U.S. Department of Transportation

Federal Highway Administration

Summary Report:

Peer Exchange on Addressing Financial Uncertainty and Conflicting Priorities in Transportation Planning

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LIST OF PARTICIPANTS*

- **Elise Barrella, Georgia Tech University**
- **Jerri Bohard, Oregon DOT**
- **Kim Fisher, TRB**
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- **Matt Hardy, AASHTO**
- **Patricia Hendren, WMATA**
- **Paul Hershkowitz, WSA**
- **Charlie Howard, Puget Sound Regional Council**
- **John Kaliski, Cambridge Systematics**
- **Sandi Kohrs, Colorado DOT**
- **Reena Mathews, Maryland State Highways Administration**
- **Ron McCready, Independent Consultant**
- **Camelia Ravanbakht, Hampton Roads TPO**
- **Jim Ritzman, PennDOT**
- **Jack Stickel, Alaska DOT**
- **Montie Wade, Texas Transportation Institute**
- **David Wasserman, North Carolina DOT**

* Members of TRB Committee on Statewide Multimodal Transportation Planning Committee (ADA10).

CONSULTANT TEAM:

- **Peter Plumeau, RSG**
- **Richard Amore, RSG**
- **David Rose, PB**

BACKGROUND AND OBJECTIVES

As various research efforts have reported over the years, investment in transportation—whether to increase capacity or to improve service—reduces travel time, lowers trip cost, and improves travel-time reliability. For individuals as well as for businesses, these improvements translate into greater productivity and better access to labor and markets, making industries more competitive and enabling economic growth.[1] However, the recent economic recession has exacerbated the existing structural problems with our traditional transportation funding system related to reliance on stagnant (or declining) motor fuel tax revenues and political reluctance to pursue revenue options beyond the gas tax. Many states and regional transportation agencies have sharply ratcheted back spending on both new projects and existing programs in order to maintain their fiscal solvency. At the same time, however, the American Recovery and Reinvestment Act of 2009 (ARRA) facilitated a renewed interest in the relationship between transportation and the economy, with DOTs required to report job-creation measures. Thus, we are faced with the concurrent imperatives to constrain transportation investment to that which a limited funding pool can support and to invest these limited funds in a manner that supports and stimulates the economy.

As the nation continues to grow, the need for transportation capacity enhancement and mobility options also grows. However, DOTs, MPOs and transit agencies are working under increasingly tight budgets while demands for both lower public spending and demonstrating a return on public investments are growing. For example, of the 602,977 bridges on the nation's roadways, one in four is classified as either functionally deficient or structurally obsolete.[2] Thus, in response to both the long-standing structural issues and the challenges precipitated by more current fiscal constraints, transportation agencies – DOTs, MPOs and transit agencies – have been pursuing a range of approaches to managing funds more effectively and efficiently and increasing revenue available for transportation investment.

To facilitate discussions among transportation officials on effective approaches to addressing the continuing funding needs of the transportation system in a world of growing fiscal uncertainty, the Federal Highway Administration (FHWA), in collaboration with the TRB Committee on Statewide Multimodal Transportation Planning Committee (ADA10) convened a peer exchange on "Addressing Financial Uncertainty and Conflicting Priorities in Transportation Planning" in Woods Hole, Massachusetts over two and a half days during July 8 - 10, 2011. Seventeen participants from state DOTs, MPOs, transit agencies, academia, and private consultants attended the two and a half day peer exchange, resulting in an exchange of ideas and practices related to the financial uncertainty in the transportation planning process between different agencies and organizations. This report summarizes how MPOs and state DOTs have been adapting to changing transportation funding realities and identifies future

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[1] U.S. Chamber of Commerce, 2008. *The Transportation Challenge: Moving the U.S. Economy*. http://www.uschamber.com/reports/transportation-challenge.

[2] U.S. Government Accountability Office, 2010. *HIGHWAY BRIDGE PROGRAM: Condition of Nation's Bridges Shows Limited Improvement, but Further Actions Could Enhance the Impact of Federal Investment* (GAO-10-930T), p. 6.

planning approaches to address the continuing uncertain financial times and conflicting priorities. Participants shared their concerns and approaches and discussed the successes and challenges experienced in programming and planning within an uncertain economic forecast. In addition, this report provides a summary of common challenges facing transportation agencies, identifies noteworthy practices and tools, and highlights areas for additional research.

A consulting team from Resource Systems Group, Inc. (RSG), in partnership with Parsons Brinckerhoff (PB), managed, facilitated and documented the peer exchange. This report summarizes the peer exchange presentations and discussions and synthesizes the results into key themes for consideration and action by FHWA, TRB and other partners.

1.0 DISCUSSION AND PRESENTATIONS SUMMARY

The peer exchange began with opening remarks and presentations. During the presentation element, six participants shared their stories related to the pre-peer exchange questionnaire responses (Appendix C provides a summary of all participants' responses). Throughout the peer exchange, the consultant team facilitated in-depth discussions of issues raised in the presentations and recorded these for summarizing in this report.

Opening Remarks

After a brief self-introduction by participants, Peter Plumeau of Resource Systems Group and Patricia Hendren, Chair of the TRB Committee on Statewide Multimodal Planning and Programming, offered welcoming remarks. Peter Plumeau of RSG, lead facilitator, introduced the agenda and purpose of the peer exchange: to share experiences and learn from each other, to build professional networks, and to provide input on the topic to TRB and FHWA. Patricia Hendren thanked FHWA for supporting this valuable peer exchange and each participant's willingness to devote time to the exchange of ideas and lessons learned.

David Rose, Parsons Brinckerhoff

David Rose presented an overview of the issues impacting the planning process that are arising from the current fiscal realities. David stressed that we are not so much facing a financial uncertainty as confronting a "new normal" in transportation finance in which the past is not at all like the future. There can no longer be expectations of periodic increases in revenue over the next 20 years from taxes or user fees like there have been over the past 20 years. Revenue streams will vary across the country resulting in varying quality of transportation systems in different parts of the country.

In this "new normal" planning becomes more meaningful as a tool for managing our transportation systems and to understand how to maximize the productivity of our existing multi-modal transportation system. There needs to be a better understanding of how to make incremental investments which maximize productivity and how to preserve the value of our transportation systems. Our funding is limited; therefore, the planning process must be the venue that makes the link between expenditure and performance. Performance-based planning becomes the tool to analyze our return on investment for incremental investments.

There are three risks with a high likelihood and big impacts affecting transportation funding today:

- The lack of stability in our finance mechanisms and the decreasing yields from the motor fuel tax.
- The federal program operates under continuing resolution with an uncertain future.
- The impacts of the great recession on transportation funding which has reduced the yields from sales tax, excise tax and transportation user fees. The recession has resulted in a large debt overhang at the national and state levels. This impacts capital available for transportation. In addition, there are many other competing priorities during the recovery of our nation's economy.

Risk is defined as the function of probability of occurrence and the magnitude of the impact of the occurrence. Planning is critical for managing risk. Some of the risks include the availability of funds to implement the long-range transportation plan goals, the accuracy of our forecasts, and the risk of accuracy of the planned scenarios. The impacts on our current financial reality mean plans will become focused on preservation and maintenance. Capacity issues will be addressed and funded through public-private or multi-agency partnerships and project specific initiatives.

The future challenges of our transportation funding and planning process need to focus on making our existing infrastructure more productive. The "new normal" increases the importance of planning, specifically performance-based planning. The planning function is critical in assisting agency management by linking outcomes to plan and budget decisions. Performance-based planning provides the tools to communicate to policy-makers and the public. It provides accountability mechanisms for communicating performance and serves as a key role in managing stakeholder expectations. The planning process can provide a collaborative framework for managing the investment decisions made by policy-makers and agency leaders regarding the operation, management and development of the transportation system. Planners will have more demands to be more business-like and provide accountability mechanisms for communicating performance.

The impacts of the financial uncertainty of the planning process will affect the plan update and STIP amendment cycles, revenue forecasts, and provide constraints on multi-modalism. Project plans and program will need to be rebalanced to address risk. There will be a changing emphasis in plans to preservation and maintenance rather than adding capacity. Planning methods and tools will be impacted and need to be focused more on revenue forecast, risk management, cost analysis and scenario analysis. Transportation planning will need to incorporate and apply new funding models, such as public-private partnerships, value capture, and new business relationships. There is a continued importance on effective communication to build stakeholder support and understanding regarding transportation strategies and outcomes.

Sandi Kohrs, Colorado DOT

Sandi Kohrs from the Colorado DOT discussed that agency's efforts to conduct transportation planning during times of financial uncertainty. Colorado has a growing population of 5 million people with an increasing annual VMT rate. The state has examined options to increase transportation revenue because it has not been able to solve transportation problems with current state and federal funds. Thus, the question is being posed, "What can we fund on a state-wide basis?" This discussion would explore a potential statewide ballot initiative. CDOT has a corridor-based long range planning process with a multimodal focus. Maintaining the existing system is Colorado's top priority given the limited funds available. Transportation has not ranked as a high concern for additional statewide funding increase in the past. The legislature did pass a bill to support fees dedicated to bridge replacement and safety projects. The public generally has not supported tolling in the past and currently tolls are seen as a way to finance additional lanes or new roads but not for existing capacity. A few corridors have had discussions about public-private partnerships and there are managed HOT lanes on portions of I-25 and US 36 in the Denver area. Colorado has used transportation bonds to advance strategic projects, but further bonding would require a public vote.

One approach Colorado is using to advance the public private partnership opportunity is with the creation of a High Performance Transportation Enterprise (HPTE). The HPTE was formed to aggressively pursue innovative means of financing important surface transportation infrastructure projects that will improve the safety, capacity, and accessibility of the surface transportation system. These HPTE transportation projects are intended to be commenced in a reasonable amount of time, allow more efficient movement of people, goods, and information throughout the state, and accelerate the economic recovery of the state. Such innovative means of financing projects include, but are not limited to, public-private partnerships, operating concession agreements, user fee-based project financing, and availability payment and design-build contracting.

The state's transportation system is managed by the Colorado Department of Transportation under the direction of the Transportation Commission. The commission is comprised of 11 commissioners who represent specific districts. Each commissioner is appointed by the Governor, confirmed by the Senate, and serves a four-year term. To provide continuity, the commissioners' term expiration dates are staggered every two years.

Under state law, the powers and duties of the Transportation Commission include: formulating general policy with respect to the management, construction, and maintenance of public highways and other transportation systems in the state; advising and making recommendations to the Governor and the General Assembly relative to transportation policy; and promulgating and adopting CDOT's budgets and programs, including construction priorities and approval of extensions of abandonments of the state highway system.

To help deal with changes in funding levels, Colorado is also employing a TIP process that includes illustrative projects. Illustrative projects are additional transportation projects that can be advanced for funding during the TIP period if additional revenues become available. Illustrative projects are not subject to the TIP financial constraint requirements. Colorado is

also looking at developing a strategic plan that will be more flexible than the federally required planning process. The strategic plan will guide the policies of future LRTPs. The next LRTP would be adopted in early 2015. Colorado also produces an annual report to measure the performance of transportation investments on the system. Colorado is also developing a multi-asset management system to help compare investment scenarios and results across several asset categories.

Camelia Ravanbakht, Hampton Roads Transportation Planning Organization

Camelia Ravanbakht is the Deputy Executive Director of the Hampton Roads Transportation Planning Organization (HRTPO) in Chesapeake, Virginia. The HRTPO encompasses a region of four counties and nine cities with 1.6 million residents. The Virginia DOT has made system operations a core business function that is managed by the Operations Management and Operations Planning divisions of VDOT. The goals of the System Operation program are to improve safety, improve highway operational performance, preserve the infrastructure, and improve the security of the system. The Hampton Roads Transportation Planning Organization (HRTPO) serves as the regional communication backbone of the Systems Operation program.

HRTPO coordinates systems operation in the planning process by utilizing the Congestion Management Process (CMP) to promote efficient system management and operation. The HRTPO created a transportation operations (HRTO) subcommittee to make operational recommendations to the Board, share operations information between members, and receive operations information from the outside. The HRTO subcommittee consists of traffic engineers, transportation operators, fire chiefs, port representatives, university representatives and the private sector.

The HRTPO integrates the Congestion Management Process into the LRTP planning process by using CMP data as an input into the LRTP project prioritization tool, which assists the HRTPO in ranking of projects and making current systems more efficient. The CMP identifies congested roadways and then projects are created for the congested locations. The LRTP ranks the projects and then the projects are implemented into the network through the TIP. The Hampton Roads TPO has developed a successful tool for identifying and selecting projects in the long range transportation planning process. The project prioritization process involves the local governments and the technical committee to facilitate an inclusive process that fosters support. The project prioritization process is a spreadsheet type of tool that ranks projects based on three criteria: project utility, project viability and economic viability. The HRTPO established six project categories to assist in evaluating similar projects separately.

The HRTPO understands the benefit of utilizing ITS architecture in the planning process and coordinates with regional stakeholders and VDOT that manages the regional transportation operation center. This center provides traffic management, incident management, emergency management and operates as a regional clearinghouse for traffic and traveler information collection and dissemination. The ITS program also created the advanced traffic management system to improve incident and event management, provides live video coverage, coordinate with EOS, and monitors congestion and traffic signal timing plans. The Hampton Roads TPO

will continue to integrate the ITS program into the planning and programming process to ensure quality data is driving the project selection process.

Jim Ritzman, Pennsylvania DOT

Jim Ritzman, Deputy Secretary for Planning, Pennsylvania Department of Transportation (PennDOT), directs the activities associated with the Center for Program Development and Management, the Bureau of Municipal Services, the Bureau of Planning and Research, the Bureau of Aviation, and the Bureau of Rail Freight, Ports, and Waterways. The primary mission of the Office of Planning is to anticipate the future and support decision-making. Jim presented an overview of trends, unmet needs, and funding levels for highways, bridges, transit, rail freight, and aviation in Pennsylvania.

Pennsylvania has established a Transportation Funding Advisory Commission to develop a comprehensive, strategic proposal for addressing the transportation funding needs of Pennsylvania. The responsibilities of the commission are to study and prepare a comprehensive listing of potential revenue sources available for current and future funding of transportation in the state for all modes of transportation. The funding sources must be reliable, dedicated, inflation sensitive and adaptive to changing environmental factors. The Commission, with Governor-appointed members, is intended to conduct a bi-partisan, objective process focused on finding ways to increase annual revenues for transportation by $2.5 billion while avoiding tax increases.

The Commission is examining three categories of options for addressing transportation needs: new finance methods; modernization; and the "Decade of Investment" program. Different finance options under consideration include raising various fees on licenses, registrations, toll roads and bridges, VMT fees, public-private partnerships, raising impact fees and implementing fees on various automobile goods such as increasing tire disposal fees and insurance fees. Modernization strategies under consideration include business approaches to help PennDOT streamline operations, save money and improve overall efficiency in project delivery. Specifically, some of the suggestions under consideration include eliminating safety inspections for new vehicles, establishing an eight-year driver's license and coordinating with municipalities to ensure proper maintenance and operation of traffic signals. The Decade of Investment program emphasizes repairing current infrastructure. The TFAC will offer different scenarios, funding packages and policy directions to the legislature by early August 2011.

Charlie Howard, Puget Sound Regional Council

The Puget Sound Regional Council (PSRC) serves the Seattle/Tacoma/Everett/Bremerton metropolitan region. PSRC is a national leader in transportation modeling and undertakes a variety of economic analyses. The agency is increasingly using economic analysis for better project selection decisions and is integrating economic impact considerations into its long range planning process. Mr. Howard believes that communicating tangible economic benefits to the public is essential for effective planning and project selection.

The PSRC long range transportation plan, called Transportation 2040, was adopted in May 2010. During the scoping process of the plan three issues arose: mobility, environment and transportation funding. Transportation funding became the key element of the plan as the PSRC region needs sufficient funding to sustain and improve the system. The LRTP has four integrated strategies including, land use, efficiency, strategic investments and pricing. The pricing strategy begins with moving from traditional forms of funding to a more sustainable user based funding system that improves mobility and the environment.

The Transportation 2040 plan calls for a phased funding strategy. The PSRC seeks funding to maintain and operate our current assets. Traditional tax financing (gas tax, etc.) will still play a central role; however, there will be an increased reliance on tolls phased in over time. The Transportation 2040 plan will allow for flexibility in the funding strategies implementation. The Puget Sound region will begin by tolling individual facilities to build specific projects transitioning into a system tolling option over the long term with variable pricing and the assumption that toll revenue can be used for a broad set of investments. The plan recommends moving from traditional tax financing to a HOT lanes system to a freeway system tolling over time to increase revenue, improve mobility and improve environmental performance.

Reena Mathews, Maryland State Highways Administration

Reena Mathews, Maryland State Highway Administration (SHA), a modal agency of the Maryland Department of Transportation, discussed how Maryland is responding to public accountability and efficiency. A key component of the State Transportation Improvement Program (STIP) process is the Annual Consultation Process, which is a process stipulated by state law requiring the Secretary of Transportation to visit with, and present to each of the state's 23 counties and the City of Baltimore, the annual draft of Maryland's six-year capital investment program known as the Consolidated Transportation Program (CTP). The CTP/STIP Fall Tour provides the opportunity for the coordination, cooperation, and consultation between all affected stakeholders, and effectively fulfils the intent of SAFETEA-LU legislation.

Maryland has also developed the StateStat management tool. StateStat is a performance-measurement and management tool implemented by Governor Martin O'Malley to make the state government more accountable and more efficient. Modeled after the CitiStat program that he developed as Mayor of Baltimore City, Governor O'Malley is using this data-based management approach to make Maryland's government work again for the people of Maryland. The CitiStat program has been studied and emulated by countless jurisdictions from around the globe.

Through a process of continually evaluating state performance at the highest levels, opportunities to improve coordination and formulate strategies are ongoing - not just during annual budget reviews. At bi-weekly meetings, state managers meet with the governor and his executive staff to report and answer questions on agency performance and priority initiatives. Each week a comprehensive executive briefing is prepared for each agency that highlights areas of concern. Briefings are based on key performance indicators from the customized data templates submitted to the StateStat office biweekly by participating agencies. Data is carefully

analyzed, performance trends are closely monitored, and strategies to achieve improved performance are developed.

Patricia Hendren, Washington Metropolitan Area Transit Authority

Patricia Hendren is the Director of the Office of Performance at the Washington Metropolitan Area Transit Authority (WMATA). WMATA provides transit services in a 1,500 square mile area, with 3.5 million residents. WMATA's service area includes the District of Columbia, two suburban counties in Maryland, and three counties and three cities in northern Virginia. WMATA's average weekday ridership is 1.2 million passengers. WMATA's rail system serves approximately 750,000 passengers a day, making it the second largest rail system in the country. WMATA has the 6th largest bus network in the U.S., with over 300 bus routes. WMATA is the 5th largest paratransit operator in the country.

WMATA created the Office of Performance in 2010. The purpose of the Office is to expand the use of performance measures to guide decision making, to promote WMATA's benefits in the region, and to unify employees to accomplish agency goals. The Office includes a small team formed by reallocating existing agency resources. The Office focuses on moving strategic thinking beyond the executive offices to front line employees and increasing WMATA's accountability and transparency. Its creation is also a response to the national focus on performance measures.

All of WMATA's performance work is guided by the agency's five strategic goals: Create a Safer Organization; Deliver Quality Service; Use Every Resource Wisely; Retain, Attract and Reward the Best and the Brightest; Maintain and Enhance Metro's Image. To make progress towards these goals, the Office created a range of products that vary by audience. The Office uses a pyramid to illustrate the different audiences: the Board of Directors and public are at the top of the pyramid; the General Manager is in the middle; and internal departments form the base. The performance products are designed to turn data into information and tell WMATA's story to key internal and external stakeholders. The focus is positive, not punitive.

WMATA's preparation for the peer exchange focused on products developed for the Board of Directors and the public. WMATA's main product for these audiences is the monthly Vital Signs Report (VSR), which depicts system-wide, long-term trends through 12 key performance indicators (KPI): bus, rail, and paratransit on-time performance, escalator and elevator availability, crime rate, employee and customer injury rates, arrests and citations, bus and rail mean distance between failures (MDBF), and the customer comment rate. What distinguishes the VSR from other performance reports and dashboards is that it answers two key questions: (1) Why did performance change? And (2), what actions are we taking to improve performance?

The success of the VSR flows from several factors. First, it opened a performance dialogue with operations. Operations staff, as opposed to headquarters staff, drives all of the content of the VSR. Second, the measures were based on external stakeholder input. Third, the measures are tied to WMATA's strategic goals and objective, keeping the agency unified in a common

direction. By going beyond a dashboard, the VSR provides ongoing communication with key stakeholders.

Numerous benefits have been realized from the VSR. The agency continues to receive positive feedback from policy makers, including a complimentary letter from Virginia Governor McDonnell. The accuracy of reporting by the media has improved because they have easy access to correct information. The reports are displayed in the WMATA lobby, enhancing internal ownership and use. The content of the VSR continues to become richer. Performance is improving on most of the measures. The VSR provides brand recognition for performance measurement within the agency and with external stakeholders. WMATA has used the VSR to improve its own performance and share its progress with the public.

Sonna Lynn Fernandez, Idaho DOT

Although Idaho is a largely rural state, it has four MPOs, one of which is a Transportation Management Area (TMA). There are disagreements between urban and rural residents over transportation funding. Idaho DOT has annual revenue shortfalls and is considering ways to increase revenue, including funds for federal match. Idaho had an excellent statewide vision plan process, which won a national award. Yet this vision has not been realized at all planning levels, as strategies were not developed during the vision process. The Idaho DOT's OPRE (operations, preservations, restoration and expansion) system keeps the DOT focused on operations and preservation rather than planning. The Idaho DOT has a strong but small planning staff, but economic analysis has been limited. Overall, Idaho has been very highway oriented but transit is beginning to take hold in Boise, the largest metropolitan area.

Idaho is working with Utah to develop and implement an iPlan tool based upon the uPlan model that the State of Utah has implemented. iPLAN will be an interactive planning and analysis tool developed to assist the Idaho Department of Transportation (IDOT) in giving decision-makers access to data to support informed discussions and decisions. iPlan also facilitates synchronizing planning efforts with other state agencies, local governments, federal agencies, utility companies, and within IDOT's many departments. Idaho DOT is gathering data from multiple sources, including local and state agencies, utility providers, fish and wildlife agencies, and other agencies to make informed and comprehensive decisions based upon everything that affects highways. Although startup is requiring significant investment by IDOT, overall maintenance is minimal because each database is updated by the entity that owns it. The future goal is provide a data warehouse for the all the western states.

Idaho DOT is utilizing other innovative methods to assist in efficiencies in the transportation planning process. Idaho DOT is pushing forward with staff development and training to expedite project delivery and efficiencies. Idaho DOT created a project management academy, and all project managers are required to attend. The academy is a two to three day educational workshop that teaches them the project management process. Also, Idaho is moving forward with an enhanced scoping process that utilizes project charters to assist in project prioritization.

2.0 NOTEWORTHY PRACTICES AND METHODS

The peer exchange highlighted several noteworthy practices from participant's organizations that can be applied by other DOTs, MPOs, and other transportation agencies. These noteworthy practices and methods relate to how MPOs, transit agencies and state DOTs can adapt to changing transportation realities and identify future planning approaches to address continuing uncertain financial times and conflicting priorities. Several noteworthy practices emerged from the peer exchange discussions and presentations, including the following:

Colorado Department of Transportation's (CDOT) High Performance Transportation Enterprise

- Colorado DOT's High Performance Transportation Enterprise (HPTE) was formed to aggressively pursue innovative means of financing important surface transportation infrastructure projects that will improve the safety, capacity, and accessibility of the surface transportation system. Such innovative means of financing projects include, but are not limited to, public-private partnerships, operating concession agreements, user fee-based project financing, and availability payment and design-build contracting.

Hampton Roads Transportation Planning Organization's (HRTPO) Integrated Congestion Management Process

- The HRTPO integrates the Congestion Management Process (CMP) into the LRTP planning process by using CMP data as an input into the LRTP project prioritization tool, which assists the HRTPO in ranking of projects and making current systems more efficient. The CMP identifies congested roadways and then projects are created for the congested locations. The LRTP ranks the projects and then the projects are implemented into the network through the TIP. The project prioritization process involves the local governments and the technical committee to facilitate an inclusive process that fosters support. The project prioritization process is a spreadsheet type of tool that ranks projects based on three criteria, project utility, project viability and economic viability.

Pennsylvania Department of Transportation (PennDOT) Smart Transportation Program

- PennDOT's Smart Transportation Program emphasizes repairing current infrastructure, investing in projects that reduce vehicle travel and sprawl, and link transportation with land use planning. Smart Transportation is more than the sum of specific initiatives; however, it is a theme that affects the functioning of PennDOT and all its constituents. The heart of the message is that transportation must support goals for strengthened communities, fiscal responsibility and good land use.

Puget Sound Regional Council's (PSRC) Transportation 2040 LRTP Funding Strategies

- PSRC's Transportation 2040 LRTP contains significant innovations that use transportation to shape a livable metropolitan region. It serves as a model for other MPOs looking to integrate transportation, environment, land use, and the economy into

one plan. Transportation 2040 identifies investments to support the region's expected growth and improve transportation services to people and businesses, lays out a financing plan that suggests a long-term shift in how it funds transportation improvements, with more reliance on users paying for transportation improvements, and proposes a strategy for reducing transportation's contribution to climate change. The plan's financial strategy relies on traditional funding sources in early years and transitions over time to a new funding structure based on user fees and other pricing approaches that replace the gas tax.

Maryland State Highways Administration's StateStat Management Tool

- StateStat is a performance-measurement and management tool implemented by Governor Martin O'Malley to make the state government more accountable and more efficient. Through a process of continually evaluating state performance at the highest levels, opportunities to improve coordination and formulate strategies are ongoing - not just during annual budget reviews. Each week a comprehensive executive briefing is prepared for each agency that highlights areas of concern. Briefings are based on key performance indicators from the customized data templates submitted to the StateStat office biweekly by participating agencies. Data is carefully analyzed, performance trends are closely monitored, and strategies to achieve improved performance are developed.

Washington Metropolitan Area Transit Agency's (WMATA) Vital Signs Report

- The WMATA's Vital Signs Report monitors progress in the strategic areas of safety, security, service reliability and customer satisfaction through a set of key performance indicators. Each month the Vital Signs Report is presented to WMATA's Board of Directors and posted online so the public can track WMATA's performance. The Vital Signs Report does not simply present performance data and graphs, but also explains this information by answering two key questions: Why did performance change? And, what actions is WMATA taking to improve performance. Every month, WMATA assesses each performance indicator including why the measure is tracked, why performance changed over the month, monthly performance trends, the target WMATA would like to meet, actions to improve performance, and conclusions. The Vital Signs Report has given WMATA the opportunity to tell its story and get the facts presented correctly to the public.

Idaho Department of Transportation (IDOT) iPlan

- IDOT's iPlan is an interactive planning and analysis tool developed to give decision-makers access to data to support informed discussions and decisions. iPlan also facilitates synchronizing planning efforts with other state agencies, local governments, federal agencies, utility companies, and within IDOT's many departments.

3.0 KEY PEER EXCHANGE THEMES

The peer exchange highlighted several key themes for research and professional capacity building in DOTs, MPOs and other transportation agencies. These themes relate to addressing financial uncertainty in the transportation planning process. Institutional issues such as capacity building and collaboration were also identified as key factors of success in addressing the financial uncertainties in the transportation planning process. Key themes that emerged from the peer exchange discussions and presentations, included the following:

- Integrated long range transportation planning processes
- Enhanced data integration and access to support decision-making
- Improved messaging and communications effectiveness
- Additional revenue and finance mechanisms

Integrated long range transportation planning processes

The peer exchange participants agreed there is a need for stronger inter-institutional collaboration that facilitates and supports a more integrated long range transportation planning process. This would include stronger partnerships between DOTs, MPOs and transit agencies and the use of scenario and performance-based planning to provide more accountability and integration. These agencies' planning processes need to inform the priorities of the LRTP and justify the plan's programs. An outcome of a more integrated planning process across agencies might be a single integrated statewide LRTP or a set of separate but closely linked LRTPs.

The process also needs to identify the barriers to creating an effective plan. The lack of a definition for what is a "good plan" results in inconsistent delivery of quality plans across the nation. The peer exchange participants suggested that there is a need to develop a "model" long range transportation plan, with a defined table of contents and structure to assist MPOs and DOTs in developing implementable and effective plans. The model LRTP will articulate the purpose and desired outcomes of the plan, identify obstacles and gaps, and consider what partnerships should be developed in the planning process.

The peer exchange participants discussed the importance of utilizing scenario planning to develop plausible futures based on different financial parameters. There need to be different methods in applying scenario planning. Scenario planning should not be solely focused on climate change or land use patterns, but should consider investment scenarios, financial scenarios and the economic impacts of plausible scenarios. Transportation planning should shift to systems-level planning that is oriented to people and goods, rather than vehicles.

Another idea discussed to better integrate long range planning was the use of performance-based planning to ensure accountability and return on investment. "Performance-based planning" is an approach for strengthening accountability by linking plans, investment decisions and actions to goals and objectives. It is also a tool to help decision-makers and the public gauge how well they are moving towards their goals and if investments are producing

the desired outcomes. Finally, from a national perspective, performance-based planning can be a method for both monitoring and reporting on the performance transportation system.

Noteworthy Practices

- Puget Sound Regional Council's *Transportation 2040* Long Range Transportation Plan
    - PSRC's long range planning process integrated transportation, environment, land use, and the economy into one plan and provided an extensive public involvement and outreach process.
- Arizona DOT's "What Moves You Arizona" and "Building a Quality Arizona" Long Range Transportation Planning Initiatives
    - These two Arizona DOT initiatives involve significant statewide collaboration between the state MPOs, COGs and the DOT to provide an integrated and multimodal planning process.
- Hampton Roads Transportation Planning Organization's LRTP prioritization tool
    - HRTPO's project prioritization process involves the local governments and the technical committee in an inclusive process that fosters support and provides an integrated approach that ranks projects based on project utility, project viability and economic viability.
- Colorado DOT's use of Strategic Planning to inform and guide the LRTP process
    - The Colorado DOT is developing a strategic plan that will be more flexible and integrated than the federally required planning process, and will guide the policies of future LRTPs.

Enhanced data integration and access to support decision-making

Peer exchange participants noted that there seems to be a disconnect between data collection, data analysis and the policy decisions that are being made, and speculated that a key unaddressed issue is the methods by which data is accessed to support decision-making. Peer exchange participants noted that there is a danger in trying to quantify and communicate too much information because people may start to doubt the data and analysis.

There is an immense set of challenges and issues regarding data integration and accessibility to support decision-making. Significant advancements have been made in data collection methods, data standards, data storage, integration of different datasets, and data representation and analysis. However, practitioners need means of taking advantage of the vast and on-going data collection efforts. At the same time, there is a need to establish standards and data sharing across different states and regions. Peer exchange participants suggested that a synthesis of current data-related research efforts be undertaken in order to ensure that AASHTO and FHWA efforts are not "siloed"and underutilized.

Peer exchange participants remarked that transportation agencies need to make better use of data resources better by integrating data management and integration systems to ensure data

is accessible to make better decisions. One participant remarked 'we are data rich but information poor'. There was also recognition that states already collect a significant amount of data, and one of the challenges is how to exploit and refine the data that already exists and turn this data into useful information, though with the acknowledgment that there are also gaps in our data and information.

Noteworthy Practices

- Idaho DOT's iPlan
    - IDOT's interactive planning tool, iPlan give decision-makers access to data to support informed decisions and synchronize planning efforts with other state, local and federal agencies.
- Utah DOT's uPlan
    - The benefits of Utah DOT's uPlan are that planners and stakeholders can now view all study data together that was once spread across various agencies. This data sharing and analysis tool allows state agencies to establish a positive and productive working relationship with other agencies, communicate needs, understand issues, and reduce duplication of work, leading to reductions in costs and time requirements, thus helping to create better projects with fewer impacts.
- Florida DOT's Enterprise Geographic Information System
    - FDOT's Enterprise Geographic Information System is an organization-wide framework for department communication and collaboration of shared geospatial data and GIS resources that enhances existing business processes and provides an efficient way to plan, analyze, and manage transportation infrastructure and related elements.

Improved messaging, transparency and communications effectiveness

While there are many tools and techniques that assist planners in time of financial uncertainty, communication of this information to the public is sometimes ineffective or interpreted incorrectly. The entire transportation planning process needs to be conveyed to the public in a more compelling, transparent and succinct manner. The peer exchange participants discussed the importance of effective messaging in providing consistent communication. Communication needs to be aligned to the audience. They also discussed the need to target different messages to different audiences, such as decision-makers and the public. The participants also suggested that early public outreach and engagement is important in order to ensure there is public buy-in and understanding.

Participants addressed the importance of telling a compelling "story," not just presenting data and information on transportation investment and funding issues. There is a need to tell stories that change people's minds. Planners need to be more thoughtful in their messages and understand what resonates with audiences. Communication and storytelling needs to be more

visual and graphically compelling. The peer exchange participants stated that transportation agencies should think and talk like a utility. The public has accepted the rates of the utility infrastructure and there is a need to communicate that transportation is another vital utility. The peer exchange participants realized the importance of utilizing technology for effective communication. The use of technology will help deliver the message through different media to different audiences. Transportation agencies need to train staff in communication strategies and offer ways to be more accessible to the general public and stakeholders.

Noteworthy Practices

- Washington Metropolitan Area Transit Agency's monthly Vital Signs Report
    - The WMATA's monthly Vital Signs Report monitors progress in the strategic areas of safety, security, service reliability and customer satisfaction through a set of key performance indicators. The Vital Signs Report represents a transparent and accountable planning process that effectively communicates to the public.
- Maryland State Highways Association's Annual Consultation Process (Fall Tour) and StateStat management tool
    - A key component of the Maryland State Transportation Improvement Program (STIP) process is the Annual Consultation Process (Fall Tour), which is a process stipulated by state law requiring the Secretary of Transportation to present the annual draft of Maryland's six-year capital investment program, known as the Consolidated Transportation Program (CTP), to each of the state's 23 counties and the City of Baltimore. The CTP/STIP Fall Tour provides the opportunity for the coordination, cooperation, and consultation between all stakeholders.
    - Maryland has also developed the StateStat management tool. StateStat is a performance-measurement and management tool implemented by Governor Martin O'Malley to make the state government more accountable and more efficient.
- Arizona DOT's Communication and Community Partnership Division (CCP)
    - The Arizona Department of Transportation (ADOT) places importance on including the public in the development of transportation plans, construction communication, and traffic management outreach strategies. ADOT's Communication and Community Partnerships Division (CCP) is responsible for developing public outreach and communication plans to improve messaging, transparency and communication effectiveness across agencies.
- Texas DOT's TRACKER System
    - The TxDOT Tracker system provides a set of key measures and indicators to gauge agency and system performance to the public. The TxDOT tracker system improves accountability and transparency in the planning process.

- Washington State DOT's Gray Notebook
    - Washington State DOT's Gray Notebook is a quarterly performance report that describes the status of the agency's key projects and program initiatives. The key aspect of WSDOT's performance measuring approach was to develop an adaptive and dynamic performance measurement tool to meet changing needs.

Additional revenue and finance mechanisms

It was generally agreed that federal transportation funding sources need to be made more stable and reliable. While federal revenue streams are part of funding equations for all transportation agencies, the federal share of the total transportation funding package for individual states is declining. There was general acknowledgement that a change is needed to increase the tax base for transportation revenues. Revenue for transportation spending is not keeping pace with inflation, escalation of materials costs or with ever increasing transportation needs. Further, the current relatively high gasoline and other petroleum prices are apparently resulting in declining vehicle miles of travel (VMT) across states and regions. This is exacerbating the overall decline in gas tax revenues across the nation and underscoring the seriousness of the transportation funding situation.

Participants suggested that the nation needs to shift from the per gallon fuel tax rate to a VMT tax or to index the gas tax to adjust for inflation. Some agencies are currently using or actively pursuing tolling as a funding source, while others believe that tolling may not be feasible. Some urban areas are moving toward variable pricing strategies to help fund transportation systems. Participants discussed the importance of using other options to increase the revenue stream, such as value capture, local revenue districts and alternative geographies. "Value capture" is a type of public financing where increases in private land values generated by highway or transit investments are all or in part "captured" or recouped by the public sector. Capturing the value of this benefit through various tools is gaining interest as a finance mechanism for infrastructure investments. Local revenue district options include ways to capture the value by imposing impact fees on development, tax-increment financing, and other means of generating revenue from transportation improvements.

As part of the discussion on fuel taxes and VMT fees, participants also noted that historical challenges associated with perceived equity considerations between urban/metropolitan and rural areas continue. While most of the public accepts the concept of paying "fair shares" for transportation improvements and system reliability, in some states there are conflicts between cities and rural areas over the equity of revenue-raising mechanisms that are perceived to fall disproportionately on one type of area or the other. VMT taxes, for example, may be seen as unfairly burdening rural residents who must drive long distances to obtain basic services (e.g., doctor, groceries, etc.) and have no ready alternatives to driving (e.g., no transit). Residents of urban areas, on the other hand, sometimes see rural areas as siphoning away urban revenues to support infrastructure that serves relatively few people. Thus, there is a need to educate the public (and elected officials) on how and why pursuing new sources of transportation revenue can benefit all parts of a state – both urban and rural (e.g., "a rising tide raises all boats" concept). Participants noted that goods movement infrastructure connecting different parts of

a state and/or between states is an example of the type of "rural" transportation investment that can benefit both urban and rural residents.

Peer exchange participants stressed the importance of understanding what the public is willing to pay for transportation infrastructure. Transportation agencies need to understand what kind of standards the public will accept for transportation facilities. There is a need to examine seasonal closings of facilities, LOS changes, and strategic abandonment and provide tiering of component priorities. It was also noted that the planning process (and related financial structures) needs to be modernized and brought more in line with the changing geographies of economic and travel patterns, and relationships (e.g., transcend traditional political boundaries at both sub-state and inter-state levels). Participants concurred that planning and finance mechanisms for transportation agencies need to become more nimble, flexible and creative to allow development of innovative finance options.

Noteworthy Practices

- Georgia's Special Purpose Local Option Sales Tax (SPLOST)
    - Georgia's Special Purpose Local Option Sales Tax (SPLOST) can be levied by any county, for the purpose of funding the building and maintenance of parks, schools, roads, and other public facilities. Counties within Georgia can levy up to an additional 2% sales tax for SPLOST.
- Blue Ribbon Commission on Maryland Transportation Funding
    - The Blue Ribbon Commission on Maryland Transportation Funding reviews, evaluates, and makes recommendations concerning state transportation funding sources and the Maryland Transportation Trust Fund.
- Pennsylvania DOT's Governor's Transportation Funding Advisory Commission
    - The Pennsylvania Transportation Funding Advisory Commission develops a comprehensive, strategic proposal for addressing the transportation funding needs of Pennsylvania and prepares a comprehensive list of potential revenue sources available for current and future funding of transportation in the state for all modes of transportation.

4.0 SUGGESTED RESEARCH AND FUTURE ACTIONS

Based on the discussions and information shared during the peer exchange, participants concurred on several recommendations for additional research and peer information-sharing regarding the financial uncertainty in the transportation planning process. They discussed several possible actions that will further address financial uncertainty in the planning process. The following list contains the key ideas and recommendations for near-future actions:

Facilitate Capacity-building for DOTs and MPOs

- FHWA should expand its efforts to help DOTs, MPOs and transit develop and build their internal professional and technical capacities to address the complex issues associated

with addressing financial uncertainty in the transportation planning process. Such efforts could include, but not be limited to, peer exchanges, webinars, training (classroom and video or web-based) and sponsored research through FHWA's own programs and TRB.

- In addition, in order to help DOTs and MPOs have a more effective method for assessing and planning for financial uncertainties, FHWA should pursue similar capacity building in fiscally-based scenario planning, effective communication strategies and collaborative planning processes.

TRB 2012 Annual Meeting

- Plan and provide sessions at the 91st TRB Annual Meeting in January 2012 that will focus on effective communication/messaging and research ideas for FHWA and TRB projects.
- Collaborate with other TRB committees, including the Committee on Transportation and Economic Development (A1A06), the Committee on Transportation Economics (A1C01) and the Committee on Public Involvement in Transportation (ADA60) in the development and execution of such sessions.

TRB May 2012 Conference - *Making Progress towards our Transportation Goals: Planners and Programmers using their Toolbox – 2012*

- Plan and provide sessions at this May 2012 conference that will focus on planning in times of financial uncertainty, effective communication and fiscally-based scenario planning.

Future Peer Exchanges

- Conduct a FHWA peer exchange on the development of a "model" long range transportation plan for state DOTs and MPOs. This peer exchange would assist in developing a LRTP template that articulates the purpose and desired outcomes, identifies obstacles and gaps, and offers ways to develop better partnerships between local, state and federal agencies.

Future NCHRP 8-36 topics

- Possible future research topics include corridor and systems level planning and governance issues to assist in clarifying who are the decision-makers.

Other NHCRP Research topics

- Provide a synthesis of successful examples of partnerships between MPOs and DOTs leading to high-quality and "implementable" long range transportation plans.

- Provide research on investment-based scenario planning that shows the economic impact of the plausible futures.
- Develop a catalog of past competition winners from TRB Committee on Public Involvement in Transportation (ADA60) annual competition.
- Develop an inventory of good methods, programs and processes that MPOs and DOTs are utilizing in accessing and disseminating data.
- Issue a call for research papers on effective public communication of financial issues in transportation planning.

APPENDICES

A. PEER EXCHANGE AGENDA

B. SUMMARY OF PRE-PEER EXCHANGE QUESTIONS

C. PARTICIPANTS FULL RESPONSE TO PRE-PEER EXCHANGE QUESTIONS

D. PRESENTATION SLIDES

- **Consultant Introductory Presentation**
- **Camelia Ravanbakht, HRTPO**
- **Jim Ritzman, PennDOT**
- **Charlie Howard, PRSC**
- **Reena Mathews, MDSHA**
- **Patricia Hendren, WMATA**
- **Sonna Lynn Fernandez, Idaho DOT**

APPENDIX A. PEER EXCHANGE AGENDA

FRIDAY, JULY 8, 2011	
8:30-9:00 am	Arrival and Continental Breakfast
9:00-9:30 am	Introductory Remarks and "Charge" to Participants by Committee Chair and FHWA Officials Participant Self-Introductions
9:30-10:00 am	"Key Issues facing DOTs and MPOs in Addressing Financial Uncertainty in the Planning Process" – presentation from Consultant Team
10:00 am-12:00 pm	Presentations from Selected Participants on Pre-Workshop Questionnaire Responses Facilitated Q&A
12:00-1:00 pm	Lunch (provided)
1:00-2:00 pm	Presentations and Facilitated Q&A (continued)
2:00-4:00 pm	Facilitated Discussion – Identify and Distill Key Themes and Topics Emerging from Presentations and Participant Comments
3:00-4:30 pm	Summary of Day1 and Preview of Day 2
7:00 pm	Group Dinner – Quarterdeck Restaurant, 164 Main St, Falmouth, MA (~3 miles from Sands of Time Hotel)

SATURDAY, JULY 9, 2011	
8:00-8:30 am	Arrival and Continental Breakfast
8:30-9:00 am	Recap of Day 1 Issues and Topics Identification of Key Breakout Topics
9:00-11:00 am	Breakout Group Discussions – participants will be pre-assigned to specific groups
11:00 am – 1:00 pm	Report-backs from Breakout Groups (lunch served during discussion)
1:00 pm	Ferry to Martha's Vineyard with specific activity(ies) to be planned (significant others are welcome)
Evening	Dinner on Your Own (suggestions on dining options to be provided)
SUNDAY, JULY 10, 2011	
7:30-8:00 am	Arrival and Continental Breakfast
8:00-9:30 am	Presentation and Facilitated Discussion of Peer Exchange Results – Issues, Research Needs, Capacity-Building Needs, Recommendations To USDOT Content and Form of Peer Exchange Report/Documentation – Facilitated Discussion
9:30-10:00 am	Closing Comments - Committee Chair and FHWA Official

APPENDIX B. SUMMARY OF PRE-PEER EXCHANGE QUESTIONS

Appendix B provides a summary chart of the pre-peer exchange questions and responses that were delivered to the participants prior to the peer-exchange. The questions are listed below:

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?
2. Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?
3. How are system operations being addressed in planning?
4. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?
5. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?
6. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?
7. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

APPENDIX C. PARTICIPANTS FULL RESPONSE TO PRE-PEER EXCHANGE QUESTIONS

Appendix C provides the full responses to the pre-peer exchange questions that were delivered to the participants prior to the peer-exchange.

APPENDIX D. PRESENTATION SLIDES

Appendix D provides the slide presentation from each of the presenters during the peer exchange. The presenters included:

- **Consultant Introductory Presentation**
- **Camelia Ravanbakht, HRTPO**
- **Jim Ritzman, PennDOT**
- **Charlie Howard, PRSC**
- **Reena Mathews, MDSHA**
- **Patricia Hendren, WMATA**
- **Sonna Lynn Fernandez, Idaho DOT**

Appendix A:
Peer Exchange Agenda

Peer Exchange on Addressing Financial Uncertainty and
Conflicting Priorities in Transportation Planning

July 8-10, 2011

Jonsson Center of the National Academy of Sciences
Wood's Hole, MA

Agenda

Friday, July 8, 2011	
8:30-9:00 am	Arrival and Continental Breakfast
9:00-9:30 am	Introductory Remarks and "Charge" to Participants by Committee Chair and FHWA Officials Participant Self-Introductions
9:30-10:00 am	"Key Issues facing DOTs and MPOs in Addressing Financial Uncertainty in the Planning Process" – presentation from Consultant Team
10:00 am-12:00 pm	Presentations from Selected Participants on Pre-Workshop Questionnaire Responses Facilitated Q&A
12:00-1:00 pm	Lunch (provided)
1:00-2:00 pm	Presentations and Facilitated Q&A (continued)
2:00-4:00 pm	Facilitated Discussion – Identify and Distill Key Themes and Topics Emerging from Presentations and Participant Comments
3:00-4:30 pm	Summary of Day1 and Preview of Day 2
7:00 pm	Group Dinner – Quarterdeck Restaurant, 164 Main St, Falmouth, MA (~3 miles from Sands of Time Hotel)

Saturday, July 9, 2011	
8:00-8:30 am	Arrival and Continental Breakfast
8:30-9:00 am	Recap of Day 1 Issues and Topics Identification of Key Breakout Topics
9:00-11:00 am	Breakout Group Discussions – participants will be pre-assigned to specific groups
11:00 am – 1:00 pm	Report-backs from Breakout Groups (lunch served during discussion)
1:00 pm	Ferry to Martha's Vineyard with specific activity(ies) to be planned (significant others are welcome)
Evening	Dinner on Your Own (suggestions on dining options to be provided)
Sunday, July 10, 2011	
7:30-8:00 am	Arrival and Continental Breakfast
8:00-9:30 am	Presentation and Facilitated Discussion of Peer Exchange Results – Issues, Research Needs, Capacity-Building Needs, Recommendations To USDOT Content and Form of Peer Exchange Report/Documentation – Facilitated Discussion
9:30-10:00 am	Closing Comments - Committee Chair and FHWA Official

Appendix B:
Summary of Pre-Peer Exchange Questions

Addressing Financial Uncertainty in the Planning Process
Peer Exchange, July 8 -10, 2011
Woods Hole, MA
Quick Reference Guide for Pre-peer Exchange Questions

Organization	Contact	Question 1a
		How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Acknowledge overwhelming role of federal funding. Completed strategic plan 2008, redefining performance measures. Transportation Asset Management, workforce plans; focus on services.
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	Recent updated LRTP use Investment Choices in expansion, modernization, preservation instead of projects to provide flexibility. Once adopted by State Board, ADOT will align programming.
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	Developing a multi-asset management tool, which will consolidate summary level data derived in various systems for the department's surface treatment, bridge, maintenance, Intelligent Transportation Systems and fleet equipment programs. Allow the Commission to comprehensively review how different funding scenarios would impact these programs.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Some agencies are utilizing Scenario Planning to consider different funding levels. Many agencies are using asset management framework and some states are using life cycle assessments for pavement selection but could be more widely used.
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Developed new prioritization tool for LRTP update; uses economic vitality, project viability, utility. Has helped Board be more focused and flexible. Understood that top projects will require multi-source funding packages.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	No change, but emphasizing project readiness and accurate cost estimating.
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Overall management change with new Director - organizational success and individual performance. New Dept vision. Goals contained in 2010 LRTP: sound investment decisions, asset management principles, collaborates with local partners on system investments. Project prioritization based on operations, preservation & restoration, expansion. Internal and external performance management.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Have not changed.

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Organization	Contact	Question 1a
		How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	2007 goals: safety, mobility, infrastructure. Enhanced process by formalizing work group including MPOs, RPOs...added 2 economic goals: b/c and economic competitiveness.
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	Running federal funding scenarios; "giving thought" to published revenue allocation formulas
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	Oregon is "right sizing" and running leaner. Oregon statewide's policy documents, both the Oregon Transportation Plan and our modal plan on Highway assume a preservation/maintenance priority over expansion of the system and that has been our direction since the early 1990s.
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	Central focus on asset management; flexibility not as important.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	2040 MTP: lowered revenue estimates by $1B, explicit that gas tax revenue growth will slow, assume increase in user fees/toll to 18% by 2040, explicit language that change is necessary for sustainable fiscal future.
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	Updated planning and project development rules; enhanced communications with MPOs/RPAs. Elected officials want clear formula driven allocations. Instigation decision support software for STIP development.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Tied to update of Statewide Plan. Explained funding in detail to demonstrate shortfall and need for new revenue sources. Reset program to a corridor basis and 12 priority classes.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Intentionally keeping Strategic Framework stable so goals/objectives don't move. Moved from prioritizing for fiscal constraint to prioritizing for safety, as a result of poor record. Capital programming shifted from Planning to Budget; 6 year funding agreement locks in 90% of the program, so little flexibility. Went to DC public on fare increase v service reduction; approved fare increase.

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Organization	**Contact**	**Question 1a** ***How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?***
Unifying Theme	Flexibility and financial uncertainty are being addressed by DOTs and MPOs in the context of Long Range Transportation Plan (LRTP) updates. There is somewhat greater communications from DOTs to MPOs in this context. Reflects decision making authority (State Legislature, State Transportation Commission, MPO Policy Board) in terms of who needs to be educated, who responds to opportunities for flexibility. Bottom line: while there are some new programming tools, this does not appear to a big issue for these agencies.	

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Organization	Contact	Question 1b
		Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Environmental review, historic preservation §106; tracking project obligations by phase.
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	No barriers identified. Facilitated by new state laws on P3 and performance based planning.
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	none identified
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	no response
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Discussing pricing regularly but barrier is legislative authorization for tolls on existing roads.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	fiscal constraint (beyond 10 year horizon meaningless and resource consuming)
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	none identified
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Federal uncertainty problematic. Doing scenario analysis of funding levels. New regulations a problem (TMDL, programming in TIP to receive ROD).
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	none identified

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Organization	Contact	Question 1b
		Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	no response
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	none identified
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	none identified
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	Initial concern of FHWA on level of toll revenue in MTP, resolved
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	No.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Lack of dedicated fund source for multimodal projects. Lack of experienced staff to progress multimodal projects. Support fiscal constraint, but identify waste of time on exercise, different federal agency interpretations.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Moving capital projects into STIP creates delays.
Unifying Theme	State DOTs generally find few barriers in planning regulations. The concept of fiscal constraint is supported, but the resources required to complete what is often seen as an exercise, particularly for the out years of the LRTP, are seen as excessive	

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Organization	Contact	Question 2
		How are system operations being addressed in planning?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	HSIP, SHSP, ITS plans
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	Created multimodal planning division; no indication understand M&O
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	Annual allocations to ITS, signals, traffic maintenance; possibility to fund stand alone operations project in STIP. Next year undertake System Operations Performance Measure and Planning study; support better inclusion of operations in next LRP.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Through performance-based planning and emphasis on congestion management/mitigation in project prioritization.
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Fully incorporated into CMP; active Operations Committee; updating ITS regional architecture. Half of CMAQ to operations, and dedicated funding in LRTP.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	Project selection criteria that address M&O; participation in TRANSTAR; exploring possibility of creating and managing a regional TIM program.

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Organization	Contact	Question 2
		How are system operations being addressed in planning?
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Answer based on internal management systems; answer to 1 indicates understanding of M&O ITD invests in cost-effective operational activities that promote mobility, safety and efficiency. Investment strategies for operations include: - Prioritizing operational investments to address congestion and safety concerns. - Encouraging investments that reduce or postpone the need for costly infrastructure expansion. - Encouraging investments that reduce ITD's maintenance burden and operational costs. - Supporting travel demand strategies that enhance state transportation operations. - Using new, proven technologies to reduce travel times, manage construction delays, improve safety, and enhance freight delivery. - Encouraging partnerships with local agencies and other stakeholders on operational investments. - Modernizing information systems to address customer needs.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Mostly handled short- term at district level, but aspire to do planning for operations, being more strategic and systematic.
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	Developing statewide travel demand model, which can be used to determine impact on statewide network of ITS, superstreets, signal systems. Corridor studies have addressed operational improvements.
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	not addressed
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	Oregon's policy documents emphasize preservation and maintenance. With a specific policy around gaining efficiencies from the system before looking at capacity increases
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	System operations considered with partners in TIP/STIP development. Recognize cannot build new capacity.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	M&O strategies included in MTP as programmatic cost.

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Organization	Contact	Question 2
		How are system operations being addressed in planning?
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	Primarily as maintenance level of service.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Corridor based ITS deployment strategy/plan (TOIP).
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Transit is an operating agency, so everything WMATA does is system operations. Always looking at reliability and capacity. Addressing signal priority, bus stop locations, specialized schedules to improve travel time.
Unifying Theme	State DOTs still have an unclear understanding of systems operations; this may be a consequence of who replied to the questions, but many who are used to the "maintenance and operations" jargon see the word operations and think of agency operations, not traffic operations. Colorado and Idaho seem to be the exception. MPOs have incorporated TSMO in their base programming; it is more a large urban issue and strategy.	

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Organization	Contact	Question 3
		Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Alaska Transportation Infrastructure Fund. Requires constitutional amendment to establish. Cruise ship passenger tax goes to localities, can be used for transportation projects.
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	P3, enabled by new state law
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	Some financing options currently under consideration are public-private partnerships, operating concession agreements, user fee-based project financing, and availability payment and design-build contracting.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Georgia is using HOT lanes to both management congestion and fund maintenance. Georgia is also using a transportation special purpose local option sales tax to fund regional transportation. Dedicated 1 cent sales tax. GDOT initiated a public-private partnership program in 2010.
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Using PPTA for some major projects; locals looking into TIFIA; one bridge paid 100% by developer.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	Has pursued discretionary federal grants, but understand that is not sustainable and moves decision making power from region to Washington.
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Governor's Task Force on Modernizing Transportation Funding; 40+ ideas, 8 most likely include excise taxes and registration fee modifications. Final report Jan 2011 recognized $200M shortfall, made no recommendation on phasing in new taxes.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Blue Ribbon Commission for Transportation Funding, to report by 11/11/11. Options under consideration include tolling, pricing, capacity of value capture tools, P3.
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	Legislature approved Mobility Fund that captures trust fund money that previously went to General Fund. Used for projects of statewide and regional significance. Only $58M/yr.

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Organization	Contact	Question 3
		Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	P3; larger local share for capacity enhancements.
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	In 2009, received an additional 6 cents added from gas tax. State has allocated a portion of the lottery funds to fund non-highway projects. But not targeting future revenue increases, goal is to run our program on limited funding.
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	Governor's Transportation Funding Advisory Commission to report Aug 1. $3.5B/yr shortfall of revenue v needs.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	Expansion of tolls and user fees.
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	Comprehensive development agreements/P3 allows sharing risk of design and construction with developers. Streamline project process. Regional Mobility Authorities as political entity to support toll/non-toll projects.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Proposed transfer of auto sales % use tax (7.5% -> 50%); and Petroleum Inspection Fund to Transportation Fund. No legislative support yet.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Funding determined; non-fare revenue generators are tiny.
Unifying Theme	Many states are conservative about exploring new fund sources, although many are investigating P3, and some tolling. Current fed and state rule stand in the way. A number of Executive level (Governor) commissions are empanelled to address transportation funding shortfall; these are primarily dealing with state fund sources rather than pricing and tolling.	

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Organization	Contact	Question 4
		How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Assessed through trends in statewide Plan: travel demand, subsidies, project cost, subsidies, climate change, dust control/PM non-attainment, system pres. FHWA high level risk assessment for Alaska (6 factor matrix).
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	Uses performance based planning (per state law - minimal measures) to assess investment choices.
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	FHWA and CDOT jointly-staffed Quality Improvement Council, which annually assesses risk on many department procedures and programs, then moves forward Quality Assurance Reviews on those risks deemed to have the greatest probability and impact.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Some agencies have the capability (i.e. data and modeling platform) to conduct risk-based prioritization of assets, but few are actually using it for decision-making. Scenario planning is another way to incorporate risk/uncertainty into the planning process by assessing performance of alternative funding levels
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	based on modeling of alternatives w/o specific projects. Note lost 2 critical bridge projects to funding shortfall; one is the one funded privately.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	Have not done so.
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Project based risk management plan, monthly risk analysis; oriented to managing individual projects.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Generally not done. Doing some financial scenario analysis.
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	Two part project prioritization, but not risk analysis.

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Organization	Contact	Question 4
		How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	prioritizing funding reductions based on risk; analyzing performance impacts of reduced funding; prescribed cost inflation
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	Oregon is not doing much on risk analysis. The Oregon Transportation Plan did include an investment scenario that recognized the impacts not only of no new funds but the impact that inflation would have on our buying power.
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	With asset based program, risk is not addressing capacity needs. No analysis.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	Conduct risk analysis planning for all major projects; sophisticated b/c analysis compare to plan baseline and limited investment alternative. Impact performance based planning process? The Transportation 2040 planning process identified values and related criteria that were used to evaluate alternatives. Based on the adopted plan targets can be identified and measured against in terms of congestion and mobility, environment and environmental objectives.
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	Begun analysis of opportunity cost and sustainable investment.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Have not done so.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Does not conduct risk analysis.
Unifying Theme	Few state DOTs are addressing risk analysis at all; those that are stand primarily at the project level rather than the program. MPOs are doing a bit better. Colorado is an exception, in collaboration with FHWA.	

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Organization	Contact	Question 5
		How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Focus on STIP management, project delivery.
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	Created Communication and Community Partnerships Division. CCP specifically embraces innovation, commitment, transparency, and trustworthiness in working with all stakeholders. Also, a 2 year exercise "Building a Quality Arizona" creates a framework of long range transportation solutions.
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	Created an Efficiency and Accountability Committee, oriented toward stakeholders rather than the public.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Performance reporting – quarterly, yearly, program-specific (like stimulus). In visual ways to easily communicate to public. MnDOT, WSDOT most often cited as good examples of transparent performance reporting
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Improved transparency, accountability, public outreach over past 3 years. Better monitoring of project obligations and expenditures. State legislation requires development of performance measures.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	Working to make project prioritization and programming more understandable and transparent to elected officials and the public.
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Committed to accountability. Engage MPOs in revenue forecasting.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	StateStat - Governor's performance measurement and management tool. Annual tour of Counties to present capital program to elected officials and public.
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	Project prioritization and project delivery all publicly accessible on web, using performance dashboards.

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Organization	Contact	Question 5
		How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	Did not understand question.
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	This is ODOT's annual performance measure report, which is good resource for this information. The State of the System Report coupled with this information provides a good portion of the information that is provided to the public
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	Improved web based tools to give public access to TIP.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	Tied to WSDOT Grey Notebook reporting. PSRC provides additional tracking
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	All project related information reported on TRACKER website.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Proposed tracking implementation of 2030 Plan, but do not have the resources to do so.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Vital Signs report: monthly, on web. 12 performance indicators. Positive public response, better media control.
Unifying Theme	While not universal, there is broad understanding of the need to be accountable to elected officials and the public. More agencies are using web based reporting of performance measures, although the range of those measures varies widely. Examples include Maryland's StateStat, TxDOT's TRACKER, Washington's Grey Notebook, WMATA's Vital Signs. Positive feedback from the public and decision makers has reduced the fear factor.	

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Organization	Contact	Question 6
		How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?
Alaska DOT	Jack Stickel Transportation Planner 907-465-6998 Jack_Stickel@dot.state.ak.us	Acknowledge different view as energy/resource producing state. "Juggling conflicting goals": Urban versus rural funding; Energy/natural resource development versus the environment; Energy development versus long term needs and potential markets; Funding for each of the transportation modes versus the area it serves, i.e., marine air, and highway service; Affordable livability versus operations & maintenance of transportation network; Air quality versus transportation contribution as a pollutant source; Permitting for construction & energy exploration versus need to protect the environment; Community changes/destruction due to climate change versus cost to maintain existing transportation infrastructure; Economic diversification and job creation versus dependence on major players in the oil, gas, timber, natural resource, and fisheries
Arizona DOT	Jennifer Toth Multimodal Planning Division Director 602-712-8143 jtoth@azdot.gov	Multidisciplinary climate change team in ADOT. Voluntary Smart Growth Scorecard for local entities.
Colorado DOT	Sandi Kohrs Branch Manager, Planning and Performance 303-757-9795 sandi.kohrs@dot.state.co.us	Partnership with Smart State Transportation Institute, CDoEnergy, and MPOs. (1) Energy Smart Transportation Initiative; (2) performance measures and b/c tools for economic growth initiatives. CDOT developed GHG emissions model. Adopted a policy directive in advance of its 2035 Statewide Long Range Plan to address (1) quality of life, (2) environment, (3) accessibility, connectivity, and modal choices, and (4) social responsibility.
Georgia Tech	Elise Barrella PhD Student, Transportation Systems Georgia Institute of Technology 717-979-5488 ebarrella@gatech.edu	Many of these goals are being incorporated into the agencies' mission statements and/or project prioritization process, particularly those goals that are supported/mandated by state legislation, executive orders, or new funding programs .
Hampton Roads Transportation Planning Organization	Camelia Ravanbakht Deputy Executive Director 757-420-8300 cravanbakht@hrpdcva.gov	Included in LRTP goals. Applied/did not receive HUD sustainability grant.
Houston Galveston Area Council	Ashby Johnson Deputy MPO Director 713-993-2474 ajohnson@h-gac.com	Early study work on GHG emissions. Work with local governments on sustainable land use concepts, transit supportive development.

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Organization	Contact	Question 6
		How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?
Idaho Transportation Department	Sonna Lynn Fernandez Intermodal Planning Manager 208-334-8209 Sonnalynn.Fernandez@itd.idaho.gov	Promoting livable communities through a balanced approach: • Community livability • Support partnerships to pursue transportation choices. • Avoid or mitigate environmental impacts. • Support the efforts of land use, housing and energy agencies. • Support the economic competitiveness of neighborhoods. • Seek opportunities to remove barriers Internal GHG action plan. IPlan is an interactive planning and analysis tool developed to give decision-makers access to data to support informed discussions and decisions. IPlan also facilitates synchronizing planning efforts with other state agencies, local governments, federal agencies, utility companies, and within IDOT's many departments. IPlan is an interactive web application that allows stakeholders to access data where they live their lives.
Maryland SHA	Reena Mathews Regional Planner 410-545-5668 rmathews@sha.state.md.us	Initiated the Comprehensive Highway Corridors (CHC) program. As part of this initiative, in the process of developing of a Model Of Sustainability And Integrated Corridors (MOSAIC), which defines sustainability indicators, analyzes the sustainability impact of corridor improvements early in the planning process, and identifies environmental mitigation needs. The sustainability indicators include mobility, safety, air quality, green house gas emissions, environmental impact, and socio-economic measures. Growing investment in bike/ped, TOD, park & ride, CSS.
North Carolina DOT	David Wasserman Transportation Engineer 919-715-1273 dswasserman@ncdot.gov	Working on definitional issues for performance dashboards. Consider economic health and jobs, energy use at rest areas. Use FHWA Driven model (reference Maine) consider economic vitality, safety, multimodal aspects, and travel time savings in project selection.
Ohio DOT	Gregory T. Giaimo Travel Modeling Manager 614-752-5738 greg.giaimo@dot.state.oh.us	no response; focus on system preservation.
Oregon DOT	Jerri Bohard Transportation Development Division Administrator 503-986-3435 Jerri.L.Bohard@odot.state.or.us	The Oregon legislature has required the state agencies of transportation, land use, and dept of energy to address climate change concerns and implement the reduction of GHG goals that were established by the legislature in 2007. sustainability has been seen as way to minimize costs as we look at the lifecycle costs and are not viewed as being in conflict with livability

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Organization	Contact	Question 6
		How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?
Pennsylvania DOT	Jim Ritzman Deputy Secretary for Planning 717-787-3154 jritzman@state.pa.us	Not primary goals. Work with locals on project delivery.
Puget Sound Regional Council	Charlie Howard Director of Transportation Planning 206-464-7122 choward@psrc.org	Central theme of MTP, spending to define and weight these factors for priority ranking.
Texas Transportation Institute/Texas DOT	Montie Wade Senior Research Engineer 817-462-0531 montie-wade@tamu.edu	Just defining sustainability; using economic impact as a metric.
Wisconsin DOT	Sandra Beaupre Director, Bureau of Planning & Economic Development 608-266-7575 sandy.beaupre@dot.wi.gov	Previous Governor created Task Force on Global Warming. Some recommendations incorporated in 2030 Plan. Current status unknown with new Governor.
WMATA	Patricia Hendren Director, Office of Performance 202-962-2677 phendren@wmata.com	Transit is by definition a contributor to regional sustainability.
Unifying Theme	While there is broad support for addressing these factors, it is not very deep. With many states focused on asset management/system preservation, they acknowledge having few resources left. Colorado is an exception	

Appendix C:
Participants Full Responses to Pre-Peer Exchange Questions

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

ELISE BARRELLA, GT

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

Note: I am not affiliated with a particular agency, so my responses will be more generalized with specific examples when possible.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

For programming and project selection, some agencies use scenario planning to consider different funding levels and/or investment themes/emphases and investigate impacts on the system. For example, the 2006 Oregon Transportation Plan update assessed seven policy scenarios and three investment scenarios to determine system performance outcomes of different levels/types of investment. Montana DOT uses Performance Programming Process (P3) which is a decision process for funding allocations based on asset management principles, scenario planning, and strategic goals. Scenario planning provides a menu of options for decision-makers to choose from and provides information for assessing trade-offs.

Asset management frameworks are becoming more prominent as many agencies shift from new construction to preservation emphases. On a related note, life cycle assessment (both monetary costs and impacts) is used by several states for pavement selection, but could be used more widely (and comprehensively) to prioritize capital and operating funds over the long-term or identify future funding gaps. Can incorporate uncertainty and multiple criteria into LCA.

2. How are system operations being addressed in planning?

- *Developing appropriate performance measures and incorporating into performance-based planning*
- *Emphasis on congestion management/mitigation in project prioritization (HOV/HOT networks, ITS, etc.) – e.g. Atlanta Regional Commission's prioritization framework for the RTP & TIP weights congestion reduction 70%*

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

Georgia is pursuing a couple of new funding sources:

1. *HOT lane demonstration opening in August 2011 along 15-miles of I-85. GDOT has a proposed network of HOT lanes to both manage congestion and fund maintenance, transit, and ITS on the highway corridors. (Project initiated with funding from USDOT's Congestion Reduction Demonstration Program)*
2. *Transportation Special-Purpose Local Option Sales Tax (T-SPLOST). Dedicated regional transportation sales tax – 1 cent sales tax to be approved by referendum in 2012. State divided into 12 regions and each will vote to pass the sales tax and approve the list of projects for their region. Atlanta Regional Commission (MPO) estimated that the 10-county Atlanta region could raise $790 million per year for ten years. Regions are currently in the process of compiling/prioritizing project lists, which will include highway capacity and maintenance projects, transit projects, pedestrian and bike projects, etc.*
3. *GDOT initiated a Public Private Partnerships (P3) Program in 2010 and currently has 3 projects in the planning/environmental review stages, including a Multi-Modal Passenger Terminal in downtown Atlanta (which has been on the books for years), a managed lanes project, and a rest area project.*

   Success of these new strategies (particularly passage of the T-SPLOST) will certainly impact the next round of regional and statewide transportation plans.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

Risk-based frameworks to assess trade-offs among risks, benefits, and costs. Applied to asset management to prioritize needs for maintenance, repair, and replacement of critical assets - prioritize according to "risk of failure" or non-performance by defining performance requirements for different asset classes. Can also relate performance of multiple classes, for example bridge load restrictions affect pavement performance. Based on a recent survey of asset management at DOTs and local agencies (conducted by researchers at Georgia Tech), NYS, FL, OR, CO, WA are leading in terms of managing multiple ancillary assets, though there is still limited data integration and analysis across asset classes. Some agencies have the capability (i.e. data and modeling platform) to conduct risk-based prioritization of assets, but few are actually using it for decision-making; they rely instead on historical data (how frequently assets were replaced in the past) and "expert judgment". An example of an available risk-based framework:

Cambridge Systematics offers Arivu, a risk-based AM software that considers both the probability of service interruption (or asset failure) and the consequences of interruption. From the survey results, there also seemed to be a disconnect between strategic goals and the performance measures that drive asset management.

Frameworks also being developed to assess climate-related risks to transportation infrastructure and prioritize retrofits, relocation, etc. Sea-level rise studies in California and along Gulf Coast are a step in developing these risk-based frameworks.

Scenario planning is another way to incorporate risk/uncertainty into the planning process by assessing performance of alternative funding levels (as mentioned in response to Q1).

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

Performance reporting – quarterly, yearly, program-specific (like stimulus). In visual ways to easily communicate to public. MnDOT, WSDOT most often cited as good examples of transparent performance reporting; Iowa DOT (www.resultsiowa.org/transport.html) and Missouri DOT (www.modot.org/about/general_info/Tracker.htm) and New Zealand Ministry of Transport also produce performance reports that can be easily digested by the public

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

Many of these goals are being incorporated into the agencies' mission statements and/or project prioritization process, particularly those goals that are supported/mandated by state legislation, executive orders, or new funding programs (i.e. HUD-EPA-DOT Livable Communities Initiative). CSD policies/manuals, green rating systems, separate sustainability plans (often with goals and targets) are being developed to address one or more of those goals. Many sustainability initiatives link several of those goals together, though there is considerable variability in how those goals are emphasized and the actual programs that are implemented to tackle those goals. Examples of more "comprehensive" frameworks include Caltrans Smart Mobility Framework, PennDOT Smart Transportation, New Zealand Ministry of Transport's 2008 Transport Strategy.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

I have attached a PowerPoint with the notes that we have been using in our discussion with legislators, the Governor's office and our Transportation Commission as to the effect that reduced funding could have on our transportation system.

A key discussion that our agency is just entering into and our director expects us to finish up by the first of August is what we are calling a "right sizing" discussion.

During the past decade, the federal government and the Oregon Legislature have made significant and historic investments in the transportation infrastructure through the three-part Oregon Transportation Investment Act, through the three installments of the ConnectOregon program, through the American Recovery and Reinvestment Act, and most recently, through the Jobs and Transportation Act.

The delivery of the projects from those programs has given the department and our private sector partners a large volume of work. These investment volumes have hidden a steady decline in STIP funding. Within the next five years, the funding for those programs will have run its course for the most part – leaving us essentially with downward trending STIP funding -- from about $350 million to $250 million. That means less work for us and the private sector.

All of these factors and others point to a leaner ODOT by 2015 in both FTE and dollars. That is a given. What is not a given is how we accomplish that objective. We can wait until the work is finished and go through a series of layoffs, accompanied by all the disruption that brings. I have begun an initiative to match the workforce with future revenue and workload. The first step is a hold on filling vacant positions and submitting reclassifications. ODOT must right size itself to align with expected revenues and projected workloads. The agency must manage its inventory of positions to continue meeting expectations into the future.

You will see in the PowerPoint that we had already assumed a reduction in federal and state funds and our STIP reflected that reduction by not identifying any new modernization/capacity projects for the years of 2014 and 2015. Couple of issues around this is that we have legislation requiring a certain level of gas tax being spent on modernization projects, which will affect us in the future. In addition, in the 2009 legislative session where the state approved a 6 cent increase in gas tax, they earmarked much of the new funds going to the state to a specific list of projects, many of these projects have a funding gap, especially those that assumed some federal earmark funds both of which could impact our flexibility in the future.

Our statewide policy documents, both the Oregon Transportation Plan and our modal plan on Highway assume a preservation/maintenance priority over expansion of the system and that has been our direction since the early 1990s.

2. How are system operations being addressed in planning?

As mentioned our policy documents emphasize preservation and maintenance. With a specific policy around gaining efficiencies from the system before looking at capacity increases.

Action 1G.1

Use the following priorities for developing corridor plans, transportation system plans, the Statewide Transportation Improvement Program, and project plans to respond to highway needs. Implement higher priority measures first unless a lower priority measure is clearly more cost-effective or unless it clearly better supports safety, growth management, or other livability and economic viability considerations. Plans must document the findings, which support using lower priority measures before higher priority measures.

1. Protect the existing system. The highest priority is to preserve the functionality of the existing highway system by means such as access management, local comprehensive plans, transportation demand management, improved traffic operations, and alternative modes of transportation.

2. Improve efficiency and capacity of existing highway facilities. The second priority is to make minor improvements to existing highway facilities such as widening highway shoulders or adding auxiliary lanes, providing better access for alternative modes (e.g., bike lanes, sidewalks, and bus shelters), extending or connecting local streets, and making other off-system improvements.

3. Add capacity to the existing system. The third priority is to make major roadway improvements to existing highway facilities such as adding general purpose lanes

4. Add new facilities to the system. The lowest priority is to add new
Transportation facilities such as a new highway or bypass.

Specifically we have developed ITS plans both statewide and for each of our MPO areas.

There is also a requirement in Oregon for consistency with state land use plans and transportation plans. So as our facility plans are developed and our local transportation system plans the policy outlined above is key to the development of those plans.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

During the 2009 legislative session, our Agency was successful in seeing an additional 6 cents added to the gas tax with portions of the funding go to city and county road programs, some going to state maintenance, and the rest essentially identified for a series of modernization

projects. The state has also been successful in allocating a portion of lottery funds for non-highway projects – this program is known as connectoregon. We anticipate seeing this program continue and while the funding will be reduced from 100 million to 40 million during this session, keeping the program afloat is a success.

We currently have a group looking at funding options to sustain our rail program and they are suppose to be forwarding recommendations at the end of the calendar year.

However, in our discussions we are not anticipating any new funding sources at this time so our investment scenarios are framed more around how to triage our programs based on limited funding.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

I am not sure that we really have done enough to incorporate risk into the discussion. At a minimum in our facility planning or local govt planning for transportation, we do alternatives that include do nothing. The Oregon Transportation Plan did include an investment scenario that recognized the impacts not only of no new funds but the impact that inflation would have on our buying power. This follows with policies on how to triage the state's transportation system given the limited funding opportunities.

Part of the work that we are doing is around Least Cost Planning with the intent being able to monetize many of the components associated with selecting a series of projects or actions. I have provided the website information. We are in the early stages hoping to have a beta version in approximately a year.

Also, provided in a link to our State of System report, which identifies some of the key performance measures that we are tracking and the status of those components. This report is done every two years in anticipation of any legislative conversation.

http://www.oregon.gov/ODOT/TD/TP/LCP.shtml
http://www.oregon.gov/ODOT/TD/docs/StateOfTheSystem/ODOT_SOS-webStandard-w-covers.pdf

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

This is ODOT's annual performance measure report, which is good resource for this information. The State of the System Report coupled with this information provides a good portion of the information that is provided to the public – although not always using these documents.

http://www.oregon.gov/ODOT/CS/PERFORMANCE/docs/2003ODOTPerformanceReport.pdf?ga=t

With regards to how we are adjusting our project delivery/investments given limited funding – ODOT has initiated a new program called Practical Design and the web link is identified below

http://www.oregon.gov/ODOT/HWY/TECHSERV/practical_design.shtml

The intent of practical design in Oregon is to take a systematic approach to deliver the broadest benefits to the transportation system, within existing resources, by establishing appropriate project scopes, to deliver specific results.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

The Oregon legislature has required the state agencies of transportation, land use, and dept of energy to address climate change concerns and implement the reduction of GHG goals that were established by the legislature in 2007. The web page below highlights the various work that is going on.
http://www.oregon.gov/ODOT/TD/OSTI/

For Oregon, sustainability has been seen as way to minimize costs as we look at the lifecycle costs and are not viewed as being in conflict with livability etc. That said the emphasis is definitely on economic development and job creation – which is more around given our limited resources putting them in a place that they provide the greatest benefit. The other expectation from the Governor's office is really around industrial lands and having all the state agencies work together to streamline opportunities for developing these lands and knowing what the limitations on development might be –such as infrastructure limitations be it water, energy or transportation.

We have also established a process to look at alternative mobility standards and to be a little more flexible as we do the analysis necessary for evaluating the development proposed against mobility standards/capacity of the roadway.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Idaho's Response

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

The Idaho Transportation Department (ITD) is addressing the need for flexibility in the current unsettling fiscal climate by addressing the lack of adequate funding to maintain, operate and expand our state transportation system through the restructuring of department's goals, developing a clear project selection/prioritization process, restructuring the programming process, monitoring the department's progress through performance measures. These activities are addressed below.

a. Change in Department Philosophy

In January 2010, the Idaho Transportation Department received Brian W. Ness as its new Director. Director Ness brought with him a new leadership style and management philosophy. He believes in setting high goals and positioning employees to achieve them. He holds employees accountable for attaining those goals. Organizational success and individual performance is based on those goals that are defined and measurable. He is a firm believer in delegating responsibility and authority to the appropriate level. He believes that the best decisions are made closest to where the work is being performed and operations are taking place. ITD's front line employees are permitted to make decisions that best serve our customers. His leadership style is clear that everyone is to work together as one team and employ the highest ethical standards in doing so.

This change in philosophy provides more flexibility to conduct daily business and provides resiliency in responding to government officials and customers.

b. Departmental Vision

The department vision has also changed in order to provide flexibility. According to Director Ness, the overriding vision for the department is "to be the best transportation department in the country." He stated that "although the department can tell our customers the good things we do, and say we are the best, but if we have to tell someone how good we are, then we may not be as good as we think. Our customers have to see and believe we are the best." In other words, the Director says that the department's actions speak louder than words.

Here is a brief outline of the Director's vision.

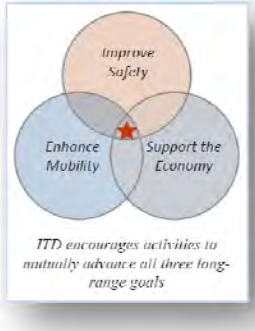
- **ITD strives to continually get better with the goal of being the best transportation department in the country.** Idaho taxpayers deserve the best transportation system possible. ITD must invest their money wisely. These means improving how the department operates and continually look for ways to be even better.
- **ITD is transparent, accountable and delivers on its promises.** This is about credibility. ITD will not promise what we cannot deliver. And when we do promise, we must deliver. Accountability means being responsible for accomplishing a goal or assignment. ITD's accountability program will be a helpful

and progressive method of assigning and completing work and will create a safe climate for improved solutions and change.

- **ITD seeks to be more effective and to save costs through increased efficiency.** ITD is the steward of the taxpayer's money. The department is to strive to spend these dollars as effectively and as cost effectively as possible to build, maintain and operate a world class transportation system. ITD must continually look for new ways to reduce our operating and overhead costs.
- I**TD provides extraordinary customer service.** ITD cannot be a "no" organization. The department should always try to get to "yes" when it is in the best interests of the public and department. In the end, the final answer may be "no." That's okay, as long as we are seen as trying to get to a resolution rather than acting as a bureaucratic roadblock. We must always be asking ourselves, "How can we help the customer?"
- **ITD uses partnerships effectively.** Partnerships are about working together. The Director defines partnerships as when all parties come together to achieve a common goal, where all parties have a vested interest in the outcome, bring resources to the table, and have input into the direction and decision making.
- **ITD values teamwork and uses it as a tool to improve.** Management and staff must be on the same page and headed in the same direction. The department must recognize weaknesses and draw on the strengths of others to fill those voids. Collaboration among headquarters, divisions and the districts is essential for the department to do its best work.
- **ITD places a high value on its employees and their development.** ITD employees are our greatest asset. The department must invest in your well being and ensure the public is served by a well-trained, competent staff.

This vision serves to remind staff to provide the best service possible to our customers and partners and provides a climate for staff to develop solutions instead of playing the blame game.

c. Department Goals



In December 2010, ITD completed its Long-Range Transportation Plan: ***Idaho on the Move***. This plan describes the path forward by defining the primary long-range transportation goals for Idaho. The approach relies on realizing how three key goals relate to the performance of the system: Safety, Mobility and Economic Vitality. ***Idaho on the Move*** carries forward all core visioning elements established in prior plans and policies and becomes the department's official Long-Range Transportation Plan.

Idaho intends to leverage investment and resource decisions in all areas to realize mutually beneficial results. The alternative would see the department pursue piecemeal spot benefits from investments and allocation of resources.

The plan also outlines the following investment strategies:

- **ITD Makes Sound Investment Decisions**
  ITD is responsible for stewardship of taxpayer's money and strives to spend dollars as cost-effectively as possible to build, maintain and operate a world-class transportation system. The department continually looks for innovative ways to reduce costs and improve productivity.

- **ITD Uses Asset Management Principles**
  ITD has direct responsibility for state-owned facilities such as highways, bridges, port of entry facilities, rest areas, state-operated airports and other facilities. For state-owned infrastructure, the department's priority is to take care of the existing system first. Capital investments are made as resources allow with deliberate attention to long-range goals and objectives.

- **ITD Collaborates on System Investments**
  The department works closely with local transportation agencies to fund investments in public transportation systems, local roads, airports, bicycle/pedestrian facilities, railways, and port facilities. ITD participates statewide in cooperative planning forums with transportation partners to build complete transportation systems. Using management practices that maximize the effective life of transportation assets provides for the best investments.

d. <u>Prioritization Process</u>

ITD's prioritization process for selecting projects is based upon "OPRE." Investments on state-owned transportation facilities can be described as Operations, Preservation, Restoration or Expansion. These categories and their investment strategies are detailed below.

- **Operations – "O"**
  Operational investments allow existing assets to be used to their fullest by keeping the system open and safe. The operations category also includes maintenance activities that safeguard the useful life, functionality, and safety of existing infrastructure. Example operations activities include pavement patching, snow removal, ncident response, bridge repair, weigh station operations, state airport and roadway weather information systems, traffic cameras, and many other essential functions.

  ITD invests in cost-effective operational activities that promote mobility, safety and efficiency. Investment strategies for operations include:
  - Prioritizing operational investments to address congestion and safety concerns.
  - Encouraging investments that reduce or postpone the need for costly infrastructure expansion.
  - Encouraging investments that reduce ITD's maintenance burden and operational costs.
  - Supporting travel demand strategies that enhance state transportation operations.
  - Using new, proven technologies to reduce travel times, manage construction delays, improve safety, and enhance freight delivery.
  - Encouraging partnerships with local agencies and other stakeholders on operational investments.
  - Modernizing information systems to address customer needs.

- **Preservation and Restoration – "P and R"**
  Preserving infrastructure currently in good condition and restoring facilities in deficient condition are keys to being efficient and effective, and positively impacting roadway safety.

  Key strategies for preservation and restoration of state-owned facilities include:
  - Prioritizing infrastructure preservation activities to maximize the life and utility of prior investments.
  - Using ITD asset management systems to identify system preservation and restoration strategies.
  - Encouraging investments that reduce ITD's maintenance burden and minimize future costs.

- **Infrastructure Expansion – "E"**
  When financial resources are available to increase the capacity of state-owned facilities, ITD links capital investments to all three long-range goals: safety, mobility, and economic vitality.

  ITD's expansion investment strategies include:
  - Focusing on expansion investments that address mobility and safety concerns.
  - Encouraging infrastructure expansion investments that promote the integration and development of an inter-modal system.
  - Collaborating with metropolitan planning organizations, tribal nations, local elected bodies and other stakeholders to identify expansion investments that meet safety and mobility needs, support the state's economic vitality, and have broad support.
  - Emphasizing expansion investments that are recommended by cooperatively developed statewide, regional, metropolitan and corridor plans.

- Leveraging local agency cost sharing opportunities and exploring partnerships for state infrastructure expansion investments.

Promoting the long-term sustainability of infrastructure expansion investments by ensuring that what is built can be maintained.

e. <u>Performance Management</u>

ITD's effort to become a national leader in the transportation industry and a model for other Idaho state agencies demands that everything the department does takes place in an open arena where people can assess our progress and hold us accountable for results. Today, more than ever, the department must demonstrate sound fiscal responsibility and wise use of the tax dollars entrusted to us. ITD receives a portion of every dollar Idaho motorists spend on fuel for their vehicles and every vehicle registration fee they pay. Those taxes and fees pay our salaries and benefits, the equipment we buy and the materials we use. Motorists demand that we use their money wisely and effectively. They expect the department to operate transparently, to be accountable for our decisions and actions, and to deliver on the commitments we make.

Transparency simply means that ITD wants people to understand what we do and why we do it. Many times it may mean that others have a say in how the department does things. That public is important to the department's decision-making process. To be accountable, ITD will begin to measure accomplishments against promised timelines. When ITD makes a promise, ITD must deliver. That is essential as the department sets high standards and constantly tries to reach or exceed those standards.

ITD's commitment to accountability will work several ways: the Director will hold staff accountable for their performance; in turn, staff should hold the Director accountable for commitments that he makes. The department must hold each other accountable and push to make each other better.

One tangible way of ensuring the process takes place as planned is through performance management – continually monitoring and assessing our progress. The goal of performance measures is not to measure, but to determine if we are reaching our goal of continually getting better.

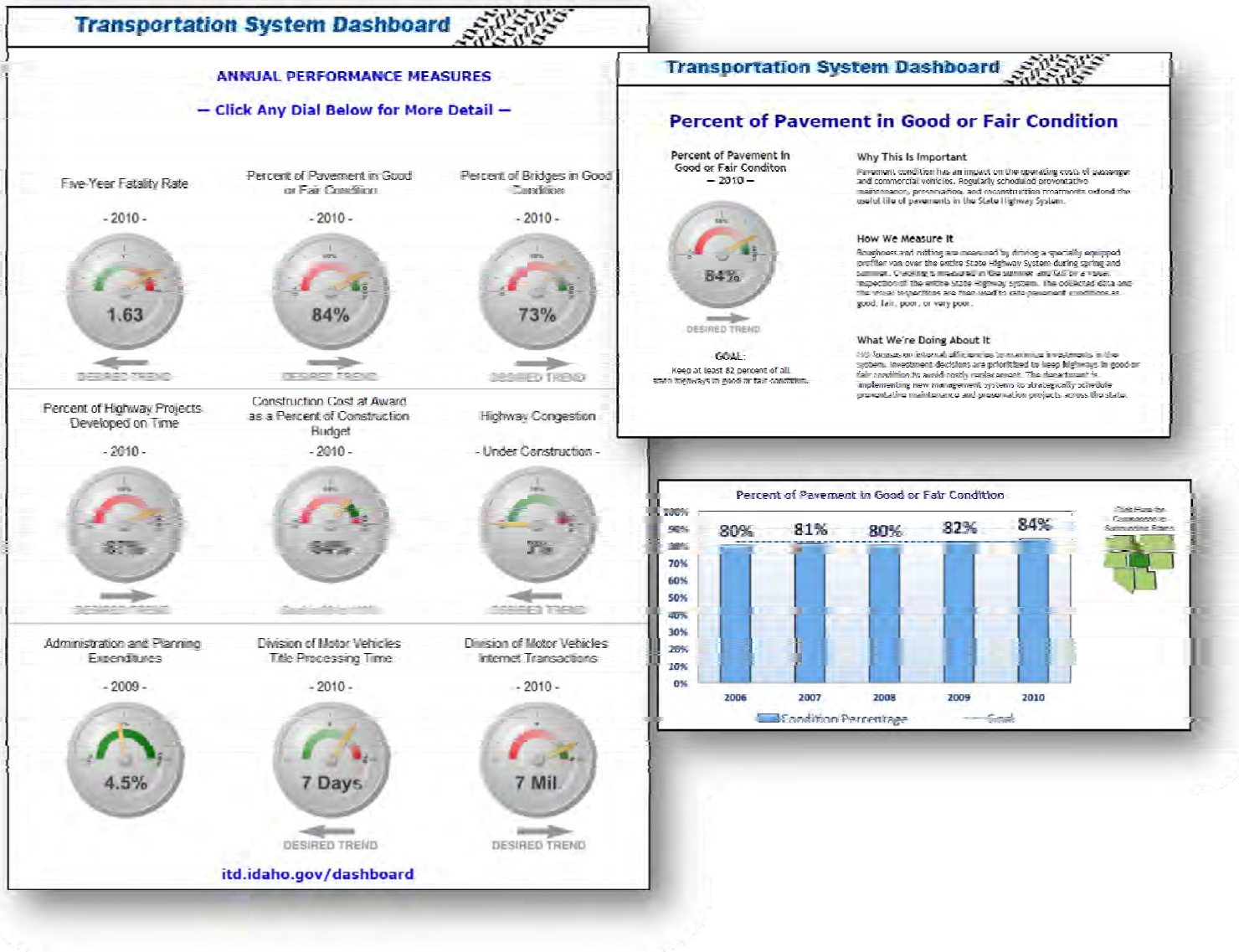
ITD will publish performance measures and goals on our website so that everyone can better understand expectations and track progress. Performance measures tell the department where we want to go, the best way to get there, how far we have come and how far we have to go.

The Idaho Transportation Department is committed to efficiency, transparency, and accountability. As stewards of public funds and managers of Idaho's largest infrastructure—the state highway system—we understand the importance of maintaining an open and responsive approach to all that we do. Our progress reporting is a living process. It will continue to evolve as we reach new milestones, achieve new efficiencies and address new challenges.

The dashboard is interactive and to see more information about any one of the performance measures tracked by the department, all a person needs to do is click on the dial. The dial page provides the actual goal being measured, a gauge of the desired trend, why the goal is important, how it is measured and what the department is doing to minimize/maximize investments. Furthermore, the page compared ITD to surrounding states.

Here is an example of ITD's Accountability webpage:

To see ITD's performance dashboard, visit: www.itd.idaho.gov/dashboard.



f. Department Realignment

After nine months of meeting with employees, elected officials and customers and assessing how the department operates, Director Ness found that there was a need for major department realignment. He found that:

- There are as many as nine layers of management between the front line workers and myself.
- There are 62 instances of one employee being managed by just one supervisor.
- We have 11 assistant managers.
- There is duplication of effort, especially between Headquarters and our district offices.

The realignment will improve customer service, efficiency and accountability and save a minimum of $1.5 million over the next two years. This will be accomplished by first reducing the layers of ITD management and second, giving decision-making back to employees who are closest to where the work is being done.

The new organization will have:

- Five layers of supervision
  - Director – serves at the pleasure of the transportation board and is responsible and held accountable for carrying out the goals of the Board and Governor.
  - Executive Officers – these positions are appointed by the Director and serve at my pleasure. The executive officers are responsible and held accountable for setting policy and effectively delivering services.
  - Administrator level – this level includes administrators in both our Headquarters and in the field. These individuals are responsible and held accountable for implementing programs within the established budget and deadlines.
  - Managerial level – this level turns programs into actions. These individuals are responsible and held accountable for managing projects or operations and for achieving specific results.
  - First line supervisors – this is the front line supervisory position for ITD. These individuals, along with their staff, are responsible and held accountable for performing the daily work.
- Managers supervising an average of eight to 10 employees.
- The assistant managers will be eventually phased out.
- Minimized duplication of effort – For example, the Division of Planning was eliminated and those positions were placed closer to those areas they served.

2. How are system operations being addressed in planning?

a. Project Scheduling System (PSS)

The Idaho Transportation Department (ITD) is focused on making on-time on-budget project delivery of the Statewide Transportation Improvement Program (STIP) a priority. With a transitioning workforce and increasing demands, it is essential that ITD ensure better utilization of our resources. ITD has decided to develop and implement a Project Scheduling System (PSS) to help track project schedules and promote early identification of areas causing bottlenecks and delays. The PSS must be in place and implemented statewide (i.e. all STIP projects included) by January 1, 2012.

The PSS utilizes Microsoft Enterprise Project Management tools that have strength and value in tracking project progression and managing project resources. Although these tools do not provide solutions or proactive guidance on how to avoid or fix delays, its usefulness comes from identifying delays or resource conflicts early so that project managers can resolve conflicts before they become a crisis.

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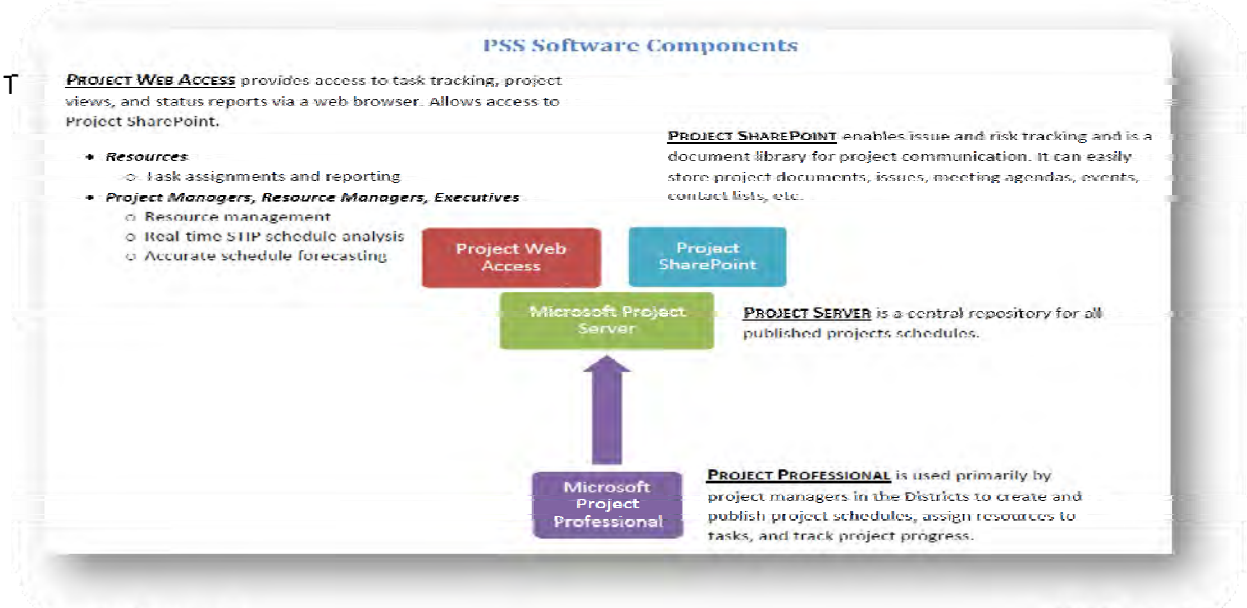


The PSS allows for accountability through transparency. Data regarding milestone completion, delivery status, project health, and cash flow analysis will be extracted from the schedules and posted to internal and external websites. One of ITD's goals is to be accountable to the public for all of our achievements and shortcomings by providing clear and concise information to the people of Idaho, elected officials, and our other transportation partners. The PSS will be able to fulfill this objective with its sophisticated data analysis capabilities.

Status Update:
As the Project Scheduling System (PSS) has developed over the last two years, it has become apparent that continued support to move to a full operational implementation is required. Concurrent efforts have focused on incorporating standardized project management principles into ITD's culture through training and documentation. As the Project Scheduling System and Project Delivery Program (PDP) continue to evolve, a re-scoping effort is needed to identify the long-term direction for the program and the subsequent steps to make it happen.

The PSS/PDP staff recognizes that executive expectations and vision for the program have significantly increased since the onset of this effort to now include at least the following items:

- All STIP Projects loaded into the scheduling software
- All schedules resource loaded with HQ and District staff
- Justify consultant usage
- Perform cash flow analysis

b. <u>Transportation Asset Management Systems (TAMS)</u>

A Pavement Management System (PMS) is generally defined as a system which identifies optimum strategies at various management levels and maintains pavements at an adequate level of serviceability". These include, but are not limited to, systematic procedures for scheduling maintenance and rehabilitation activities based on optimization of benefits and minimization of costs. Historically, Idaho has used their pavement management system (PMS) to manage approximately 12,000 lane miles, with additions and subtractions annually.

In 1977, the Idaho Transportation Department (ITD) began a review of existing pavement management programs with the goal of adopting one to fit Idaho's needs. The following year a Pavement Performance Management Information System (PPMIS) was acquired and made operational on ITD's mainframe computer. Since 1978, the PPMIS has been improved and modified to meet conditions in Idaho. Economic analysis and optimization was added in July 1986. The HERS-ST (Highway Economic Requirements System, State model), from implemented in 2007 as software to forecast pavement condition by economic analysis. HERS-ST is a federally maintained computer model run with data taken from ITD's mainframe. Rehabilitation and reconstruction project recommendations were generated by this system and distributed to Idaho's 6 districts for consideration.

ITD used the HERS-ST model to provide information on how quickly Idaho pavements will deteriorate, what types of projects are recommended for the pavement sections, what year the projects might be programmed, and approximately how much they would cost. However, the HERS-ST model often did not provide results consistent with what ITD showed for their historical deterioration, and thus required mathematical modification.

In 2008, Applied Pavement Technology, Inc was hired by ITD to perform an evaluation of the department needs for a maintenance and pavement management system. They presented their findings in a report dated December 18, 2008.

The evaluation report found that the existing pavement and maintenance management system had the following flaws:

- Maintenance management projects were not tracked by the pavement management system
- PMS could not provide districts with information on the most cost effective use of their available funding
- The HERS-ST model focused on a *worst-first* strategy, which has been shown to lead to worse long-term pavement conditions than a *best-first* pavement preservation-focused strategy
- The current system did not reward districts for preventative maintenance programming (such projects could not raise a pavement out of deficiency so there was little incentive to program them)
- All pavement data such as historical condition, cracking index, programmed projects, roughness index, rutting depth, friction number etc. was kept in a small division of Headquarters and was unavailable to district or headquarters personnel without a lengthy wait period
- Needs reports showing the locations and distresses of the pavement were created after the time period in which pavement project programming was performed, rendering them less useful
- Funding was decreasing as deficient pavement was increasing, amplifying urgency

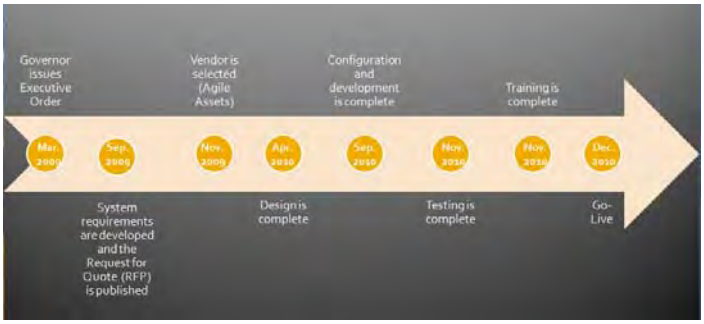
The Applied Pavement Technology report heavily recommended that the department purchase pavement management software to better analyze treatments strategies for their network. Additionally, it realized that ITD had no maintenance management system in place, and recommended that one be implemented as soon as possible.

Following the first evaluation, a Performance Audit of the pavement management system was performed by the Office of Performance Evaluations (OPE) in January 2009 (2). This report had similar findings to the first evaluation, also noting the need for a *best-first* strategy. It also noted the distinct and troubling lack of communication between maintenance forces and pavement management; state maintenance work was not tracked due to a lack of a maintenance management system, and thus all maintenance work performed on pavements did not get accounted for in the pavement management system. Districts were performing work on deficient sections that was not tracked by Headquarters, and thus no improvement was shown in the construction history records.

Project Implementation Schedule

After the review of these two independent external reports of the pavement management system at ITD, Idaho's Governor Otter issued an Executive Order in March 2009. This Order instructed ITD to develop requirements for a new pavement management and maintenance management system by January 1, 2010, with implementation of such a system in place and live by January 1, 2011.

A task force was created immediately to design and release a Request for Proposal (RFP). The RFP was released and in late 2009, ITD purchased and began implementation of a new pavement management and maintenance management system, abbreviated as "TAMS" (Transportation Asset Management System) immediately thereafter. The new system software was purchased from AgileAssets, who provided both maintenance management and pavement management modules for implementation by January 1st, 2011.



An AgileAssets consultant team was assigned to the year-long project, with an ITD project lead for each module, an AgileAssets project manager on-site in Idaho, and an independent project manager consultant for each module. An extremely aggressive and tightly controlled schedule was necessary to bring such a large, complex system in place in 12 months. Scope and schedule control would be of upmost importance.

Change Management

As with any business, change management was paramount to successful implementation of such a large system in such a tight timeline. "Super-Users" were designated in each district to represent districts interests and constantly coordinate with the effort based in Headquarters. Transparency and accountability were heavily emphasized and implemented during the entire project to ensure that all questions were addressed. Districts were encouraged to provide feedback, future enhancement ideas, and system features that would benefit and complement their business processes. All business processes were carefully documented by the PMS team in order to ensure that the system mimicked the established routine with as little change as possible; this would encourage users to familiarize themselves with the system, and establish trust that the system was built for the user, with respect to their business needs. The aggressive timeline forced a delicate and sometimes difficult balance between desired enhancements and scope creep. Adjustments that could not be addressed in 2010 were saved for future years, in the hopes that every year the system can become more robust and provide users with information that assists them in what they already do.

The implementation of a pavement management system is complicated process. With Web based applications, pavement management systems are being rolled out to more transportation agency users and the processes surrounding the systems are becoming more complex. This project had a very tight time constraint so the project team needed to work closely together to bring the system together. Some of the critical factors that allowed the team to complete the system successfully were:

1. Excellent documentation of the existing a initial prototype "to-be" business processes
2. Project team buy-in to the PRD development process
3. Adherence to the CML and DML lists of development work
4. Weekly meetings to carefully track progress and immediately identify schedule obstacles
5. Utilizing the PRD documents to guide the development of training and testing.

In the end, the success of the implementation of the pavement management system was due to a focus on the accelerated schedule, a motivation from all parties to be a part of a successful system and a focus, through the Expert Panel process, on understanding of the system setup and use.

3. **Is your state pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?**

a. <u>Governor's Task Force on Modernizing Transportation Funding in Idaho</u>
During the 2008 Legislative Session, Governor Otter met great opposition to increasing Idaho's fuel tax although it was identified in a legislative audit that "the current funding for transportation cannot keep pace with the growth costs to meet Idaho's basic transportation needs of preserving and restoring Idaho's highways and bridges".

Idaho Legislature passed HCR 34 during the 2009 Legislative Session supporting the creation of a task force to evaluate transportation issues and created a Gubernatorial Task Force on Modernizing Transportation Funding in Idaho. The Task force consisted of 15 members and two non-voting, ex officio members including:

- The Lieutenant Governor;
- The Chair of the Senate Transportation Committee;
- The Chair of the House Transportation and Defense Committee;
- Four members of the Idaho House of Representatives, including a member from the minority party;
- Four members of the Idaho Senate, including a member from the minority party;

- Four members of the public, knowledgeable in the state's transportation system and funding mechanisms; and
- The Chair of the ITD board and another ITD board member as non-voting, ex officio members.

The Task Force was charged to consider both traditional and non-traditional sources of revenue for maintenance and preservation of highways and bridges, including but not limited to possible revisions to the rates, methods and manner of calculating any and all taxes, fees and registrations relating to fuels, motor vehicles and motor carriers. The Governor's Task Force on Modernizing Transportation Funding in Idaho was required to provide findings and recommendations to the Governor by December 1, 2010 and draft and present legislation for consideration by the Idaho Legislature during the 2011 legislative session.

During the 18 months of study, the Task Force identified and considered 46 funding sources. The task force reviewed many options—both traditional and non-traditional—for generating additional transportation funding to meet Idaho's funding needs. Some options would produce large revenue increases, and some would produce only small amounts of additional revenue. Some options were deemed to have a high likelihood of public acceptance, others were deemed to be lacking in public support. The following list contains some of the revenue options explored by the task force:

1. Motor Fuel Taxes
2. Vehicle Registration
3. Sales tax on transportation related products and services
4. Car rental tax
5. Tolling and pricing
6. Impact fees
7. Local option taxes
8. Alternative fuels/hybrid electronic taxation
9. Public Transportation fees

Each of the 46 potential revenue sources were ranked (see following pages)from low to high by the task force members based on fairness, public acceptance, current trends, revenue predictability, cost effectiveness of implementation, readiness, competitiveness, and our of state equity. Attached is the spreadsheet used by the Task Force ranking potential funding sources.

There were eight revenue options identified as most likely to be used. These are (in order of priority):

1. Increase fuel tax by 1¢ per gallon
2. Create a transfer fee of 1¢ per gallon on all fuels
3. Increase the index fuel tax
4. Create an excise tax in car rental fees
5. Increase by 10% the county vehicle registration fees on passenger cars only
6. Increase by 10% the state truck registration fees on heavy duty trucks only
7. Create an index passenger vehicle registration fee on passenger vehicles only
8. Allow local option registration statewide

The Task Force published its Final Report in January 2011 after 18 months of study. The Final Report was able to confirm that Idaho's real and significant funding shortfall. The learned that revenue amounts in the $200 million range would only cover needs to maintain the transportation infrastructure we currently have. Other needs for capacity and safety enhancement were also determined to be well into the $200 million range – if not larger. Unfortunately, the Task Force did not make a recommendation for how revenue enhancement should be timed or phased in, due to the volatility of the economy.

It is anticipated that in 2012, ITD will seek a funding increase. At this time, the Director has not stated the type of revenue option(s) will be requested and the potential funds to be raised.

SUMMARY RESULTS

POTENTIAL TRANSPORTATION REVENUE SOURCES

Revenue Source	Revenue Collection Method	Revenue Base (Jan 2010)	Amount/Unit Multiplier	Potential Additional Revenue (base revenue amounts-not recommend-ations for revenue increases)	Comments/ Information	Rating: (1 = low and 5 = high)								Rankings	
						Fairness	Public acceptance	Trend up or down	Revenue Predict-ability	Cost effective-ness of implement-ation	Readiness	Competitiveness	Out of state equity	Overall Rating (1 = low, 5 = high)	Revenue Options Ranking
								Reliability							
Motor Fuel Tax															
Fuel Tax (cents/gal.)	25 cents/gallon fuel tax	890 million gal. /yr. (FY09), net to H.D.A = $205.3 millon	1 cent/gallon tax	$8.2 million net to H.D.A (FY09)	Fuel taxing system in use – easy	4.50	3.56	2.44	3.75	4.76	4.94	3.94	4.56	4.06	1
Index Fuel Tax (cents/gal.)	25 cent fuel tax indexed to CPI or PPI (Highway & Streets)	890 million gal. /yr.	1996 to 2010 preliminary index CPI – 25 to 34 cents PPI – 25 to 42 cents	 CPI - $73.8 million PPI - $139.4 million	Shows increase if indexed since 1996	4.25	2.69	3.63	3.63	4.00	3.81	3.00	4.19	3.65	3
Transfer fee – added to current cents/gallon	Use similar collection methodology as for Petroleum Clean Water Trust Fund. Collected at the distributor level.	$10.2M to SHA(80%) $200K to P&R $8.0M to HDA (std dist to state/locals)	1-cent collected on all fuels listed = $10.25M	$10.25M	Impacts all petroleum products even those not related to highway use.										2
Vehicle Registration															
County Vehicle Registration (state reg. at county level - cars and light trucks)	Three-tier registration system: 1 - 2 years - $48 3 - 6 years - $36 Over 6 years - $24	$49.9 million (FY09 actual)	10% increase	$5.0 million	Passenger vehicles only	3.67	3.13	3.20	3.93	4.00	4.00	3.67	1.60	3.40	5
State Truck Registration	Multiple-tier registration system	$47.9 million (FY09 actual)	10% increase	$4.8 million	Heavy trucks only	3.33	3.64	3.29	3.79	4.00	3.86	3.08	2.13	3.39	6
Index Passenger Vehicle Registration	Three-tier registration system (FY09 actual). $39.7 millon	None	1996 to 2010 prelim. index CPI – 36.4% increase	$14.5 million	Passenger vehicles only	3.87	2.87	3.33	3.80	4.13	3.93	3.21	1.67	3.35	7
Weight Distance Tax	Cents per mile based on weight	None	Depends on base registration fee and cents per mile imposed	$50-60 million est. for FY09	Reinstitutes a tax on trucks beginning at 26,000 gvw	3.80	2.93	3.20	3.13	2.53	2.40	3.00	3.27	3.033	9
Sales Tax on Transportation-related Products & Services															
Sales Tax on Auto Sales, Parts, Tires & Accessories	Idaho tax categories #371, 501, 551 & 553 - FY09 taxable value = $1.81 billion	None	1% sales tax 6% sales tax	$18.1 million $108.8 million	Shift to HDA from General Fund	3.93	2.93	3.00	2.93	2.93	2.73	3.13	2.60	3.02	11
Car Rental Tax															
Excise Tax on Car Rental Fees	New excise tax	None	3% tax on car rental fees	$1.0 million est.	Tax Commission implementation	4.00	4.00	3.36	3.21	2.93	2.64	3.46	4.29	3.49	4
Tolling and Pricing															
Vehicle Miles of Travel (VMT) Tax	User fee based on miles traveled	None	Tax paid according to number of miles driven	High potential for revenue	Oregon DOT tested. Recommended further study	4.33	2.00	3.36	3.00	1.93	1.36	2.43	2.07	2.56	23
Impact Fees															
Development Impact Fees	Currently restricted to authorized local governments only	Amount depends on level of new construction	Based on developer's proportionate share of system improvement costs	Low potential for revenue - one-time fee is an expense for providing a service	Fees may only be used for mtce, repair, or facilities connected with the develpmnt	3.40	3.13	2.40	2.00	2.27	2.33	2.71	2.14	2.548	24
Local Option Taxes															
Local Option Fuel Tax	Per gallon fuel tax	None	Add on to 25 cent/ gal. in local area	Dependent on local jurisdiction	Revenue restricted to local area.	3.33	2.57	2.57	2.64	3.00	2.20	2.80	3.50	2.826	14
Local Option Registration	County/local	Ada County - $6.3	3-tier Ada System	Dependent on local	Ada County - only in Idaho.										

Revenue Source	Revenue Collection Method	Revenue Base (Jan 2010)	Amount/Unit Multiplier	Potential Additional Revenue (base revenue amounts-not recommend-ations for revenue increases)	Comments/ Information	Rating: (1 = low and 5 = high)								Rankings	
						Fairness	Public acceptance	Trend up or down	Revenue Predict-ability	Cost effective-ness of implement-ation	Readiness	Competitiveness	Out of state equity	Overall Rating (1 = low, 5 = high)	Revenue Options Ranking
								Reliability							
	Registration fee	million FFY09	$24-$36-$40	jurisdiction		3.73	3.14	3.00	3.07	3.50	3.13	3.07	2.07	3.09	8
Local Option Sales Tax	Sales tax dedicated to transportation	None	Percent sales tax added for transportation	Dependent on local jurisdiction	Revenue restricted to local area.	3.13	2.79	2.64	2.71	2.79	2.27	2.60	3.43	2.795	19
Alternative Fuels/Hybrid/Electric Taxation															
Alternative Fuels – *Propane, Hydrogen, BTU	Gallon equivalent for tax rate; $60 - $208	FY2009 - $10,000	Annual rate flat fee by vehicle weight	Low potential for revenue – few vehicles	Hydrogen vehicles not commercially viable yet.	4.27	3.67	3.31	2.50	3.00	2.40	2.53	2.14	2.978	13
Electric Vehicles	Proposed lower fee based on 1/2 the annual average passenger vehicle mileage	None	Based on 6,000 miles at 20 MPG		Range of vehicles is lower and may operate less miles	4.43	3.86	3.67	2.38	3.08	2.29	2.50	2.00	3.026	10
Additional Revenue Options Added By Members															
Surcharge Sales Tax on Auto tires and Parts	Report from Tax Commission					3.36	2.73	3.00	2.90	2.90	2.80	2.89	2.00	2.82	16
Dyed Fuel/Nondyed fuel apply for refund	Report from Tax Commission					3.64	3.18	2.60	2.80	2.91	2.36	3.10	1.78	2.796	18
General Fund Appropriation	Report from Tax Commission					2.30	2.30	2.30	2.80	3.30	3.10	2.70	1.56	2.545	25
Excise Tax on Tires	New excise tax - potentially based on a 60,000 mile tire rating - see handout	None	$1 per tire (1/5 fleet requring new tires of 1.75M registered vehicles)	$1.4 million per year	No current system in place to collect tax or audit	3.91	2.73	2.80	3.10	3.50	3.00	2.90	1.89	2.979	12
Adjust Fees	See motor fuel tax and registration fees					3.29	2.71	2.67	3.00	3.29	3.14	2.83	1.67	2.825	15
Excise Tax on Studded Tires	New tax - see handout	None				3.82	3.00	2.60	2.70	3.00	2.91	2.70	1.67	2.800	17
STARS (State Tax Anticipation Revenue)	Qualified sales and use tax rebate - see handout	None			Qualified rebates of 60% sales tax not to exceed $35M or actuals	3.27	3.36	2.60	2.00	3.09	3.00	2.90	1.86	2.76	20
Road Development Agreements	Negotiated on a project by project basis			Dependent on local jurisdiction	State cannot impose and does not address current needs	3.63	3.38	2.86	2.13	2.88	2.50	2.71	1.86	2.74	21
Value based vehicle registration	Registration fee based on assessed vehicle value - see handout	None			Requires change to existing code	3.09	2.45	2.60	2.82	3.10	2.73	2.73	1.70	2.65	22
Recreation Incentives	Incentivize tourism to elicite indirect economic dollars.	None		Low potential potential for revenue	Minor direct revenue to transportation	2.71	2.57	2.43	1.67	2.33	2.00	1.83	2.86	2.30	26
Public Transportation Subcommittee Recommended Options															
User Fees & Fares for public transportation	Subject to variable rates	None	Rate/fare added for PT	Dependent on local provider rates	User fees cannot be used for matching federal funds	4.80	4.60	4.00	3.40	4.40	4.20	4.00	4.20	4.14	PT 1
Local Option Sales Tax	Sales tax dedicated to public transportation	None	Percent sales tax added for PT regional mobility network	Dependent on local jurisdiction	Revenue restricted to local area.	3.13	2.79	2.64	2.71	2.79	2.27	2.60	3.43	3.73	PT 2

Revenue Source	Revenue Collection Method	Revenue Base (Jan 2010)	Amount/Unit Multiplier	Potential Additional Revenue (base revenue amounts-not recommend-ations for revenue increases)	Comments/ Information	Rating: (1 = low and 5 = high)								Rankings	
						Fairness	Public acceptance	Trend up or down	Revenue Predict-ability	Cost effective-ness of implement-ation	Readiness	Competitiveness	Out of state equity	Overall Rating (1 = low, 5 = high)	Revenue Options Ranking
								Reliability							
Local Option Resort Tax	Resort tax dedicated to public transportation	None	Percent resort tax added for PT	Dependent on local jurisdiction	Revenue restricted to city populations under 10,000	3.40	3.40	3.20	2.60	3.40	3.20	3.20	3.40	3.24	PT 3
Local Option Real Property Taxes	Property tax dedicated to public transportation	Principle source of local "match" funds	Permitted to levy within limits established by the legislature	Dependent on local jurisdiction	Restricted to local governments and districts	3.33	2.83	2.83	3.83	3.67	3.17	2.50	1.33	3.08	PT 4
Impact Fees	Currently restricted to authorized local governments only	Amount depends on level of new construction	Based on developer's proportionate share of system improvement costs	Low potential for revenue - one-time fee is an expense for providing a service	Only for infrastructure connected with develpmnt; code change needed for transit capital improvments	3.40	3.13	2.40	2.00	2.27	2.33	2.71	2.14	2.72	PT 5
Recommended Alternative Funding Sources for ISP - Not listed in priority order (from the Alternative Funding Task Force)															
Increase vehicle registration fee		varies	Fee increase of $1 based on 1,614,392 vehicle registration	$1,614,392											ISP1
Sales tax			Proposed 1%	$160,550,000??											ISP2
Increase drivers license fee		varies	Proposed $5 based on 343,700 licenses issued	$1,718,500											ISP3
Increase on recreational vehicle registrations		varies	Proposed $3 based on 90,957 recreational vehicles	$272,871											ISP4
Dedicated sales tax on transportation items		None	Proposed 0.5%	$13,750,000											ISP5
Auto dealer vehicle sales tax		None	Proposed 0.5% based on annual auto sales	$9,527,797											ISP6
Tire fee		None	Proposed $3 per tire fee based on vehicle registrations	$4,843,176											ISP7
Increase titling fee		$8 current fee	Proposed $5 based on 552,795 titles issued	$2,763,975											ISP8
Statewide DUI impound fee		None	Proposed fee increase of $300 based on 12,146 DUIs	$2,429,200											ISP9
Surcharge on local and wireless access lines		$0.06 current fee	Proposed $1 based on 1,602,500 telephone lines	$19,230,000											ISP10
Vehicle insurance surcharge		None	Proposed fee increase of $1 per month based on 1,614,392 vehicle registrations	$19,372,704											ISP11
Revenue Options Removed															
Fuel Sales Tax (on wholesale price) – added to current cents/gallon	Sales tax on fuel wholesale price (excluding state and federal tax)	890 million gal. /yr.	1% sales tax at $2.50 per gallon wholesale price	$22.5 million	Based on current fuel price @ $3.00 gallon (including state & federal tax)	4.25	3.00	3.38	3.75	4.25	4.20	4.19	3.94	3.87	
High Occupancy Toll (HOT) Lanes	Toll for use of new high occupancy lanes	None	Per vehicle fee for use of HOT lanes	Low potential for revenue	Only viable for high traffic volume routes.	3.43	2.29	2.36	2.14	1.71	1.50	2.07	3.00	2.31	

Revenue Source	Revenue Collection Method	Revenue Base (Jan 2010)	Amount/Unit Multiplier	Potential Additional Revenue (base revenue amounts-not recommend-ations for revenue increases)	Comments/ Information	Rating: (1 = low and 5 = high)								Rankings	
						Fairness	Public acceptance	Trend up or down	Revenue Predict-ability	Cost effective-ness of implement-ation	Readiness	Competitiveness	Out of state equity	Overall Rating (1 = low, 5 = high)	Revenue Options Ranking
								Reliability							
Toll Roads	Place tolls on high-volume roads - new or existing routes	None	Per vehicle fee for use of toll way	Low potential for revenue	Only viable for high traffic volume routes.	3.50	1.21	2.07	2.36	1.43	1.50	1.86	3.50	2.18	
Congestion Pricing	User fee based on time and route	None	User fees aimed at reducing congestion	Low potential for revenue	Fees for entering city center or congested roads at peak times.	3.00	1.79	2.23	2.00	1.50	1.07	1.79	2.36	1.97	

ASSUMPTIONS

Attributes (columns) that were left blank (or had a question mark) and without comment were not factored into the average.
Attributes (columns) that received a '0' (outside the range of 1 - 5) were scored as zero and factored into the average.

TERMS

Fairness - Is there a logical connection to transportation? To what degree are those who pay the same as those who benefit?
Public acceptance - How controversial is this apt to be? How willing is your constituency apt to accept it?
Trend up or down - Do you believe use of this option by states will increase or rise over time?
Revenue predictability - Can revenue from this option be easily projected or forecasted?
Cost effectiveness of implementation - Would it be cost effective to enact or administer the program?
Competitiveness - How does this option compare with other states in our region?
Readiness - Can the option be implemented in a reasonable time frame?
Out of state equity - Does the option capture fees from out of state travelers using the system?

LEGEND:

Top potential options for consideration

Lowest potential options considered for removal

Denotes "weak link" results

Recommended PT Subcommittee Options:
(Overall score includes ratings for usablility in rural and urban areas)

ISP funding alternatives provided from the Alternative Funding Task Force.

Revenue options previously removed by task force. Removal was done prior to rating the additional revenue options added by the members.

4. How are states incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

a. How is your state incorporating risk analysis into the planning process?

When projects are chartered during the initiation stage, risks are identified and communicated to the project sponsor and product owner. In this way, the people responsible for providing financial and human resources are aware of potential issues that could affect the scope, time, and cost baselines.

Projects are required to assemble and finalize a Risk Management Plan that accounts for the identification, prioritization and analysis, management, and reporting of project risks throughout the project life-cycle.

Additionally, during the project, an independent Risk Analysis is performed on a monthly basis where the project management team is interviewed by an independent department quality control agent. The 5 following facets of the project risk profile are analyzed and reported: Scope, Schedule, Budget, Resources, and Stakeholder Readiness. The overall risk of the project is reported to department executives as a means to communicate and elevate risk in order to affect positive change on project execution.

b. How does this impact implementing performance based planning and programming?

This process makes portfolio prioritization (which projects get resources, attention, focus etc. and when) much easier. Performance based planning is the process of making investments to generate a desired impact on stated and defined organizational goals. Projects are required to have a stated business case and strategic alignment objectives. Risk Management at the project and portfolio level helps executives identify which projects will require greater attention to time, cost, and scope based upon the level and degree to which a project or program aligns with organizational performance goals.

Director Ness states that one tangible way of ensuring that the department is transparent and accountable is through performance management – continually monitoring and assessing our progress. "The goal of performance measures is not to measure, but to determine if we are reaching our goal of continually getting better."

5. How is your state responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

a. Transparency and Accountability

Director Ness clearly defined transparency and accountability for the department. He stated that transparency is helping people to understand what we do and why we do it. This may mean that others have a say in how ITD does things and in ITD's decision-making process such as the Governor, Idaho Legislature and most importantly – the public.

To be accountable, we will begin to measure accomplishments against promised timelines. When we do promise, we must deliver. That is essential as we set high standards and constantly try to reach or exceed those standards.

b. Better Revenue and Forecasting Techniques

Another way that the department is evaluating and comparing investment choices is by conducting better revenue and financial forecasting. Annually, the department updates a six-year revenue forecast that takes on information on economic growth and other factors.

In 2010, ITD, the Local Technical Highway Advisory Council and Idaho's five metropolitan planning organizations embarked upon doing joint revenue and financial forecasting. The benefit of doing this is that it avoids a conflict that often confuses Idaho Legislators, local officials and the general public about financial conclusions. Furthermore, because it is anticipated that the Legislature and Congress will not provide additional financial remedies for the next few years, it is imperative that we have a handle on what finances will be available.

c. Planning for Idaho's Economy

Supporting the economy is new to the Idaho Transportation Department. In early 2010, the Idaho Transportation Department and the Idaho Department of Commerce and Labor accessed a research grant to learn more about transportation and its effects on the economy. ITD hired Glen Heimstra with Futurist.com to work with the department in defining this. Several meetings around the state were conducted with economic developers, community leaders and local planners. It was not ITD's intent to take public comment, but ask these people how they felt transportation affected their community and what they saw as economic draws to their areas. The department asked Glenn not to parrot back to us what we wanted to hear, but to assess what people said to the department and do a real assessment of the future. The result was the development of this document – "Growing the Idaho Economy."

6. How is your state dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

a. ITD is promoting livable communities through a balanced approach:

- Community livability is becoming more important as federal funding for future transportation projects is allocated. Attention to the following concepts helps ITD maintain an appropriately balanced approach and stay competitive for both traditional and non-traditional federal funds.
- Support partnerships to pursue transportation choices. Transportation options can help decrease household transportation costs, reduce oil dependence, improve air quality, and enhance the unique characteristics of Idaho communities.
- Avoid or mitigate environmental impacts. Clean air, water and land have a direct bearing on the quality of life for Idahoans. ITD collaborates with environmental resource agencies in the development of plans and projects to avoid or mitigate negative effects on the quality of our environment for both people and wildlife.
- Support the efforts of land use, housing and energy agencies. The availability of location-efficient housing choices can help manage travel demands. Over time, continued integration of transportation and land use planning may help lower the combined cost of housing and transportation for Idahoans.
- Support the economic competitiveness of neighborhoods. Department economic vitality objectives include supporting reliable access to employment centers. ITD also understands the importance of access to educational opportunities, services and other basic needs.
- Seek opportunities to remove barriers. ITD's collaborative working style can spark ideas to streamline processes, leverage funding and increase the effectiveness of programs to plan for future growth.

b. IPlan

IPLAN is an interactive planning and analysis tool developed to assist the Idaho Transportation Department (ITD) in giving decision-makers access to data to support informed discussions and decisions. IPlan also facilitates synchronizing planning efforts with other state agencies, local governments, federal agencies, utility companies, and within IDOT's many departments. IPlan is an interactive web application that allows stakeholders to access data where they live their lives.

Data is compiled from a variety of sources and displayed spatially on an interactive map allowing users to view potential projects or studies and their adjacent resources. By organizing data in this format, data can be analyzed and displayed as meaningful information. Additional information (i.e. reports) can be linked spatially so all data associated with a project or study can be viewed on a single platform. IPlan has powerful analytical capabilities to allow us to measure environmental impacts in an automated way.

Benefits of IPlan

a. Planners and stakeholders can now view all study data together that was once spread across various agency and;
b. ITD departments. By compiling this data spatially, ITD and State agencies can establish more positive and;
c. productive working relationships, communicate needs, understand issues, and reduce duplication of work, leading to reductions in costs and time requirements, thus helping to create better projects with fewer impacts.

An example of IPlan and how it is used is attached to this plan.

c. Greenhouse Gas Action Plan

This action plan was developed as part of a comprehensive effort by the State of Idaho to reduce greenhouse gas (GHG) emissions. Through Executive Order No. 2007-05, Governor Otter directed the Department of Environmental Quality (DEQ) to work with all state agencies to develop and implement GHG emission reductions. Though Idaho state government's contributions are relatively minor compared to the rest of the state and particularly the rest of the nation, it is our obligation to lead by example before we expect anyone else to make similar efforts and reductions. Each state government agency is responsible for developing a GHG emission reduction agency action plan. Governor Otter has also published Executive Order No. 2007-21, which mandates that state agencies will decrease the amount of gasoline and diesel used in state vehicles, shall limit the purchase of four-wheel drive sport utility vehicles and shall give priority to the purchase and use of hybrid/gas electric and other fuel efficient/low emission vehicles.

This plan is the Idaho Transportation Department's (ITD) effort to identify policy, management, purchasing, work practice, and other changes that will result in a reduction in agency GHG emissions. This plan also identifies ITD's GHG emissions baseline that will be used to quantify emission reductions, to identify areas for additional action, and to provide information on how effective particular actions are. ITD participated in the statewide agency group called together by DEQ and has also established an internal Green House Gas Emission Reduction team. The action plan was developed by that team and reviewed and approved by ITD management.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?
    - We are keeping our Strategic Framework (agency goals & objectives) stable on purpose so that we have a solid foundation on which to build our performance-based management approach. Moving the goal post on a sports field leads to chaos in the playing teams. The same holds for transit. Metro has locked down its goals and started to build down though the organization from there. Since our Strategic Framework guides the entire organization the focus can shift to defining actions employees should take to accomplish agency goals.
    - Metro's Board of Directors recently came up with a mission statement and is working on a longer term vision to help guide agency decision making.
    - Metro used its Strategic Framework to prioritize projects for stimulus funding. Stakeholders from throughout the organization voted on how each capital project contributed to each agency goal and objective. This resulted in a prioritized list of capital projects. As projections of stimulus funding were revised downward multiple times, prioritization guided decisions about what should ultimately receive funding.
    - As Metro prepared to renew its 6 year capital funding agreement with local jurisdictions (District of Columbia, State of Maryland and jurisdictions in Northern Virginia) in 2010, the focus shifted from prioritizing for funding constraints to prioritizing for safety. This followed the accident of June 2009 on Metro's Red Line that killed 9 people. Metro's focus shifted to implementing NTSB recommendations (such as replacing Metro's oldest rail cars that were involved in the crash) and bringing the rail system to a State of Good Repair.

- At the same time, responsibility for capital prioritization shifted from the planning office to the budget office. This change meant a return to Metro's historic way of selecting capital projects (decision made by the budget office with little to no input from other departments in the organization, the Board or public).
- Now that Metro has a 6-year funding agreement, the majority (90%) of our capital budget is "locked" due to commitments to safety (NTSB recommendations to purchase new rail cars and track maintenance work), SOGR (rail system infrastructure rehabilitation projects for Metro's oldest track segments) and other critical replacement needs (e.g., bus replacements, track maintenance equipment, elevator/escalator rehabilitation). As a result, there's very money left with which to prioritize the other capital projects.
- Despite this, the budget office is soliciting new capital needs from project managers. So prioritization is expected to be used to identify projects for the remaining 10%.
- Difficult economic conditions have meant that the local jurisdictions that fund Metro's operating budget (the portion not covered by fares) have faced extremely constrained budgets. At the same time, Metro's ridership and fare revenues have been below projections due primarily to economic conditions. Metro's budget is approximately 70% operating and 30% capital. Almost 70% of the operating budget is for personnel (salaries/wages and benefits). The costs are governed in large part by Metro's labor contracts which cover almost all operations employees. Facing projected budget deficits, the only options left are to reduce service or raise fares.
- In 2010, Metro asked its riders what option was palatable for the FY11 budget, and the overwhelming response was to raise fares. As a result, passenger fares were raised for rail, bus and paratransit. This year, raising fares was not an option. Instead, all jurisdictions increased their contributions to the FY12 operating budget, with only one jurisdiction (DC) increasing their contribution below what Metro required to maintain the same level of service. A series of public hearings took place to consider a small number of service cuts in DC. Turnout for these meetings was relatively light, in great contrast to FY11 budget effort.
- Yes, planning regulations inhibit our ability to be nimble and responsive to changing conditions. The FTA requires that capital projects be in the State Transportation Improvement Plan (STIP) before a FTA grant application can be reviewed. And because Metro is not a state, it must first submit projects to DC who then submits them to the local TPB on our behalf. This can take months. This requirement creates a number of administrative hurdles and delays that don't add value. In order to have the grants approved as the new fiscal year begins, Metro must submit projects to the STIP months before public hearing and Board consideration/approval of the budget. Inevitably, revisions must be made to the STIP to match the approved budget, again taking several months. At that point, projects may be well underway. A better process would allow for earlier review by FTA of grant applications, before the grants are submitted to the STIP.
- Overall, we are not really changing our decision processes. Metro's budget office is making the final calls on what projects are funded and how much. A change from

previous years is that there's much more transparency and accountability to make the case for funding. For example, starting in FY10, Metro received an additional $150 million in federal funding, matched by $50 million from each of Metro's supporting jurisdictions. As part of Metro's capital funding agreement with the jurisdictions stipulating the levels of funding over the next 6 years, the agreement also lays out new quarterly capital reporting requirements. Metro is now reporting the following capital budget measures: "on-time," "on-budget," and "on-scope." This reporting is prepared by a consulting firm that is managing Metro's capital program.

- For Metro's stimulus dollars ($200 million), a website allowed customers and the press to easily see a description of each capital project, the location of work, deliverables and contractor selected.
- A significant challenge for Metro is our ability to spend capital money. We have historically spent well below budgeted amounts. In response to this, local jurisdictions pushed that Metro switch back to an expenditure based budget in the 6-year funding agreement, meaning that they fund only what we can spend. Metro has taken steps to improve capital spending, including bringing in consultants to manage the capital program. This has brought about some progress over FY10 spending (44% more spending Fiscal Year to date), but with a much bigger budget in FY11, only 50% of the budget has been spent with one more month to go. At this time last year, 77% of the budget had been spent. This puts Metro at risk of not being able to complete projects included in the capital improvement plan as funding may be reduced in future years.

2. How are system operations being addressed in planning?
    - Metro is an operating agency, so for us, planning means looking at how to adjust our current operations to address reliability and capacity in the future. Metro is looking at a variety of ways to do that. For bus, Metro studies its corridors with the highest ridership to identify targeted strategies to improve travel times. This includes signal prioritization, bus stop placement or removal, specialized schedules (like limited stop service) and changes to street supervisor schedules (from typical "zone" system to managing on-time performance for an assigned route or corridor). Metro has begun implementing a number of these fixes along its busy routes. For example, Metro is piloting a bus signal prioritization project in Virginia using TIGER funds.
    - For rail, a huge effort is underway to reconfigure Metro's operations to accommodate the planned rail expansion to Dulles Airport in Northern Virginia. The new Silver Line will bring an Orange Line river tunnel crossing to capacity, requiring Metro to re-route Blue Line trains to the Yellow Lines. This is being done keeping in mind ridership changes since the system's original design (DC's downtown employment center is expanding eastward as a result of new development near Metro stations) and anticipated ridership growth. This will require significant changes to the operation schedule and significant outreach to the public on what the changes will mean for them. Metro has hired its original map designer to redesign the map with all these changes in mind.

- Metro is also looking at core, high ridership stations to identify how ridership growth will impact the flow of people through the stations. These studies produce a series of recommendations that have benefits to operations. Examples include additional faregates and reconfiguring entrances (reducing pedestrian bottlenecks), adding pedestrian tunnels linking nearby stations (increasing customer travel options and balancing demand) and running longer trains (allows the platform to be cleared, reducing crowding and improving safety).

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

- In terms of federal funding, Metro is trying to hang on to what it has. Metro has joined with the transit industry to ask for additional transit (5307/5309) funding. Most projections show reduced funding, with 2-4% at a minimum ranging up to much more dramatic cuts. Metro is unique in that beginning in FY10, it receives $150 million from the Passenger Rail Investment and Improvement Act of 2008. The dollars are matched by local jurisdictions. While the funds are "authorized," for 10 years, every year the dollars must be "appropriated." Metro is working with its local delegation (VA, MD and DC) to make sure these dollars are continued in FY11. This is particularly important because half of Metro's rail stations serve federal facilities and federal employees make up nearly half of Metro's peak period commuters.
- Metro is in its 1st year of funding in its 6-year capital agreement with its local funding jurisdictions. Metro anticipates this funding continuing, though Metro's struggle to spend capital money on schedule does put us at risk of reduced funding in the future due.
- Metro is looking at ways to increase non-fare revenue, though the revenue potential is limited. For example, Metro had added vending machines in stations, resulting in an additional $8,000 in monthly revenue.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

- Metro is not conducting risk analysis. While the value is acknowledged, that level of analysis is not being conducted currently.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

- In June 2010, WMATA launched the Vital Signs Report, a monthly report on 12 of Metro's key performance indicators that monitor progress toward the agency's strategic goals. Each month the report is presented to our Board of Directors and posted online so the public can monitor WMATA's performance. The Vital Signs Report answers two key questions: Why did performance change? And what actions

is WMATA taking to improve performance? To answer these questions requires an open dialogue, partnership and collaboration with operational departments across the agency. As the GM/CEO Richard Sarles stated, "The report is an important part of WMATA's plan to improve safety, customer service, reliability and financial stability. We want to be as transparent as possible and invite the public to join us in following progress. The monthly report is intended to document performance, and to hold WMATA's management accountable for what's working, what not working and why."

- When the report was first published there was an expectation of a flood of public criticism and complaints about bad performance. The opposite happened. The public reaction was one of praise and compliments for opening up the organization. Both the Governor of Virginia and the Maryland Secretary of Transportation sent letters complimenting the creation of the Vital Signs Report.
- The Vital Signs Report has also changed the way the media are looking at Metro. Historically, WMATA would release performance data to the public without any context leaving the data exposed to misinterpretation. Some of the erroneous interpretation made catch headlines but were damaging to WMATA's reputation and employee morale. Now, the media are taking quotes directly from the Vital Signs Report. The Vital Signs Report has given WMATA the opportunity to tell our story and get the right facts correctly presented in the public.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc. in this current environment? How are you juggling these goals when they appear to conflict?

- Metro is in the business of giving people a transportation choice. Metro directly benefits those who use the transit service providing regional mobility and access for work, school and recreation. 17% of region's commute trips are on transit (vs. 5% nationally). Federal employees make up about half our peak period commuters. Over 16.6 million visitors came to DC in 2008, many of whom used Metro to see the sights. Metro's easy to use system makes the DC region an even more attractive place to visit.
- Transit rich areas spend on average 9% of disposable income on transportation while auto dependent areas spend 25%, allowing people use that income for other things like housing.
- Transit also create jobs. APTA estimated that every $1 billion of investment in transit capital infrastructure supports 24,000 jobs.
- Transit support existing communities. Public transit contributes to creating places where one wants to invest, live and work. For example, Metro's Rosslyn-Ballston corridor in Arlington County, VA is a nationally recognized example of how transit can help concentrate, sustain and attract development. When the Ballston Metro station opened in 1979, the area was mostly used-car lots. The county encouraged denser residential development near the station and with that came more retail.

Today the area is filled with restaurants, shops and offices bringing customers and workers to the area, increasing tax revenue.

- Urban Land Institute estimated that in Arlington County, VA, development in two Metrorail corridors is concentrated on 6% of the land in the county but produces almost half of the county's tax revenues.
- USDOT's Livability in Transportation Guidebook states, "Publically funded transit programs were increasingly viewed as critical community anchors and catalysts for more concentrated economic growth and development."
- When Metro is asked how it contributes to these other goals, we often refer to national studies that document the benefits of transit. We don't have any way of systematic way of documenting how Metro contributes to the DC region. Metro recently initiated an effort to better quantify the regional benefits of Metro in the categories of: saving taxpayers money, enhancing local economic development, keeping the region moving, protecting the environment, increasing safety, protecting public health, saving families money, increasing livability, enhancing regional identity and supporting the federal workforce.
- Metro's Office of Performance is working with Metro's Planning office (who is leading this effort) to ensure the list of measures gets whittled down to a manageable list. A consultant will be developing a methodology for quantifying the benefits, including identifying what can actually be measured and addressing what Metro can take credit for. It is envisioned that the results would be used in future planning, public relations and in applying for FTA grants.
- Metro's Strategic Framework (five strategic goals and related objectives) touch on a wide range of the goals mentioned. Livability is specifically mentioned in one objective (5.2), for example. Sustainability (typically defined as a three legged stool: equity, economy and environment) is addressed throughout our Strategic Framework, including:

Sustainability "Leg"	**Metro Objectives**
Equity	• 2.3 Maximize rider satisfaction through convenient and comfortable services and facilities that are in good condition and are easy to navigate • 2.4 Enhance mobility by improving access to and linkages between transportation options
Economy	• 3.1 Manage resources efficiently • 3.2 Target investments that reduce operating costs and /or generate revenue • 5.2 Promote the region's economy and livable communities
Environment	• 5.2 Promote the region's economy and livable communities • 5.3 Use natural resources efficiently and reduce environmental impacts

- To develop strategic objectives for each goal, Metro conducted outreach with riders and partner jurisdictions. Rider groups included the Riders Advisory Council and the

Accessibility Advisory Committee (representing seniors and passengers with disabilities). Metro also facilitated discussion among a cross-departmental group of Metro staff, including staff from Metro's Environmental Management department. In addition, feedback from a group of employees focused on sustainability issues was also incorporated into the Strategic Framework.

- Some parts of Metro are starting to report on these "hard to measure" areas. For example, Metro's bus maintenance department is tracking "percentage of fleet fueled by clean technology." This measure illustrates the impact of a Board policy decision to invest in compressed natural gas and hybrid buses as Metro's diesel fleet is replaced. At present, 66% of Metro's bus fleet is fueled by clean technology. Another measure is "percentage compliance to environmental policies and procedures." This is particularly important for Metro's maintenance operations where the proper disposal of oil and other materials is an important safety and environmental issue.
- These measures are not tracked agency-wide at present. With the reality of getting service out day-in and day-out, efforts related to service reliability and safety are the focus.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process
Agency: Puget Sound Regional Council
Peer Exchange Attendee: Charlie Howard

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. **How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?**

   In the development and adoption of our latest MTP- Transportation 2040:
   - *Lowered review estimates in the near term by approximately $1B in the T. 2040 constrained financial plan to reflect lower sales, property and gas tax revenues resulting from the recession.*
   - *Recognized that gas tax revenue will slow over time.*
     "The future of the fuel tax as a road finance approach is limited. Advances in vehicle technology and constant erosion of purchasing power from inflation have demonstrated the need to find other ways to pay for transportation investments. Business leaders, national experts, and state legislators are all coming to similar conclusions: traditional tax-based financing measures will not, by themselves, be sufficient to solve our transportation problems."
   - *Assumed changing nature of sources of revenue to reflect increase in user fees and tolls (18% of 2040 revenues)*
   - *Explicit language in plan to reflect that things will change.*

     "Finally, Transportation 2040 takes steps to move the region toward a sustainable financial future, breaking with historic and increasingly unreliable funding approaches and identifying new financing strategies that not only provide needed revenue, but also reduce vehicle miles traveled and delay, improve reliability, and support more choices for the people who use the system to meet their daily needs."

a. Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

- *There was an initial concern from FHWA on the level of tolling revenue that was assumed in our Financially Constrained portion on the MTP, but it was accepted as a necessary part of a well thought out financial plan for long range transportation plans in this difficult financial climate.*

2. How are system operations being addressed in planning?

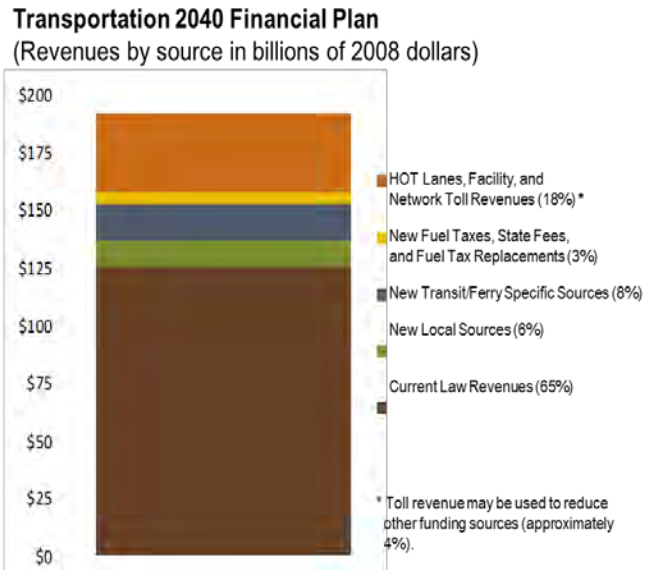
- *Existing and planned operations investments are included in plan as a programmatic cost.*
  "The efficiency of the region's existing transportation system is identified as one of the highest priorities in Transportation 2040. One way to improve system efficiency is with transportation system management and operations strategies. These strategies, also referred to as intelligent transportation systems (ITS), are meant to optimize the efficiency and effectiveness of the metropolitan transportation system by managing congestion, increasing reliability and providing convenient connections for people and goods."

1. Is your state/MPO pursuing new sources of funding? If so, what types?

- *Expansion of existing sources of revenue in the near term and increasing use of tolls and other user fees in the mid to longer term.*

Develops a Sustainable Funding Strategy:

- To raise over $64 billion to support transportation investment (constrained part of the plan)
- Equitable geographically and across incomes

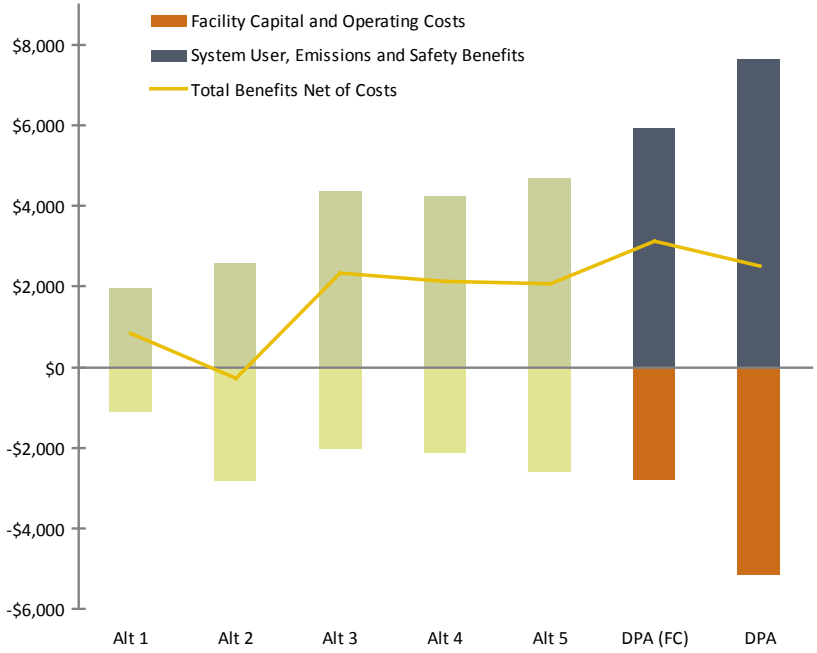


a. Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

- *The Puget Sound Regional Council is currently going through an extensive prioritization process for all projects and programs in the plan. This will include clarifying the goals that the region is pursuing with transportation investments, and recognition of the financial impacts of the recession and allow any reductions in anticipated funding to be applied to the highest priority projects and programs consistent with funding program limitations.*

3. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects?

- *The largest projects in the region conduct extensive risk analysis planning and the PSRC conducted a sophisticated benefit-cost analysis that compared plan alternatives against a baseline or limited investment alternative.*



a) How does this impact implementing performance based planning and programming?

- *The Transportation 2040 planning process identified values and related criteria that were used to evaluate alternatives. Based on the adopted plan targets can be identified and measured against in terms of congestion and mobility, environment and environmental objectives. In addition, the previously mentioned prioritization process is examining more closely the region's adopted policy of considering maintenance, preservation and operations as our number one regional priority. We have a work group which is examining implications of not maintaining the system – what risks the region will face if this commitment is not made.*

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

- *The state has adopted strong accountability measures and reporting requirements- The Grey Notebook. The Regional Council tracks projects with PSRC funding and provides frequent reports. Projects that come in under budget and those that have been delayed have returned funds based on this process.*

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

- *We obviously could send all day on this topic- but from a data standpoint this was the basis for our plan development and the criteria and benefit cost work that was done. It is also a basis for the Prioritization work that is currently being developed by the agency. We are spending a significant amount of time to define our regional goals in each of these areas, weight the relative importance of these different factors, and apply the weights to an evaluation of projects contained in the plan. After this work is completed, our boards may use the information to screen future projects entering the plan, or may apply the information to existing projects to determine relative priority, or even which projects should not be continued in future plan updates.*

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

   The Colorado Department of Transportation (CDOT) has a number of efforts underway to facilitate better programming of funds and provide improved data to the Transportation Commission and other decision makers. One such effort involves developing a multi-asset management tool, which will consolidate summary level data derived in various systems for the department's surface treatment, bridge, maintenance, Intelligent Transportation Systems and fleet equipment programs. Ultimately, this will allow the Commission to comprehensively review how different funding scenarios would impact these programs, instead of the current approach which examines funding one asset at a time.

2. How are system operations being addressed in planning?

   Currently system operations are included in the planning process through annual resource allocation to the following programs: Intelligent Transportation Systems (capital and operating), traffic signals, traffic maintenance, and federal programs such as enhancement, hot spots, congestion mitigation and air quality, etc. Projects with measurable system operations improvements may also be planned for within the STIP, though not called out in resource allocation in support of the long range plan. In the next fiscal year, CDOT through its Research Investment Council will undertake a System Operations Performance Measure and Planning study to determine how to better incorporate system operations into its performance measure and planning processes. This should be completed in time to enable the department to better envelope operations improvements and resource allocations into the next long range plan.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

   CDOT's High Performance Transportation Enterprise (HPTE) was created by state legislation in 2009. The HPTE is charged with researching and introducing, where appropriate, innovative financing options for important surface transportation projects. Some financing options currently under consideration are public-private partnerships, operating concession agreements, user fee-based project financing, and availability payment and design-build contracting.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

   The long range planning process at CDOT is not a risk-based process but rather a compilation of corridor-level and regional priorities, though the multi-asset management system currently under development at CDOT will allow for trade-off analysis of different funding scenarios at the program level. Assessing risk of "not doing" certain programs, projects, and processes occurs through project-evaluation at the regional level and also at the headquarters level through the FHWA and CDOT jointly-staffed Quality Improvement Council, which annually assesses risk on many department procedures and programs, then moves forward Quality Assurance Reviews on those risks deemed to have the greatest probability and impact.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

   CDOT is involved in an ongoing effort to improve efficiency and accountability to the public. CDOT's new Executive Director has converted his Deputy Director position to a Director of Process Improvement. Under 2009 legislation, an Efficiency and Accountability committee comprised of CDOT staff and transportation stakeholders from a variety of industries monthly reviews department processes and activities to ensure maximum investment in the state transportation system. The department annually reports to its stakeholders investment activities and outcomes through an Annual Report, an Annual Performance Report, a Strategic Plan within its annual budget submittal, and a variety of program-specific reports. Those reports can be found here http://www.coloradodot.info/library .

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

   CDOT has undertaken several efforts to address many of the emerging issues it perceives will be important in the next LRP update. In partnership with the Smart State Transportation Institute (SSTI), the Colorado Energy Office and MPOs, CDOT is participating in the Energy Smart Transportation Initiative, which aims to develop a framework for considering energy efficiency and greenhouse gas emissions in transportation decision-making. CDOT is also participating in another study with SSTI to develop performance measures and benefit-cost tools for economic growth. CDOT has recently built a greenhouse gas emissions model to forecast statewide transportation-sector emissions. The department adopted a policy directive in advance of its

2035 Statewide Long Range Plan to address (1) quality of life, (2) environment, (3) accessibility, connectivity, and modal choices, and (4) social responsibility. And it actively trains staff and others on incorporating Context Sensitive Solutions into design phases.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

From: Reena Mathews, Maryland State Highway Administration

1. **How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?**

In general, we have not changed our goal setting. Our priorities have and continue to be (in order) safety, system preservation, and expansion. We are flexible in some targets such as maintenance. We have not backed off on our efforts to reduce crashes. We are looking at operational ways we can impact the system over capital and moving toward a more TSM/TDM approach in managing congestion.

We are doing scenario analysis based on various funding levels. Federal regulations have been nimble and we want to be prepared. In some cases regulations call for too much precision.

The biggest challenge is the instability in Washington and not knowing where they are headed. We've heard we will receive 30% less or 60% more.

One recent example from FHWA is the requirement for some part of a next phase of a planning project be programmed in the TIP before receiving ROD.

Another example is the Total Maximum Daily Load (TMDL) guidelines that will severely impact the way we can deliver our transportation program. If transportation funding does not improve, we will have very challenging decisions to make.

2. How are system operations being addressed in planning?

As part of the SHA business plan, our objectives include reduction in delay. Our focus in recent years has been more so on system operations than expansion.
However, we want to do a better job in this arena because we do not specifically do long term plan for operations. Our process can be further improved by being more strategic and systematic incorporating a planning for operations approach. We'd like to select our top corridors and invest in them, but a lot of our operational issues are handled at the district level, which is driven partly by public and political input.
In the short-term planning work, we conduct a B/C analysis on every project and continue address our top needs: pedestrian/traffic safety and congestion.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

In looking toward the future to address the State's transportation infrastructure preservation and maintenance needs as well as the long-term sustainability, the Blue Ribbon Commission for Maryland Transportation Funding was established in 2010 to review, evaluate, and make recommendations on financing the State's future transportation needs. The Commission is composed of members representing a wide variety of interests. A final report of its findings and recommendations is due to the Governor and General Assembly on or before November 1, 2011.

Some preliminary ideas include: Increasing and expanding tolling (pricing) or variable pricing strategies; VMT based revenue sources; Capacity of Value Capture tools and Public-Private Partnerships (P3) to leverage investment in Maryland's transportation infrastructure; and Some entirely new sources could also be explored, such as energy use taxes, electric/alternative fuel taxes, regional parking charges, and automotive fees.

In order to make better finding decisions as well as improve transportation, environmental, and livability conditions for Maryland residents and visitors, we have initiated the Comprehensive Highway Corridors (CHC) program.

As part of this initiative, we are in the process of developing of a **M**odel **O**f **S**ustainability **A**nd **I**ntegrated **C**orridors (MOSAIC), which defines sustainability indicators, analyzes the sustainability impact of corridor improvements early in the planning process, and identifies environmental mitigation needs. The sustainability indicators include mobility, safety, air quality, green house gas emissions, environmental impact, and socio-economic measures.

When implemented at the highway needs assessment and long-range planning stages, MOSAIC can help SHA identify the corridor improvement option that best balances these sustainability indicators, and avoid improvement options with major environmental impacts that often leads to costly and lengthy environmental screening and mitigation procedures.

Our goal is to integrate into existing SHA project planning efforts which we believe will provide cost and time savings for needs assessment, long-range planning, and project development.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

For financial analysis, we are beginning to do some scenario planning. In general, we do not do a lot of risk analysis. We generally stay conservative on our assumptions about federal aid.

Other than three years ago (due to the national economic down turn) we have not cut projects from our program.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

StateStat is a performance-measurement and management tool implemented by Governor Martin O'Malley to make Maryland more accountable and more efficient.
http://www.gov.state.md.us/statestat/

State managers meet with the Governor and his executive staff to report and answer questions on agency performance and priority initiatives. Each week a comprehensive executive briefing is prepared for each agency that highlights areas of concern. Briefings are based on key performance indicators from the customized data templates submitted to the StateStat office biweekly by participating agencies. Data is carefully analyzed, performance trends are closely monitored, and strategies to achieve improved performance are developed. Specific reports can be found at the following link:
http://www.statestat.maryland.gov/reports.asp

We also have an annual tour we present to all the counties our CTP program. At this time an update on all the capital projects and well as cuts are presented to the public and elected officials.

Based on the funding scenario, we adjust our targets (outside of safety) based on cuts.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

We believe that within the sustainability goals lie livability, climate change, GHG emissions, energy, and economic health. Sustainability is part of the way we do business. As such, we do not believe the conflict.

The CHC corridor program we are developing (see Question 3) is a perfect example of how SHA is attempting to balance these goals. We continue to invest and focus more than ever on multi-modal solutions; our investment in the bicycle and pedestrian program continue to grow and so does our efforts to focus on context sensitive solutions. There is also focus on growing the Department's TOD and Park and ride program.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

CAMEILIA RAVANBAKHT, HRTPO

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

The Hampton Roads Transportation Planning Organization (HRTPO) has made the following changes to the transportation planning and programming process in response to current funding conditions:

- Developed a new prioritization tool for the long range transportation plan update (2034). This tool is composed of three components: Utility, Economic Vitality, and Project Viability. The last two components were added in order to distinguish viable projects with economic impacts from others. This tool was applied to 200+ projects to select the top scores by roadway/funding category.
- This new tool assisted the Board to select the top project (s) one for each category. In the past the region had a system of projects as opposed to individual prioritized projects. Board members were much more "flexible" this round of project selection process compared to years past.
- The on-going mantra among Board members/elected officials is "let's build one project".
- It's totally understood now that there will be a package of funding options in order to move forward with the construction of top projects. Funding options include: public, private, P3, tolls, congestion pricing, TIFIA, and etc.)
- There are discussions of making the current system more efficient with demand management strategies and operational/ITS strategies.

- The concept of pricing is regularly discussed and the only regulations inhibiting the region's ability is not be able to put tolls on existing systems without making capacity improvements.

2. How are system operations being addressed in planning?
    - The Hampton Roads region has fully incorporated system operations into its planning process through CMP.
    - There is an active Operations Committee that meets every other month to discuss operational issues and projects.
    - Half of the region's CMAQ funds have been allocated on transportation operations, ITS and signal systems.
    - Active Traffic and Demand Management (ATDM) is on VDOT's priority.
    - The regional ITS Architecture is being currently updated. The Hampton Roads ITS Strategic Plan is scheduled for an update after July 1, 2011.
    - Operations are also incorporated into the LRTP with dedicated funding.
    -

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?
    - The Hampton Roads MPO is currently working on a few PPTA projects for major tunnel/bridges and new/improved highway corridors.
    - Several localities are looking into TIFIA funding to complement the funding packet.
    - A major bridge replacement is currently under construction with 100% private dollars.
    - During the prioritization process, projects with PPTA proposals received higher scores under the Viability component.
    -

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?
    - The risk analysis is considered through alternative modeling runs with various options including the risk of not having some projects, loosing some due to funding shortfall and not doing certain programs.
    - To note here that the Hampton Roads region has lost two "deficient/unsafe" bridges due to a lack of funding for replacement. One of those bridges is being currently replaced by the private developer.
    -

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

- The Hampton Roads MPO has gone through a series of reforms in the past three years to improve its transparency, accountability and public outreach process.
- VDOT conducted an audit of the region's CMAQ and RSTP projects as they discovered money has been "parked" on some projects. Those monies have been transferred to shovel ready projects for implementation.
- Regular monitoring of project funding obligations, allocations and expenditures by phases (PE/RW/Construction) is taking place. If a project is not moving forward, monies will be transfer on projects that are shovel ready or the CTB will move them to other parts of VA.
- The Commonwealth Transportation Board (CTB) has passed legislation to require all MPOs in TMA develop a set of regional performance measures. State matches of RSTP are tied to these measures.
- There is more increase of federal oversight on local administered projects. Localities are working harder to increase efficiency.
-

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?
   - The HRTPO has prepared a transportation proposal for the HUD sustainability grant but did not receive any funding in 2010. However, the staff and localities are working with the DOT and HUD for making necessary changes and be ready for the next round of grant applications.
   - These are all part of the HRTPO goals for the update of LRTP. The prioritization tool included a number of measures to satisfy these goals.

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Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

   The Pennsylvania Department of Transportation in cooperation with our Metropolitan and Rural Planning Organizations have made a concerted effort over the last 5-7 years to focus primarily on asset management type projects. We are also in the midst of updating our project delivery process and in the very near future will be implementing Linking Planning and NEPA that will aide/assist in project selection/prioritization. To date, the planning regulations have not had any direct impact to our ability to retain flexibility in planning/programming activities and react to the every changing economic influence.

2. How are system operations being addressed in planning?

   We have a very robust planning/programming process that includes our 23 Planning Partners, local transit providers, FHWA, FTA, and other state agencies. As we develop our Transportation Improvement Program (TIP) with these partners, system operations are considered in any planning/programming deliberations. Operations of the existing transportation system are more important than ever given the extremely tight federal/state funding situation. Our TIP currently has very limited ability to address any additional capacity to the existing infrastructure.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

Governor Corbett has established a Transportation Funding Advisory Commission to develop and evaluate possible funding solutions to help our current $3.5 billion annual funding shortfall. The Commission must provide a final report to the Governor by August 1, 2011. At this time, it is unclear what recommendations may be included in the final report but a continued focus on maintaining our existing infrastructure and overall system operations will maintain priority.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

   Our primary focus is currently on maintaining our existing infrastructure. Therefore, our primary risk is the risk of "not doing" added capacity type projects in favor or maintaining existing infrastructure. Our performance based planning and programming is based on the current financial situation and largely focused on maintain our existing transportation system.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

   We have implemented some additional web-based tools to better enable the public to view/review our TIP. One of these tools can be found at http://www.dot7.state.pa.us/tip%5Fvisualization/. To date, we have not slowed delivery of our programmed projects. However, in at least one instance we did pull back on advancing resurfacing projects due to the cost of asphalt.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

   The Department looks for opportunities to incorporate these types of initiatives into existing projects where it makes sense to do so, but these are not "primary goals" in this economic environment. We have also directed a small amount of funding for a program called "Pennsylvania's Community Transportation Initiative" (PCTI). The program's intent is to fund planning and construction projects that demonstrate creative and efficient ways of addressing various transportation challenges through strong local partnerships and with careful consideration of community goals.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process
Alaska Department of Transportation and Public Facilities (ADOT&PF)

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. **How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?**

   Changes to Goal Setting, Prioritization, Programming, & Project Selection

   Alaska and Puerto Rico are unique in that they can use federal-aid funds for construction of access and development roads that will serve resource development, recreational, residential, commercial, industrial, or other like purposes 23 USC, CH 1, Sec 118, Para e (Title 23, United States Code, Section 118 Availability of Funds, para e). This essentially allows use of federal-aid funds for use on all public roads. However, at the same time, this avenue also raises the level for project prioritization.

   The Department's new Commissioner is embarking on a multi-step Statewide Quality Improvement Program to improve the operational performance across the Department. Ongoing initiatives include:

   - *Performance Measures*. The Department completed a Strategic Plan in 2008 and the Department's Alaska Priorities performance measures (Office of Management and Budget web site) earlier this year. A working group is providing recommendations for improvements that address the mission, goals, strategies, and performance measures in both these areas. A high-level management team retreat this coming June will tackle the Strategic Plan and potential changes to the performance measures and strategic goals. Project programming and the prioritization process will also be reviewed.

- *Refocus on Services*. ADOT&PF completed a Department-wide survey (April 2011) that asked personnel who routinely provide services or who use services to assess how well the Department is doing on responsiveness, helpfulness, timeliness, and accuracy. The input will be used to improve the Department's performance and to identify areas where improvement can be made.

- *Transportation Asset Management Assessment* (TAM). TAM impacts multi-work center like no other program in the Department. The financial and budget implications in a fiscally constrained environment are significant challenges. The FHWA Office of Asset Management conducted a TAM assessment at ADOT&PF earlier this year (3-7 May 2010). The draft report identifies 68 key observations where there is room for improvement and provides recommendations on addressing each area. Since the outcomes have Department-wide implications, we anticipate many of the recommendations will be implemented.

- *Workforce Development*. The Department has begun a long-term plan to create and implement a strategic workforce development plan that provides for the recruitment, retention, and professional growth of its workforce. Almost 30 percent of the workforce can retire in the next five years (DOT&PF Workforce Profile – FY 2009). These projections may be even higher in 2011. Succession planning and work force development is not much different in other transportation agencies; keeping and retaining a professionally trained work force that can make fact-based analysis and decisions on financial commitments is a challenge now. Target deployment of the program is January 2012.

Inhibiting Planning Regulations

There are several key project development milestones where planning regulations may add cost and timeline slippages. Three of these are highlighted:

- *Environmental Review of Highway Projects*. Getting the environmental approval can be one of most significant project delays. The most visible result of the delay is the delay in obligating funds for design and/or construction. Pushing projects to an out year increases stakeholder frustration and potentially the project cost. Streamlining the environmental process would increase the confidence in the project milestone and funding needs forecasts. There are some very recent information on expending the planning and environmental reviews that may be helpful:

    - Expediting Planning and Environmental Review of Highway Projects - TRB held a webinar (4 May 2011) that identified, described, and evaluated effective tools and techniques to expedite the planning and environmental review of transportation projects. Email Reggie Gillum RGIllum@nas.edu to receive a link to the recording session. There is no

fee for TRB sponsors to receive this recording. Others must pay $89 to receive a link.

- Transportation for Communities – Advancing Projects through Partnerships (TCAPP). SHRP2 assembled tools and practices to collaborate on highway projects. Projects can be delayed or expedited in every phase of delivery; TCAPP provides information that can be used to understand and implement specific strategies for expediting project delivery. This effort targets the earlier phases of project delivery that lead up to the final design and construction. Nearly all of the strategies described are implemented during the planning, National Environmental Policy Act (NEPA), and/or permitting phases.

- NCHRP Synthesis 414 – A very recent publication (so recent that I just received it on 1 June, 2011) that may add to the discussions is NCHRP Synthesis 414, *Effective Delivery of Small-Scale Federal-Aid Projects*. There are sections on all project phases, financing, applicable regulations, risk, project management, and education. Definitely worth a review.

- *National Historic Preservation Act*. Section 106 of the National Historic Preservation Act (NHPA) requires agencies to take into account the effects that federally funded activities have on significant historic properties. The Statewide Historic Preservation Officer (SHPO) reviews projects as part of the environmental review. This adds an unknown time and potential additional delay to the project. Typically federal-aid highway projects have little or no effect on historic properties. SAFETEA-LU Section 6007 exempts the bulk of the Interstate Highway from consideration as a historic property under Section 4(f) of the Department of Transportation Act. There is wide interest in applying this process to the State Highway System.

- *Project Funding Obligation*. DOTs need to systematically track the obligation of STIP project funds across the various phases (Planning, Design, Right of Way, Utilities, Construction). Without an effective obligation tracking system there are risks in being able to identify potential project phase delays, anticipated cost increases, and impact on other projects. With the Department organized in a centralized planning and decentralized execution structure, we do not have effective performance model for tracking project obligations.

2. How are system operations being addressed in planning?

The Statewide Long-Range Transportation Plan (LRTP) and each of the regional transportation plans address system operations. Since most Alaskan communities are dependent on the air, land, and sea connections for travel and supplies, the plans cover the multi-modal transportation system in some detail. The major plans include:

1) Alaska Statewide Long- Range Transportation Policy Plan, *Let's Get Moving 2030* (2008)
2) Anchorage Metropolitan Area Transportation Solutions, Metropolitan Transportation 2035 (under revision)
3) Fairbanks Metro 2035, *A Plan to Keep YOU Moving* (2010)
4) Interior Alaska Transportation Plan (2010)
5) Southeast Alaska Transportation Plan, currently under revision
6) Northwest Alaska Transportation Plan (2004)
7) Prince William Sound Area Plan Transportation Plan (2001)
8) Yukon-Kuskokwim Area Transportation Plan (2002)

Operations are also addressed in other planning documents, which include:

1) Highway Safety Improvement Program (HSIP)
2) Intelligent Transportation System Program
3) Strategic Highway Safety Plan

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

Existing Sources of Funding

ADOT&PF uses a broad range of Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Other Funding. These funding sources are shown in Tables 1, 2, and 3. Many of these funding sources are used by other states, although they are being used in different ways in the current funding environment. For example, the example of advance construct given below is increasing becoming important as the cost of construction and petroleum products continues to rise. Some funding sources that are mostly unique to Alaska include:

- Bureau of Indian Affairs Indian Reservation Roads (IRR) Program
- Coordinated Border Infrastructure Program
- Denali Commission
- Ferry Boat Discretionary - Alaska set aside

While these funds benefit community transportation projects, they are generally not used for regional highway projects. Sources of funding (public and private) and cash management techniques, e.g. advance construction, are reflected in the STIP project phases. I am continually amazed at the flexibility and ingenuity of the ADOT&PF financial team!

FHWA Funding		
Programmed Funds	**Code**	**Funding Description**
SAFETEA-LU 1934 Earmarks	1934	Available only to projects identified in the legislation
Consolidated Appropriations Act 2010 HR 3288	3288	Earmark funds for Alaska – available only to projects identified in the legislation
Bridge Rehabilitation & Replacement	BR	Available for deficient bridges that are unsafe due to structural deficiencies, physical deterioration, or functional obsolescence
Bridge Rehabilitation & Replacement, Special	BRS	Eligible for BR activities that supplement the existing bridge list
Congestion Mitigation / Air Quality	CMAQ	Projects that can proven to reduce traffic congestion and/or improve air quality in federally designated non-attainment areas
Corridor Border Infrastructure Program	CORB	Formula program to improve motor vehicle safety at or across the land borders between the US, Canada, and Mexico
Disadvantaged Business Enterprise Program	DBE	Ensures equal opportunity in transportation contracting markets
Discretionary Bridge Program	DBP	Nationwide competitive program for rehabilitation or replacement of bridges costing more than $10 million
FFY2003 Appropriations Sect 330 Earmarks	E330	Not available to any other projects
FFY2004 Appropriations Sect 115 Earmarks	E115	Not available to any other projects
FFY2005 Appropriations Sect 117 Earmarks	E117	Not available to any other projects
Flexible Earmarked funds SAFETEA-LU	EMFX	Changed the availability of several deductive & non-deductive earmarks for the Knik Arm and Gravina Island bridge projects, allowing Alaska to use them for any eligible project
Economic stimulus – under 5000 pop.	ES30	ARRA funds for local communities with populations under 5,000 and MPOs
Economic stimulus – flexible	ES67	ARRA funds for any state eligible project
Economic stimulus – ferry boat	ESFB	ARRA competitive, discretionary funding for ferry projects
Economic stimulus – transportation enhancements	ESTE	ARRA funding for transportation enhancements
Ferry boat discretionary – Alaska set aside	FBDA	Construction or improvements to ferryboats or ferry terminal facilities on NHS
Future earmark projects		Anticipated high priority funds
Forest highways	FH	Planning, research, engineering, and construction of highways, roads, parkways or transit facilities with forest lands

Table 1A – FHWA Funding Sources

FHWA Funding		
Programmed Funds	**Code**	**Funding Description**
High priority (TEA21)	HIPR	TEA-21, Section 1602, earmarked 16 Alaska projects for $68 million
High priority – SAFETEA-LU under AK100	HPRL	SAFETEA-LU, Section 1702, earmarked over 5,00o projects nationwide
High priority – SAFETEA-LU over AK100	HPRM	Functionally the same HPRL; different codes indicates personnel where to find legislative language
Illustrative – fund place holder	ILLU	Project that will be funded and advanced if other sources of funds become available or because another project cannot be advanced. Specific source or sources of funds will be determined when and the project is selected
Interstate maintenance	IM	Funds for resurfacing, restoring, rehabilitation, and reconstruction of the Interstate Highway System.
National Highway System (non-interstate)	NHS	Includes the current interstate system, much of the old primary system, and all of the Alaska Marine Highway System vessels and designated terminals.
Public lands discretionary	PLD	Improve access to and within Federal lands
Planning	PLNG	Mandatory planning tasks, including the STIP, statistical measurements of the transportation system (traffic volume, pavement condition, crash location, severity, and causes, & physical characteristics of the highways); mapping, and management systems.
Research (HPR) 25%	RES	
Rail Hazard Elimination – SAFETEA-LU	RHE	Maintain inventory of railroad crossings that may require separation, relocation, or protective devices, & implement a schedule of projects
Recreational Trails Program	RTP	Develop and maintain recreational trails and trail related facilities for both non-motorized and motorized recreational trail users.
Safety	SA	Hazard elimination, railroad crossing, and railroad protective devices. Projects must be indentified through the HSIP.

Table 1B – FHWA Funding Sources

FHWA Funding		
Programmed Funds	**Code**	**Funding Description**
Sanction funds – SA 402	SA40	Funds made available by a sanction or reduction to Alaska's Interstate Maintenance, NHS, and STP apportionments. Each year, 3% of these funds are reallocated because Alaska does not have conforming laws addressing DUI and open alcoholic containers on motorcycles.
Scenic Byways	SCBY	Planning, design, and development of scenic byways program on existing transportation routes.
Safe Routes to School	SRTS	Planning, design, and construction of projects that will substantially improve the ability of students to walk and bike to school
Surface Transportation Program	STP	Flexible funding that may be used by state and localities for projects on any Federal-aid highway, including the NHS, bridges on any public road, transit capital projects, and intracity/intercity bus terminals/facilities. Alaska is allowed to use these funds on any public road, regardless of classification
Transportation enhancements	TE	Enhance the transportation experience, including bicycle and pedestrian facilities, landscaping, historic preservation, and reduction of wildlife deaths by vehicles.
Metropolitan planning	URPL	Funds for any use, including planning processes and special planning studies, in an urban area

Table 1C – FHWA Funding Sources

FTA Funding		
Programmed Funds	**Code**	**Description**
Economic Stimulus – Fixed Guideway	ESFG	One-time ARRA funding for guideway projects that includes ferries
TEA-21 Job Access/Reverse Commute	3037	Discretionary program to fund new or expanded projects for low-income who may live in city core and work in suburban locations, or work non-traditional work schedules
FTA Urban Rail Set-aside	5307RR	Portion of Section 5307 funds (capital & operating) for urbanized areas related to passenger operations.
Transit Capital Program	5309	Capital assistance for 5309BU, 5309FG, and 5309NS
FTA Buses & Bus Facilities	5309BU	New and replacement buses and facilities
FTA Fixed Guideway	5309FG	Modernization of existing rail and ferry systems
FTA New Start	5309NS	New fixed-guideway systems, including ferry systems. Set aside for State Ferry & Denali Commission, and occasionally transit
Transit Elderly/Disabled	5310	Special needs. Funds are apportioned to states based on number of affected persons. Grants for vehicle purchase, related equipment, & rides
Transit Rural Cap & Ops	5311	Enhance public transportation in rural and small urban areas. Component of RTAP.
Job Access & Reverse Commute	5316	Funds new or expanded projects for low-income who may live in city core and work in suburban locations, or work non-traditional work schedules. Apportioned based on number of low-income persons
New Freedom Program	5317	Service and facility improvement to address persons with disability transportation needs that go beyond the Americans with Disability Act
FTA Alternative Transportation in Parks and Public Lands	5320	Alternative transportation in national parks & public lands
Highway funds transferred to FTA, but not yet under grant	TRNSFR	

Table 2 – FTA Funding Sources

Other Funding	
Programmed Funds	**Code**
Third Party Funds	3PF
Advanced Construction Projects	AC
Advanced Construction Conversion/Payback	ACC
Targeted Advance Construction Conversion	ACC-T
Targeted Advance Construction	AC-T
Denali Commission Funds	DEN
General Obligation Funds	BOND
Indian Reservation Roads	IRR
Cruise Ship Tax	CST
Other State Funds	OSF
Public-Private Partnership Financing	PPP
Proposed State Funds	PSF
State Match	SM

Table 3 – Other Funding Sources

ADOT&PF uses several financial instruments to mitigate staggered funding and to maximize available construction resources. Key financing instruments include:

a) Flex funding
b) Advance Construction (AC)
c) Third party funds (3PF)
d) Public-private partnerships (PPPs)

ADOT&PF uses a mix of targeted AC with FHWA approval to begin a project using state funds prior to the availability of federal funds. This tool allows the state flexibility to use its resources to more efficiently schedule project start-ups.

For example, a project is going to cost $40 million but only $20 million is available in the current fiscal year. The project is initiated under AC because the project phase must be fully funded prior to starting. The AC is partially converted (the $20 million available in the first year is obligated to the project). The remaining costs are then converted in the second year when the additional federal funds become available. This cash management technique allows a project to proceed or be accelerated to meet the State's transportation priorities.

Third party funds include those from the Federal Aviation Administration (FAA), the Bureau of Indian Affairs Indian Reservation Roads Program (BIA IRR) allocated to Tribes under 23 U.S.C 202(d)(2), Federal Transit Authority Administration (particularly the Tribal Transit Program), aviation, marine, and rail.

Public-private partnership (PPP) projects are often undertaken to supplement conventional procurement practices as a way to achieve cost and time efficiencies and expand funding sources, thereby reducing demands on a constrained budget. Some of the funding sources used to support PPPs include:

a) Shareholder equity
b) Grant Anticipation Revenue Vehicles (GARVEE bonds as explained by CALTRANS) and Grant Anticipation Notes (GANs) – repaid through commitments of future Federal and State match.
c) Revenue and general obligation bonds
d) Private activity bonds
e) Bank loans
f) SIB loans
g) Transportation Infrastructure Finance and Innovation Act (TIFA) credit assistance
h) Direct user charges (tolls and transit fares) leveraged to obtain bonds
i) Public agency dedicated revenue streams made available to a private franchisee or concessionaire, e.g., leases, direct user charges for tolled facilities.

The Economic Stimulus, aka the American Recovery and Reinvestment Act Funding (ARRA), directed more the $50 million into the STIP. The many sidebar discussions in Alaska undoubtedly were not much different than those that took place in the other 49 states. There is an extensive reporting and review involved with the ARRA; this information is available if it would help our discussions.

New Sources of Funding

The FHWA Innovative Program Delivery is an excellent source to help transportation agencies explore and implement innovative strategies for transportation project financing. The web site provides details for:

- Project Delivery
- Project Finance
- Public-Private Partnerships
- TIFIA – Transportation Infrastructure Finance and Innovation Act Program
- Revenue

Four new sources of funding that Alaska has tapped are:

1) Alaska Transportation Infrastructure Fund (ATIP)
2) Knik Arm Bridge and Toll Authority (KABATA)
3) Cruise Ship Excise Tax
4) Denali Commission

The **Alaska Transportation Infrastructure Fund** (ATIP) is being proposed to provide a long-term stable funding source for transportation projects. In FY10, 87 percent of the transportation budget came from federal sources. The State has funded specific small transportation projects, but working on larger projects will require sustainable, multi-year funding. The Legislature is examining the possibility of creating the ATIP to address the funding. The Alaska State Constitution does not allow dedicated funds for surface transportation; the legislation must specifically appropriate funds for maintenance, much of the Alaska Marine Highway System (AHMS), state match, and new construction. All the revenue from the gas tax, licensing, and registration goes into the general fund. Creating an ATIP would require a change to the Alaska Constitution.

The ATIP goal is to create a steady, reliable source to fund transportation projects. One ATIP proposal would be to seed the fund with an initial endowment of $1 billion from the State's general fund. ATIP would then receive revenue generated from fuel taxes, vehicle registration, driver's license, studded tire tax, and vehicle rental taxes. One half of these revenues would be available each year for appropriation. The other half would be deposited in the fund to grow and inflation-proof the fund. In addition, six percent of the market value of the fund would be available for appropriation. The Department of Revenue estimates the Legislature should be able to appropriate approximately $100 million the first year and then grow the appropriation about $1.5-2M per year after that.

The proposal calls for a 26 member stakeholder panel composed of 2 legislators, 3 DOT&PF employees, 13 from transportation affiliated associations, 2 from native organizations, and 4 public members. The four public members will be appointed by the Governor. ADOT&PF would create a set of criteria to rank potential projects for the panel to score submitted projects. For each year, not more than:

- 80% of the funds may be used for both state and municipal roads and surface transportation,
- 25% may be used for aviation,
- 25% may be used for the Alaska Marine Highway,
- 20% may be used for harbor facilities, state owned marine facilities, and for deposit into the municipal harbor facility grant fund,
- 20% may be used for local community transportation and transit,
- 15% may be used for trails and bike-paths.

The percentages provide the flexibility needed to focus on one mode one year and switch to another in the following year as needs dictate. The 2012 legislative session will be the next chance to implement the ATIP.

The **Knik Arm Bridge and Toll Authority** (KABATA) was created in 2003 by Alaska Statute 19.75.011 to construct a bridge across Knik Arm connecting the Municipality of Anchorage and the Mat-Su Borough. KABATA has received preliminary funds through Congressional appropriate. Future project funds are anticipated through federal, state,

and local grants, public and private investment. As a public incorporation, KABATA is empowered by the state to sell revenue bonds and establish user fees to fund and operate the project.

In 2006, KABATA received, through legislation, the power and authority to finance construction and maintenance of the Knik Arm Bridge, to set and collect tolls, and to carry out operations. In essence, KABATA would operate much like highway toll authorities in the Lower 48.

The **cruise ship industry** has joined the long list of tourism facilities that are taxed around the country, e.g., lodging, vehicle rentals, entertainment venues, etc. The Governor recently signed legislation reducing the commercial passenger vessel tax from $46 per passenger to $34.50 per passenger traveling on commercial vessels in state marine waters. The bill contains an offset that reduces the tax by up to half for taxes paid to local communities. The bill also repealed the cruise ship impact fund; all tax revenues are now deposited in a special tax account in the general fund. This change will not affect the ongoing community tax fund revenue sharing. This fund supplements local transportation projects that are related to tourism.
The **Denali Commission** is an independent federal agency designed to provide critical utilities, infrastructure, and economic support throughout Alaska. The Commission increases inter-agency cooperation and brings the focus on improving livability in Alaska's rural communities. The Commission brings together expertise from the Alaska native community, universities, construction, public health, finance, local government, construction, economic developing, transportation, energy, and training to address rural Alaska problems. The road program targets basic road improvement needs, opportunities to connect rural communities to one another and the State highway system, and to enhance economic development.

The Denali Commission Transportation Program has established partnerships with the FHWA Western Lands Highway Division, ADOT&PF, and the Corps of Engineers. A wide variety of multi-modal transportation projects have been completed. The types of projects include:

- Local roads and boardwalks (this is really unique to Alaska)
- ATV roads
- Regional ports and local small boat harbors
- Barge landings
- Community connection and economic development roads

Evaluating and Comparing Investment Choices

The STIP establishes the process and criteria for selecting projects for the eight transportation categories:

1) *National Highway System* (NHS) – system of important highways and ferry links that connect the state's population centers with economic centers, border crossings, and intermodal facilities. In 1995, Congress designated all routes that make up the NHS. Ferries and terminals are reviewed in separate category, although are financially part of the AHS or NHS, as appropriate.

2) *Alaska Highway System* (AHS) – system of state highways, roads, and ferry links that are not part of the NHS but are still important to the state because they link cities with economic centers, recreational areas, and span the distances between cities. The AHS routes are established in regulation.

3) *Community Transportation Program* (CTP) – creates partnerships with local governments, tribes, and other parties to build projects serving local and regional needs including economic development related projects.

4) *Trails and Recreational Access for Alaska* (TRAAK) – projects that improve access to recreational facilities and provide trails and pathways for transportation, scenic, and interpretative improvements along highways.
5) *Federally Required Programs and Preventive Maintenance* (Section 200) – projects that are required to meet federally eligibility such as data collection, bridge inspection, research, and similar programs.

6) *Earmark Projects* – known or expected earmark projects, where some of the projects are sometimes speculative since future earmark funding is not realized until the earmark is contained in a Congressional appropriations bill.

7) *Public Transportation* (Transit) – projects that provide financial assistance to develop new transportation systems and to improve, maintain, and operate existing systems.

8) *Federal Lands Highway Program* – projects that include other federal surface transportation funding programs, not generally allocation to the states, including the Park Roads and Parkways, Forest Highways, and Indian Reservation Roads.

The STIP outlines the Department's project selection process for the NHS, AHS, CTP, and TRAAK.

1) **National Highway System including AHMS**: ADOT&PF selects NHS projects based on the need to upgrade sections that are below current standards, accomplish pavement rehabilitation, provide safety improvements, or increase capability. Since nearly all NHS routes are and will remain in state ownership, no scoring process is used as competition for these funds do not involve a third party. Tools such as safety, pavement, and bridge management systems are relied on extensively.

2) **Alaska Highway System**: ADOT&PF selects AHS projects based on the need to upgrade sections that are below standards, accomplish initial hard surfacing or pavement rehabilitation, provide safety improvements, or increase capacity. Since nearly all AHS routes are and will remain in state ownership, no scoring system is used as competition for these funds to not involve a third party. The State uses the safety, pavement, and bridge management systems to inventory and monitor the State's roadways and bridges.

3) **CTP and TRAAK**: there is a public call for project nominations. Native organizations, local government, private parties, state and federal agencies and others interested in transportation development may nominate projects. ADOT&PF can also submit projects for consideration. For the 2010-2013 STIP, there were about 1,000 potential surface transportation projects submitted for consideration.
Each potential project is scored using established evaluation standards and criteria, as published in each STIP rendition, i.e., 2010 to 2013 STIP Project Evaluation Criteria. Each project is scoring using of the five sets of standards and criteria:

   a) Community Transportation and Economic Development Program (CTP)
      a. Rural and Urban Street and Roads Criteria
      b. Remote Roads and Trails Criteria
      c. Transit Projects Criteria
      d. ITS Projects Criteria

   b) Trails and Recreational Access for Alaska (TRAAK) Criteria

   The list of top scoring projects in the CTP and TRAAK programs are programmed into the ST, with the funding allocated for each program. Generally, the highest scoring projects are included in the earliest years of the STIP. While this general rule guides the placement of most CTP and TRAAK projects, other programming factors also influence the STIP development, including the following considerations:

   - Projects with approved environmental documents are "grandfathered" or "baselined" and are carried forward for construction. These include the "time trap" projects that may require payback if not completed with a certain time period.
   - State advance construction or bond repayments are given priority; the financial obligations that must be repaid.
   - Complex projects involving difficult right-of-way issues, utility relocation, or extensive environmental considerations are assigned more time between phases.
   - Projects recommended by an adopted regional transportation plan as part of the Statewide Plan are given higher consideration consistent with the federal regulations and state law.

- Projects are coordinated with associated projects and other funding sources in order to best leverage the overall transportation program to maximum benefit.
- Projects associated with unique events, such as the centennial of a community's founding are scheduled to fulfill the event time when possible.
- Congressional earmarked projects are scheduled in the STP according to the sponsor's needs if permitted by FHWA.
- Preventative maintenance, security, and emergency work is given priority.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

Risk Analysis in the Planning Process

Risk is addressed in terms of future trends affecting long-range planning in the Alaska's Statewide Long-Range Transportation Policy Plan, *Let's Get Moving 2030* (Feb 2008). The Plan lays out strategies to address the primary risks to transportation in Alaska. The following areas are intended to be reflected in the Statewide Transportation Improvement Program (STIP):

a) Travel Demand. Growth in travel in the State's two metropolitan planning areas is likely.
b) Financial conditions. ADOT&PF is highly dependent on federal funds, which places Alaska's ability to fund surface transportation projects (multimodal for the significant contributions from the marine highway and airports). Federal funds are not expected to grow and likely could decrease in the coming years. User fees, such as fuel tax, have limited yield due to the high cost of highways, the low number of users, and the heavy industrial component. The throughput for the Oil Pipeline is about half of the original production. Even though the price for petroleum has increased significantly, the out years would suggest there would be less funds available to the State with further declining North Slope production. Other potential sources of funding, e.g., revenue bonds, tolls, and ultimately VMT-based charges, are not viable.
c) Subsidies. The Essential Air Service and By-Pass Mail programs bring a major source of federal funds that subsidize air service in Alaska. The Alaska Marine Highway System (AHMS) operating subsidy is a major part of the ferry system operations. All of these subsidies must continue to grow with increased costs, if these systems are to continue at present service levels.
d) Construction costs. Alaska continues to experience construction cost inflation rates that more than the general inflation rate. This impacts both project completion and project selection.

e) Climate Change. The implications of climate change are real and staggering. The cost for replacement of destroyed critical transportation infrastructure and relocation of facilities, and in some cases, the entire village, is staggering.
f) Dust Control. The cost and regulatory requirements for dust control in rural communities are uncertain.
g) Preservation and Maintenance Needs. The continued underfunding of maintenance and the anticipated shortfalls for preserving an aging infrastructure will result in a growing backlog of preservation and maintenance needs.
h) Non-Attainment Designation. The Fairbanks Metropolitan Planning Area was recently listed as $PM^{2.5}$ non-attainment area. The Clean Air Act will requirement the transportation planning process to address this issue.

The LRTP lays out strategies and actions to reduce the needs versus the anticipated funding gap in implementing the plan's policies and addressing the State's priorities. Risk is an element of the discussion. Some of the Plan's Actions have been implemented. Four strategies are discussed:

1) Prioritize needs through an integrated planning process that evaluates choices and guides investment decisions based on fiscal realities.
2) Manage for results and apply resources effectively through the application of best practices.
3) Constrain needs
4) Increase revenues

The Federal Highway Administration (FHWA), Alaska Division, has been conducting a Department-wide high level risk assessment review. There are similar activities ongoing in other state DOTs. Table 4 identifies the six high-level risks identified in the *ADOT&PF Planning Customer Risk Register.* The FHWA Alaska Division and the DOT&PF Planning staff review this register annually.

<u>Performance Based Planning & Performance Based Planning</u>

The 8 primary risks identified in the LRTP are reflected in the ADOT&PF Customer Risk Registers for each Department functional area. The Alaska Priority, Department, and work center performance measures should also reflect the primary risk and risk matrices. The Department's LRTP, regional transportation plans, and the two regional metropolitan area plans reflect the constraints and risks. Conveying the uncertainty for both adequate funding and delivery construction delays beyond the control of the transportation agency, e.g., increasing construction costs, is an ongoing activity for ADOT&PF.

Risk Event (if….)	Risk Impact (then….)	Likelihood	Threat / Opportunity
If financial plans and information relating to fiscal constraint are not adequately reviewed, verified, or substantiated,	then the program will suffer loss of public trust between what is promised and what is provided; financial shortfalls will occur that require delaying or dropping projects; taking money from other projects/ programs.	Almost Certain	Major Threat
If the STIP project prioritization process is challenged or the institutional knowledge in completing the process is lost	then the program will suffer loss of public trust because of lack of transparency; the STIP development will be delayed; and the program effectiveness will be temporarily reduced	Possible	Major Opportunity
If the Motor Fuels Taxes are not reported accurately or timely	then the State's contribution to the Highway Trust Fund is not accurate and the formula for distributing Federal-aid highway funds will not be accurate	Unlikely	Moderate Threat
If the Highway Statistics Reports are not reported accurately or timely	Then FHWA will not have consistent, comprehensive overview of the source and application of funds for highway purposes	Possible	Minor Threat
If the Statewide LRTP isn't developed with enough stakeholder involvement and it will not express a true vision for transportation in Alaska	then the plan will not be effective in getting the transportation decisions	Unlikely	Moderate Threat
If the public involvement in the planning process is not done in an effective manner,	Then the program will suffer loss of public trust because of lack of transparency, and the program effectiveness will be temporarily reduced.	Possible	Moderate Threat

Table 4. ***ADOT&PF Planning Customer Risk Register***

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

<u>Public Accountability and Efficiency</u>

One of the most significant issues in the overall process is the time span between when projects are approved & funded for match requirements, and published in the STIP and when the projects go to construction. Many in the public arena, including the

legislature, think as soon as their project is listed in the STIP they will see the project progress. Delays in other projects and unanticipated costs often require slippage in future projects. Right-of-way procurement and environmental review often takes more time than budgeted. For this reason, Transportation is often scrutinized.

Many of the factors for project delay are beyond the control of ADOT&PF. The Statewide Transportation Improvement Program (STIP) implements the policies developed in the Statewide Long-Range Transportation Policy Plan: *Let's Get Moving*. The STIP is structured to address key policy objectives outlined in this LRTP, and include:

- System development
- System preservation
- System management and operation
- Economic development
- Safety
- Security
- Economic development and quality of life
- Good government

The Department has gone to great lengths to brief the legislature and the public on the STIP process and how each project's lifecycle works. In addition to the environmental and historic pieces, each project may consist of a number of intermediate stages for four major project stages:

1) Planning – includes project need identification, preliminary scope and description, project ranking, compliance with federal/state regulations, coordinating into the regional, statewide, and modal plans, evaluating and prioritized in accord with the LRTP, and finally programming into the STIP.
2) Design – depending of the complexity of the project, this may include preconstruction, engineering design, and environmental review
3) Right-of-way (ROW) – identification and acquisition of land needed to build a project and the relocation of residences and businesses that may be in conflict.
4) Utilities – when public utilities located in the right-of-way are in conflict with the planned improvements, they may be relocated
5) Construction – includes all physical steps to build the project.

Some of the STIP's key elements that address this process include:

a) New transportation authorization legislation is still being developed.
b) The Highway Trust Fund is tapped out.
c) The *American Recovery and Reinvestment Act of 2009* provides additive projects.
d) Illustration list of projects that could advance if additional funding becomes available.

e) Authorization versus appropriations in the governing legislation versus the Congressional appropriations may impact the current STIP.
f) Assumptions of fiscal constraints for anticipated available funding.
g) Innovative financing
    a. Flex funding
    b. Advance Construction (AC)
    c. Third party funds (3PF)
    d. Public-private partnerships (PPPs)

Adjusting Project Delivery

The STIP is very much a living document – even after receiving final approval. There are multiple forces at work here that include unforeseen right-of-way or environmental issues, new priorities, or a natural disaster. Delays in obligating some funds could result in losing the ability to use them later. That means that in order to maximize the state's ability to use its federal spending authority, projects not ready to advance at a critical time may be replaced in the schedule by others that are ready to go. These additional "illustrative" projects are allowed under 23 CFR 450.216(l). For the reasons described, ADOT&PF has many STIP amendments to deal with project changes.

Another challenge is for ADOT&PF to systematically track the obligation of STIP project funds across the various phases (Planning, Design, Right of Way, Utilities, Construction). Without a robust obligation tracking system there is a risk in not being able to identify potential project phase delays, anticipated cost increases, and the impact on other projects. With the Department organized in a centralized planning and decentralized execution structure, we do not have effective performance model for tracking project obligations.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

Other Goals

Alaska, like other states, is addressing these issues in several venues. It is fair to say that Alaska has differences with some other states and the federal government on approaches to addressing these issues. None is more visible that with the national energy policy. The Governor and congressional delegation are advancing these issues. Here are just a few with appropriate references:

a) Air Quality – Alaska has air quality nonattainment and maintenance areas. Nonattainment areas are those that fall below air quality standards. Maintenance areas are those that now meet air quality standards, but need funds to maintain to acceptable standards. Communities impacted by the maintenance and

nonattainment, with assistance from the Alaska Department of Environmental Conservation, must periodically prepare updates to the State Implementation Plan (SIP) that demonstrate maintenance of CO and PM air quality standards. The current National Ambient Air Quality Standards (NAAQS) Alaska locations are:

a. Portions of Anchorage and Fairbanks – maintenance areas for carbon monoxide (CO;
b. Portions of Eagle River – moderate nonattainment area for coarse particulate matter (PM_{10})
c. Juneau's Mendenhall Valley – maintenance area for PM_{10}
d. Portions for Fairbanks – nonattainment area for fine particulate matter ($PM_{2.5}$)

The Clean Air Act policy requires a review for all transportation projects in the non-attainment areas, aka Transportation Conformity. LRTP and Transportation Improvement Program (TIP) projects proposed for construction within the air quality nonattainment and maintenance areas must undergo regional and project-level analysis to make sure they conform to the SIP. Regional analysis looks at the combined emission impacts of all projects in an area for each year within the TIP timeframe, an approximate 20 year period. The regional analysis must consider all transportation projects, regardless of funding.

One source of particulate matter, especially in rural areas, is road dust from the use of vehicles (cars, trucks, and four-wheelers) on unpaved roads. Control options, which all have both advantages and disadvantages, include:

a. Watering roads during dry periods
b. Use of chemical additives (salts) mixed with water
c. Speed limits and limiting mechanized travel
d. Rerouting traffic away from elder's homes or schools which have people who are sensitive to dust
e. Road paving

b) Alaska Gasline Potential

c) Alaska Performance Scholarship

d) Air Pollution in Alaska Communities

e) Climate Change

f) Comprehensive Energy Plan

g) Creating a Climate for Jobs and Economic Growth

a. Energy development
b. Incentives for companies that invest in Alaska
c. Increased focus on developing business and the workforce
d. Construction of critical infrastructure, including deferred maintenance
e. Roads to Resources Initiative. Opening roads to resources and communities is vital to the economic health, sustainability, and livability. The LRTP, STIP, and regional transportation plans all focus on this initiative. ADOT&PF has a distinct program for the Industrial Road Program. The Roads to Resources Initiative objectives are:
    i. Increase access for communities
    ii. Responsible development of fish, timber, minerals, and petroleum reserves
    iii. Road to Nome to provide connect western communities to the road system and to provide access to natural resource deposits.
    iv. Road to Umiat to connect known and perspective oil and gas resources from the Dalton Highway
    v. Improving key roads such as Dalton Highway to North Slope and Cascade Point Road in Juneau
    vi. Stable, reliable Alaska Marine Highway System

h) North Slope Oil Production Decline

Juggling the Goals

As with other States, Alaska has many of the challenges in addressing goals that sometimes conflict with each other. Some of these conflicts that involve transportation include:

1) Urban versus rural funding
2) Energy/natural resource development versus the environment
3) Energy development versus long term needs and potential markets
4) Funding for each of the transportation modes versus the area it serves, i.e., marine air, and highway service
5) Affordable livability versus operations & maintenance of transportation network
6) Air quality versus transportation contribution as a pollutant source
7) Permitting for construction & energy exploration versus need to protect the environment
8) Community changes/destruction due to climate change versus cost to maintain existing transportation infrastructure
9) Economic diversification and job creation versus dependence on major players in the oil, gas, timber, natural resource, and fisheries

Ultimately many of these challenges are left to the political decisions, regulations, environmental considerations, and apportionments, with transportation responding to the expressed needs and strategic goals. The STIP is structured to address these policy

decisions, which are reflected in the LRTP. The emphasis areas in the 2010 – 2013 STIP emphasis areas are:

- System development
- System preservation
- System management and operation
- Economic development
- Safety
- Security
- Environment and quality of life
- Good government

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Note: Response Prepared by Montie Wade (Texas Transportation Institute) with input of Texas Department of Transportation Staff *fn=c:/trb/questionnaire response peer 7.8.11ver 2*

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

Answer: TxDOT significantly updated its planning and project develop rules earlier this year (Texas Administrative Code – see following link) with significant input from our external stakeholders (both Legislature and statewide committees). Particular emphasis has been placed on improved communication and early involvement of our Regional Planning Authorities either at the Metropolitan Planning organizations or Council of Governments, City and/or County. Due to the current financial environment, it has become apparent that our partners and elected leadership are interested in a most robust formula driven allocation of all funds available for "mobility" enhancements. Across all categories; metro, urban and rural, the formulas must produce statewide prioritization. TxDOT is currently investigating the implementation of "Decision Optimization" software, to assist in the ranking and weighting of all projects proposed for inclusion in the STIP. As far as we know, we do not believe regulations will prohibit this enhancement.

Texas Administrative Code: Title 43-Transportation, Chapter 16-Planning & Development of Transportation Projects

2. How are system operations being addressed in planning?

Answer: Minimum "levels of service" supporting optimum system operations have been established. The offices responsible for maintenance operations have developed four year maintenance plans ties to the optimum service levels as targets for pavement/bridge/ROW performance. The maintenance funding is distributed to each District office based on the processes outlined and justified in the plans.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

Answer: Yes, our MPOs and Regional Mobility Authorities work closely with TxDOT in identifying local sources of funding to leverage with traditional transportation funding. TIFIAs, bond programs supported by toll roads, and transportation tax zones designated for specific time and projects are all providing user-based funds for construction.

Comprehensive Development Agreements and Public-Private Partnerships are working here in Texas to provide up front capitol for long term management and operation of toll/managed facilities. A Comprehensive Development Agreement (CDA) is the tool TxDOT uses to enable private development by sharing the risks and responsibilities of design and construction. In some cases, financing and private investment in the transportation system can be included in the process. It provides a competitive selection process for developing regional projects or much larger undertakings. In addition, this contracting tool can streamline the time needed to deliver the project because multiple tasks can be under way simultaneously. A public-private partnership, like a CDA, opens the door to accelerated financing, design, construction, operation and/or maintenance of a project.

TxDOT also uses Regional Mobility Authorities (RMAs) as political subdivisions formed by one or more counties to finance, acquire, design, construct, operate, maintain, expand or extend transportation projects. These projects may be tolled or non-tolled.

TxDOT performance is impacted through increased funding capacity to bring more projects to construction in the nearer term.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

Answer: TxDOT has begun the analysis of economic impacts benefits or "opportunity cost" to support the build/no build analysis. Also, the question of sustainable investment has become a question of who has responsibility; local or state, the long

term maintenance of HOV/Managed Lanes/Landscape Enhancements drives most funding options.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

Answer: TxDOT has chosen to display all information relative to both the funded and unfunded elements of project programs. Performance is reported on our capability to produce projects in the programs and complete them on time. Our legislature is permitting additional bond authority only for selected projects. Those specific projects are progressed on our TxDOT Project TRACKER web site.

Project Information includes studies, reports, databases and applications related to current and future infrastructure projects. Users may find information such as a project's current status, plans for future construction and how these projects will impact mobility. Inside TRACKER you'll find a set of key measures and indicators that we use to gauge agency and system performance. Statewide congestion trends as well as how the Department is staying on budget with the resources provided the agency are shown. The following is a link to Project Tracker.

http://apps.dot.state.tx.us/txdot_tracker/

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

Answer: We are defining what sustainability means to the Department and using evaluation of economic impact as a metric in the justification of capacity projects. When goals conflict, the weights of the indices are used to integrate the impacts into the decision of choosing projects for the required fiscally constrained plans.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Response from David Wasserman – NC Dept. of Transportation

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

NCDOT has three main goals of:

- Make our transportation network safer (safety)
- Make our transportation network move people and goods more efficiently (mobility)
- Make our infrastructure last longer (infrastructure health)

The Department adopted these goals in 2007 and has been using them as the foundations for most everything the Department has done since. NCDOT implemented the first Strategic Prioritization Process in 2009, using safety, mobility, and infrastructure health as drivers in the project scoring and ranking process. Projects were evaluated based on crash rates, congestion, and pavement condition rating as part of the quantitative scoring component. For the next round of Strategic Prioritization is referred to as P2.0 (implementation in summer 2011), NCDOT has formalized a workgroup of internal and external partners (MPOs, RPOs, etc.) to enhance the prioritization process. Based on input from this workgroup, two additional criteria relating to economic have been added to the quantitative scoring: Benefit/Cost and Economic Competitiveness. These new criteria evaluate projects based on bang for the buck and show how these projects might influence the local economy.

2. How are system operations being addressed in planning?

The Department is currently in the midst of developing a statewide travel demand model. When complete this tool will allow NCDOT to evaluate various types of transportation improvements and see their effect on the entire statewide network. This includes the evaluation of such improvements as superstreets, ITS components, signal systems, etc. In the absence of the statewide travel demand model, these improvements are evaluated based on engineering analysis, judgment, and research, and the expected travel time benefits.

NCDOT has also conducted several corridor studies within the past decade that analyze both long-term and short-term improvements. While the long-term improvements are typically majority capacity projects, the short-term improvements have focused on implementing access management techniques, superstreets, and other operational type projects.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

In the summer of 2010, North Carolina created the Mobility Fund to fund projects of statewide and regional significance. The Mobility Fund is funded through NC highway trust monies (these funds previously went sent to the NC General Fund, but have since been allocated towards the Mobility Fund). While the current amount of funding is only $58M per year, the current General Assembly has proposed increasing this amount by transferring previously allocated highway funds. The same workgroup that assisted with P2.0 (as noted in question 1) also help develop project criteria and selection process for the Mobility Fund.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

NCDOT's prioritization process is comprised of two components. The first piece is the scoring and ranking process, as described in question #1. Once all the projects are ranked, they are classified by the type of projects and what Department goal they intend to help the most. A performance level of service (LOS) is used to evaluate the current and forecasted conditions (A-F) for each of the Department goals. The ranked projects are then analyzed on how they will help maintain or improve the LOS for each goal. This approach shows the benefits the project/group of projects will provide. Likewise if these projects are not funded or implemented, the effect on the LOS can be seen.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

NCDOT's mission statement includes the very word accountability - *Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity*. NCDOT's goal is to deliver 90-95% of projects within the first five years of the Work Program on-time and on-budget. The Department is committed to these projects to make sure they are implemented. NCDOT has created a performance dashboard where anyone can see how effective the Department is in meeting these goals. In addition, the top 50 managers at NCDOT have their annual performance measures tied directly to these executive dashboard metrics which ensures a full commitment within the staff.

The Work Program document not only includes major transportation projects, it contains revenue projections and proposed funding allocations across all modes of transportation (aviation, bicycle and pedestrian, ferry, highway, public transportation and rail) for Construction and Engineering, Maintenance, Operations and Administration. This document is a very transparent approach to see where every dollar is spent.

Similarly, the Department's Prioritization processes have also been very transparent. The detailed process and all project information, scores, data, and results are posted on NCDOT's website for anyone to see.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

While these items are not specifically noted in the Department's goals or mission statement, NCDOT does consider these goals to be important topics. A major challenge is defining these terms and determining performance measures that can equitably be applied Statewide. What may be considered "sustainable" and "livable" at the coast may be very different in the metropolitan areas or in the mountains. These issues seem best suited for decision-makers to define at the local level.

Nevertheless, NCDOT's prioritization process does incorporate a number of sustainability and livability measures. Based on an FHWA Driven model (used in Maine), NCDOT incorporates several of these items into the Department's strategic prioritization process:

- Economic Vitality is incorporated with the economic competitiveness criterion, as this factor measures the potential increase in jobs, wages, and productivity the project may create
- Safety is incorporated through evaluation of crash rates and crash severity that occur along the project corridor

- The expected travel time savings that the project will provide along the corridor is one of the prioritization criteria. Savings are calculated for projects that improve both the physical (widening, new route) and/or operational capacity (such as ramp metering, signal systems, etc.)
- Projects are awarded multimodal bonus points based on whether the project incorporates such options such as light-rail or HOV/HOT; whether the project enhances a direct connection to a major transportation terminal such as an airport, rail depot, bus depot, etc.; or whether the project incorporate design features such as sidewalks, bike lanes, transit pullouts, etc.

In addition:

- Sustainability is specifically listed on NCDOT's performance dashboard, in particular regards to the amount of energy use at rest areas.
- Economic health and jobs are now included in the prioritization process as part of the economic competitiveness criterion.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions?

Arizona Councils of Governments (COGs) and Metropolitan Planning Organizations (MPOs) are ADOT's partners in regional and statewide planning and continually strive to find alternative ways in restructuring and prioritization to make projects happen with scare funding. State Planning and Research (SPR) funding from FHWA is traditionally the resource of which ADOT utilizes to conduct planning studies small or large in scope. One planning product derived from this process is the Planning Assistance for Rural Areas or 'PARA'. Because this planning activity is supported by federal funding and in-kind match, ADOT has been able to make this available to rural local governments with no match commitment.

Additionally, the PARA program has been able to be more flexible with federal funding than other federally funded transportation planning programs. The PARA program may be applied to address a broad range of planning issues related to roadway and non-motorized transportation modes. Funds may be applied to studies dedicated solely to the planning of public transportation and potentially other non-motorized modes.

ADOT recently completed an update to their Long Range Transportation Plan, which is required by federal regs as well as State Statue. In the update, the Plan has identified investment Choices in Expansion, Modernization and Preservation instead of identifying actual projects. This approach will give ADOT the flexibility to change it's priorities based on current trends and influences. Once the Plan is adopted by the State Transportation Board, ADOT intends to restructure it's Priority Programming process to align with their Long Range Plan. This will provide a direct link between planning and programming.

Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

With respect to planning regulations, in the past decade the Arizona legislature has done the opposite of restraining, by creating more financial opportunities, clearer guidance and requirements.

The State has enacted two important pieces of legislation that have been instrumental in the way ADOT currently conducts financial management and transportation planning processes.

Public Private Partnerships (PPP)
On July 13, 2009, current governor Jan Brewer signed into law HB 2396, which allows the Arizona Department of Transportation to use public-private partnerships as a tool to address Arizona's transportation requirements. This new law grants the Department broad authority to partner with the private sector to build or improve Arizona transportation facilities. The new authority gives ADOT additional methods to fund the construction and enhancement of roads, transit and other transportation facilities.

Performance Based Planning
Arizona Revised Statutes define transportation planning practices to be carried out by the ADOT Transportation Planning Division (re-named Multimodal Planning Division). The goal of the performance measures is to determine the extent to which the transportation system is moving people, goods, and services in relation to the cost of system preservation, maintenance, and expansion."(ARS 28-504)

By State Law (ARS 28-504), ADOT's standardized transportation system performance measures shall include at least all of the following:

1. The estimated number of individuals transported.
2. The estimated amount, by weight or volume, of freight transported.
3. The number of miles traveled.
4. The number of vehicles and the estimated capacity of those vehicles.
5. The estimated cost per individual moved per mile.

2. How are system operations being addressed in planning?

In 2007 ADOT leadership began a process of reorganizing its own planning processes and personnel to address system operations planning, among other modes, e.g. transit, bicycle, highway. This radical change required for the consolidation of the recently formed Public Transportation Division into the existing Transportation Planning Division. This formed ADOT's Multimodal Planning Division (MPD).

ADOT's Multimodal Planning Division is committed to providing the highest quality multimodal transportation research, plans, and programs to the public. The central objective of MPD is to help identify current significant transportation issues in Arizona as well as

improve existing systems. MPD is also committed to researching and planning the development of supporting strategies needed to optimize investment to preserve and expand the State's transportation infrastructure.

Maintenance and operations were address in our Long Range Plan when the overall needs were identified and in the financial forecasts.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding

Arizona is continually pursuing new sources of funding, and learning to be more creative with existing funding. Because of limited and uncertain available funding, ADOT has been seeking other solutions to sustain planning and construction activities. One creative use of existing funding is through the development of public-private partnerships. In 2009 Arizona Governor Jan Brewer signed into law a bill enabling the state to pursue public-private partnership (PPP) agreements for transportation projects, including the use of toll roads (a first for Arizona). The law, HB 2396, gives ADOT broad authority to purse PPPs using a variety of project delivery methods and forms of agreement. While developing public-private partnership (PPP) ADOT may consider both solicited and unsolicited proposals, permit private sector partners to collect user fees on PPP projects and accept private capital in pursuing projects, among other key provisions.

As part of the Long Range Plan, many new funding sources were identified to assist with bridging the gap between our expected revenue and the overall needs over the next 25 yrs. These potential new revenue sources could be pursued by ADOT Management and possibly introduce to the State Legislature for consideration.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects?

ADOT implements a 'no-build' scenario in its highway planning projects, e.g. design concept reports, etc. The 'no-build' alternative is always included as a benchmark against which the impacts of other alternatives may be compared. The 'no-build' alternative does not typically provide major improvements to the highway project.

During the update to ADOT's LRTP, performance based planning was utilized by the State to evaluate the different Alternative Investment Choices. These performance measures will be a critical part in linking planning and programming in the future. Risk analysis could be a component in identifying which programs and/or projects are considered for funding or not.

How does this impact implementing performance based planning and programming?
As ADOT conducts performance based planning, as required by State law in ARS 28-504, the agency determines the extent to which the transportation system is impacted in a 'no-build' scenario, with respect to moving people, goods, and services in relation to the cost of system preservation, maintenance, and expansion.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times?

One example of ADOT's commitment to weather the storm of these difficult economic times while retaining the trust of the public is the agency's creation of the Communication and Community Partnerships (CCP) Division or 'CCP'. CCP follows the agency's strategic objectives while following a vision statement of, "Driven to get people where they want to go." The division's mission is "To Engage the Community in Arizona's Transportation Solutions." In addition to ADOT values, CCP specifically embraces innovation, commitment, transparency, and trustworthiness in working with all stakeholders. Annual performance measurements for the division emanate from four strategic focus areas:

- Customers – Build positive relationships with customers
- Processes – Develop operational rigor
- Services – Provide "best practices" transportation communication services
- People – Create fulfilling, high-performance culture

During the development of ADOT's LRTP, extensive public involvement and outreach was utilized by the study team to explain the impacts during these difficult economic times. During these outreach efforts, many individuals understand the affects of the economic and how some reduction in certain types of transportation investments could be reduced, such as expansion investments. Based on limited funding and the lack of any new or additional funding, the desire to maintain the existing system seemed to be the most accepted approach during these tough economic times. The input ADOT received during this outreach effort showed support for adjusting our priorities in the future.

Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

The State has been active during these economic times where reduced transportation investments are possible. In 2009 ADOT was actively involved with the delivery and distribution of funding statewide during the American Recovery and Reinvestment Act (ARRA) program. Also completed in 2009 was a two-year planning exercise that ADOT conducted with members of the public and organizations throughout the state to develop "Building a Quality Arizona (bqAZ), a shared vision for Arizona's transportation future. The intent of bqAZ was to develop a framework of long range transportation solutions to meet the state's growth in the next forty years. The overall goal is to develop a program of projects that meet the demand for our future transportation needs. The program of projects and costs

will be developed during the State's current long range planning process known as, 'What Moves You Arizona.'

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment?

ADOT understands the need to address environmental issues while address planning and construction of the transportation projects.

During ADOT's bqAZ planning process, the COGs and MPOs from around the state worked with ADOT to focus on a sustainable and livable Arizona. The following are some of the needs or policy changes and concepts identified within the bqAZ planning process:

- Need to recognize NEPA process will change. We need to be at the table, not on the menu.
- Create multi-disciplinary climate change team across ADOT
- Wildlife connectivity mitigation in response to Climate Change
- Impact to asphalt (rubberized, emulsifications)
- Consider more roundabouts
- Reduce idling, safety improvement, lots of benefits

How are you juggling these goals when they appear to conflict?

ADOT, among other State agencies, including the Arizona Department of Environmental Quality, realized a need to logically and efficiently manage the state's needs relative to sustainability, livability, climate change, etc., overall with respect to smart growth. During this time the Arizona Smart Growth Scorecard was developed to address this need.

The Arizona Smart Growth Scorecard is a voluntary, self-assessment tool that local jurisdictions can use to evaluate the effectiveness of their planning and development efforts. Planning and zoning decisions have considerable influence on quality of life and that of future generations. How land use decisions are implemented impacts every resident of every community - from travel to work and school, to which parks have picnic areas and pools, to the safety of neighborhoods.

The Smart Growth Scorecard can aid the ability of local officials to plan for growth and development though its use of the Principles of Smart Growth. These include:

- Mix land uses
- Take advantage of compact building design
- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Foster distinctive, attractive communities with a strong sense of place
- Preserve open space, farmland, natural beauty and critical environmental areas
- Strengthen and direct development towards existing communities
- Provide a variety of transportation choices

- Make development decisions predictable, fair and cost effective
- Encourage community and stakeholder collaboration in development decisions

TRB Statewide Planning Committee (ADA10)

Peer Exchange, July 8-10, 2011

Addressing Financial Uncertainty in the Planning Process

WISCONSIN

1. **How are you structuring/changing your goal setting, prioritization process, programming and project selection process in order to provide flexibility and resiliency in response to changing funding conditions?**

   As part of the development of the updated State long range plan—Connections 2030--we took a different approach (http://www.dot.wisconsin.gov/projects/state/connections2030.htm). The previous plan "costed out" plan implementation over the life of the plan, which resulted in large dollar amounts & large gaps in revenue. This was not received well by implementers—the Governor, the Legislature or the public. Unattainable funding levels were perceived as irresponsible and unrealistic. Instead, as part of C2030, we: Explained the current funding system in Wisconsin for transportation improvements (there were many new actors who were not well versed in funding); described near-term and long-term revenue forecasts; compared funding the base programs to these forecasts and came to the logical conclusion that more revenue was needed. We restated the problems/challenges for Wisconsin, which were: An eroding revenue base; increasing cost of doing business; new demands for alternative modes (funding our rail system improvements); and the lack of focused funding for multimodal corridors. We then included a description of the current transportation study efforts at both the federal and state level. The major change for the Plan development process was to make transportation needs in the state more manageable, more specific and more multimodal—thus the development of individual corridor recommendations & maps (see C2030 statewide, system-level priority

corridor maps, Appendix A). This approach also allowed us to illustrate the operational needs in each corridor—more on that later. Individual corridor projects could then be brought into our programming process directly from the C2030 Plan framework.

In terms of programming, our prioritization process assigns projects to one of 12 priority classes. Things we consider in prioritization include: safety, critical bridge replacement needs, cost of service life extension, interstate status, ADT, and truck-weighted ADT, etc. Projects are prioritized until we have assigned all of the available funding.

Relatively small changes in funding between years result in moving backward or forward projects between fiscal years. Major changes in funding will require both reprioritization and further analysis of selected pavement treatments (significant funding reductions may force the selection of the lowest upfront cost treatment—even though these treatments may cost more in the long run).

Are there planning regulations that are inhibiting your ability to be more nimble & responsive to changing conditions?

(a) One of the continuing problems faced by all states is the lack of multimodal dollars to be allocated to cross-mode projects. As an example, we can plan at the corridor level and illustrate the needs for multimodal connections that improve last mile facilities between a port and the local road system but there is no funding pot to support these types of projects. (b) Also, there continues to be a lack of trained staff with experience in multimodal planning & project development in State DOT's. (c) To some extent, fiscal constraint continues to be a problem for both MPO's and the State. Not so much that it is difficult to illustrate but whether the time spent in these discussions is productive and useful to the process. Individual federal agencies seem to impose different interpretations to how rigorous federal requirements are imposed.

2) **How are system operations being addressed in planning?**

For the first time, Connections 2030 included both maintenance recommendations and system operations recommendations. Managers of the system operations function at Wisconsin DOT took the corridor maps directly from the long range plan and developed an Operations Plan & Programming document. This plan, entitled "Wisconsin Traffic Operations Infrastructure Plan (TOIP) outlines methodologies & plans developed to assess the operational needs along Wisconsin's 37 State-wide System Level Priority Corridors directly as developed by the C2030 long range plan, including appropriate ITS improvements to mitigate needs. These needs were developed in a quantifiable manner to enable deployment with traditional highway project improvements. This is the first time that this has occurred in the planning process at Wisconsin DOT. The TOIP can be viewed on the Wisconsin Traffic Operations & Safety Laboratory website (http://www.topslab.wisc.edu/its/toip).

3) **Is your State pursuing new sources of funding? Is that influencing how you are evaluating& comparing investment choices?**

The Governor of Wisconsin included in his biennial budget recommendations for the Department several new sources of revenue, including depositing 7.5 % of the sales & use tax revenue generated from automobile-related sales into the Transportation Fund beginning in FY13. The percent of revenue transferred each year increases by 5% until 50% of the revenue would be deposited. In FY13 up to $35.2 million would have been deposited. In addition, all state operations assistance for transit would be transferred to the general fund (freeing up segregated transportation funds for other uses); $19.5 million each year would be transferred from the Petroleum Inspection Fund to the Transportation Fund and additional bonding. For the next biennium (July 1, 2011 thru June 30, 2013) with a substantial deficit in the Fund, the Governor's budget included employee retirement/sick leave contribution increases, 10% reductions in local aids, elimination of all vacancies 12 months or older (142 FTE long term vacancies in DOT) as well as other operations reductions. At the time of this write-up, the Legislature just approved several changes to this budget including a direct one

time transfer from the State's general fund to the transportation Fund rather than the sales tax transfer. The biennial budget process will not be complete until June.

It is not clear that with the changes the Legislature has made, that transportation funding will be sustainable beyond the next biennium. With uncertainty in the status of federal funding as well as the loss of many positions, there continues to be a concern over delivering basic transportation programs.

4) **How are States incorporating risk analysis into the planning process?**

We did not specifically address risk analysis in the development of Connections 2030. We did discuss emergency planning and operations. We have completed some "risk assessment" as part of the biennial budget development process where we document impacts from across-the-board budget reductions or the impact of eliminating certain programs entirely.

5) **How is your state responding to the desire for public accountability and efficiency?**

The Connections 2030 long range plan was designed to identify specific actions the Wisconsin DOT will take in response to each policy area, along with a specific timeframe for each. It is the intent that we will be able to track progress on implementing the Plan by reporting on these specific action items. However, due to a lack of resources the tracking process has not been established. Because the policy recommendations were developed in conjunction with program areas in the department, some program managers have already moved forward to implement specific actions in the Plan. In addition, the priority corridor maps were designed to illustrate needs and next steps for transportation improvements in each corridor. Efficiency concerns have not been a particular issue because of the large reductions in operating budgets and staff being experienced across state

government in this biennium. Many program responsibilities have been reduced due to resource constraints.

6) **How is your state dealing with other goals such as sustainability, livability, climate change, etc. in this current environment?**

In 2007, then Governor Doyle established the Governor's Task Force on Global Warming to look at actions to curb greenhouse gas emissions. A transportation subcommittee was created as part of this process and developed recommendations specific to reductions in the transportation sector. In 2008, the task force presented it findings and recommendations for a state plan to reduce Wisconsin's contributions to global warming. The Connections 2030 long range plan incorporated some of the recommendations from the task force; however, the status of the task force plan is unknown at this time until the new Walker administration evaluates the statewide recommendations.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

I work in a research institution (university), and therefore our conditions are different from those of professionals working for state agencies (as probably most people in this committee). Changing funding conditions are significantly affecting our structure and organization: in particular, our efforts on transportation modeling on behalf of state agencies have been put in difficulties due to budget constraints. Besides, what we lack is now the possibility for longer term planning in our organization, as many sources of funding are confirmed/revoked at the very last minute, which makes all planning process more difficult (overall, we had to adopt a more conservative approach, downsizing some activities to account for the possibilities of reductions for funds in the future for our modeling activities).

2. How are system operations being addressed in planning?

I believe this question is not mainly addressed to me (as a researcher). However, we have to account for system operations for a proper representation of services in our modeling studies. System operations have been changing too to account for the changing scenarios in funding, and this has required increased attention from us to adjust our studies.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

We, at the university, had to diversify our sources of funding, and this also has broaden our portfolio of clients, as we now work on different types of models, and not all addressed to match state agencies' interests, and not all related to transportation. Overall, the process has led to an interesting process of increase of know-how, although we have to reduce some activities in the core field of transportation planning and modeling.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

You will find better responses from members working for MPOs/State agencies. We as research institutions have to assist to an increased number of projects that are NOT developed or postponed. Our work is also to contribute to the assessment of what the impact of these choices will be on the use of the transportation system in the state.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

This is an important topic, as we had a lot of attention on this issue in California. Unfortunately, budget constraints are creating difficulties to the implementation of plans for reduced GHG emissions. However, the overall targets have been maintained in the state, and we believe that it will become very important to assess the impact of the changing scenarios on the achievement of these targets. We are working in cooperation with state agencies to assess the impact of projects and plans, and we feel a time of increased interests in this, as the changing funding situation may actually reduce the potential to achieve the targets.

Peer Exchange: TRB Statewide Planning Committee (ADA10)
TRB Summer Meeting, Woods Hole, Massachusetts
July 8-10, 2011
Addressing Financial Uncertainty in the Planning Process

ASHBY JOHNSON, HGAC

Meeting Purpose: Share what agencies are doing differently in their planning processes to deal with the substantial uncertainty in funding levels and revenue sources. Summarize common challenges facing agencies, identify solutions especially adjustments to planning processes and highlight areas for additional research.

Questions for Participants: To prepare for our July peer exchange, please send Reena Mathews (rmathews@sha.state.md.us) responses to the following questions by May 31st, 2011. Your responses are a key way to share experiences with each other and will drive the peer exchange agenda. So, please submit responses even if you will not be able to attend the peer exchange. A consultant (TBD) will begin the peer exchange with a summary of these answers.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

H-GAC hasn't changed its prioritization or programming processes to deal with the financial uncertainty we are experiencing. We feel that there is some built-in flexibility in the current system to handle the position we find ourselves in at the moment.

Having said those things, we are reemphasizing the following in our prioritization and programming processes: project readiness and accurate project cost estimates. We can no longer afford to have projects languishing from one TIP to the next because of the uncertainty we have.

The planning regulation that seems to provide the most problem for us during this time is fiscal constraint. It is not a bad regulation – we actually feel that it enforces fiscal discipline and transparency which are needed but as an MPO we sometimes spends lots of effort trying to chase a regulation that it is completely unrealistic outside of a 10-year window. In other words, fiscal constraint should not be applied on long-range plans past year 10. Additionally, fiscal constraint is a problem for our MPO and for several others in the state because FHWA/FTA are not equally enforcing fiscal constraint requirements on the state DOT like they are with the MPOs. This leads to disconnects that require MPOs to jump through a lot of hoops.

2. How are system operations being addressed in planning?

H-GAC has project selection criteria that address systems operations. The criteria are not perfect but it is a proxy for now. H-GAC is also actively involved in the TRANSTAR network for the greater Houston region and we work closely with our state and local governments to produce and maintain an operations center that is linked and state of the art. In future, H-GAC is working towards taking a larger role in this area. We will refine our project selection criteria to include more specific preference for systems operations type projects. We are also exploring the possibility of H-GAC assuming responsibility for creating and operating a regional incident management program on the region's freeways and toll roads.

3. Is your state/MPO pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

On the state level, TxDOT has worked with the state Legislature to secure bond funding for highway expansion and maintenance projects (Propositions 12 and 14). The bonds produce $4-$6 billion dollars in revenue for transportation. However, only Proposition 12 is truly new money. Proposition 14 revenues are really "pay day loans" in that the revenue it produces must also be used to repay the debt.

On the MPO level, H-GAC has long explored grant opportunities and has been extremely successful at winning grants in the air quality arena. We are attempting to expand our view to planning and project related grants from the federal government. However, we are alarmed at the appearance of a movement in Washington to fund more transportation activities through discretionary grants rather than formula. In the short- and long-term we feel this approach is not conducive to long-range transportation planning activities, removes transportation decision-making from the local to the federal level, and will produce disjointed outcomes that do not serve local communities very well.

4. How are states/MPO's incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

H-GAC has done very little work in this area. I know of no other MPO in Texas that has and I'm unaware of any risk analysis at TxDOT.

5. How is your state/MPO responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

H-GAC and TxDOT have responded by trying to make the project prioritization and programming process more understandable to elected officials and the general public. In particular, we have tried to demystify the financing of transportation activities so that it is clear how we are using scarce resources.

Towards those ends, H-GAC has held several workshops on project programming and financing for our elected officials and the general public over the past year. TxDOT has also done more outreach through public appearances and through a revamped website to make project information more accessible and understandable. Both efforts are still evolving. H-GAC and TxDOT has also stepped up its activities to keep state and local elected officials informed on the funding, prioritization, and programming activities.

6. How is your state/MPO dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

H-GAC is currently undertaking some study work in GHG emissions and we have an ongoing livability program that educates local governments on planning codes and other activities that can produce transit-friendly, sustainable developments that provide and promote viable alternatives to the single-occupant vehicle. We also strongly support a bicycle/pedestrian program throughout the region

However, we are still in the early stages on climate change. This is a sensitive subject for our policy makers and we are still trying to chart a path forward. I am unaware of any activities at the state level to address sustainability and climate change.

From: Scott Phinney [mailto:sphinney@dot.state.oh.us]
Sent: Wednesday, June 01, 2011 11:01 AM
To: Reena Mathews
Cc: Jennifer.Townley@dot.state.oh.us; Greg Giaimo
Subject: Addressing Financial Uncertainty in the Planning Process

Ms. Mathews,

As requested for the Peer Exchange: TRB Statewide Planning Committee (ADA10) Summer Meeting in Woods Hole, Massachusetts on July 8-10, please find below the responses to your questionnaire on "Addressing Financial Uncertainty in the Planning Process." If you have any questions, please feel free to contact me.

1. How are you structuring/changing your goal setting, prioritization process, programming, and project selection process in order to provide for flexibility and resiliency in response to changing funding conditions? Are there planning regulations that are inhibiting your ability to be more nimble and responsive to changing conditions?

- ODOT is running different federal revenue scenarios to discover their impact on Ohio
- ODOT is giving thought to developing published policies that would specify how funding would be allocated to various programs based on changing revenue levels. This would provide transparency in how ODOT funding decisions will be made.

2. How are system operations being addressed in planning?

- Historically, system condition goals are set first. Analysis is then performed to convert system condition goals into required levels of system preservation funding. Allocations for system preservation funding are set based on the analysis. Allocations for system expansion (i.e. capacity additions) are set last, after system preservation, with whatever funds remain.

3. Is your state pursuing new sources of funding? If so, what types? Is that influencing how you are evaluating and comparing investment choices within this new climate of limited and uncertain funding?

- Ohio is investigating a number of new funding sources, including Public-Private Partnerships (P3)
- For capacity adding programs, Ohio is increasing its expectations of local funding contributions (up to 30%, or more)
- In the future, large transportation projects in Ohio will likely not move forward without funding participation from many different agencies and organizations

4. How is your state incorporating risk analysis into the planning process, i.e. the risk associated with various choices or the risk of "not doing" certain programs or projects? How does this impact implementing performance based planning and programming?

- Ohio is prioritizing funding reductions to various programs based on risk

- In addition, Ohio is already analyzing the performance impacts of reduced funding for certain programs
- Ohio performs in-depth analysis of future inflation rates in order to predict future construction costs which factor in a certain level of risk
    - Project personnel are required to use the inflation predictions in project cost estimates

5. How is your state responding to the desire for public accountability and efficiency in these difficult economic times? Are you adjusting the delivery of the case for, in some instances reduced transportation investments or need for more funding? If so, how?

- Not sure if we understand the question.
- In terms of reducing operating costs, Ohio is looking into the following cost cutting measures in order to redirect funding into system preservation:
    - Reduce ODOT workforce by approximately 10%
    - Investigate other operational efficiencies
- In terms of reducing system preservation costs, Ohio is looking to:
    - Privatize rest stops on non-interstate routes
    - Lease the turnpike
    - Perform more two-step design-build contracting

6. How is your state dealing with other goals such as sustainability, livability, climate change, GHG emissions, energy, economic health, jobs, etc in this current environment? How are you juggling these goals when they appear to conflict?

- As funding is reduced, Ohio is placing more and more emphasis on getting back-to-basics and preserving the existing transportation (primarily highway) system.

Regards,
Scott N. Phinney, P.E.
Office of Statewide Planning & Research
The Ohio Department of Transportation
1980 West Broad St.
Columbus, OH 43223
sphinney@dot.state.oh.us
(614) 644-9147

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Appendix D:
Presentation Slides

ADDRESSING FINANCIAL UNCERTAINTY IN THE PLANNING PROCESS

July 8, 2011

PARSONS BRINCKERHOFF

Addressing Financial Uncertainty in the Planning Process

Topics

- Financial uncertainty or the “new normal”
- Planning is critical for managing risk
- Impact on planning process
- Impact on tools and methods

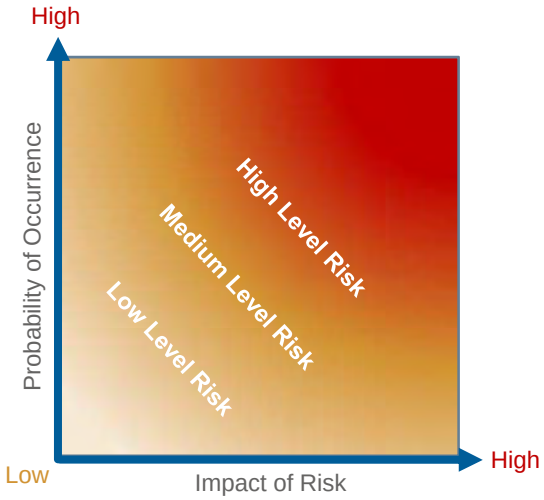
Financial Uncertainty or the "New Normal"

Revenue Sources
- Broken link between use and revenue, e.g. Motor fuel tax
- Tolls "sticky"
- Sales tax down

Policy
- Future of Federal Program
- Federal funding level
- Fiscal policy reality – "no longer a national transportation consensus"

US Economy
- Stuttering recovery
- Debt overhang

Risk Management



Financial Uncertainty

- Uncertainty = Risks
  - Probability of something happening times the impact
- The new normal - risk is that near term our financial future is more certain than we would like
- Diminution of federal role – limited to Trust Fund receipts
  - Transportation infrastructure not a national policy priority
  - Slow economic growth – impacts revenues
  - Customers, tax payers not supporting revenue

Financial Uncertainty

- Impacts of the New Normal – Risks to be Addressed in Planning Process
  - Plans become focused on preservation – limited ability to address capacity
  - State of good repair/lifecycle preservation needs to be better understood
  - Partnerships and project-specific initiatives required to fund capacity

Financial Uncertainty

- Impacts of the New Normal – Increased Importance of Planning
  - Planning function critical for agency management – provides process for performance-management, linking outcomes to plan and budget decisions
  - Provides tools to communicate to policy-makers and public
  - Provides accountability mechanisms for communicating performance
  - Key role in managing stakeholder, partner, and customer expectations

Planning is critical for managing risk

- Planning process continues to adapt to provide process, tools, and mechanism for agencies to manage risk
  - Link capital, M&O programs and budgets to outcomes
  - Enabling “fact based” decision making
  - Supporting scenario/performance analysis
- Provides tools and accountability mechanisms to link expenditures/plans to outcomes
  - Performance management/measurement
  - More business like investment decisions (programming) at odds with demonstration projects, formulas based allocation

Planning is critical for managing risk

- New Challenges
  - Providing process/tools to make infrastructure more productive
  - Continue to communicate and build stakeholder, partner understanding regarding transportation strategies and outcomes
  - Support the “business case” for increased funding in transportation
  - Incorporate and apply new funding models P3s, value capture and new business relationships
  - Explore new partnerships with government, industry

Impacts on Planning Process

- Plan Update Cycle
  - Revenue forecasts – policy driven and economic very sensitive to assumptions
  - Financially constrained plans need to address revenue risk
  - Plans may need to change
  - Changing emphasis in plans – preservation and operations to the fore
  - Constraints on multi-modalism

Impacts on Planning Process

- Project plans and programs
  - Navigating fiscal constraint – programs need to be rebalanced -
  - Financially constrained plans need to address revenue risk
  - Plans may need to change
  - Changing emphasis in plans – preservation and operations to the fore
  - Constraints on multi-modalism

Impacts on Tools and Methods

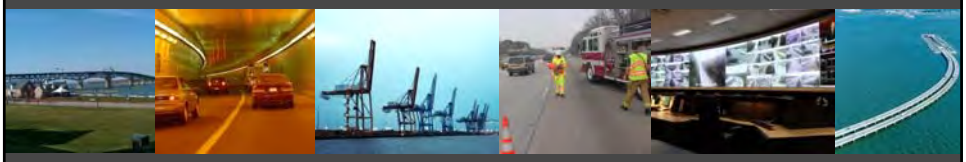
- Revenue forecasts, risks and scenario analysis
- Cost analysis and management
- Corridor and project plans
  - Tension between “back to basics” and other project goals

Questions to Discuss

- Increased importance of planning or diminution of role?
  - New roles?
- Technical questions to resolve?

INTEGRATION OF SYSTEM OPERATIONS INTO THE PLANNING PROCESS

HAMPTON ROADS, VIRGINIA

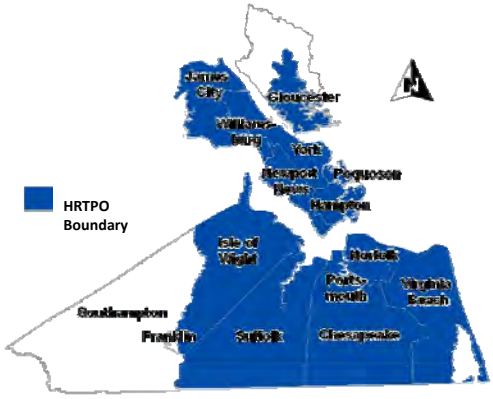


Presented by:

Camelia Ravanbakht, Ph.D.
Deputy Executive Director
TRB Peer Exchange
July 8-10, 2011

THE HAMPTON ROADS REGION

- Located in SE Virginia with over 1.6 million residents
- Region includes 9 cities and 4 counties
- Economy driven by the military, ports and tourism
- Diverse transportation system connected with tunnels, bridges, and ferries



2

PRESENTATION OVERVIEW

- Integration of Planning & Operations
  - State Level Initiative
  - Regional Perspective
  - Local Level Implementation
- Problems Encountered by the Region
- Challenges & Opportunities

INTEGRATION OF SYSTEM OPERATIONS INTO THE PLANNING PROCESS:

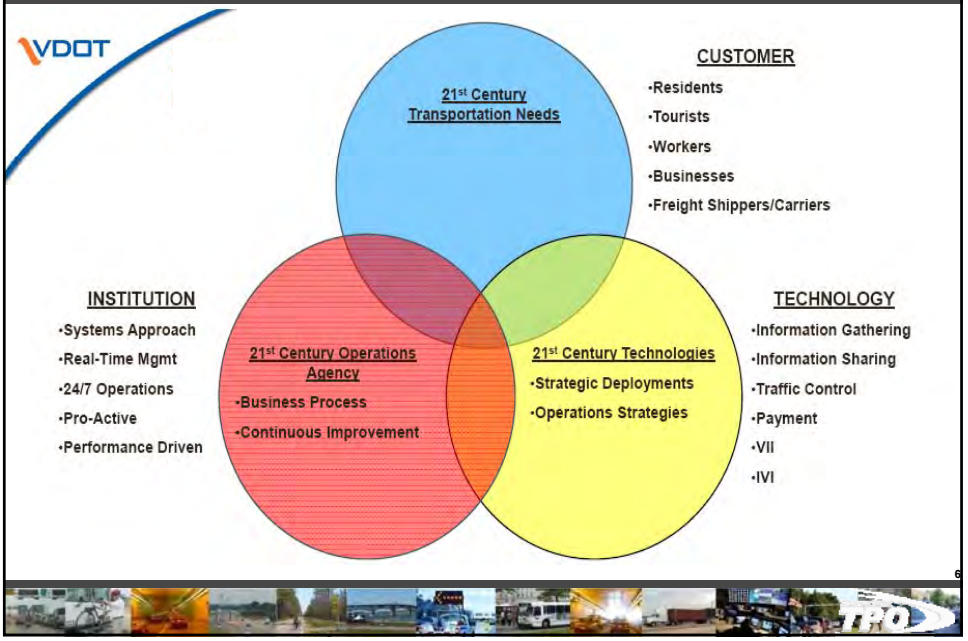
STATE LEVEL INITIATIVE

VDOT Focusing on Systems Operations

- In 2004, Virginia DOT formally made "operations" within the Department a core business function with creation of two new divisions:
  - Operations Management
  - Operations Planning
- System Operations Goals:
  - Improve safety
  - Improve highway operational performance
  - Preserve the infrastructure
  - Improve security

5

21st Century Transportation System Operations



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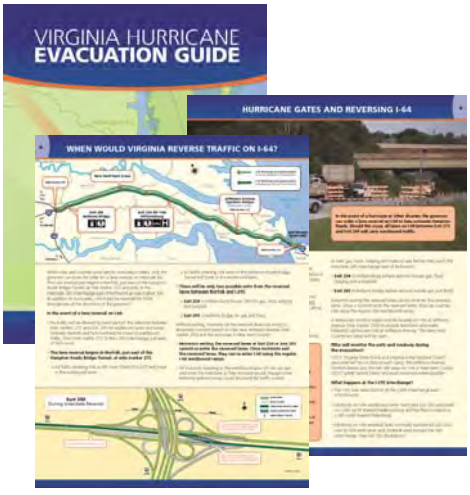
Hampton Roads Transportation Operations Center

- HRTOC is a vital regional link with diverse functions:
  - Traffic Management
  - Regional clearinghouse for traffic and traveler information collection and dissemination
  - Incident Management
  - Emergency Management
- HRTOC is the communications backbone allowing regional coordination and integration

7

Virginia Hurricane Evacuation Guide



8

FUTURE FOCUS

VDOT

- Increased Use of ITS Work Zone Applications
- Better Traveler Information / Improved Data
- Integrated Corridor Management / Transit Partners
- Integrating ITS with Construction Projects
- Expanded Performance Measures
- Active Traffic Management

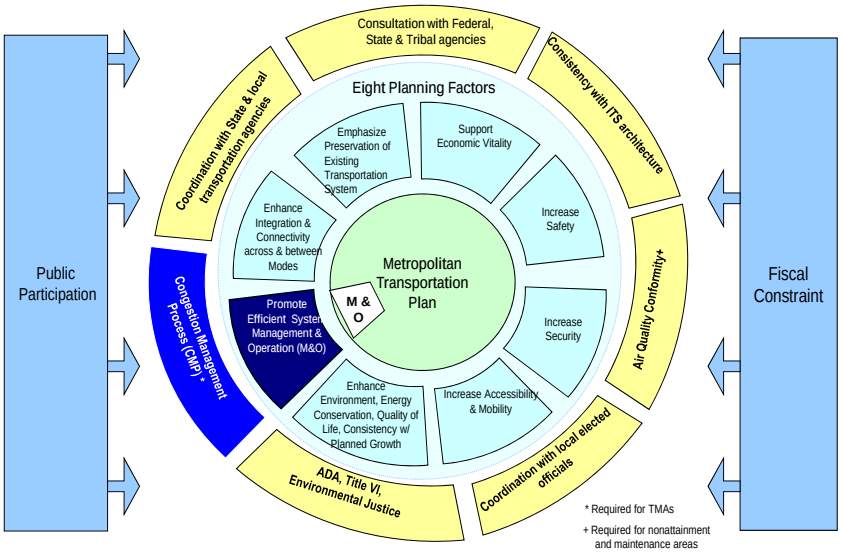


9

INTEGRATION OF SYSTEM OPERATIONS INTO THE PLANNING PROCESS:

REGIONAL PERSPECTIVE

M&O AND CMP IN THE CONTEXT OF METROPOLITAN TRANSPORTATION PLANNING REQUIREMENTS



11

HAMPTON ROADS TRANSPORTATION OPERATIONS (HRTO) SUBCOMMITTEE

Purpose

- make operational recommendations to TTAC/HRTPO Board
- share operations information between members
- receive operations information from outside

Membership

- traffic engineers
- operators of state and local transportation operations centers
- fire chiefs
- port representatives
- university
- private sector

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HAMPTON ROADS TRANSPORTATION OPERATIONS (HRTO) SUBCOMMITTEE

Recent Activities & Accomplishments

- Established a "Regional System of City-Maintained Highways for which Cities will Routinely Notify VDOT of Planned Closures"
- HRTPO staff tested improvements to VDOT's Hurricane Lane Reversal Plan, and HRTO recommended changes to that plan based on the analysis.
- HRTO scored VDOT's candidate Intelligent Transportation System (ITS) projects, and prepared a prioritized list of same for VDOT.
- Received presentations from vendors:
  1) count database system
  2) collection of turning movement counts via video

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HAMPTON ROADS ITS STRATEGIC PLAN

- The ITS Strategic Plan aims to create an integrated regional program of ITS for Hampton Roads.
- The first Hampton Roads ITS Strategic Plan (COMPARE) was prepared in 1995, with updates released in 2000 and 2004.
- An update to the ITS Strategic Plan is scheduled for 2011.

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HAMPTON ROADS ITS ARCHITECTURE

- The first Hampton Roads ITS Architecture was included in the original COMPARE ITS Strategic Plan in 1995.
- The Hampton Roads ITS Architecture was updated with the regional ITS Strategic Plan updates in 2000 and 2004.
- The regional ITS Architecture was updated as part of a VDOT statewide effort in 2009
  - Included many meetings and workshops with regional stakeholders, and coordination with the Hampton Roads Transportation Operations (HRTO) Subcommittee.
  - Web-based Architecture
- The regional ITS Architecture will be updated again in 2011-2012

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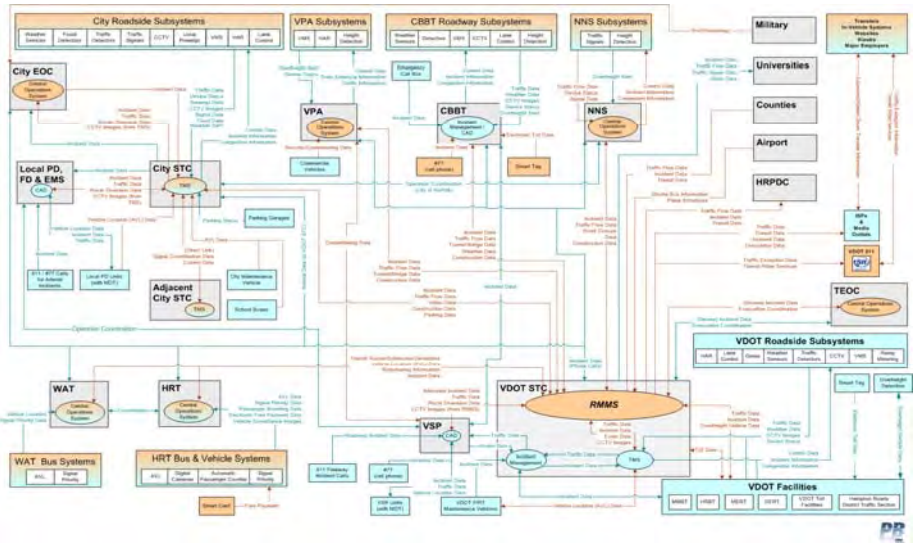
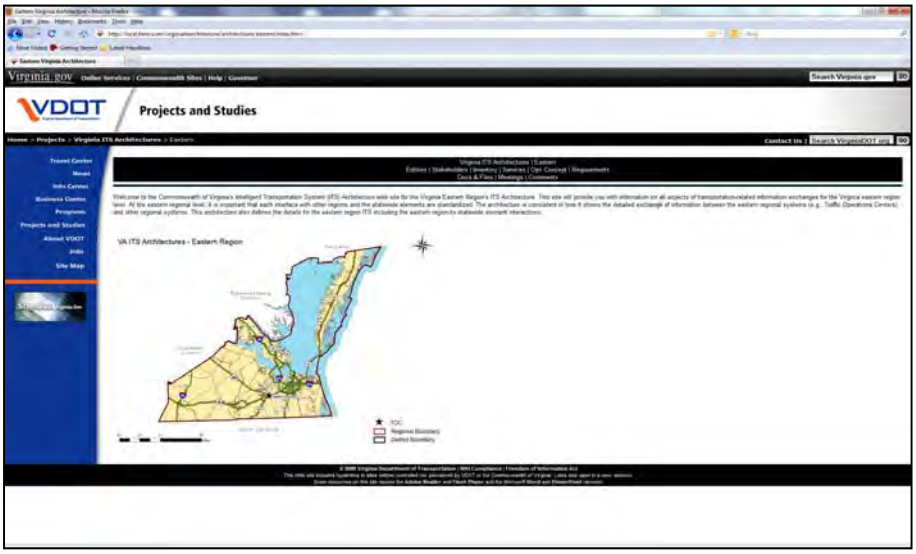
HAMPTON ROADS ITS ARCHITECTURE (2004)



16

Hampton Roads ITS Architecture Website



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HRTPO Long Range Transportation Plan Project Prioritization

Project Prioritization Components

- **Project Utility** – Effectiveness
- **Project Viability** – Feasibility
- **Economic Vitality** – Potential for Economic Gain

Project Categories*

A set of project categories has been established to evaluate similar projects separately

- **Highways**
- **Bridge/Tunnel**
- **Transit**
- **Intermodal**
- **Systems Management/Transportation Demand Management/Operational Improvements**
- **Bicycle and Pedestrian**

** Project Categories will compete with respective funding sources.*

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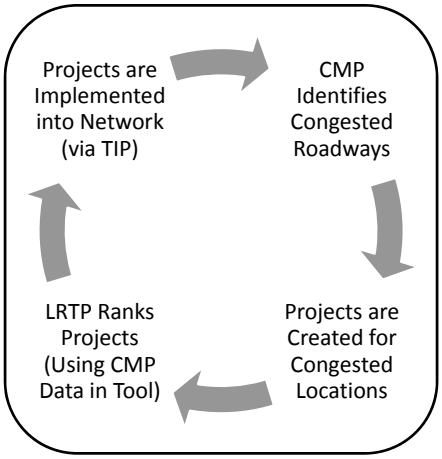
INTEGRATING CMP WITH LRTP

- **CMP data used as input into the LRTP Project Prioritization Tool in order to assist in the ranking of projects**
- **Continue to monitor the regional transportation network and update transportation databases**



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CONGESTION MANAGEMENT PROCESS (CMP)

APPLYING CONGESTION MITIGATION STRATEGIES

CMP CONGESTED CORRIDOR - ARTERIAL # 1

Hampton Boulevard/ Midtown Tunnel Between Western Freeway and 26th Street

Cities of Norfolk and Portsmouth

Probable Causes of Congestion

- Heavy PM peak hour volume
- High directional distribution on Hampton Boulevard during PM peak (68% southbound)
- High signals per mile on Hampton Boulevard
- Heavy truck volumes (4%)
- Capacity deficiency (2 Lanes at Midtown Tunnel)
- Lack of turn lanes on Hampton Boulevard

Recent Projects

- Pinners Point Interchange (completed in 2005)

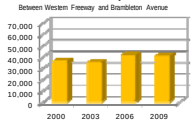
Future Projects

- Midtown Tunnel/ MLK Extension* – widening & new facility (LRTP)

* Discussions are currently underway to construct this as a public-private project.

Historical Weekday Volumes

Between Western Freeway and Brambleton Avenue



Corridor Characteristics

Corridor Length	2.63 Miles
Speed Limit	30-35 mph
Roadway Class	Principal Arterial
Transit Service	HRT Bus Routes 2, 4, 44
2008 Total Crashes	50

Peak Hour Characteristics

AM Peak Hour	7:00 – 8:00 AM
PM Peak Hour	3:15 – 4:15 PM (Hampton Blvd) 4:15 – 5:15 PM (Midtown Tun.)
AM Peak Direction	Northbound
PM Peak Direction	Southbound

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Congestion Management Process (CMP)

Applying Congestion Mitigation Strategies

	Congestion Management Strategies	Applicable Strategy?
Strategy # 1 Eliminate Person Trips or Reduce VMT	**Growth Management/ Activity Centers**	
	1 - 1 Land Use Policies/ Regulations	IN USE
	Congestion/ Value Pricing	
	1 - 2 Road User Fees/ High Occupancy Toll (HOT) Lanes	YES
	1 - 3 Parking Fees	YES
	Transportation Demand Management (TDM)	
	1 - 4 Telecommuting	IN USE
	1 - 5 Employee Flextime Benefits/ Compressed Work Week	IN USE
Strategy # 2 Shift Trips from Auto to Other Modes	**Public Transit Capital Improvements**	
	2 - 1 Exclusive Right-of-Way - New Rail Service	YES
	2 - 2 Exclusive Right-of-Way - New Bus Facilities	YES
	2 - 3 Ferry Services	IN USE
	2 - 4 Fleet Expansion	YES
	2 - 5 Improved Intermodal Connections	YES
	2 - 6 Improved Transit Park & Ride Facilities & Capital Improvements	YES
	Public Transit Operational Improvements	
	2 - 7 Service Expansion	YES
	2 - 8 Traffic Signal Preemption	YES
	2 - 9 Improved Transit Performance	YES
	2 - 10 Transit Fare Reductions Plan/ Reduced Rate of Fare	YES
	2 - 11 Transit Information Systems	YES
	Bicycle and Pedestrian Modes	
	2 - 12 Improved/ Expanded Bicycle Network	YES
	2 - 13 Bicycle Storage Systems	YES
	2 - 14 Improved/ Expanded Pedestrian Network	YES
Strategy # 3 Shift Trips from SO V to HOV	**High Occupancy Vehicles (HOV)**	
	3 - 1 Add HOV Lanes	-
	3 - 2 HOV Toll Savings	-
	Transportation Demand Management (TDM)	
	3 - 3 Rideshare Matching Services	IN USE
	3 - 4 Vanpool/ Employer Shuttle Program	IN USE
	3 - 5 Trip Reduction Program	IN USE
	3 - 6 Parking Management	IN USE
Strategy # 4 Improve Roadway Operations	**Traffic Operational Improvements**	
	4 - 1 Geometric Improvements	YES
	4 - 2 Intersection Turn Restrictions	IN USE
	4 - 3 Intersection Signalization Improvements	IN USE
	4 - 4 Coordinated Intersections Signals	IN USE
	4 - 5 Roadway Environment	YES
	4 - 6 Intelligent Transportation Systems/ Smart Traffic Centers (ITS)	IN USE
	4 - 7 Reversible Lanes	-
	4 - 8 Freight Policies and Improvements	IN USE
	4 - 9 Incident Management, Detection, Response & Clearance	IN USE
	4 - 10 Construction Management	IN USE
	4 - 11 Elimination of Bottlenecks	YES
	4 - 12 Ramp Metering	-
	4 - 13 Access Control and Connectivity	YES
	4 - 14 Median Control	YES
Strategy # 5 Add Capacity	**Addition of General Purpose Lanes**	
	5 - 1 Freeway Lanes	-
	5 - 2 Arterial lanes	YES
	5 - 3 Interchanges	-
	5 - 4 Improve Alternate Routes	YES

CMP CONGESTED CORRIDOR - ARTERIAL # 1
Hampton Boulevard/ Midtown Tunnel
Between Western Freeway and 26th Street

Segment	Length (mi)	Number of Lanes 2009	Number of Lanes 2030	2030 Projected Volumes	2030 Congestion Level
Midtown Tunnel M.L.K/ Western Freeway to Brambleton Avenue	1.54	2	4	42,000*	A-C*
Hampton Boulevard Brambleton Avenue to 21st Street	0.88	4	4	37,000	F
Hampton Boulevard 21st Street to 26th Street	0.21	4	4	41,000	D

* Assumes tolls are in place as part of the Midtown Tunnel project

Observations

- Afternoon backups from the Midtown Tunnel frequently reach 26th Street on Hampton Boulevard and Colley Avenue on Brambleton Avenue.

Recommendations

- Add tolls/ congestion pricing to the Midtown Tunnel
- Give priority to HOV and/ or transit vehicles via queue jumping
- Add Variable Message Signs in Downtown Norfolk to alert drivers to traffic conditions
- Continue to promote TDM strategies
- Widen the Midtown Tunnel
- Construct/ widen alternate routes (Downtown Tunnel/ Third Crossing)

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CMAQ/RSTP Funding Project Selection Process

- **Congestion Mitigation and Air Quality (CMAQ)**
  - Selection based on emissions reduction per dollar (VOCs and NOx)
  - 31 projects selected for FY11-15
    - 19 of 31 were ITS/Systems Operations-related
- **Regional Surface Transportation Program (RSTP)**
  - Selection based largely on candidate project scores
  - Candidate projects are scored by category
    - Highway capacity & operational improvements
    - ITS
    - Intermodal
    - Transit
    - Planning Studies
    - TDM
  - 23 projects selected for FY11-15
    - 5 of 23 were ITS/Systems Operations-related

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NORFOLK ATMS EVALUATION STUDY PERFORMANCE MEASURES

Quantitative Measures:

- Safety
- Travel Times
- Average Travel Speeds
- Delay Times
- Number of Stops
- Vehicle Emissions
- Incident Response Times
- B/C Ratio

Qualitative Measures:

- Communications
- Real-time information collection and dissemination
- Coordination between City and VDOT Smart Traffic Center

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NORFOLK ATMS SIMULATION RESULTS

Citywide Benefits

Component	Annual
In-vehicle Travel Time	$20,604,493
User Fuel	$659,942
Non-Fuel Operating	($672)
Internal Accident	$242,555
External Accident	$42,803
HC Emissions	$64,735
CO Emissions	$1,277,139
NOx Emissions	$19,049
Noise	($18)
Total Annual Value of Benefits	**$22,910,026**

ATMS Costs

ATMS Costs	Total	Annual
Initial Capital	$ 8,400,000	
Operating and Maintenance		$ 1,177,321
Total Average Annual Costs		**$ 2,017,321**

Benefits to Costs

Total Annual Benefits	**$ 22,910,026**
Total Annual Costs	**$ 2,017,321**
B/C Ratio	**11.36**

Results based on IDAS model.

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Regional Concept of Transportation Operations (RCTO)

- Initiated in early 2005
- Initial Benefit: expanded and enhanced regional collaboration among planners and operations stakeholders
- RCTO Focus: Incident Management
  - **Objective 1: Increase responder safety by eliminating struck-by incidents and fatalities**
  - **Objective 2: Decrease incident clearance time**
  - **Objective 3: Decrease secondary incident occurrences**
  - **Objective 4: Improve inter-agency communication during incidents**
  - **Objective 5: Identify existing regional incident management resources and establish plan for inter-agency**
  - **Objective 6: Establish a regional incident management pro-active and post-incident review consortium**
- Hampton Roads selected by FHWA as one of four national demonstration sites
  - FHWA's The Regional Concept of Transportation Operations: A Practitioner's Guide (to be released July-August 2011)

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Freight Transportation Advisory Committee (FTAC)

- Advisory Committee of HRTPO Board
- Purpose:
  - advise HRTPO on regional freight transportation requirements
- Membership:
  - mostly representatives from local private freight firms, (e.g. Givens, Norfolk Southern, Target, etc.)
- Recent Activities
  - Recommended method of developing HRTPO long-range plan
  - Preparing media product to teach importance of freight
  - Guiding HRTPO staff in study of traffic impact of an inland port

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INTEGRATION OF SYSTEM OPERATIONS INTO THE PLANNING PROCESS:

LOCAL LEVEL IMPLEMENTATION

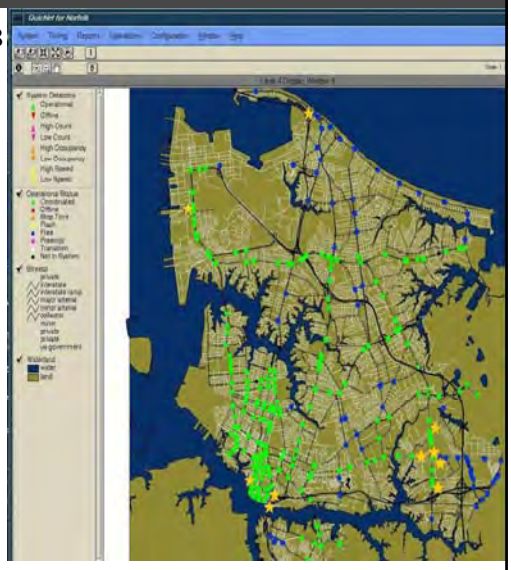
CITY OF NORFOLK SMART TRAFFIC CENTER

System Implementation began, Nov 1998

Fully Operational System, May 2001

Advanced Traffic Management System

- 1st City-based ITS Project in the Region
- Funded by CMAQ
- 304 total signals (City Wide)
- CCTV Cameras
- Changeable Message Signs
- 100+ Miles of fiber Optic Cable



Norfolk Traffic Management System Benefits

- **Incident Management**
  - Real time adjustments and coordination/use of VDOT variable message signs
- **Event Management**
  - Over 50 events annually
  - Norfolk STC is used as a "command center"
  - Special Event Team: Police/Transportation / Parking Administration
- **Live Video Coverage**
  - 24/7 live cable service for City residents
  - Additional traffic information:
    - closures at regional tunnels/ bridges
    - major events and street closures in conjunction with construction projects
- **Coordination with EOS**
  Real-Time Notification of Incidents (RTIMIS)

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Hampton Traffic Management System

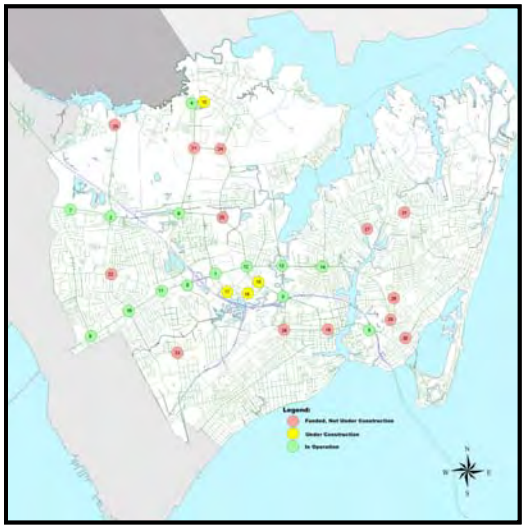
A Local Project With Regional Benefits

Design Started: July 1997

Completion: Spring 2005

Funded by CMAQ)

- 160 intersections
- Expansion up to 300 intersections
- CCTV cameras
- Fiber optic cable



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HAMPTON TRAFFIC MANAGEMENT SYSTEM BENEFITS

- Incident response
- Incident location
- Typical peak hour congestion
- Congestion observed during incident
- Interstate congestion & impact to city streets
- Monitor traffic and signal timing plans

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CITY OF VIRGINIA BEACH - ITS PROGRAM

TRAFFIC MANAGEMENT OPERATIONS DIVISION




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THE NORFOLK LRT - TRAFFIC SIGNALS

- Study area consists of 44 signalized intersections surrounding the LRT alignment between the Medical Center Station and the Harbor Park Station: 18 intersection along the alignment, 23 additional to reflect the transit impact to the overall Downtown system

Figure 1: Downtown Norfolk Study Area

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PROBLEMS ENCOUNTERED BY THE REGION

- Procurement and contractor difficulties
- Delayed and flawed project deployments
- Project cost overruns
- Lack of trained staff to address sophisticated issues
- Lack of "champions" at the policy level
- Inadequate coordination between certain organizations

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Challenges & Opportunities

- Maintenance of ITS Systems will reduce funding available for new ITS projects
- Define clear roles & responsibilities of regional jurisdictions and agencies
- Complete communications backbone supporting the exchange of information between agencies
- Implement full integration of HRTOC with local systems
- Educate elected officials & stakeholders
- Achieve more "standardization" of data exchange
- Improve state and local procurement and deployment procedures
- Eliminate roadblocks to funding, planning, & deploying projects in the region
- Improve quality of data for travelers
- **Continue integration of ITS into the planning and programming process**

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Contact Information

Camelia Ravanbakht, Ph.D.
Deputy Executive Director
cravanbakht@hrpdcva.gov

Hampton Roads Transportation Planning Organization
www.hrtpo.org

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Transportation Funding Advisory Commission

Transportation Overview

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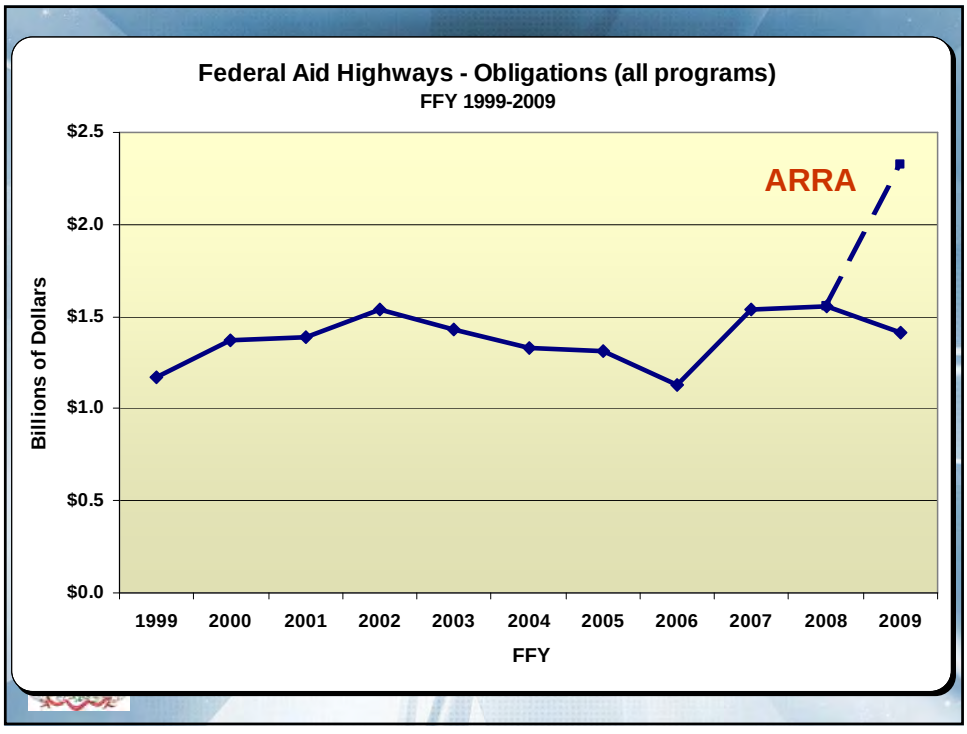
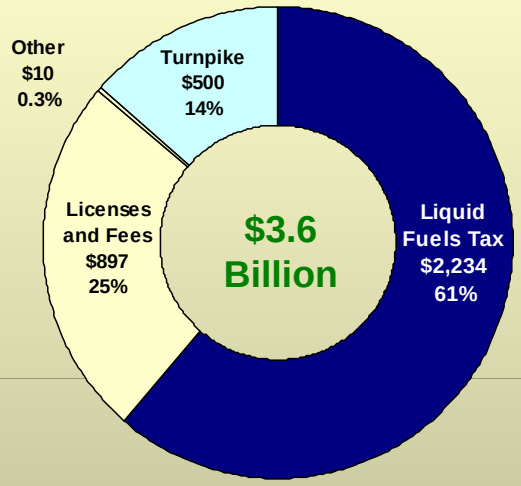
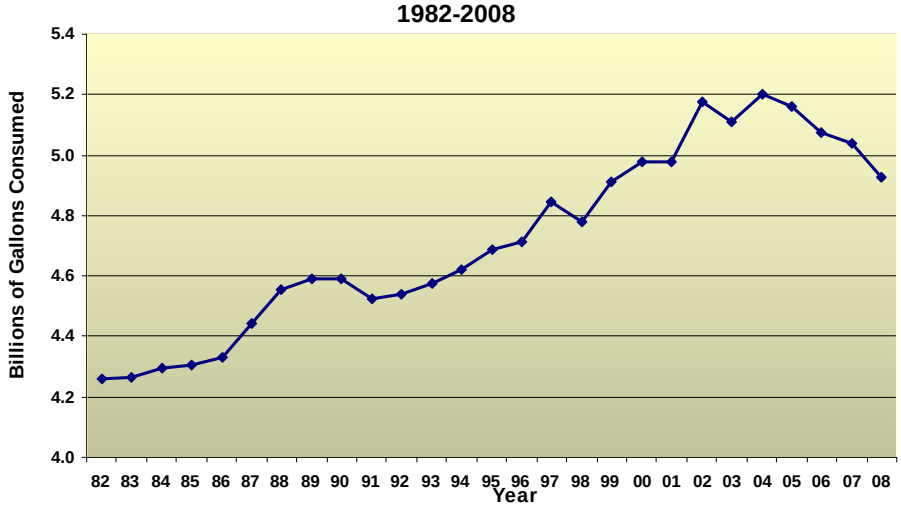


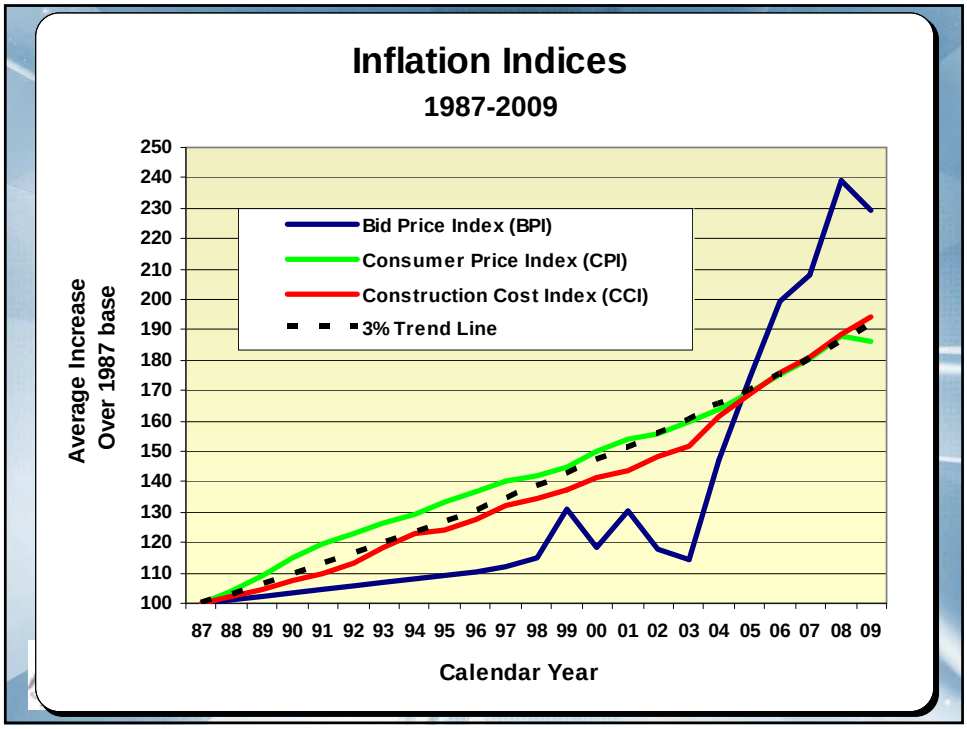
FY 2008-09 Motor License Fund Revenues

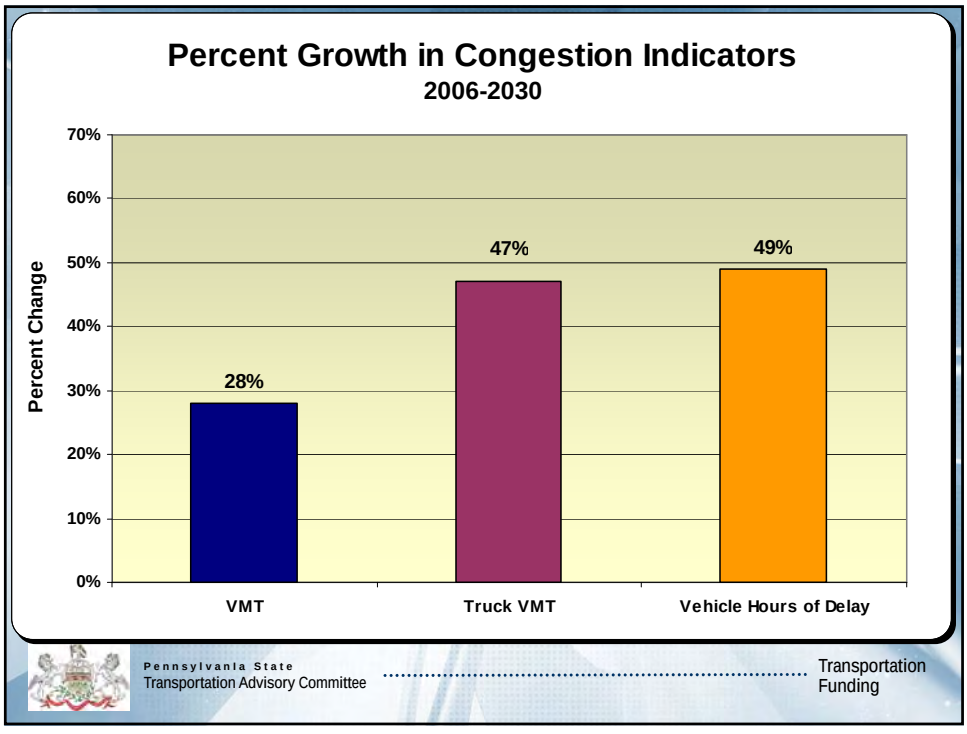
($ in millions)



Pennsylvania Statewide
Gasoline Consumption
1982-2008




Inflation Indices
1987-2009
Average Increase Over 1987 base
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
Bid Price Index (BPI)
Consumer Price Index (CPI)
Construction Cost Index (CCI)
3% Trend Line
87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09
Calendar Year


Percent Growth in Congestion Indicators
2006-2030
Percent Change
70%
60%
50%
40%
30%
20%
10%
0%
28%
47%
49%
VMT
Truck VMT
Vehicle Hours of Delay
Pennsylvania State
Transportation Advisory Committee
Transportation
Funding

Combined Unmet Needs

Recommended Funding (millions)

	2010 Need	2020 Need	2030 Need
Highway & Bridge	$2,576	$4,693	$6,545
Public Transportation	$484	$1,383	$3,063
Local Government	$432	$670	$1,092
TOTAL	**$3,492**	**$6,746**	**$10,700**

Pennsylvania State
Transportation Advisory Committee

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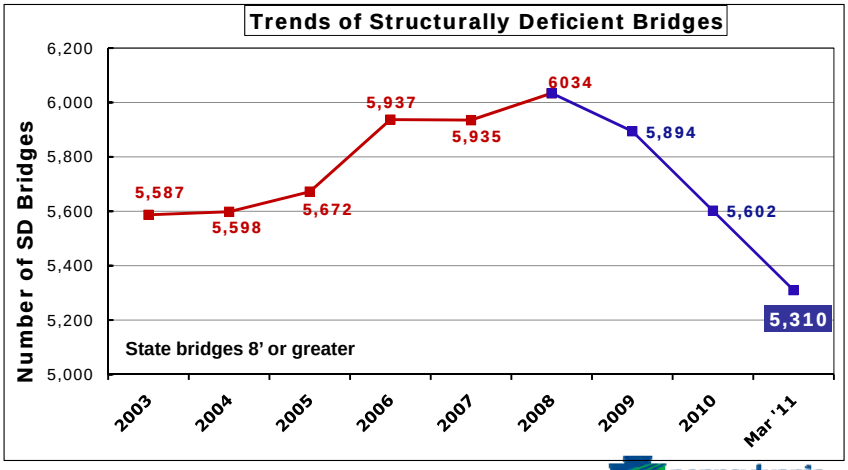
Condition of PA Bridges



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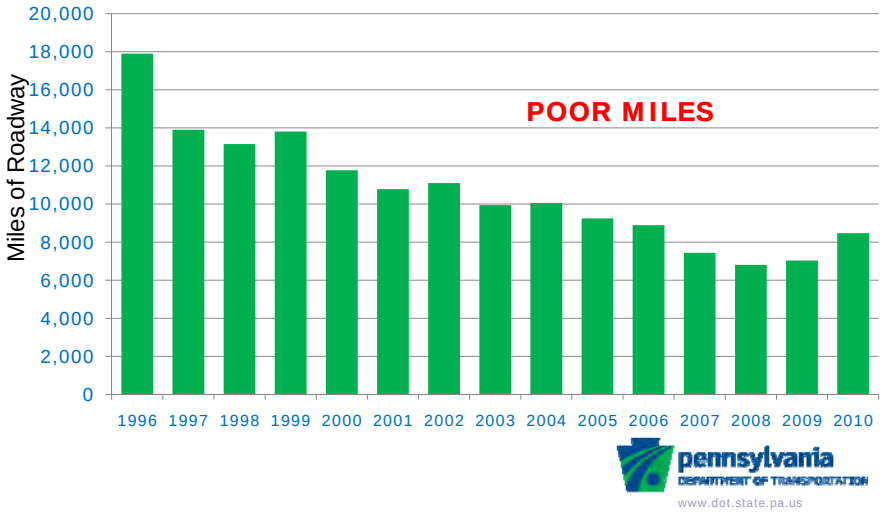
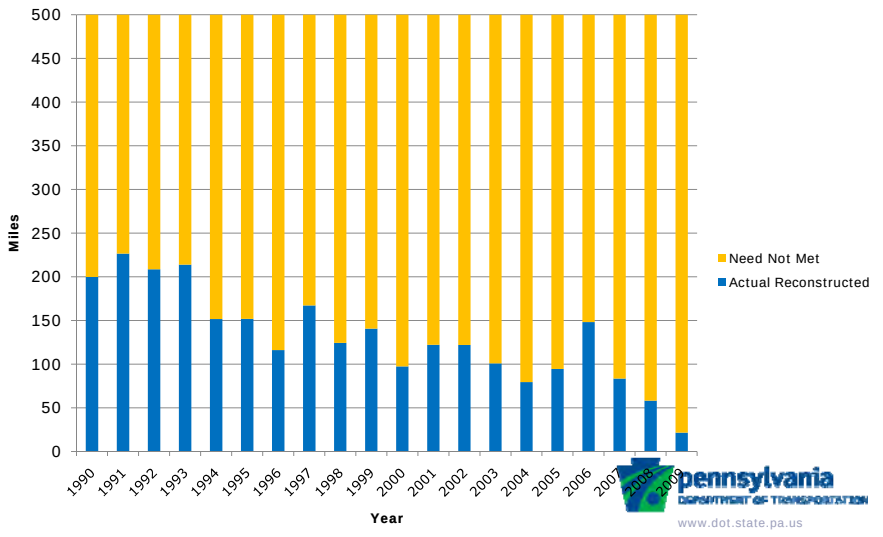
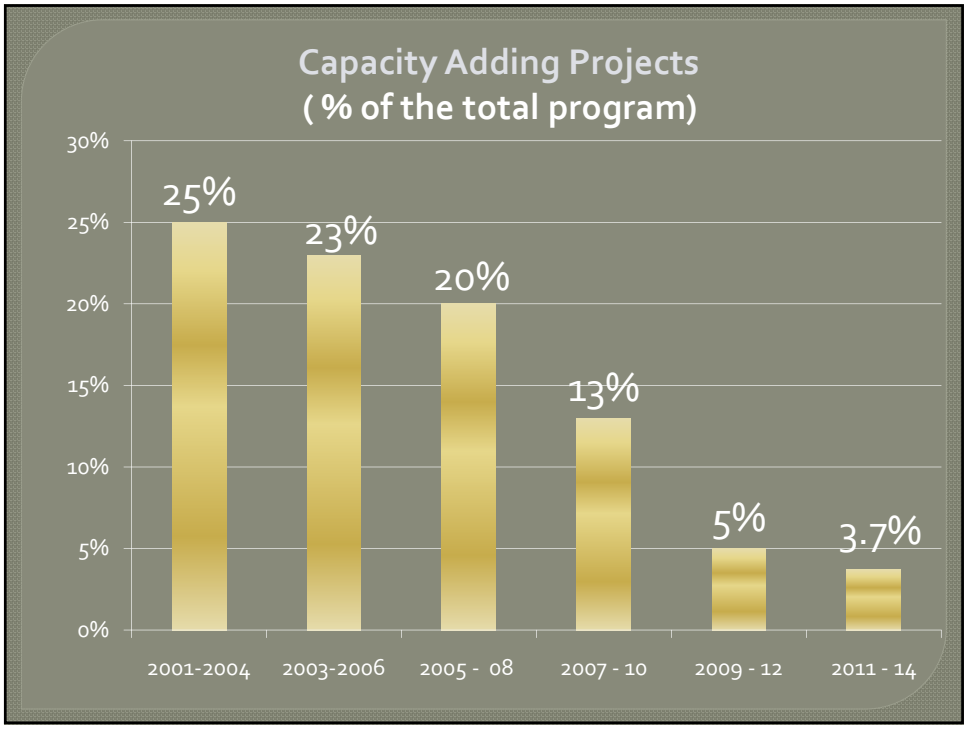
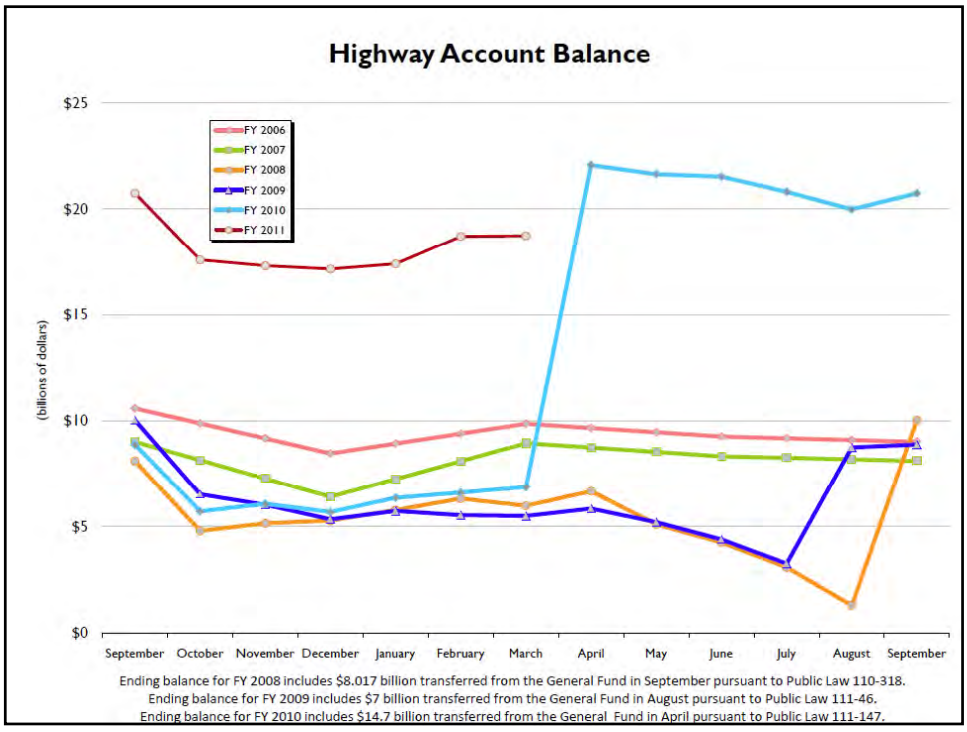
Condition of PA Pavements

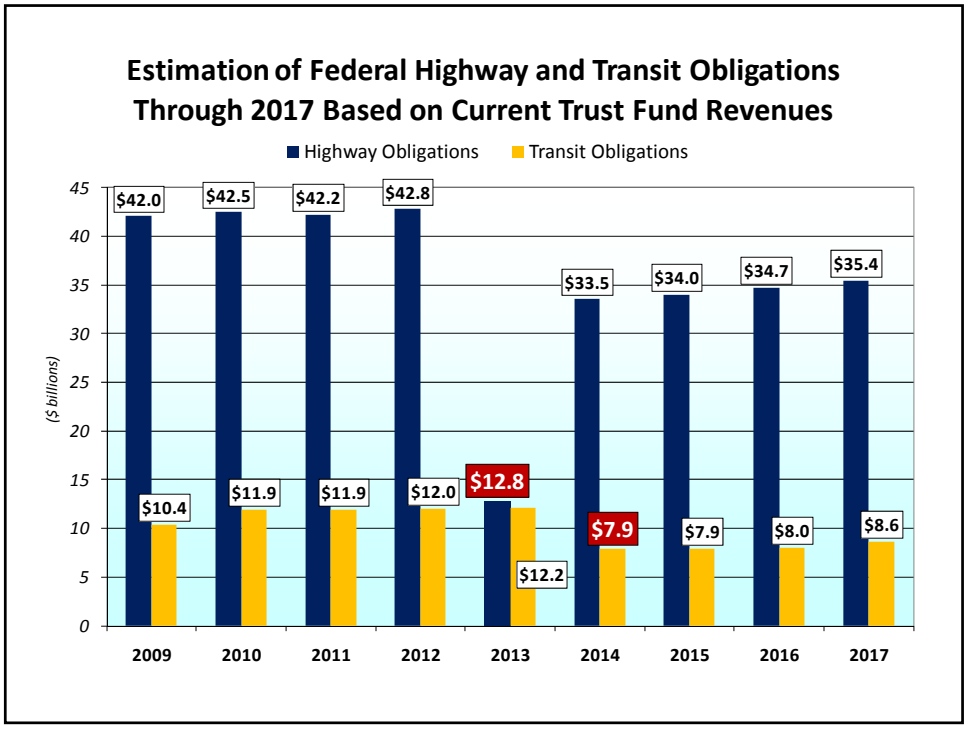


Pavement Reconstruction Status




Capacity Adding Projects
(% of the total program)
30%
25%
20%
15%
10%
5%
0%
25%
23%
20%
13%
5%
3.7%
2001-2004
2003-2006
2005 - 08
2007 - 10
2009 - 12
2011 - 14


Highway Account Balance
$25
$20
$15
$10
$5
$0
(billions of dollars)
FY 2006
FY 2007
FY 2008
FY 2009
FY 2010
FY 2011
September
October
November
December
January
February
March
April
May
June
July
August
September
Ending balance for FY 2008 includes $8.017 billion transferred from the General Fund in September pursuant to Public Law 110-318.
Ending balance for FY 2009 includes $7 billion transferred from the General Fund in August pursuant to Public Law 111-46.
Ending balance for FY 2010 includes $14.7 billion transferred from the General Fund in April pursuant to Public Law 111-147.



Projected Unmet Transit Funding Needs (in millions)

Program	FY 2010-11	FY 2019-20	FY 2029-30
Operating Assistance	$ - - *	$752	$2,214
Capital Assistance/ System Expansion	$484	$631	$849
Totals	**$484***	**$1,383**	**$3,063**

* The level of operating shortfall for FY 2010-11 is uncertain at this time

Local Needs

Local Highways & Bridges					
Highways & Bridges	•	Addresses local road and bridge needs. This is an estimate. Needs for local bridges are known but no estimate is available for highways.	$250	$388	$632
Traffic Signals	•	Funding for a traffic signal modernization and retiming program to be collaborative between PennDOT and local governments.	$182	$282	$460
		TOTAL	$432 million	$670 million	$1,092 million


PENNSYLVANIA STATE TRANSPORTATION ADVISORY COMMITTEE

FINANCIAL NEEDS OF COUNTIES AND MUNICIPALITIES FOR HIGHWAYS AND BRIDGES

DISCUSSION PAPER
BACKGROUND AND EXISTING CONDITIONS

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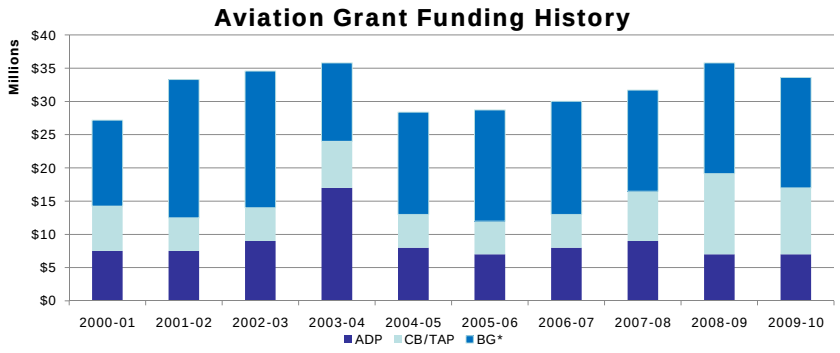
Three Airport Development Grant Programs



- The Aviation Development Program (ADP)
- The State Block Grant Program (BGP)
- The Capital Budget Program (TAP)

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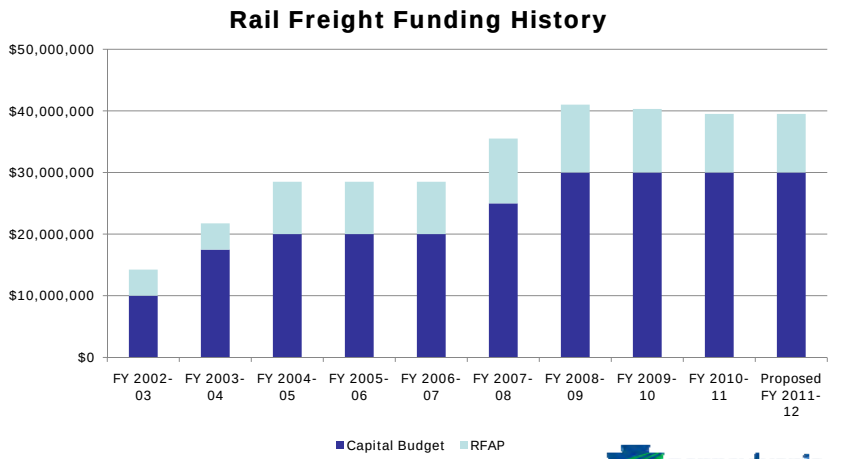
Rail Freight Financing



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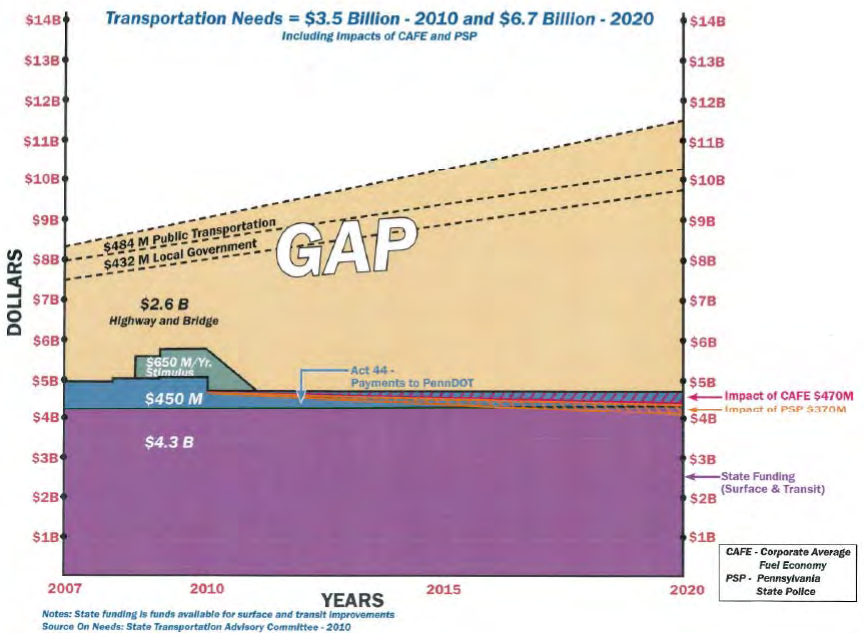
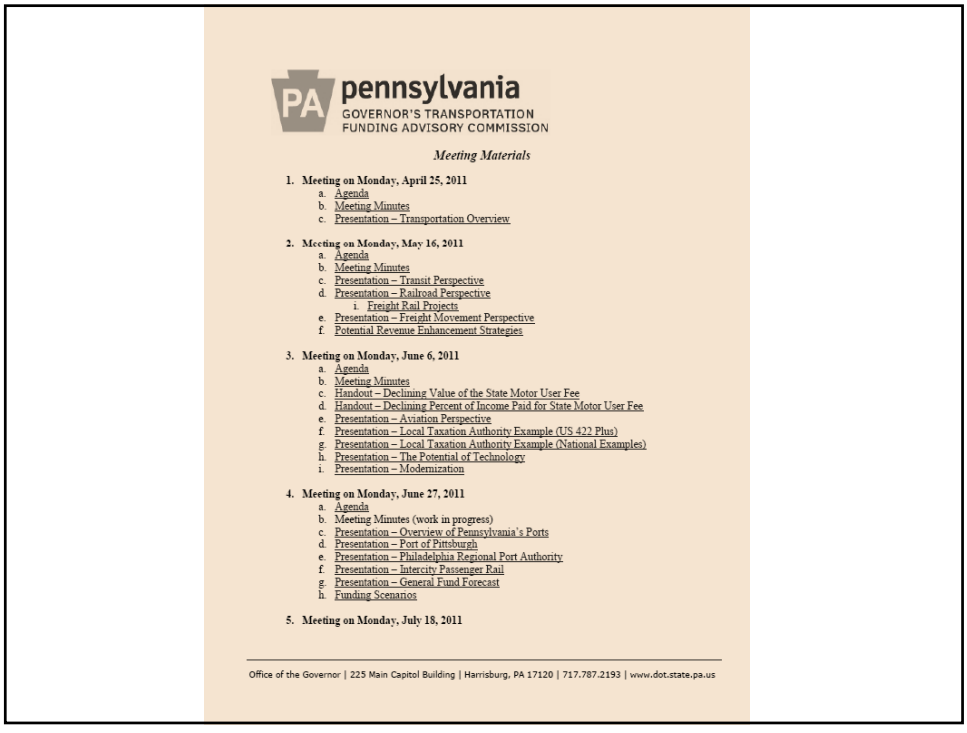




pennsylvania
GOVERNOR'S TRANSPORTATION
FUNDING ADVISORY COMMISSION

Meeting Materials

1. **Meeting on Monday, April 25, 2011**
   a. Agenda
   b. Meeting Minutes
   c. Presentation – Transportation Overview

2. **Meeting on Monday, May 16, 2011**
   a. Agenda
   b. Meeting Minutes
   c. Presentation – Transit Perspective
   d. Presentation – Railroad Perspective
      i. Freight Rail Projects
   e. Presentation – Freight Movement Perspective
   f. Potential Revenue Enhancement Strategies

3. **Meeting on Monday, June 6, 2011**
   a. Agenda
   b. Meeting Minutes
   c. Handout – Declining Value of the State Motor User Fee
   d. Handout – Declining Percent of Income Paid for State Motor User Fee
   e. Presentation – Aviation Perspective
   f. Presentation – Local Taxation Authority Example (US 422 Plus)
   g. Presentation – Local Taxation Authority Example (National Examples)
   h. Presentation – The Potential of Technology
   i. Presentation – Modernization

4. **Meeting on Monday, June 27, 2011**
   a. Agenda
   b. Meeting Minutes (work in progress)
   c. Presentation – Overview of Pennsylvania's Ports
   d. Presentation – Port of Pittsburgh
   e. Presentation – Philadelphia Regional Port Authority
   f. Presentation – Intercity Passenger Rail
   g. Presentation – General Fund Forecast
   h. Funding Scenarios

5. **Meeting on Monday, July 18, 2011**

Office of the Governor | 225 Main Capitol Building | Harrisburg, PA 17120 | 717.787.2193 | www.dot.state.pa.us

Declining Value of the State Motor Fuel User Fee
Cost of Driving 12,000 Miles in 2010 Dollars
Based on Cents per Gallon Adjusted for Inflation and Fuel Efficiency

Years	Average Miles per Gallon*	Gallons of Motor Fuel Purchased	Cents per Gallon	Total Cost Actual Dollars	Cost per Month: Actual Dollars	Total in 2010 Dollars	Cost per Month: 2010 Dollars
1983	17.1	702	$0.15	$107.38	$8.95	$229.78	$19.15
1990	20.3	591	$0.17	$102.83	$8.57	$170.63	$14.22
2000	22	545	$0.26	$141.16	$11.76	$178.99	$14.92
2010	23.8	504	$0.31	$157.25	$13.10	$157.25	$13.10
2015	26.1	460	$0.31	$143.52	$11.96	$123.74	$10.31
2020	30.6	392	$0.31	$122.30	$10.19	$91.04	$7.59

Based on National average of 12,000 miles/year.
*Average Miles per Gallon for passenger fleet obtained from US DOT. FHWA Highway Statistics 1936-1995, 2000, and 2009.

TFAC Funding Packages
Amounts in Millions of Dollars
(* Indicates 3% on the new rate - which includes current base and revenue increment)

TARGET	Year 1	Year 2	Year 3	Year 4	Year 5
Highway & Bridge Total	460	920	1,070	1,425	1,800
Local Government Total	60	130	200	250	300-400
Transit Total	80	150	230	325	300-400
TOTAL GOAL	600	1,200	1,500	2,000	2,500

PACKAGE 1

	Year 1	Year 2	Year 3	Year 4	Year 5
Move State Police to General Fund	0	0	0	228	570
Veh & Driver Fee Incr. (prior inflation) *	412	451	491	532	574
Vehicle Ad Valorem Fee *	0	659	679	699	720
Miscellaneous Items	112	112	157	157	267
Modernization & Cost Savings - MLF	20	60	110	120	136
Increase Fees Dedicated to Transit	0	0	88	88	88
1/6 of 6% Vehicle Sales Tax to Transit	33	66	100	133	166
Increase Local Transit Match	0	29	59	88	118
Modernization & Cost Savings - Transit	20	20	20	20	20
GRAND TOTAL	**597**	**1,397**	**1,704**	**2,065**	**2,659**
Highway & Bridge Total	*466*	*1,099*	*1,231*	*1,488*	*1,943*
Local Highway & Bridge Total	*78*	*183*	*205*	*248*	*324*
Transit Total	*53*	*115*	*267*	*329*	*392*
GRAND TOTAL	**597**	**1,397**	**1,704**	**2,065**	**2,659**
General Fund Impact	**87**	**120**	**154**	**415**	**790**

TFAC Funding Packages
Yearly Impact To Average Driver (Direct User Fees)
Amounts in Actual Dollars

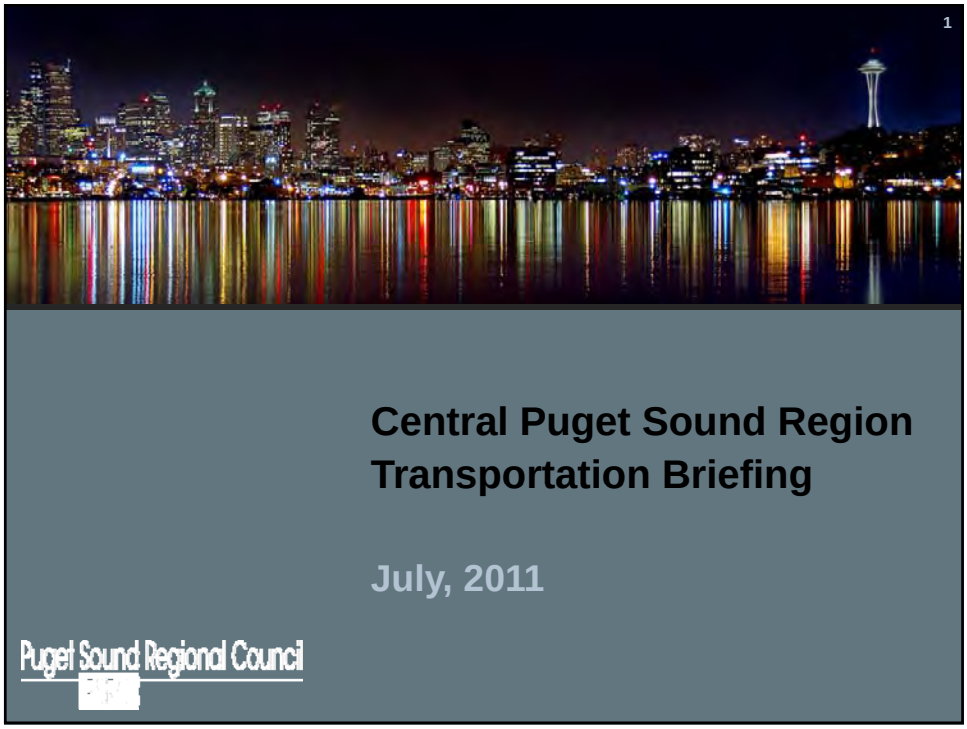
Assumptions for Average Driver:	Year 1	Year 2	Year 3	Year 4	Year 5
• Holds one passenger car registration					
• Drives 12,000 miles per year					
• Has a vehicle with an Average Miles Per Gallon (Adjusted Average Projected Fuel Efficiency):	23.97	24.30	24.75	25.34	26.06
• Pays an average of $76.33 for the Vehicle Ad Valorem (Fee based on declining car value over ten year period)					
Sample for illustrative purposes					
($18,000 new car - $180 for the first year, $126 for the fourth year, $72 for the seventh year)					
($30,000 new car - $300 for the first year, $210 for the fourth year, $120 for the seventh year)					
• Buys four tires every four years					
• Buys a car. Does not lease or use rental car					
• Does not incur vehicle code infractions such as speeding tickets					
Note: Any fee not charged annually is spread out to be shown as an annual cost					

PACKAGE 1

	Year 1	Year 2	Year 3	Year 4	Year 5
Move State Police to General Fund	0	0	0	0	0
Veh & Driver Fee Incr. (prior inflation) *	14	16	18	19	21
Vehicle Ad Valorem Fee *	0	78	81	83	86
Miscellaneous Items	10	10	10	10	10
Modernization & Cost Savings - MLF	0	0	0	0	0
Increase Fees Dedicated to Transit	1	1	1	1	1
1/6 of 6% Vehicle Sales Tax to Transit	0	0	0	0	0
Increase Local Transit Match	0	0	0	0	0
Modernization & Cost Savings - Transit	0	0	0	0	0
GRAND TOTAL	**25**	**105**	**109**	**113**	**118**
Weekly Cost	*$ 0.49*	*$ 2.02*	*$ 2.10*	*$ 2.18*	*$ 2.26*

PACKAGE 2

	Year 1	Year 2	Year 3	Year 4	Year 5
Veh & Driver Fee Incr. (double fee) *	41	44	46	48	52
Fuels: Raise OCFT (AWP) Over 5 Years	4	8	11	15	18
Increase License Fee for State Police	67	67	67	67	67
Miscellaneous Items	10	10	10	10	10
Modernization & Cost Savings - MLF	0	0	0	0	0
Increase Fees Dedicated to Transit	1	1	1	1	1
1/6 of 6% Vehicle Sales Tax to Transit	0	0	0	0	0
Increase Local Transit Match	0	0	0	0	0
Modernization & Cost Savings - Transit	0	0	0	0	0
GRAND TOTAL	**123**	**129**	**135**	**141**	**147**
Weekly Cost	*$ 2.36*	*$ 2.48*	*$ 2.60*	*$ 2.71*	*$ 2.83*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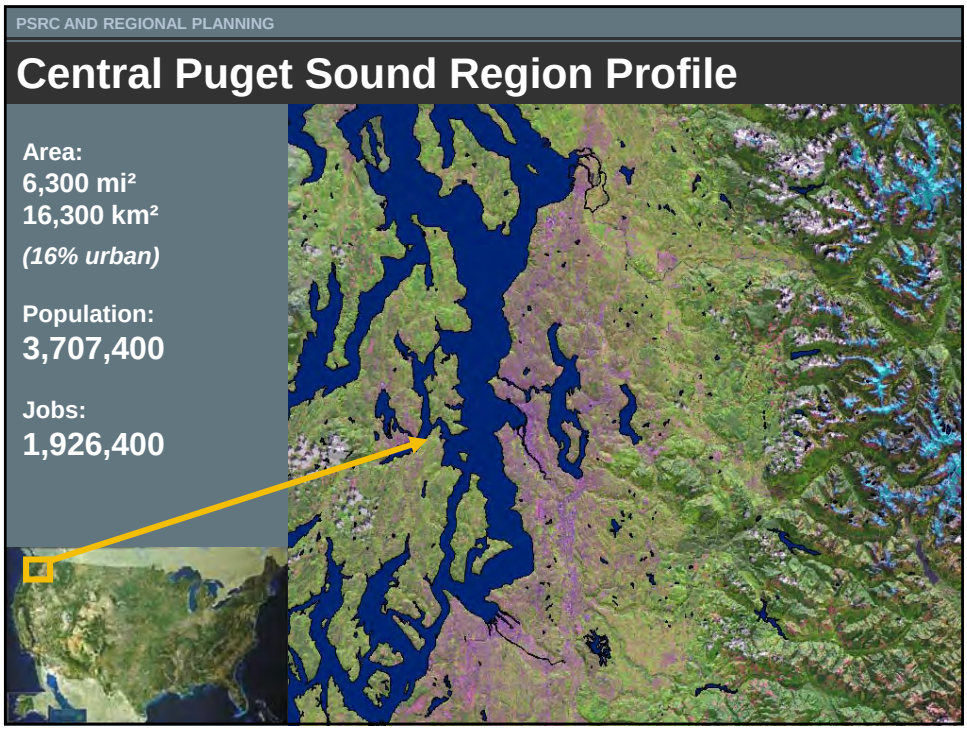
Central Puget Sound Region
Transportation Briefing
July, 2011
Puget Sound Regional Council


PSRC AND REGIONAL PLANNING
Central Puget Sound Region Profile
Area:
6,300 mi²
16,300 km²
(16% urban)
Population:
3,707,400
Jobs:
1,926,400

Puget Sound Regional Council

PSRC

- Metropolitan Planning Organization
- Regional Planning Organization
- Economic Development District
- Interlocal Agreement for Regional Planning

Our Members

- Cities, Counties, ports & transit agencies
- State agencies & Tribal governments
- *Associate members:* University of Washington, Thurston County, Island County, Puget Sound Partnership

Transportation 2040

Adopted May 20, 2010

- Makes progress on **major transportation system issues** and informs near-term project decisions
- Aligns with **VISION 2040** and the **Regional Economic Strategy**
- Responds to the **2040 growth forecasts** for person and freight travel demand

PSRC AND REGIONAL PLANNING 5

Transportation 2040

OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

What is different about this plan?

Sustainably supports improving:

- Mobility for all users and the movement of goods
- Environment including air (all regulated and GHG emissions) and water quality
- Transportation funding sufficient to sustain and improve the system

6

Four Integrated Strategies

Land Use

Supporting a more concentrated development pattern that is more walkable, bikeable, easier to support with transit, and that balances jobs and housing.

Efficiency

Efficient transportation starts with fully maintaining and operating a system that is safe, secure and manages facilities to achieve their optimum performance.

Strategic Investments

Moves the region from single focused investments to integrated strategies that are more cost effective and support all forms of travel.

Pricing

Begins moving from traditional forms of funding to a more sustainable user based funding that improves mobility and the environment.

7

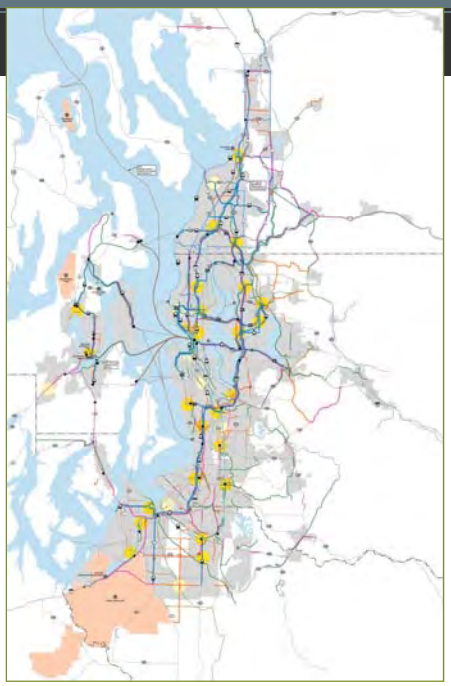
Strategic Investments




Transportation 2040

	Existing	Constrained Plan*	Full Plan**
Rapid Transit			
Bus Rapid Transit			
Light Rail***			
Commuter Rail			
Rail/Bus			
State Highway			
Arterial			
Passenger-Only Ferry			
Auto Ferry			
Bicycle/Pedestrian			
Transit Station		■	□
Park and Ride		■	○
Regional Growth Center		Urban Growth Area	
Manufacturing/Industrial Center		Military Base	

* Constrained Plan includes projects and programs covered by the plan's financial strategy.
** Full Plan includes additional projects and programs not covered by the plan's financial strategy.
*** Future Light Rail alignments are yet to be determined.



8

Align With VISION 2040

OVERVIEW

GROWTH MANAGEMENT

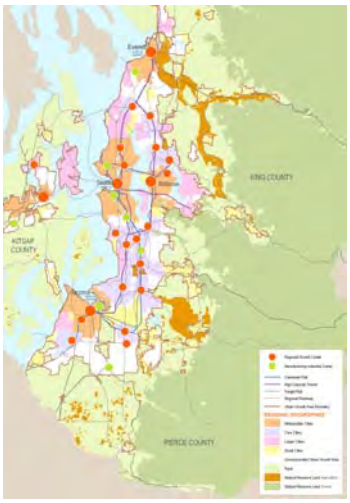
ECONOMIC DEVELOPMENT

TRANSPORTATION

The transportation plan is designed to support the adopted growth strategy.

Transportation 2040:

- 87% of roadway investments are within or directly serve Metropolitan or Core Cities
- Regional transit investments connect and serve all of the 27 designated regional growth centers
- Bicycle and pedestrian facilities designed to support transit and access to centers



PSRC AND REGIONAL PLANNING 9

The Region Must Compete for Good Jobs

OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

Transportation is a critical component of economic strategy.

Competitive Benchmarking

United States:
- Denver
- Phoenix
- Minneapolis
- San Diego
- SF Bay Area (inc. Silicon Valley)

International:
- Barcelona
- Daejeon
- Dublin
- Fukuoka
- Helsinki
- Melbourne
- Munich
- Stockholm
- Vancouver

- Canada, B.C., and the Prince Rupert Port Authority have committed $1 billion to build new freight handling and transportation infrastructure
- About 40% of freight coming into Prince Rupert from Asia is bound for a major distribution center in Memphis, Tennessee serviced by CN Rail

PSRC AND REGIONAL PLANNING 10

Support Regional Economic Strategy

OVERVIEW

GROWTH MANAGEMENT

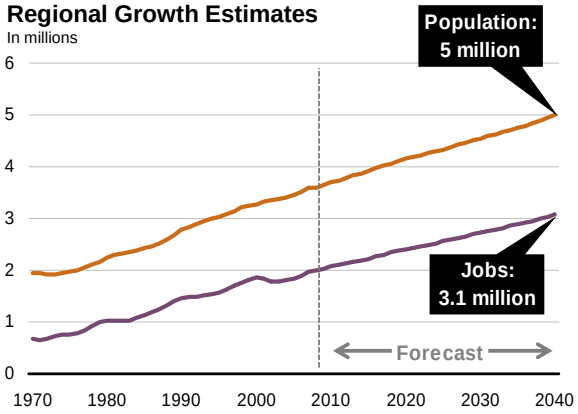
ECONOMIC DEVELOPMENT

TRANSPORTATION

Transportation 2040 is designed to support access to job centers and improve freight movement.

PSRC AND REGIONAL PLANNING 11

Region will Continue to Grow

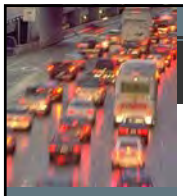


By 2040, forecast increase of 36% in population, 51% in jobs

Region Aging

By 2040, our 65+ population will reach 17%

More Diverse



PSRC AND REGIONAL PLANNING 12

More Trips and Congestion

Mobility challenges will increase without action.

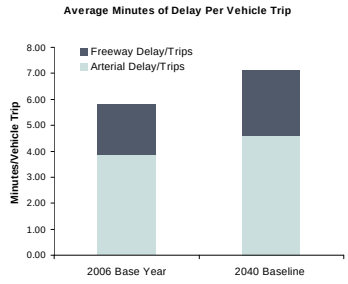
OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

- Daily person trips: 13.7 mil. (2006) to 19.0 mil. (2040); 40% increase
- Daily vehicle miles traveled: 79.5 mil. (2006) to 102.5 mil. (2040)
- Daily vehicle delay: 840,000 hours (2006) to 1.4 mil. hours (2040); 72% increase
- Average one-way commute time: 36 min. (2006) to 42 min. (2040)



PSRC AND REGIONAL PLANNING 13

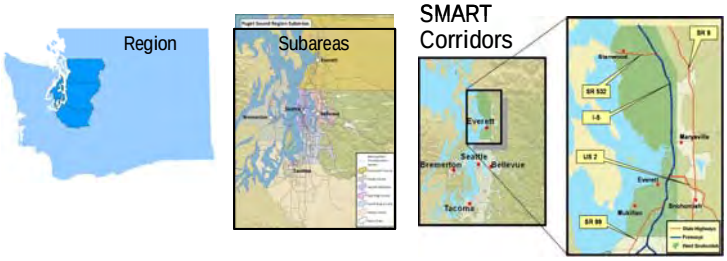
Mobility and Congestion Program

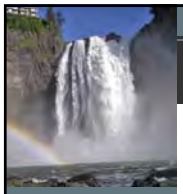
The region has develop a new program to better define, analyze and correct mobility problems.

OVERVIEW
GROWTH MANAGEMENT
ECONOMIC DEVELOPMENT
TRANSPORTATION

Congestion Management Process:

- Land use planning (VISION 2040)
- Demand management
- Transportation system management and operations
- Strategic capacity





PSRC AND REGIONAL PLANNING 14

Growing Environmental Concerns

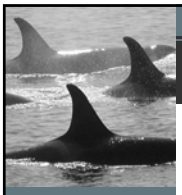
VISION 2040 commits the region to actions that create a healthy environment.

OVERVIEW
GROWTH MANAGEMENT
ECONOMIC DEVELOPMENT
TRANSPORTATION

The state has adopted greenhouse gas reduction goals and supports a national or regional (multiple states/provinces) greenhouse gas reduction program.

Statewide Greenhouse Gas Reduction Goals (all sources):

- to 1990 levels by 2020
- 25% below 1990 levels by 2035
- 50% below 1990 levels by 2050



PSRC AND REGIONAL PLANNING 15

Aggressive Environmental Program

OVERVIEW
GROWTH MANAGEMENT
ECONOMIC DEVELOPMENT
TRANSPORTATION

Transportation 2040 focuses on water and air quality issues in the region.

Water Quality

Supports travel reduction, cleaner vehicles and fuels, better treatment of stormwater, and fish passage barriers results in less polluted water in streams, rivers and Puget Sound.

Greenhouse Gas Strategy Complements the Overall State Approach

1. Land use: implement VISION 2040
2. User fees
3. Transportation choices
4. Technology: vehicle & fuels

PSRC AND REGIONAL PLANNING 16

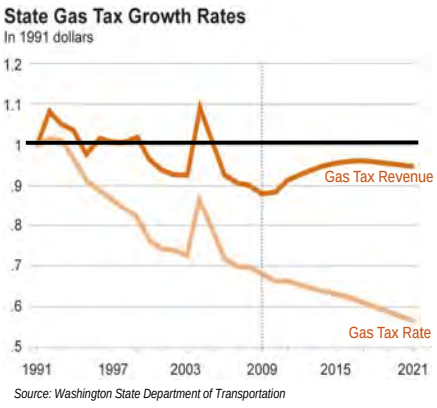
Funding Gap Threatens Mobility

OVERVIEW
GROWTH MANAGEMENT
ECONOMIC DEVELOPMENT
TRANSPORTATION

Transportation funding is a major issue.

- Estimated program costs: $189 billion (2008 dollars)
- Current law revenues: $125 billion (2008 dollars)
- The value of the gas tax, the primary source of transportation funding at local, state and federal levels, is declining due to inflation and more fuel-efficient vehicles, and transit funding is unstable

Additional funding must be found to implement Transportation 2040



Source: Washington State Department of Transportation

PSRC AND REGIONAL PLANNING 17

Financial Program

Transportation 2040 calls for a phased funding strategy.

OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

- Funding to maintain and operate our current assets
- Traditional tax financing (gas tax, etc.) will still play a central role
- There should be a relationship between the tax, fee, or toll and the use of the revenues
- Increase reliance on tolls – phased in over time
- Allow for flexibility in implementation

PSRC AND REGIONAL PLANNING 18

Sustainable and Fair Funding for Transportation

Develops a Sustainable Funding Strategy:

- To raise over $64 billion to support transportation investment (constrained part of the plan)
- Equitable geographically and across incomes

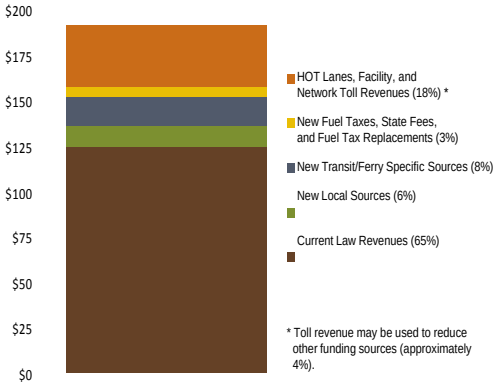
OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

Transportation 2040 Financial Plan
(Revenues by source in billions of 2008 dollars)



OVERVIEW

GROWTH MANAGEMENT

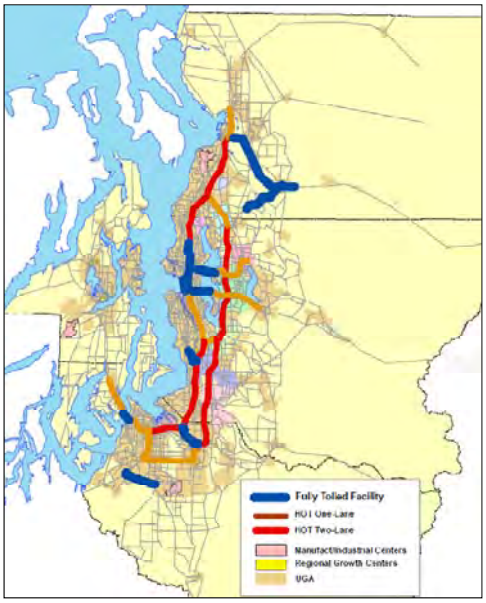
ECONOMIC DEVELOPMENT

TRANSPORTATION

Tolling Implementation Concept—Early Phase

Mid Range Constrained:

One- and two-lane HOT with fully tolled selected facilities



OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

Tolling Implementation Concept – Longer Term

Long Range Constrained:

freeway system tolling

System-level tolls reflect an improved method for estimating optimal toll rates.

OVERVIEW

GROWTH MANAGEMENT

ECONOMIC DEVELOPMENT

TRANSPORTATION

Funding the Constrained Plan: A General Scenario

- **Traditional tax financing, especially in the early years of the plan**
  - Early "modest" fuel tax increase
  - Various local sources (road levy, employee tax, impact fees, street utility)
  - MVET (or other stable source) for local transit in early years
  - Sales tax increases for local and regional transit as needed
- **Increase reliance on tolls – phased in over time**
  - VMT charge 1 cent/mi 2020; 2 cents/mi in 2030 (substitute for additional fuel taxes)
  - Tolls, parking charges and fares as modeled (previous slide)
- **Use of toll revenues**
  - HOT lane revenues support the HOT system
  - Facility tolls help finance toll projects
  - Highway system toll revenues used for various purposes
    - Highway system projects – primary use
    - Other supporting program (transit, local projects, etc.)
    - Used to reduce/offset other transportation taxes and fees (by 2030 dedicating 25% of highway tolls to a tax offset could eliminate all state fuel taxes)

New Revenue Needs: New Funding Scenario

(millions of year 2008 constant dollars)

Funding Category	2010-2020	2021-2030	2031-2040	2010-2040
Local Sources				
Road Levy (property tax)	$1,000	$1,000	$1,100	$3,100
Other Local Sources (parking, license, and impact fees)	$2,300	$2,600	$2,900	$7,800
Transit Specific Sources				
MVET (transit)	$800	$1,300	$1,800	$3,900
Sales tax increase for local transit	$0	$900	$2,800	$3,700
Sales tax increase for Sound Transit (bonded)	$0	$5,100	$2,400	$7,500
Increases in Transit and Ferry Fares	$100	$400	$500	$1,000
Fuel Taxes, State Fees and Fuel Tax Replacements				
State Fuel Tax and Bonding Net Proceeds	$4,100	$1,000	$800	$5,900
Fuel Tax Replacement	$1,100	$2,100	$2,700	$5,900
HOT Lanes and Facility Toll Revenues				
HOT and Facility Toll Proceeds	$5,600	$1,100	$0	$6,700
Highway System Tolls (various modeled)	$0	$2,700	$24,700	$27,400
Offsetting fuel tax	$0	$0	($8,800)	($8,800)
Total New Revenue	**$15,000**	**$18,200**	**$30,900**	**$64,100**

In the last decade (2001-2010) the region secured over $20 billion in new revenue for transportation*

* ST2, Nickel, TPA, Transit Now, Bridging the Gap, etc.

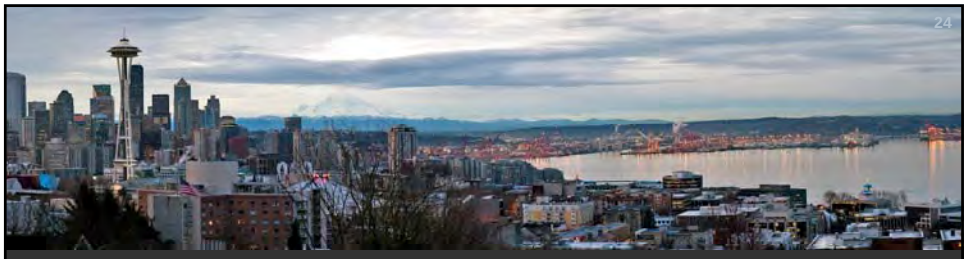
PSRC AND REGIONAL PLANNING 23

What is Next?

Focus/Program Areas

Implement Transportation 2040, including:

1. Project and program prioritization
2. Short-range transportation funding strategies and aligning PSRC funding programs
3. Resolving air quality conformity issues and continuing work on long-term greenhouse gas reduction programs
4. Freight, non-motorized and special needs planning implementation



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For More Information

Puget Sound Regional Council
www.psrc.org

Charlie Howard
206-464-7122
choward@psrc.org

Mike Cummings
206-464-6172
mcummings@psrc.org

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