The toll segments of the TTC could be developed through a variety of means including low-bid contracts for turnpike improvements coordinated by TxDOT. Another mechanism for toll-segment development would be through low-bid contracts coordinated by RMAs and comprehensive development agreements (CDAs) with private-sector developers. Administration of such projects would come through TxDOT, an RMA, or a regional toll authority. Proposals for CDAs will be solicited by TxDOT and also will be submitted by private entities as unsolicited proposals. Regional toll authorities (such as the NTfA) or a county toll authority (such as the Harris County Toll Road Authority) may also play a role in development of the corridor's toll segments.
 - Development of needs-based transportation plans for the metropolitan areas.
 - 2030 statewide plan.
 - A draft plan has been furnished to the TTC. A second review is in progress and expected to be completed this year.

VIRGINIA DEPARTMENT OF TRANSPORTATION

- VDOT established the Rail Enhancement Fund that traded off passenger and freight rail. The cost–benefit had to be greater than 1, and a project had to advance both freight and passenger rail.
- VDOT is currently performing a multimodal freight study in conjunction with the Hampton Roads Planning District Commission (PDC).
- According to the appropriation act state planning officials are required to work with MPOs to develop performance measures and then use them to evaluate their plans and programs. This will be a joint effort.
- VDOT is advancing the concept of multimodal investment networks that will serve as a system of statewide significance and focus funding.
- VDOT has created a Multimodal Transportation Planning Office to coordinate planning among the modes.

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Comprehensive System-Based Planning

With WSDOT's current update process under way, planning officials established a new way of approaching problems on the entire statewide transportation system. Rather than the traditional approach of looking at problems by mode (highway, ferry, bicycle etc.) or by jurisdiction (state-owned, locally owned, or private), the agency tackled nine key issues about the transportation system that all or most modes and jurisdictions face:

- System preservation,
- Safety,
- Bottleneck and chokepoints,
- Transportation access for those who cannot or do not drive,
- System efficiency,
- Support for a strong economy,
- Moving freight,
- Health and the environment, and
- Visions beyond the 20-year horizon of the long-range plan.

This approach has enabled us to conduct the plan update without many lapses into discussions about modal or jurisdictional favoritism or lack of focus. A data- and fact-driven approach adopted for examining each of these issues led in turn to a much better understanding of where and what the key problems are. From there concepts were crafted for either strategic investment or potential policy change. The potential investments have been held to a programmatic level and are not project specific (again avoiding unnecessary discussions on who wins or loses).

This plan update has been the first successful statewide plan with an investment proposal as part of the plan. To be clear, the investment proposal is not a budgeting tool, but rather a set of recommendations for programs that the state legislature should consider funding.

Data Library

The data library is an online resource used and maintained by the Transportation Planning Office to assist the agency and the Washington State Transportation Commission (WSTC) with the formation and continuing update of the Washington Transportation Plan (WTP).

As with any plan, the WTP draws its conclusions from data collected and analyzed. It is the belief of the Transportation Planning Office that to be more transparent and accountable to the citizens of Washington, the data used to formulate the WTP should be made conveniently available to the general citizenry.

With the growth in internet use and general availability, the data library lends itself well to agency accountability and transparency as it not only makes available the data that policy makers use to make decisions inexpensively but is able to be publicized on the agency's website, with minimal staff time.

Information in the form of raw data about the state's population, its economy, and the conditions and uses of its transportation systems and facilities is essential for the preparation of

the WTP update. The data library takes this information, which has already been compiled and analyzed, and simply makes it available to the general public in an easy-to-read format, complete with text, graphs and charts, and links to the actual numbers used to generate them. As a further step toward achieving accountability, the data library contains links to the websites and organizations from which the original data were gleaned.

This format works well with the WSDOT website that contains information about projects that are currently under way or about to be undertaken. WSDOT wishes to make public factual data about what it is doing or is going to do and why. The data library helps to explain why WSDOT and WSTC have come to their conclusions. The data library further invites visitors to take a look at the available data, and draw their own conclusions about what should be prioritized. Links are also provided to contact WSDOT staff with questions, comments, or concerns about data published in the data library.

The data library is built on a content management server (Microsoft CMS) software platform. To view the data library, please visit www.wsdot.wa.gov/planning/wtp/datalibrary/.

Development Review Database

WSDOT is developing a departmentwide database for documenting and analyzing the department's participation in local government processes that permit development and related land use.

WSDOT's six region offices review public and private development proposals for potential impacts to state transportation assets under the state environmental policy act. For private developments, the regions work through local agencies to eliminate adverse impacts or to minimize impacts through mitigation. Although the regions utilize a common manual to guide their development review work with local agencies, the regions do not collect comparable data or documentation about their activities.

The first iteration of the development review database will tie together consistent data from each region to document developer review activities from a one-WSDOT perspective. As part of WSDOT's departmentwide data system, the development review database will link to other data systems, including roadway information, highway usage, accounting, contracts, geographic information, and highway projects.

Coordinated Public Transit–Human Services Transportation Plans: The Role of Washington's Regional Transportation Planning Organizations

SAFETEA-LU (49 USC) requires the establishment of a locally developed, coordinated public transit–human services transportation plan for all FTA human service transportation programs. Plans must be developed with strong coordination among representatives of public, private, and nonprofit transportation and human services providers and participation by the public. The human services transportation coordination provisions in SAFETEA-LU aim to improve transportation services for persons with disabilities, older adults, and individuals with lower incomes by ensuring that communities coordinate transportation resources provided through multiple federal programs. Effective completion of these plans enhances transportation access, minimizes duplication of services, and facilitates the most appropriate and cost-effective transportation option possible with available resources.

In consideration of the SAFETEA-LU requirement to develop a coordinated public transit-human services transportation plan, Washington State has initiated a coordinated approach that

- Provides federal funds to rural and small urban areas to complete the plans,
- Uses the existing structure of regional transportation planning organizations (RTPOs) as the plan areas but allows flexibility in who develops the plan,
- Uses existing Job Access Reverse Commute (JARC) and similar coordinated plans and plan frameworks already in place, and
- Builds on the existing consolidated grants application program allowing efficient and effective project identification and funding consistent with new federal requirements on the basis of regionally identified needs.

RTPOs that cover rural and small urban areas are eligible to receive one-time planning grants. RTPOs may appoint a different lead agency (transit system, the local coordination coalition, etc.) that participates in the RTPO to take on the task of developing the coordinated public transit-human services transportation plan.

WSDOT is currently working with FTA Region X to identify the minimum requirements for the plan. Initial guidance from FTA (as well as the literature that WSDOT officials have received, and the listening sessions that they have participated in during the past 3 months) leads them to believe that these new regional plans will closely parallel existing JARC plans, with some additional elements from the United We Ride assessment. WSDOT will be providing a framework and guidance for the local plans and will continue to communicate with the lead agencies on any additional guidance provided by FTA. For more information, please visit www.wsdot.wa.gov/acct/.

Urban Planning Office–HOV Lane User Survey

Over the past 25 years more than 200 mi of HOV lanes have been implemented on freeways in the Puget Sound region. Most of the remaining 100 mi are now funded or planned.

Performance of the HOV lanes has been well documented by using standard metrics such as speed, volume, and person throughput. However, the question of whether HOV lanes induced a shift to HOV modes had not been answered in a rigorous way. As a result, WSDOT lacked a firm empirical basis for responding to critics who suggested the lanes were used primarily by families who would have been riding together anyway. If that conjecture proved true, it would mean that the HOV lanes were contributing less to system efficiency than assumed.

In early 2006, Urban Planning Office staff retained a consultant to help design and conduct a survey of HOV lane users. The survey was developed to fill in the blanks by telling the staff who was using HOV lanes, the purpose of HOV trips, and whether people traveling together were from the same household. In addition, the survey asked respondents to identify the characteristics that influenced their decision to use the HOV lanes. With this information WSDOT is now able to answer important questions about HOV system performance, including

- The extent to which HOV lanes induce a shift to HOV modes,
- What share of HOV lane use is by individuals from the same household,
- How midday HOV lane use and trip purpose differs from peak period use, and

- How HOV lane use varies among carpoolers, vanpoolers, and transit riders.

This information will help WSDOT evaluate adjustments to HOV operating policy, and will be a useful input to planned HOV system improvements.

Geographic Services Office—GIS Workbench

The GIS workbench is custom software developed by WSDOT to remove some complexity of using GIS. The GIS workbench resides in ESRI ArcMap to provide access to the GIS data and tools that WSDOT has for addressing various business functions. Data pick lists help users find the available data and display the information in ArcMap using standardized selection criteria and display formats. Tools that automate GIS analysis and map production processes are also available through a pick list. Because both data and tool lists are generated on the fly from a special workbench database, including additional items does not require reprogramming. To simplify the user's GIS experience, the data and tool list are organized into groups so that only those items pertinent to a business area are presented. The GIS workbench has made GIS accessible to more users with less training. Current uses include environmental review, project scoping and estimating, transportation data analysis (volume, collisions, and roadway geometrics), and general use. Improvements will consist of adding additional business areas with the associated data and tools and developing a version of the workbench that requires only a web viewer.

Evolving Role of Statewide Transportation Planning in an Era of Regional Funding and Governance

This section of the report summarizes the presentations made by California, Texas, and Washington on the evolution of statewide transportation planning in an era of regional funding and governance. A 10-question survey addressing basic issues related to the workshop theme was sent to the presenters before the workshop. The results of this survey are provided below and the PowerPoint slides of the presentations are included in the Appendix. “Regional” as used in this document can refer to countywide or multicounty regions (or portions thereof).

CALIFORNIA

What regional funding and governance mechanisms have been put into place in your state?

Local Sales Tax Measures

Proposition 13 (Article XIII of the state constitution) authorizes cities and counties, subject to voter approval, to impose local general sales tax measures up to 1% for a specified period (typically 20 years). These general sales tax increases are subject to a simple majority vote requirement. The revenues can be used for transportation or a wide range of other purposes to be identified through the annual budget process.

In addition, through individual county-specific enabling legislation followed by generic statewide enabling legislation, special sales tax measures for transportation have been authorized. Initially these local measures required a majority vote, but as a result of a series of statewide propositions and court decisions, such measures now require 2/3 voter approval. Over the past 20 years, a total of 18 counties (referred to as “self-help counties”) have passed these local transportation sales tax measures. Currently, all major urban counties, representing nearly 85% of the state population, have passed such sales tax measures to fund specific local highway, transit, and local street and road projects (see chart). However, except for Los Angeles County, these measures have specified termination dates and will require voter approval to extend them. Several counties have successfully passed such extensions (for example, in 2004, San Diego passed a 40-year extension to continue its ½% sales tax through 2048). Seven counties with established transit districts have passed permanent local sales tax measures for transit operating and capital support under separate authority granted to the transit districts. The state statutes also authorize local option fuel taxes, with a 2/3 voter approval requirement, but no counties have passed such measures.

The failure of all five new local sales tax ballot measures in June of this year (Solano, Napa, Monterey, Merced, and Santa Clara) may have been the result of extremely low voter turnout but may also indicate how difficult the 2/3 vote threshold is and that it may not be possible to pass these measures in all counties.

Street Assessment Districts

Five years after the passage of Proposition 13, California's state legislators enacted the Community Facilities District Act (CFD), better known as the Mello–Roos Act. The CFD Act permits local governments and agencies, subject to 2/3 voter approval, to form CFDs to pay for municipal services and facilities through the sales of tax-exempt bonds. Property owners within the CFD are assessed a special tax to pay back the bond debt. Forming street assessment districts is now a common tool for many local agencies to fund local road and street projects.

Development Fees

The Mitigation Fee Act (Gov. Code, Sec. 66000) allows local agencies to charge developers a fee as a precondition to issuing building or occupancy permits to mitigate for the environmental and traffic effects of specific local development projects. Fee programs that use an established formula for all new development are beginning to be established by cities and counties in California. Such fees are imposed on the basis of how much traffic the development projects would generate (usually in terms of dollars per trip per day). Local agencies also may impose exactions on private development in the form of right-of-way donations, cash payments, and requirements for the developer to provide specific transportation improvements through specific development agreements. Local agencies have employed alternative methods of obtaining funds upfront, such as interfund borrowing and issuing bonds, to complete projects sooner.

At the state level, the trend has been toward increasing local–regional control over project selection and earmarking a specific share of funding for regional agencies and programs:

- SB 45 (1997). Earmarked 75% of STIP funds (federal and state) for regions to fund RTIPs, and greatly enhanced regional control and authority over funding and capacity increasing project selection.
- Traffic Congestion Relief Act (TCRA, 2000)/Proposition 42 (2002). TCRA authorized the Traffic Congestion Relief Program (TCRP) which allowed local and regional agencies to actively participate in the nomination of specific projects for funding under TCRP. Approved by the voters in a 2002 referendum, Prop 42 sets aside 40% of the gasoline sales tax revenues for cities and counties to fund their own local street and road projects.
- 2006 Transportation Bond Proposal. If approved by voters in November, would provide \$19.9 billion for a variety of state and local transportation projects; legislation would also authorize public–private partnerships.

What problems or issues led to the creation of a regional funding and/or governing entity?

1. Insufficient federal and state funding for regional–local projects and programs. California has not raised the state gas tax since 1990 (Proposition 111 increased the gas tax to 18 cents with an immediate 5-cent increase followed by annual 1-cent increases for 4 years), and the federal gas tax levels have not been adjusted since 1993. In a rapidly growing state such as California, the lack of growth in state and federal sources has forced regional agencies to take action to provide the funding needed to implement improvements identified in regional transportation plans.

2. Desire to have more control and authority over funding and project selection—as the regions have moved forward with the implementation of funding measures, they have taken greater control over the projects to be implemented.

What is the relationship between the state department of transportation and the regional entity or entities?

California has 18 federally designated MPOs and 26 state-designed regional transportation planning agencies (RTPAs) that prepare long-range plans and RTIPs for regional and metropolitan areas. Caltrans prepares a long-term transportation policy plan for the state, the California transportation plan. Specific projects are identified through the regional transportation plan (RTP) process.

Planning

- During state FY 2006–2007, Caltrans allocates federal metropolitan planning funds: FHWA PL and FTA 5303 (a total of \$55 million). The 26 RTPAs receive a total of \$6 million in rural planning assistance state funds. These funding sources are used by these agencies to conduct their various planning activities.
- Caltrans staff and representatives from the MPOs/RTPAs work regularly together during the various planning activities conducted both at the state and regional level. For example, at the San Diego Association of Governments (SANDAG), the Caltrans district director sits at the table as an ex officio member at board of directors' meetings. Caltrans district staff is actively involved in the preparation of the RTP and related corridor studies and other long-term planning efforts related to the state highway system.

Programming

1. Caltrans and regional agency staff also work closely together in programming activities. Regions work through their respective Caltrans district offices on projects for nomination through the discretionary interregional improvement program portion of the STIP. Regional agencies such as SANDAG seek Caltrans' input on the development of the formula-based Regional Improvement Program portion of the STIP.
2. The California Transportation Commission (CTC) is responsible for the programming and allocating funds for the construction of highways, passenger rail and transit improvements throughout California.
3. CTC meets approximately every 6 weeks with MPO and RTPA staff to discuss programming related issues, and Caltrans staff participates in these meetings as well.
4. Caltrans and MPO programming staff meet regularly through the California Federal Programming Group.

What is the relationship between the MPO and the regional entity or entities when they are not the same organization?

The structure of MPOs and RTPAs varies widely across the state from single-county MPOs (such as SANDAG) to large multicounty MPOs [such as the Metropolitan Transportation

Commission (MTC) in the San Francisco Bay Area and the Southern California Association of Governments (SCAG)]. The STIP process distributes funding on a formula basis by county requiring a coordination process within multicounty MPOs to include the individual county project proposals (developed by county transportation commissions within the SCAG region for example) as part of the overall RTIP approved by the MPO.

The local transportation sales taxes are implemented on a county-by-county basis as well. The agency designated as the sales tax authority also varies across the state. SANDAG, besides being the MPO, RTPA, and congestion management agency (CMA) under state law for the region, is the sales tax authority, making coordination of the sales tax program with the programming of matching state and federal funds relatively easy. Within the SCAG area, the county commissions are the sales tax authorities. In the MTC area, separate traffic authorities have been established to administer the sales tax programs in each county. Some counties also have separate CMAs. This makes the programming process in terms of matching sales tax funding with other state and federal funds a more challenging process.

What types of projects are funded at the regional level?

Under both SB 45 and local sales tax measures, regional agencies have wide discretion and control over the choice of projects that are nominated for funding. Project eligibility is quite flexible and covers a wide range of highway, public transit, local street and road, and bicycle and pedestrian improvements. The list of projects includes both conventional and more innovative types of projects, improvements to the state highway system that benefit local–regional travel, and urban–commuter public transit expansions and service connections to intercity rail.

The projects included in the local sales tax ballot measures are typically drawn from projects or programs identified in RTPs that are then evaluated through public opinion research to determine projects of high priority to likely voters. The Self-Help Counties Coalition has summarized the expenditure plans of the various sales tax counties.

Although the distribution of funds by county varies considerably, the average for all counties in total is as follows:

- 46%: highway improvements,
- 21%: local street and road projects,
- 18%: transit capital projects,
- 13%: transit operations, and
- 2%: paratransit services.

For comparison, the breakdown of SANDAG’s expenditure plan for the 40-year extension of the region’s ½% sales tax approved by the voters in November 2004 is as follows:

- 37%: major highway–transit corridor projects (47 projects to be matched 50/50 with state and federal funds);
- 28%: local street and road projects;
- 24%: transit operations and capital improvements—including Americans with Disabilities Act and senior transportation programs;
- 6%: environmental mitigation program;
- 2%: smart growth incentive program;

- 2%: bicycle, pedestrian, and neighborhood safety grant program; and
- 1%: SANDAG administration.

How has the establishment of regional transportation funding entities affected project selection by the MPO and state?

Because the sales tax ballot measures typically include specific transportation projects to be completed if the measure passes, there is a substantial commitment among the elected officials involved to deliver on the promises made in the measure. Often state and federal matching funds are assumed to complete the funding package for the major highway and transit projects included in the expenditure plans. For this reason, the sales tax ballot measures also influence decision making by the MPO on the programming of state and federal funds. At the state level, programs have been established to provide matching funds as a reward to self-help counties that have passed local measures and as an encouragement to other counties that have not yet passed such measures.

While the local ballot measures do drive the project selection process, the funds derived from the local sales taxes are used to implement the RTPs. The RTPs remain as the long-term blueprints for project selection. In SANDAG's case, the sales tax ordinance includes a consistency requirement with the RTP. All projects in the sales tax expenditure plan were drawn from the RTP, and the RTP environmental document was used as the environmental document for the ballot measure. SANDAG views the sales tax measure as one of the financing tools to be used to help implement the RTP.

How is the regional entity governed?

Each MPO, RTPA, and sales tax authority is structured differently. The governing boards may be voluntary or statutorily created, but most are voluntary in California. SANDAG, as one example, is governed statutorily by a board of directors consisting of a mayor or council member from each of the 18 incorporated cities (the City of San Diego has two members) and a member of the county board of supervisors. In addition to the 20 voting members, ex officio or nonvoting members include representatives from Caltrans, the two transit districts, Imperial County, the U.S. Department of Defense, the Unified Port District, the county water authority, and Mexico.

What funding sources are raised at the regional level? Is a public vote required?

As described more fully under Question 1 above, the following are the major sources of funding for transportation generated at the regional or local level:

- Local sales tax measures. Temporary and permanent county tax measures provide more than \$3 billion per year. A two-thirds vote is required.
- Local general funds. Historically city and county general funds have provided funds for transportation projects (up to \$1 billion a year), no public vote required.
- Other local revenues, street assessments, developer impact fees, some special road taxes, and transit fare revenues (see attached chart).

Note that

- Cities and counties also get about 35% (about \$1 billion) of the state fuel excise tax revenues;
- Transportation Development Act of 1971 (TDA) earmarks ¼% of general sales tax generated in each county (deposited in local transportation funds) mostly for transit, about \$1 billion;
- State Transit Assistance—TDA also allocates 50% of the funds in the public transportation account, funded by a portion of state fuel sales tax, to regional agencies for transit.

How has the existence of the regional funding and governance mechanism changed statewide planning? MPO planning?

- In California, planning activities in the non-MPO areas (rural portions of the state) are conducted by our RTPAs. The RTPAs prepare long-range transportation plans and coordinate with Caltrans on programming issues.
 - The federally required long-range statewide transportation plan is prepared by Caltrans and takes into account each of the long-range transportation plans prepared by the MPOs and RTPAs. The statewide plan then guides the development of subsequent regional plan updates in an iterative cycle.
 - The existence of local sales tax measures has not changed the basic planning process; however, where separate sales tax authorities are created, the coordination involved in conducting the planning and programming process becomes more complicated. As the regional measures pass, the revenues are included as part of the “revenue-constrained” RTPs. The planning process continues to identify the need for transportation improvements. Where the needs exceed the existing levels of revenue (basically everywhere in the state), the RTPs provide the planning justification needed for the regions to proceed with the local ballot measures. The ballot measures and other locally generated revenues help to match state and federal funds to implement the long-range plans.
 - The problem that arises as the measures pass on a county-by-county basis is one of equity. On a statewide basis, a “have and have not” situation is created between the self-help counties (predominately urban counties) and the “wanna be” counties (rural or urbanizing counties). This is mitigated somewhat by the fact that most congestion and need for capacity-enhancing improvements is in the urban counties, which have the local sales taxes as an additional revenue source to help fund these improvements. Constitutional provisions are in place giving priority in the use of state funds for the operation, maintenance, and rehabilitation of the existing system before funding capacity enhancing projects. This helps to ensure that maintenance and rehabilitation needs are being met throughout the state. The primary funding gap that exists is for capacity improvements on highway facilities serving interregional movements, including tourism through several of these rural or urbanizing counties.
 - Currently because the gas tax has not been increased in so long, basically all state resources are consumed by maintenance and rehabilitation needs. Without the local sales taxes, few new capacity-increasing projects would be under development.

What changes in MPO and state DOT roles do you foresee with the emergence of regional transportation funding authorities?

While the planning and programming process embodied in state and federal law has not significantly changed, the relationships between Caltrans and areas with significant local sales tax revenues for highway improvements have evolved over time. The major change in the relationships has been in the area of project delivery. This relationship has evolved differently in different areas of the state, with some areas using Caltrans as the primary implementer of the highway improvements and others relying on the private sector to develop the projects with Caltrans oversight.

SANDAG and Caltrans have built a strong partnership in the development of major transportation improvements. SANDAG has employed primarily Caltrans staff to develop the sales tax-funded highway projects from the environmental phase through construction. Over the past year, this partnership has been taken to another level with the establishment of a new category of Caltrans employees to serve as corridor directors for the major multimodal corridor projects that were part of the recent sales tax extension. Many proposed projects include both major highway-widening improvements combined with bus rapid transit (BRT) improvements. These new corridor directors are accountable for the delivery of the major projects within the approved budgets and schedules. These projects will involve the coordinated effort of Caltrans engineers designing the highway elements and SANDAG staff working on the BRT elements and the related FasTrak improvements to include the expansion of the region's high-occupancy toll lane system.

TEXAS**What regional funding and governance mechanisms have been put into place in your state?**

A new regional funding process was initiated when the TTC worked with the MPO to change the allocation of metropolitan funding. The MPOs are now provided multiyear funding allocations so they can better plan for transportation projects with an expected level of funding. Previously, the MPOs knew of funding allocations only on a year-by-year basis, within long-term funding projections. Rounding capacity funds are allocated to regions by formula with project selection authority also by region.

The department's Texas Turnpike Authority division is working to identify and develop toll projects across the state. Some toll projects will include the use of toll equity, where the department grants funds toward the cost of the acquisition, construction, maintenance, and operation of a toll facility of a public or private entity.

Comprehensive development agreements are a method to use a contract with a private entity to allow them to provide financing, design, right-of-way acquisition, construction, maintenance, and operation activities for a project.

A new governance mechanism was established in 2001 when the Texas Legislature passed a law to allow the creation of RMAs. These authorities are political subdivisions, formed by one or more counties, which have the ability to complete any and all phases of a transportation project.

What problems or issues led to the creation of a regional funding and/or governing entity?

For the funding process, the problem was that the MPOs were constrained by not knowing from one year to the next about the level of funding they would receive. It made long-range planning difficult. They also were concerned that toll road initiatives within the region would result in lost gas tax revenue.

For the RMAs, the problems were the lack of sufficient revenue for the timely completion of transportation projects and a need to have local governments more in control of transportation planning.

What is the relationship between the state department of transportation and the regional entity or entities?

The MPOs are the DOT's local partners in providing transportation to our 25 urbanized areas of the state. The commission has delegated more decision-making authority to the MPOs and local governments.

The department has been working with the MPOs to develop TMMP and TUMP for their areas. The TMMP–TUMP allows the MPOs to prepare a needs-based plan with prioritized transportation projects and forecasts of available financing. The plans highlight the funding needed to augment the expected traditional financial resources to meet the transportation needs.

The department has oversight responsibilities with the RMAs. The commission approves the creation of RMAs and RMA projects that tie into the state transportation system, RMA application for federal funds, the addition or withdrawal of counties, and the dissolution of an RMA. The commission establishes design and construction standards for RMA projects that tie in the state transportation system, audit and reporting requirements, and ethical standards for directors and employees of a RMA. The commission also can authorize an RMA to execute a contract with Mexico.

What is the relationship between the MPO and the regional entity or entities when they are not the same organization?

The MPOs and the RMAs should be working together to find acceptable solutions to transportation problems. Because the RMA can work only on projects that are in the MPO metropolitan transportation plan, there is a direct link between the two organizations. Also, the RMAs have members appointed by the counties and the counties participate in the MPO process.

What types of projects are funded at the regional level?

The MPOs fund transportation project typical for MPOs all over the country. Nonattainment MPOs select congestion mitigation–air quality projects. The eligible projects for RMAs are tolled or nontolled roadway, passenger or freight rail, ferry, airport, pedestrian or bicycle, intermodal hub, border-crossing inspection station, automated conveyor belt, air quality improvement initiative, public utility facility, or projects listed in the state implementation plan.

How has the establishment of regional transportation funding entities affected project selection by the MPOs and state?

There has been some competition between the department, the MPOs, and the RMAs due to the attractiveness of toll revenues for certain transportation projects.

How is the regional entity governed?

The RMA has at least two members appointed by each county and a presiding officer appointed by the governor.

What funding sources are raised at the regional level? Is a public vote required?

The RMAs may issue tax-exempt revenue bonds that can be repaid with tolls. Excess toll revenue can be used to finance additional transportation projects in the RMA area. The RMA can generate revenue also by the proceeds from the sale or lease of a transportation project or property adjoining a transportation project.

A public vote is not required for raising funds.

How has the existence of the regional funding and governance mechanism changed statewide planning? MPO planning?

The department has given more responsibility for funding decisions to the MPOs and RMAs. The department, MPOs, and RMAs must work and coordinate needed transportation projects cooperatively.

What changes in MPO and state DOT roles do you foresee with the emergence of regional transportation funding authorities?

The department and the MPOs will have to coordinate transportation projects closely with RMAs to ensure that state and regional transportation needs are met. More decision making is at the MPO and local level than ever before.

WASHINGTON**What regional funding and governance mechanisms have been put into place in your state?**

In 2002 the Washington State legislature created a regional funding mechanism for the three largest counties in the Central Puget Sound region (King, Pierce, and Snohomish Counties). The state statute enabled these three counties to form a regional transportation investment district (RTID) as authorized to develop an investment plan with a specific list of projects, to develop a funding plan drawn from sources authorized in the state law, and to put this plan to a vote of the people. In June 2002 these three counties agreed to develop this regional investment plan and have been working since to develop the list of projects and funding proposal.

In 2005 the Washington State legislature created a regional funding mechanism for the other 36 counties in the state. This statute enabled transportation benefit districts to develop an investment plan including projects and funding and to seek voter approval of the plan. The transportation benefit district can consist of multiple jurisdictions both within a county and across counties, and can include parts of jurisdictions.

What problems or issues led to the creation of a regional funding and/or governing entity?

Transportation needs in the state's metropolitan areas were larger than the ability of the state to pay for those needs. Even though the state enacted state transportation revenue increases in 2003 and 2005, major capacity and preservation projects within the metropolitan areas still needed more funding to be completed. Since the economy was stronger in these metropolitan areas, the legislature felt that these regions needed a mechanism to raise regional revenue to augment state investment to complete these major projects.

What is the relationship between the state department of transportation and the regional entity or entities?

In the enabling legislation creating the RTID, the secretary of transportation has specific roles as does WSDOT staff.

The specific roles for the secretary are as follows:

1. The secretary serves as a nonvoting member on the district planning committee. The planning committee is comprised of all members of each of the three county councils.
2. The enabling legislation is focused on designated "highways of statewide significance" (HSS). It does allow investments to be made on other state highways and local roads if the secretary determines those investments will better relieve traffic congestion than a similar investment on HSS.

In essence, the enabling legislation requires WSDOT to provide "services, data, and personnel" to assist in the development of the improvement plan as desired by the planning committee. Since the first version of the legislation was passed in 2002, WSDOT has provided staff support to the planning committee and the RTID executive board, which includes developing project scopes, cost estimates and expenditure plans, financial planning assistance, modeling project and system-level performance, and website maintenance.

What is the relationship between the MPO and the regional entity or entities where they are not the same organization?

In the Central Puget Sound region, the legislature authorized the creation of a new entity, the RTID, to develop the investment plan. This organization is distinct and separate from the Puget Sound Regional Council, which is the MPO and the RTPO, and actually covers only three of the four counties included in the MPO. The legislation allows the RTID to seek input from the regional transportation planning organization but does not require any other formal linkage. Under state law, all regionally significant projects must be consistent with the regional transportation plan; this would apply to the RTID projects.

What types of projects are funded at the regional level?

The original purpose of the RTID was to supplement state funding to complete major state highway projects. The legislation is specific about the types of projects that may be funded. The primary focus is on capital improvements to HSS or approaches to these highways. HSS are the primary principal arterials in the state system that provide for statewide connectivity. They carry most of the people, vehicles and freight in the state of Washington. An approach to an HSS route was defined as any principal arterial (state or locally owned) that connects to an HSS route back to such point where it connects with another principal arterial roadway. Improvements that may be considered include

- New lanes (including HOV lanes),
- Flyover ramps,
- Park-and-ride lots,
- Bus pullouts,
- Vans for vanpools,
- Buses, and
- Traffic signals, ramp meters, and other transportation system management improvements

The legislation also allows these type improvements be made on regionally significant state highways (not HSS), city streets, and county roads if all following conditions are met:

- Matching money equal to 15% of the project cost is provided by local entities (this was changed from a one-third local match during the 2006 legislative session);
- The cumulative contribution in this category by the district does not exceed 10% of the total revenues generated by the district;
- The cumulative district total in this category does not exceed \$1 billion, and
- The Secretary of Transportation determines these expenditures will better relieve traffic congestion than investing the same money in adding capacity to a HSS.

In general, operations, preservation, and maintenance may not be funded as part of the regional plan. However, a special subsection allows for the repair of the SR 99 Alaskan Way Viaduct that was damaged by an earthquake in 2001. Additionally, during the 2006 legislative session, language was added that allows toll revenues to be used for operations, preservation, and maintenance of tolled facilities where toll revenues have been pledged for the payment of contracts. This change was made specifically for the SR 520 bridge on which tolls are envisioned to help finance the project.

Finally, another 2006 amendment to the enabling legislation allows for operational expenses for construction mitigation to be funded with RTID revenues. This mitigation may include funding for increased transit service hours, trip reduction incentives, nonmotorized mode support, and ride matching services.

Sound Transit is currently developing a list of transit-related projects and services for which it will seek funding approval from the voters. Both the RTID and Sound Transit were trying to go to the ballot in 2006. The legislature, in creating the RTC (see next question) to examine transportation governance in the Central Puget Sound, required both the RTID and

Sound Transit to go to voters at the same time in 2007 and required passage of both measures for either to be able to go forward.

How has the establishment of regional transportation funding entities affected project selection by the MPOs and state?

At the state level, the last two gas tax increases (2003, 2005) enacted by the legislature were tied to specific project lists. The 2005 transportation funding package was called the transportation partnership account. The partnership part of the title is important. It refers to the fact the state has now contributed a portion of the funding for specific projects on the current RTID project list. The region is now expected to contribute the remainder through the RTID mechanism. Outside the Central Puget Sound region, the remaining projects included in the 2005 transportation funding package were fully funded. The partnership aspect of this budget refers only to the Central Puget Sound region and speaks to this region's need to find the funding to complete these projects through an RTID ballot measure.

How is the regional entity governed?

The RTID is governed at first by a 22-member planning committee which is made up of all county council members from King, Pierce, and Snohomish Counties (21 members) plus the state secretary of transportation as a nonvoting member. This group also has an executive board made up of seven council members representing the three counties. The planning committee has a weighted voting structure representing the population of the three counties. This planning committee proposes the investment plan and funding sources and seeks voter approval. Once approved by the voters, the RTID is created to collect the taxes and oversee the building of the program. The investment district is governed by the same 21-county council members, plus the state secretary of transportation as a nonvoting member. This governing structure stays in place until the projects are completed and any bonds paid off.

Currently numerous entities in the Central Puget Sound are actively engaged in major activities related to developing, funding, constructing, and operating transportation facilities and services. Key players include WSDOT, the RTID, Sound Transit, the City of Seattle, and King County. All have a major stake in implementing projects recently funded (at least in part) by the legislature or in proposing projects and services for which the voters will be asked to approve funding at several times in the next two years. Of course, the Puget Sound Regional Council is the MPO responsible for transportation planning and programming pursuant to federal law in the region, and numerous other city and county agencies and transit operators are engaged in the project identification and planning process.

In part, as a result of so many entities all trying to provide services and develop funding for transportation simultaneously, and in the interest of increasing the efficiency of service delivery and accountability to the public, the legislature recently created the Regional Transportation Commission (RTC). RTC, appointed by the governor, is charged with developing options for a new governance structure that improves transportation planning coordination in the years to come to address future needs, along with developing a comprehensive financing strategy that will allow future transportation projects to be funded.

If we assume that some type of new regional governance structure is implemented by the state legislature as a result of RTC's recommendations, and assuming there is a "yes" vote on

both the RTID and Sound Transit 2 measures in November 2007, some agency consolidation could occur. Construction of the RTID projects will be left to the project sponsors such as WSDOT, Sound Transit, and the three counties. The RTID governing board will be responsible for

- Imposing the taxes and fees approved by the voters;
- Entering into agreements with state, local, and regional agencies to accomplish district purposes and protect the district's investment in transportation projects;
- Accepting gifts, grants, or other contributions of funds that will support the purposes and programs of the district;
- Monitoring and auditing the progress and execution of transportation projects to protect the public investment and develop an annual public report;
- Paying for services and enter into leases and contracts, including professional service contracts;
- Hiring no more than 10 employees;
- Coordinating its activities with affected cities, towns, and other local or regional governments that engage in transportation planning; and
- Exercising other powers and duties as may be reasonable to carry out the purposes of the district.

Assuming a positive vote, the RTID may not acquire, hold, or dispose of real property. It is also prohibited from owning, operating, or maintaining any transportation facilities.

RTID is meant to provide an immediate influx of funding to build highway-related projects meeting existing needs, most of which have been on the various county priority lists for many years. The RTC's focus is on recommending a governance structure that can effectively identify and fund transportation solutions for future needs. There is a strong likelihood that if all these pieces fall into place, the new regional governing authority will absorb RTID's responsibilities.

What funding sources are raised at the regional level? Is a public vote required?

1. A regional sales and use tax (up to 0.1%).
2. A motor vehicle excise tax (up to 0.8% of a vehicle's value).
3. A local option vehicle license fee (up to \$100 per vehicle).
4. A parking tax (this only applies to commercial parking lots).
5. A local option fuel tax (up to 10% of the statewide gas tax).
6. An employer excise tax (a maximum \$2 per month per employee).
7. Vehicle tolls on local, state and federal highways within the boundary of the district if
 - The toll is approved by the statewide tolling authority,
 - The RTID plan identifies the facilities that will be tolled, and
 - The department administers the collection of tolls unless otherwise specified by law.

No taxes, fees, or tolls may be imposed without an affirmative vote of the people within the district.

A draft plan was adopted by the RTID executive board in April 2004. This initial plan utilized five of the seven allowable tax sources. They were a 0.2% sales and use tax, a \$100 vehicle license fee, a 0.3% motor vehicle excise tax (the upper limit at that time), a 10% local option gas tax and an estimated \$700 million in toll revenues on the new SR 520 bridge.

Following adoption of this draft plan more than 2 years ago, public polling was done by the business community to determine if this tax package had a realistic chance passing. In a nutshell, the answer was that this package of improvements with the array of associated proposed taxes would not generate a positive public vote. At that point the public vote was called off, and a new, smaller transportation improvement package reliant on only one or two taxes was developed.

We have now developed that slimmed-down list of improvements, and they rely on two revenue sources: a 0.1% sales and use tax and a 0.8% motor vehicle excise tax. Even though the total number of projects is smaller and overall cost of the package has been reduced by about \$4 billion to fund the package with only two revenue sources, the length of the program was extended from 15 years to 20 years.

How has the existence of the regional funding and governance mechanism changed statewide planning?

The main effect on statewide transportation planning has resulted from differences in timing between the development of the statewide plan and any funding package or plan of the regional entity. Because RTID has not concluded a project selection and funding discussion during the time WSDOT has been preparing the update to the STP, the plan cannot include the anticipated regional investments. All that can be said currently is that the region intends to contribute to numerous large projects which the statewide plan recognizes will require regional funding.

What changes in MPO and state DOT roles do you foresee with the emergence of regional transportation funding authorities?

WSDOT's role is unlikely to change fundamentally as a result of a successful RTID ballot measure. WSDOT will still be responsible for monitoring and managing roadway performance, travel, and safety trends and identifying the scope, cost, and proposed scheduling of future improvements. Combined with the vote for Sound Transit 2, this "ask" of the public is likely to be large—probably between \$15 billion to \$20 billion. In the sense of being careful what you ask for, passage of these measures, combined with existing funded projects, will swamp WSDOT and some local agencies with work. It will also challenge the capacity of the design and construction industry. The real challenge will be trying to get it all done and will require unprecedented coordination and cooperation between all involved entities.

Final Discussion

The workshop concluded with a brainstorming session on general observations and needed actions. The following comments and questions were offered by participants:

- Collaboration of state DOTs, regional entities, and private entities is necessary for generating funding. There is a sense of urgency associated with this issue.
- No one model fits all. There are different institutional contexts. As shown in the different cases discussed, there is no universal model. Different models are being evolved to suit different institutional contexts.
- It is essential for states to work closely with their MPOs to ensure that a systemwide (state) framework is used in selecting projects.
- The DOT is needed to provide the statewide (or interregional) perspective. The DOT has the major role of ensuring that the MPO is included in the process.
- Project lists in regional funding initiatives to getting voter approval. However, the necessary oversight must occur in all stakeholder agencies to ensure that there is a clear purpose and need for all funded projects; that is, the projects have to relate to or support the desired outcomes of the long range plan.
- If local or regional funding occurs, legislation is necessary to ensure that projects are being funded to meet articulated performance goals in the SLRP. There is a need to create a nexus between the project function or need and the way in which revenue is raised. It will become more difficult to implement performance-based project selection programs that support systemwide objectives, as the more popular projects are likely to get passage by voters. It would also be increasingly important to merge state and local need lists.
- Operations and preservation projects are harder to sell than new capacity projects. Tools that could facilitate with explaining and promoting operations and maintenance would be helpful in this regard.
- Should statewide planning be integrated with metro planning or kept separate? A helpful approach may be to base planning on intended function(s) and customer(s). This could reduce perceived differences in goals, relative priorities, system definitions and rules.

The purpose of all planning is to create an effective system at multiple levels:

- International,
- National,
- State, and
- Regional.

In this regard, do we plan by use or by ownership (e.g., federal system versus local system)?

- Accountability to citizens will lead to better decisions.

- Should categorization of MPOs (small, large, etc.) be based on population or context? The different models for state involvement could be used as a basis for categorizing MPOs more effectively in this era or regional governance.

- Geographical equity. Who are the haves and have-nots with the new funding structures?

- Integrate systems and innovating finance. There is a need for financial structures to address the system at all levels: international, national, statewide, regional.

- Because of the increasingly important role that MPOs are playing in statewide transportation planning, MPO staffs need to be articulate with respect to all systems: local, regional, and statewide.

- What is the role of FHWA and FTA in the emerging context? Will these agencies become more of regulators, breaking new ground, defining the vision for the national system, developing minimum standards to ensure integrity in the system as funding and financing resources increase? Given the multiplicity of models, needs, and visions at the state and regional levels, there is need for an integrative oversight role to ensure system coherence and integrity.

- Native American Tribal Nationals. How does collaboration occur effectively with Native American Tribal Nationals in this context? And how can the various planning entities help to improve the transportation systems in Native American Nations?

- How do state DOTs ensure that their statewide plans, which are largely policy plans, are consistent with other plans? How are regulations enforced without the financial leverage?

- A customer focus could be adopted as the basis of cost allocation, given the multiple sources of funding and financing and multiple players in this era of regional governance.

- A common set of goals and measures of success, and training programs among partners would help to provide a better integrated planning framework among multiple stakeholders with different organizational cultures.

Potential Actions

The following list of potential actions, research, and initiatives were mentioned by participants:

- Develop new tools for operations and maintenance, particularly to demonstrate the impacts and benefits of operations.
- Develop definition and framework for systems, roles, and terminology. This definition and framework will assist officials in metropolitan and state agencies with thinking about how to address effectively and efficiently the scope of needs for all systems without over-investments in portions of the systems at the expense of others.
 - FHWA should actively promote integrated planning.
 - Fund a study to examine the requirements for integrated planning.
 - AASHTO should take the lead, in conjunction with Association of Metropolitan Planning Organizations and the National Association of Regional Councils, in clearly defining state responsibilities regarding metropolitan transportation.
 - Federal and state funding sources are necessary to address international and national needs in transportation planning. Obtain help from FHWA or the National Highway Institute to integrate international and national needs in statewide policy plans.
 - Develop a GIS layer on environmental resources.
 - Develop tools to address trip uses. This would help with modal investment
 - Develop resources for organizational capacity building to support planning in an era of regional funding and governance.
 - Research national purpose and outcomes for system investment and develop blueprint for how outcomes are to be achieved in the emerging planning context.
 - FHWA should offer incentives to try new institutional models to deliver transportation services.
 - Develop a TRB session on transportation planning in an era of regional funding and governance.
 - Develop a TRB session on statewide innovative finance solutions.
 - Develop synthesis on the subject of transportation planning in an era of regional funding and governance as an 8-36 project.
 - Recommend that FHWA work with smaller MPOs to guide them toward simplified planning.
 - Develop best practices of system management investment as an 8-36 project and a TRB session. This synthesis and session should address inventory capital versus operations and maintenance trade-offs.
 - Fund research project to examine best practices of PPPs between regions and states to generate alternative models for state DOT–MPO interaction.

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APPENDIX

Powerpoint Presentations

**Statewide Transportation
Planning Peer Exchange**
La Jolla, California
July 7-8, 2006

Joan Sollenberger, Chief
California Department of Transportation
Division of Transportation Planning

Craig Scott, *TransNet* Program Manager
San Diego Association of Governments
(SANDAG)

**Regional-Local Methods to Increase
Funding for Transportation**

- o Local sales tax measures.
- o Street assessment districts.
- o Development fees.
- o Toll road authorities-PPPs.

California Transportation Sales Tax Measures Self-Help Counties

County	Duration	Est. Revenue
Alameda	2002-2022	\$2.8 billion
Contra Costa	1989-2034	\$4.0 billion
Fresno	1987-2007	\$900 million
Imperial	1990-2010	\$150 million
Los Angeles (1%)	Permanent	\$1.2 bil/year
Madera	1990-2005	\$70 million
Marin	2005-2025	\$500 million
Orange	1991-2011	\$4.7 billion
Riverside	1989-2039	\$12.6 billion
Sacramento	1989-2039	\$7.5 billion
San Bernardino	1990-2040	\$12.0 billion
San Diego	1988-2048	\$24.0 billion
San Francisco	1990-2034	\$3.0 billion
San Joaquin	1991-2011	\$750 million
San Mateo	1989-2033	\$3.0 billion
Santa Barbara	1990-2010	\$500 million
Santa Clara	1996-2036	\$7.8 billion
Sonoma (1/4%)	2005-2025	\$550 million

State Level Trends

Increased local-regional control over project selection.

Senate Bill 45 (1997): Earmarked 75% of STIP funds (federal and state) for regions to fund RTIPs and greatly enhanced regional control and authority over funding and project selection.

Traffic Congestion Relief Program (TCRP)/Proposition 42: Traffic Congestion Relief Act (2000) allowed local and regional agencies actively participate to nominate their specific projects for funding under TCRP. Prop 42 (2002) sets aside 40% of the gasoline sales tax revenues for cities and counties to fund their own projects.

Proposed Strategic Growth Plan Bond Package/PPPs:

If approved by the voters this November, would raise \$19.9 billion for state and local projects and would authorize PPPs.

Issues Leading to Emergence of Regional Funding

- o Insufficient federal and state funding led to the creation of these local-regional measures to increase funding for transportation and other infrastructure projects.
- o A desire to have more control or authority over funding and project selection.

Relationship Between Caltrans and Regional Agencies

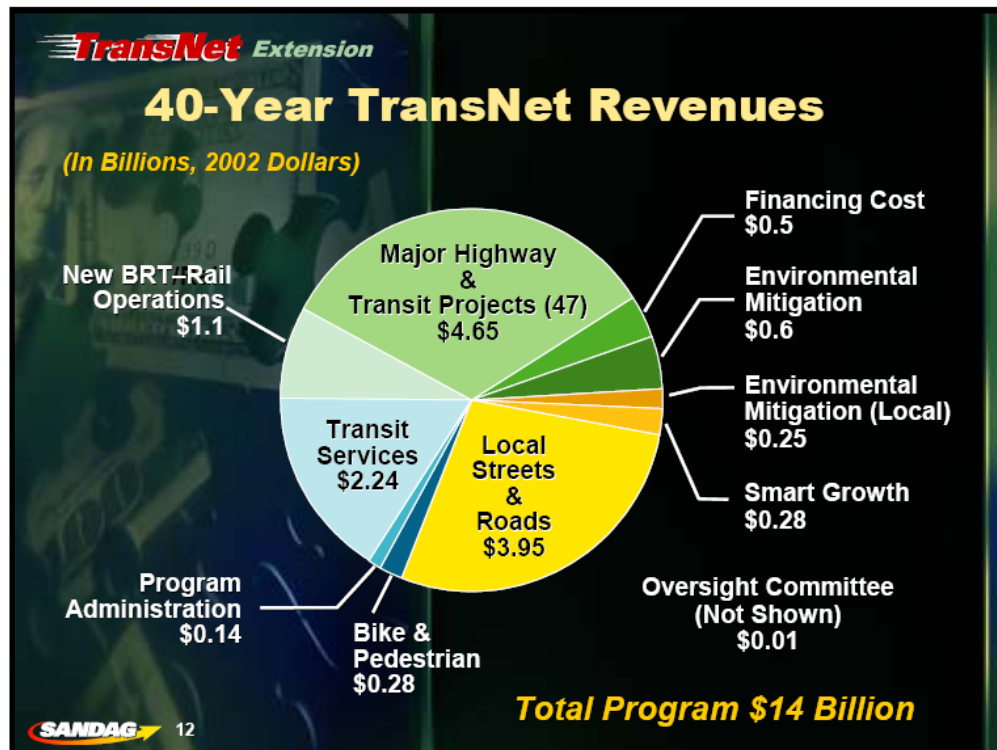
- o Caltrans prepares the State Transportation Plan.
- o MPOs and RTPAs prepare Regional Transportation Plans (RTPs):
 - 18 federally designated MPOs and
 - 41 state-designated RTPAs.
- o Caltrans/regions coordinate on the development of plans and related programming documents.

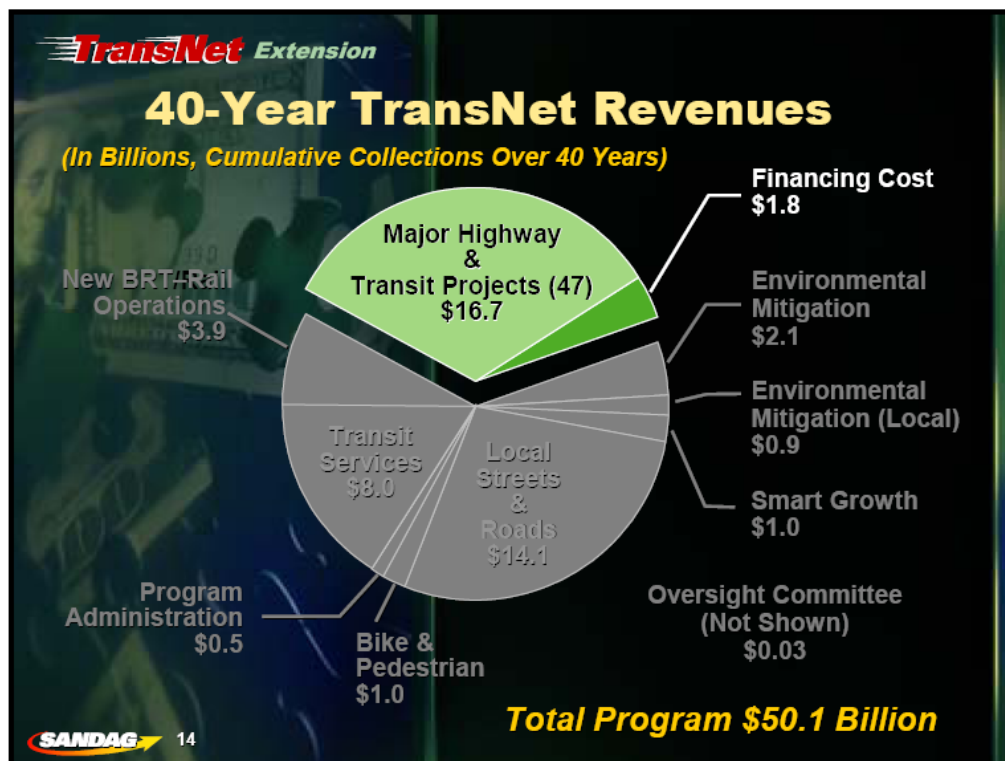
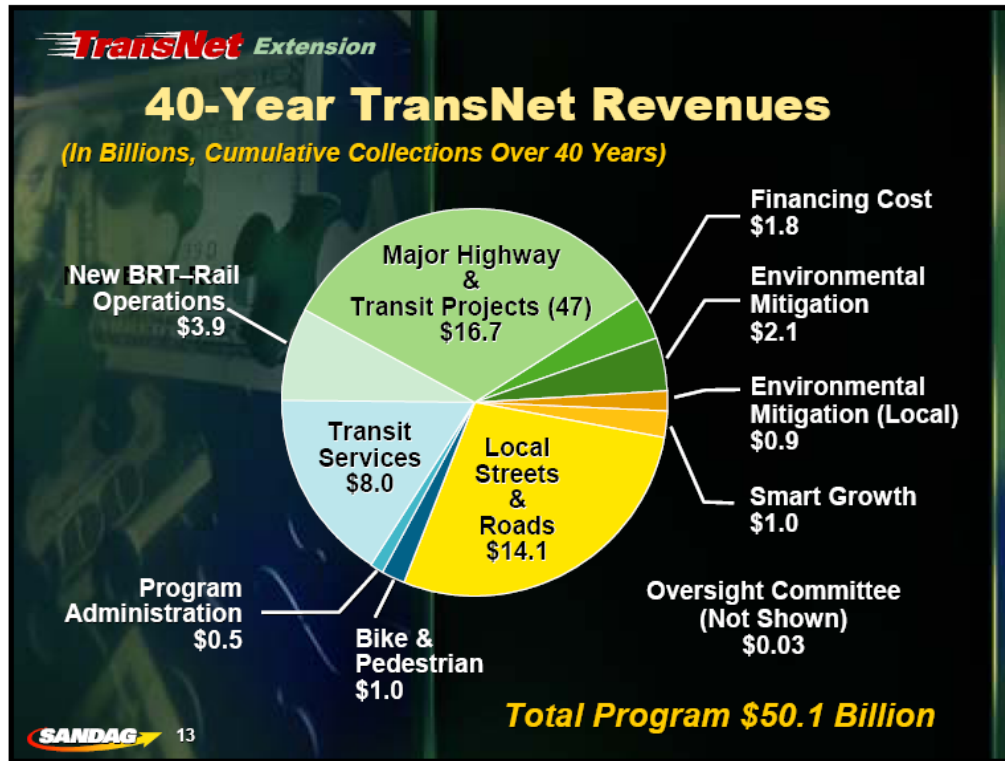
Relationship Between the MPO and Other Regional Entities

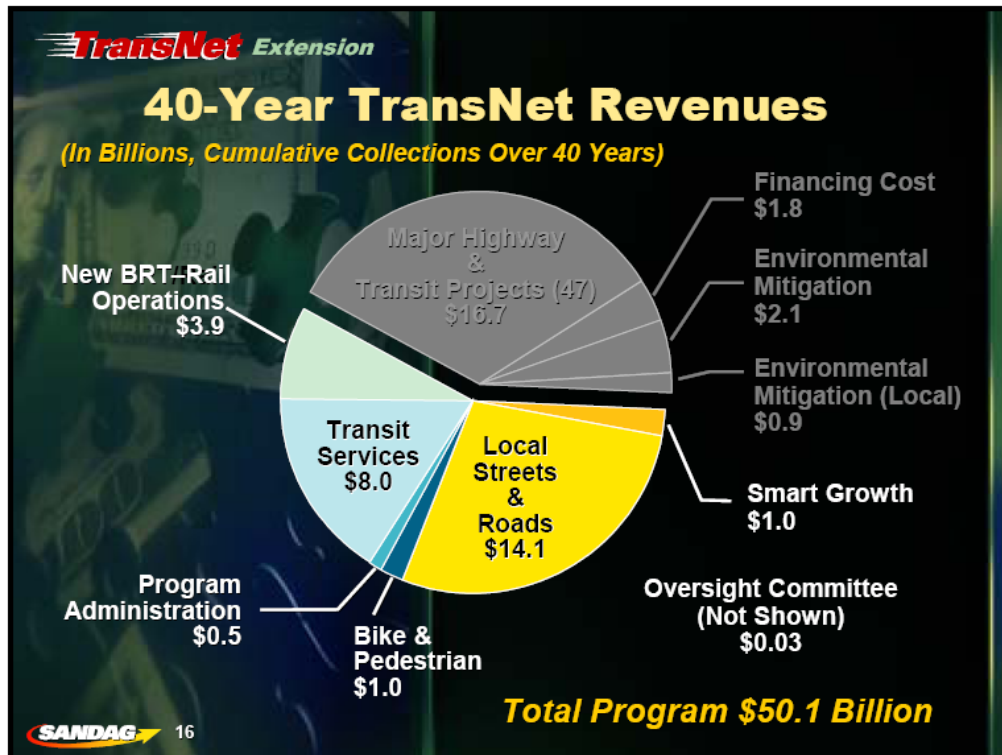
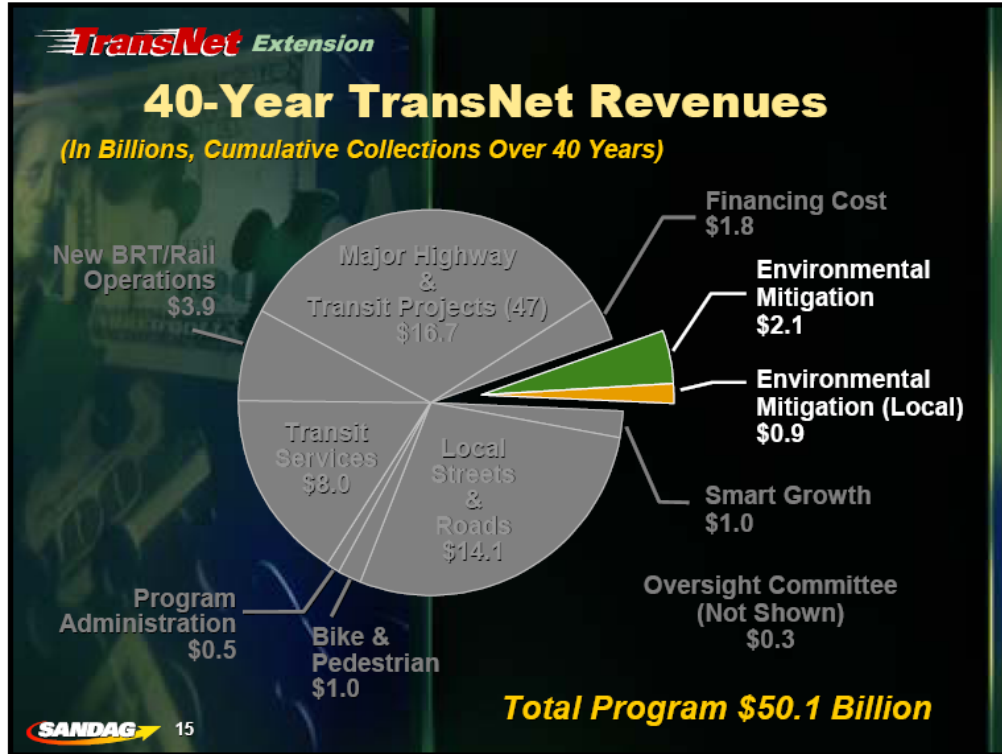
- Structure varies across the state.
- SANDAG model: "one-stop shopping."
- MTC/SCAG: large multicounty model.
- Ongoing coordination efforts essential.

What Types of Projects Are Funded at the Regional Level?

- Both SB 45 and Local Sales Tax Expenditure Plans provide great flexibility.
- Statewide average distribution of local sales taxes:
 - 46%: Highway improvements;
 - 21%: Local streets and roads;
 - 18%: Transit capital projects; and
 - 2%: Paratransit services.







Go California



Statewide Multimodal Performance Measurement Outcomes

- 1) Cost effectiveness;
- 2) Customer satisfaction;
- 3) Economic well being;
- 4) Environmental quality;
- 5) Equity;
- 6) Mobility/accessibility;
- 7) Reliability;
- 8) Safety/security; and
- 9) Sustainability.

Impact of Regional Funding on MPO-State Project Selection

- o Sales tax projects "selected" at ballot box.
- o State-federal matching funds typically assumed.
- o Sales tax projects usually are among highest priority projects in RTPs.
- o State has created matching funds as "reward/encouragement" for Self-Help Counties.

How Is the Regional Entity Governed?

- o Structure varies throughout the state.
- o Some are separate single-purpose authorities.
- o Others are combined with other functions.
- o SANDAG model—combines MPO/RTPA/CMA/sales tax authority in one agency.
- o SANDAG Board of Directors:
 - 20 voting members (city- or county-elected officials),
 - 8 nonvoting ex-officio members (including Caltrans), and
 - Policy committee structure.

Has the Existence of Regional Funding Mechanisms Changed Statewide Planning?

- o Emergence of regional measures viewed as a positive for California.
- o Any increases in overall transportation funding levels will benefit Californians and increase mobility.
- o Basic planning requirements remain.
- o As new revenue sources are established, the "revenue - constrained" RTPs grow.
- o RTP process used as planning justification for local sales tax expenditure plans.

Future Role of Caltrans and MPOs

- o Roles and relationships have evolved as new regional revenue sources and agencies have been established.
- o Increased effort required to coordinate work of multiple agencies.
- o Opportunities for new partnerships are emerging.
- o SANDAG-Caltrans partnership on project delivery as a potential model.



TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Background

TTC-35 CDA with Cintra-Zachry (CZ)

- Executed in March 2005.
- Predevelopment/strategic partner CDA.
- Contract allowed \$400 million right of first negotiation for self performance.

SH 130 5 & 6 Facility

- April 2005 TxDOT agreed SH 130 was appropriate for self performance.
- Authorized negotiations to begin.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Facility Description

- SH-130 segments 5 and 6.
- 40-mi project.
- \$1.35 billion construction cost.
- Extends SH-130 from US-183 in Creedmoor south to I-10 east of Seguin.
- 50-year lease after opening.
- Estimated opening date of 2012 (subject to NEPA).

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Overall Goals

TxDOT uses 5 goals to evaluate projects:

1. Reduce congestion,
2. Enhance safety,
3. Expand economic opportunity,
4. Improve air quality, and
5. Increase the value of transportation assets.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Project Agreement

- Texas receives:
 - \$1.35 billion project at no cost to state,
 - \$25 million up-front concession fee,
 - Estimated \$245 million present value of revenue sharing over 50 years, and
 - A long-term source of maintenance funding.
- Cintra receives the right to collect tolls for 50 years in return for the obligation to design, build, finance, operate, and maintain the toll project.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Policy Issues

- **Risk Commensurate to Return**
 - Required for successful long-term partnership.
- **Revenue Sharing**
 - Up front and over time through revenue “bands.”
- **Non-Compete Clause**
 - Included in contract but strictly limited.
- **Toll Rates**
 - Initial rate with annual escalation cap of GSP.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Policy Issues – Continued

- **All Electronic Toll Collection**
 - Interoperability required for all toll roads in state.
- **Project Oversight**
 - Independent engineer w/ dual reporting and split invoicing.
- **Performance-Based Contract**
 - Requires service levels including traffic flow and speed.
- **Conflict of Interest and Confidentiality**
 - General policy with reviews by project and
 - Written certifications required by project.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPP5 TEXAS STYLE

Substantial Risk Transfer to Cintra-Zachry

- Construction delays
 - Estimated opening date of 2012 (subject to NEPA).
- Cost
 - Includes inflation risk and other price uncertainties.
- Long-term operations and maintenance
 - Life-cycle costs and pavement performance.
- Traffic demand
 - Toll revenues.
- Financing
 - Interest rate risk.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPP5 TEXAS STYLE

Revenue Sharing

- Revenue shared beginning with first dollar collected.
- Future toll revenues shared in “bands”:

 - Up to 11% equity return— Texas receives 4.65% of revenues;
 - Up to 15% equity return— Texas receives 9.3% of revenues; and
 - Over 15% equity return— Texas receives 50% of revenues.

- Estimated \$245 million present value over 50 years.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Non-Compete Clause

- Extensive protections are included to maintain future flexibility:
 - All projects in current long-range plan will be built as planned;
 - No limitations to work on I-35;
 - No future roadways are delayed or prohibited; and
 - Establishes competing facility zone:
 - Non-exempt projects will be studied for revenue impact and banked (could be positive or negative).

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Toll Rates

- Market rates based on consumer demand.
- Texans will decide what they are willing to pay.
- Toll rate escalation methodology will be approved by the commission according to state law.
- Tolls may be increased annually but are capped.
- Rates are based on the growth of the Texas economy (gross state product).

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPP5 TEXAS STYLE

Benefits to the State

- Texans would own new asset— \$1.35 billion.
- Private investment— no cost to the state.
- Preserves local resources.
- Reduces \$86-billion state funding gap.
- Attracts economic development to region.
- Motorists enjoy less congestion whether they choose SH-130 or I-35.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPP5 TEXAS STYLE

Benefits to the State

- Improves mobility and safety on I-35 corridor.
- Transfer project risks to private sector.
- Operations and maintenance cost paid by CZ.
- Accelerates project by decades.
- Concession fee and revenue sharing used to advance other needed projects.

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Conclusion

- **Balancing risk, return, and oversight is essential for successful partnering.**
- **PPP, like all transportation projects, are not without controversy.**
- **Many policy issues to work through.**
- **Public education is critical.**
- **The benefits speak for themselves.**

TEXAS DEPARTMENT OF TRANSPORTATION

TxDOT: Open For Business

CDA PROGRAM: PPPS TEXAS STYLE

Conclusion – continued

- **Texans would own new asset— \$1.35 billion at no cost to state or local governments.**
- **This project and others will be accelerated by decades.**
- **Motorists enjoy less congestion whether they choose I-35 or SH-130.**
- **Project risk is transferred to private sector.**
- **Accelerating projects provides safety and mobility that promote economic productivity and quality of life for Texans.**

Regional Transportation Investment District: A Regional Approach to Funding Transportation in the Central Puget Sound Region

By Charlie Howard, Puget Sound Regional Council

Statewide Planning Peer Exchange
July 7–8, 2006
La Jolla, California

Why Regional Investment?

- Transportation investment in the Central Puget Sound Region has not kept pace with population or employment growth.
- Resistance to statewide tax increases limits the ability of the state to invest in expensive urban corridor solutions— recent statewide transportation tax increases partially fund major corridor investments with the intent that regional sources complete the projects.
- Regional investment ensures that 100% of taxes are spent where they are raised.

Who Is RTID?

- **Planning Committee**

Council members of King (9), Pierce (7), and Snohomish (5) Counties and the state secretary of transportation – 22 total members.

- **Executive Board**

Seven members charged with proposing the district boundary, projects and financing plan.

- **Voters**

Must approve the projects and funding.

- **Counties, WSDOT, Transit, Cities**

Project sponsors.

RTID Schedule

- December 2006 – Draft Investment Plan.
- May 2007 – Final Investment Plan.
- June 2007 – County Councils certify plan to ballot.
- November 2007 – public vote on same ballot as Sound Transit Phase 2. (Note: the 2006 Legislature linked the RTID and regional transit ballots; they must be on the same ballot, and must both pass for either to pass.)

RTID Boundary

- Planning boundary includes King, Pierce, and Snohomish Counties— must include at least two counties to go to ballot.
- RTID Planning committee proposes boundary as part of investment plan— must at a minimum include the regional transit authority boundary.
- Planning committee may exempt locations or include locations that benefit from the investment plan.

RTID Eligible Projects

- Capital Projects that
 - Add lane capacity to highways of statewide significance;
 - Repair or replace a seismically damaged structure; and
 - Multimodal capital improvements:
 - Approaches to HSS highways, HOV lanes, park-and-ride lots, bus pull outs, vans, buses, traffic management systems, and local arterials (local arterials are limited to 10% of the total, and must have a 15% local match).
- Operations, preservation, and maintenance of tolled facilities.
- Transportation project construction mitigation including transit service and demand management.

RTID-Eligible Revenue Sources

- Sales and use tax (up to .1%).
- Vehicle license fee (up to \$100).
- Parking tax.
- Local motor vehicle excise tax (up to .8%).
- Employer tax.
- Local option fuel tax (up to 10% of statewide fuel tax).
- Tolls.

RTID Sub-Area Equity

- RTID statute specifically requires that “the plan must use tax revenues and related debt for projects that generally benefit a participating county in proportion to the general level of tax revenues generated within that participating county.”
- This “equity principle” is a key element of project selection, package sizing, and ultimately selling the package to the voters.

RTID Project Cost Controls

- Enhanced cost analysis required in developing the plan.
- Voters approve specific projects and tax levels.
- Projects must be built within 20% of budget **cost**. If not, the project must be stopped, and/or changes in the project or cost must be approved by voters.
- District monitors and audits projects. Annual reporting of project costs, expenditures, revenues, and construction schedules.

Project Performance

The planning committee considers the following criteria for selecting transportation projects to improve corridor performance:

- Reduced level of congestion and improved safety;
- Improved travel time;
- Improved air quality;
- Increases in daily and peak period person and vehicle trip capacity;
- Reductions in person and vehicle delay;
- Improved freight mobility; and
- Cost-effectiveness of the investment.

RTID After the Election

- If approved by the voters, the District Board is formed including all county council members (21 members) and the state Secretary of Transportation (nonvoting).
- The RTID board collects taxes, oversees the plan implementation, and reports annually on progress.
- The RTID board sunsets after projects are complete and any bonds paid off.

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine

The **National Academy of Sciences** is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. On the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Ralph J. Cicerone is president of the National Academy of Sciences.

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