



Tennessee Department of Transportation's Toll System Feasibility Study

Peer Review

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Prepared
by

Wilbur Smith Associates

900 Chapel St., Suite 1400, New Haven, CT 06511 (203)865-2191



Introduction

As part of the Tennessee Department of Transportation's Toll System Feasibility Study, Wilbur Smith Associates reviewed toll agencies around the United States to evaluate existing and potential administrative structures for implementing and managing a toll system within the State of Tennessee. The purpose of this task is to determine best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. This report contains the information collected during the Peer Review and provides an overview of concepts to assist TDOT as it addresses the potential of introducing toll facilities. This report, however, is not a comprehensive analysis of the necessary decisions required to formulate statutes and policies for the creation of a toll agency.

Peer Review Agencies

The peer review began with the development of a list of candidate toll agencies for TDOT's consideration. This list, referred to as the Peer Agency Candidate Matrix, was comprised of 12 toll agencies in 10 states and identified established versus new, state versus local/regional, and by authority to enter public-private partnerships. An example of a toll facility at each agency was provided as was the length and age of the facility. The Peer Agency Candidate Matrix is included as Appendix A.

Through consultation with Wilbur Smith Associates, TDOT selected the agencies for WSA to examine for the full peer review process. Parameters for selection included the number of years the agency has operated facilities and the number of toll facilities in operation. Consideration was given to the similarity of the demographics of the state in which the toll agency is located as compared to the demographics of the state of Tennessee. Additional factors included the agency's use of public-private partnerships, or 3Ps, as well as other transportation financing structures supported by tolling. The five agencies TDOT selected are listed below with brief descriptions.

Florida Turnpike Enterprise. FTE was established as the Florida State Turnpike Authority by the State Legislature in 1953. The primary purpose of the Authority was to construct the Sunshine State Parkway using bonds. Since then, the Turnpike mainline has grown to more than 400 miles with the Turnpike Enterprise operating another approximately 200 miles of roadway and additional facilities on behalf of other FDOT districts and local agencies.

Georgia State Road and Tollway Authority. SRTA, as it is currently known, was originally created by an act of the Georgia General Assembly in 1953 as a division within the Georgia Department of Transportation. It did not begin operating until changes were made to the law in 1972. Shortly after, planning and design began on the widening of the F.J. Torras Causeway on the Georgia coast, making the once toll-free passage a tolled causeway. In 2001, when additional changes were made to the law, including the authorization to issue GARVEE bonds, **SRTA** became its own agency separate from the Georgia DOT. **SRTA** is presently the only state agency allowed by law to operate toll facilities.

Maryland Transportation Authority. MdTA is an independent state authority that began its operations in 1971 and currently manages 49 linear miles on four toll bridges and two toll tunnels. In addition to creating and maintaining toll facilities, **MdTA** provides conduit financing for revenue-producing transportation projects like parking garages and a new rental car facility at Baltimore/Washington International Thurgood Marshall Airport, as well as other aviation, transit, and port projects. **MdTA** is nearing the opening of the Inter County Connector (ICC) in the northern suburbs of Washington, D.C. and is examining 10 miles of managed lanes on I-95.



North Carolina Turnpike Authority. NCTA is one of the new toll agencies TDOT selected. It was created by an act of the General Assembly in 2002 and began selecting potential toll facilities in 2004. Preliminary feasibility studies began on four possible toll projects in 2006. While NCTA is located within the North Carolina Department of Transportation for administrative purposes, it has the authority to exercise all of its powers independently of NCDOT.

Texas Turnpike Authority. TTA is a division of the Texas Department of Transportation. TTA operates within the auspices of TxDOT and under the approval of the Texas Transportation Commission except as prescribed otherwise by state statute and rules. According to TTA’s website, its mission is to “improve mobility and safety through the development and operation of safe, reliable, and cost-efficient system of toll roads using alternative financing and delivery methods to accelerate projects.” TTA is not yet responsible for the operation of any toll facilities but is working in conjunction with regional tollway and mobility authorities toward the development and financing of several toll roads around the state. Additionally, TTA is leading the planning and development of the Trans-Texas Corridor projects under public-private partnerships, known as comprehensive development agreements (CDAs) in Texas.

Table 1. Peer Review Agencies

Agency	Organizational	Toll Facilities	3P Authority
North Carolina Turnpike Authority	Independent Authority	0	Yes
Georgia State Road and Tollway Authority	Independent Authority	1	Yes
Florida's Turnpike Enterprise	Division of FDOT	8	Yes
Texas Turnpike Authority	Division of TxDOT	1	Yes
Maryland Transportation Authority	Independent Authority	7	No

Review Methodology

On behalf of TDOT, WSA contacted representatives of the selected toll agencies to request their participation in the peer review. All five agreed to participate in a conference call meeting to discuss topics related to the agency’s authorizing legislation, organizational structure, operational matters, finance tools, and general lessons learned in operating toll facilities.

Prior to the conference call meeting, attendees received conversation guides and questionnaires to facilitate a preliminary understanding of each party’s level of knowledge upon entering the discussion. The guides included a significant amount of information obtained from readily available resources, which allowed the conference calls to involve discussions of intangible topics that could not be researched otherwise, such as executives’ perspectives on the nuances of managing a toll agency.

Conference calls were held between September 22 and October 18, 2006, each one lasting approximately one hour and 15 minutes. Participants always included Teresa Estes of TDOT Long Range Planning and



Jannine Miller of WSA, along with the respective agency's representative. Other WSA staff participated as needed. The Conversation Guides and Notes from these calls are included as Appendix B.

Enabling Statutes

Some state statutes provide peer review agencies with the authority to operate toll facilities. Common elements of these statutes generally enable the tolling of roads, bridges, tunnels, and other transportation facilities, and may address specific policy and operational details. Tolling authority is either granted to a state Department of Transportation or to a separately-formed toll agency; an indication of the level of government that may institute a toll agency is usually specified. Such specification can include one, or a combination, of the state Department of Transportation, the state toll authority separate from the Department of Transportation, local government, or a regional public entity.

Statutes creating a state toll agency other than one controlled by the state Department of Transportation typically stipulate characteristics of the governing body of the toll agency. Such provisions include the number of members, method for appointing and/or electing members to posts, and the length and number of terms the members will serve.

If the authorization of local and regional toll agencies is instituted such as in Texas, the statutes include provisions under which local or regional entities are formed and the resulting interface with the Department of Transportation. Often statutes that create tolling agencies allow for more flexible construction practices such as the use of design/build contracting. This is true in North Carolina and Maryland.

Tolling statutes generally provide for toll evasion enforcement. Such provisions can include the leveling and collection of fines, plus the ability for the tolling entity to work with other state agencies to withhold driver license renewals and vehicle registrations until outstanding tolls and fines are paid. Traffic enforcement measures may also be stipulated in law. Such provisions may address law enforcement agencies that are authorized to issue citations to drivers evading the toll or may enable the tolling agency to outsource enforcement.

In addition to the basic elements, statutory language may address pertinent policy, operations, and financial objectives, including: the ability of the toll agency to toll existing facilities; mandatory public involvement in the planning and designing phases of toll facility development; and a requirement that the determination of facilities to toll results only from the statewide transportation planning process. Policy goals and performance measures may also be mentioned in statute including congestion management, air quality conformity, economic development, demand-driven infrastructure investment, and toll revenues as a supplement to tax revenues.

Various provisions related to toll revenues and financing can also be written into state laws. For instance, some states address whether toll collections can continue upon the retirement of toll-backed bonds. These laws may explicitly require tolls to be removed after bonds are repaid, such as in North Carolina, or they may explicitly allow, at the discretion of the DOT or facility operating agency, the continuation of toll collections after bond indebtedness is discharged, such as in Florida. This continuation allowance provides a clear advantage for the on-going maintenance, improvement, and extension of the toll facility itself plus the possible subsidy of corresponding transportation facilities in the corridor such as arterials, feeder roads, and transit.



In some states, such as Georgia, the law excludes the use of toll revenues on expenses other than the operation, maintenance, and improvement of the facility covered by bond indentures, i.e. transit capital or operations and improvement of adjacent facilities. States should consider a provision to release the state of obligation to local toll road indebtedness, similar to the way Texas law is written. Finally, the ability of the DOT or toll agency to issue project-specific, revenue-secured bonds is sometimes specified in law.

Attached as Appendix C is a paper providing additional discussion on the specifics of the enabling statutes for each of the five agencies.

Organization

Organizational issues that must be addressed when creating a toll agency include a relationship with the DOT, governance, and employees. This report found common ground and variances among the organizational structures of the five peer review agencies. The three organizational topics are discussed below.

Relationship with DOT

State toll agencies can be included within the organizational framework of the state Department of Transportation or can be created as a separate authority with minimal legal ties to the DOT. Among the peer review agencies, three are independent toll authorities and two are divisions within state DOTs.

Peer review agencies operating as divisions of a DOT enjoy the advantages of: more direct access to financial support from the DOT, toll facility planning integrated within statewide planning, and construction letting and oversight by the DOT. However, these advantages can be arranged between a DOT and an independent toll agency as is the case with the **MdTA**, **NCTA**, and **SRTA**. Additionally, **NCTA** and **SRTA** report that their independent status enables expedited progress toward organizational goals and project delivery because they are not bound by state DOT policies and procedures, especially related to procurement and staffing.

Florida Turnpike Enterprise. FTE is a semi-independent enterprise that is also a part of the Florida Department of Transportation. It is governed by more flexible regulations and operates within the jurisdiction of several FDOT districts. **FTE** is a hybrid organization that relies on FDOT for construction yet is not bound by FDOT rules for other procurement and administrative functions. **FTE** is authorized to issue its own bonds backed by its toll facilities even though it is a division of FDOT. Of primary importance is the linkage with FDOT that remains for project delivery.

Georgia State Road and Tollway Authority. SRTA was previously attached to the Georgia Department of Transportation for administrative purposes, and even though it exercised nearly all of its powers independently of the DOT, state laws still required **SRTA** to administer human resource and procurement matters through GDOT. Legislation enacted by the General Assembly in 2006 now situates **SRTA** as a fully independent agency with the authority to hire staff outside of the constraints of GDOT's organizational and compensation structure. **SRTA**'s offices are not located in the same building as GDOT. Technically, **SRTA** and GDOT have delineated responsibility for transportation planning and financing via a memorandum of agreement. This affects daily duties with staff and management at all levels of corresponding and meeting as project development progresses. **SRTA** recommends this arrangement if Tennessee's toll agency is an authority separate from TDOT.



Maryland Transportation Authority. **MdTA** is an independent state agency that acts on behalf of, but is separate from, the Maryland Department of Transportation. **MdTA**'s offices are not located in the same building as Maryland DOT. The Maryland DOT commissioner serves on **MdTA**'s board and the staff of both agencies interacts regularly with regard to specific projects.

North Carolina Turnpike Authority. **NCTA** is administratively located within the North Carolina Department of Transportation for administrative purposes but exercises all of its powers independently of NCDOT except in certain small instances as otherwise specified by state law. In essence, it operates totally independent of NCDOT. Organizationally, there is a "dotted line" affiliation with NCDOT because it receives an appropriation from NCDOT yet is otherwise autonomous, including its exemption from state employment classifications and procedures. **NCTA**'s offices are not located in the same building as NCDOT.

Texas Turnpike Authority. The Texas Turnpike Authority is administratively located within the Texas Department of Transportation and exercises most of its powers with the approval of the Texas Transportation Commission, except as otherwise specified by state law. **TTA** is a fully functioning division of TxDOT that interacts regularly with other divisions and the Texas Transportation Commission. The disadvantages of this arrangement are the required adherence to the DOT's rules, policies, and procedures, which can inhibit optimal and efficient toll project development. **TTA**'s offices are located in the same building as TxDOT.

Governing Board

Toll agencies that are divisions of state DOTs are typically governed by the DOT board or commission. Independent authorities are governed by an independent board or commission that is set up in statutes. The following describes the governing boards of the three independent peer agencies.

The governing members of **SRTA** are ex officio the Governor, the Commissioner of the Georgia DOT, the director of the Governor's Office of Planning and Budget, one member to be appointed by the Lieutenant Governor and to serve during the term of office of the Lieutenant Governor and until a successor is duly appointed and qualified, and one member to be appointed by the Speaker of the House of Representatives and to serve during the term of office of the Speaker of the House of Representatives and until a successor is duly appointed and qualified; and membership shall be a separate and distinct duty for which they shall receive no additional compensation. The authority elects one of its members as chairman. It also elects its secretary and a treasurer, who need not necessarily be members of the authority Board. The authority may make such bylaws for its government as is deemed necessary but it is under no duty to do so. Currently none of **SRTA**'s board members are locally elected officials.

While **SRTA** advises that many of its projects require the participation of local governments and local community leaders, it shares **NCTA**'s conflict-of-interest concern if locally elected officials were to be placed on the board of a toll agency. Also, **SRTA** advises that the size of its board is efficient for managing a toll agency. The **SRTA** Board meets on an ad hoc basis to review and approve management's major decisions such as annual budgets, strategic plans, RFPs over \$250,000 and bond issuances. However, because the agency is close with the governor's office, **SRTA**'s executive director is in regular contact with the governor and his staff to discuss policy and planning topics as they arise.

Members of **MdTA** include the Chairman, who is the Secretary of Maryland Department of Transportation. In addition to the Chairman, the Authority consists of six members appointed by the Governor with the advice and consent of the Senate. Each appointed member serves for a term of three



years and until his successor is appointed and qualifies. The terms of one third of the appointed members expire each year. A member appointed to fill a vacancy in an unexpired term serves only for the remainder of that term. A member of the Authority is entitled to the compensation provided in the State budget; and reimbursement for expenses, in accordance with the Standard State Travel Regulations of the Department of Budget and Management.

MdTA Board holds monthly meetings that are generally open to the public except for an optional closed-door executive session. Its current membership stems from the geographic regions around its toll facilities, including the Eastern Shore, Southern Maryland, the Baltimore-metropolitan region, and Montgomery County (future site of the planned Inter-County Connector). **MdTA** recommends a Board with its size and structure made up of community leaders and citizens. Prior to January 2006, no selection criteria were in place for the appointment of **MdTA** board members. However, recent changes to the law require that members have engineering, planning, and/or finance expertise.

NCTA is governed by a nine-member Authority Board consisting of two members appointed by the General Assembly upon the recommendation of the President Pro Tempore of the Senate, two members appointed by the General Assembly upon the recommendation of the Speaker of the House of Representatives, four members appointed by the Governor, and the Secretary of Transportation. Each appointing authority is required to appoint members who reside in diverse regions of the State. The Chair of the Authority is selected by the Authority Board. No more than two members of the North Carolina Board of Transportation may serve as members of the Authority Board. The Secretary of Transportation serves as an ex officio voting member of the Board. To execute the powers provided in its authorizing statutes, **NCTA** determines its own policies by majority vote of the members of the Authority Board present and voting if a quorum is established.

NCTA is required by law to consult with and report to the Joint Legislative Transportation Oversight Committee and the Joint Legislative Commission on Governmental Operations prior to the study, planning, development, or design of any turnpike project. None of **NCTA**'s members are locally elected officials and accordingly, **NCTA** reports that such is likely the case because of potential conflicts of interest. Alternatively, **NCTA** recommends the ability to have community leaders appointed to a toll agency's board.

The **NCTA** Board meets roughly once per month yet certain months are skipped because of scheduling constraints with the **IBTTA** Annual Meeting and other pertinent events. According to **NCTA**, immense resources are required for the preparation for board meetings.

Staffing

An issue with the creation of any new public agency is how to staff the agency. While each of the peer review agencies have executive and administrative support staff, each also relies upon outside engineering firms, legal counsel, and other experts.

The executive director of **FTE** appoints staff. Among the staff is a chief financial officer, who must be a proven, effective administrator with demonstrated experience in financial management of a large bonded capital program and must hold an active license to practice public accounting in Florida. The turnpike enterprise staff must also include the Office of Toll Operations. Management staff was capped at a level of 100 employees with other legislative changes that were enacted in 1988. Other recent statutory changes added 380 employees to the **FTE** roster, yet these employees are dedicated to toll plaza and service plaza operations.



FTE staff is composed of FDOT employees and employees of various consulting firms. FDOT employees comprise approximately 10% of the Turnpike Enterprise's 4,600 staff with consultants making up the remaining 90% of the staff, some of which are empowered to make management decisions. The consultants and their subcontractors are selected to perform specific functions for the Turnpike Enterprise. The primary functions performed by consultant teams are: operations, maintenance, general engineering, planning and finance, communications and marketing, tolls, and concessions. In addition to these areas the Turnpike Enterprise also has Troop K of the Florida Highway Patrol dedicated to law enforcement on the Turnpike System.

The **SRTA** Board appoints its officers, who need not be members of the Authority Board, as the authority deems advisable and employs such experts, employees, and agents as may be necessary to carry on properly the business of the authority. The **SRTA** Board also has the authority to fix compensation and to promote and discharge employees. There is no requirement for **SRTA** to report the hiring of administrative employees to the General Assembly or Governor's office. **SRTA** has 52 state employees on staff including an "executive team," which consists of the CEO (executive director), COO (deputy executive director), shared services director (oversees HR, IT, and accounting), communications director, strategic director, and a treasurer. This is the result of a recent organizational restructure that occurred in July 2006 and more accurately captures the daily functions of **SRTA** management. **SRTA** also employs two year-round graduate (or senior college level) interns to assist the management team. **SRTA** believes that subject-matter experts in the toll industry are key to successful toll facility and toll agency operations. **SRTA** outsources toll collections to a contractor that employs 35 to 40 toll collectors.

MdTA is granted the authority to employ and fix the compensation of attorneys, consulting engineers, accountants, construction and financial experts, superintendents, managers, and any other agents and employees that it considers necessary to exercise its powers and perform its duties. The compensation established by **MdTA** for executive management positions must be consistent with the compensation of comparable positions in the Maryland Department of Transportation. The compensation established by **MdTA** must be reported to the General Assembly each year as part of **MdTA**'s presentation of its budget; and therefore **MdTA** is entitled to the staff provided in the State budget. The expense of employing these persons may be paid only from revenues or from the proceeds of revenue bonds issued by **MdTA**. Currently, **MdTA** employees 1,600 staff for toll collections, facilities maintenance, administrative functions, and management. Its police staff is 600 and the E-ZPass group has three staff.

The **NCTA** Board appoints the executive director, whose salary is set by the Authority. The executive director is responsible for the daily administration of the toll roads and bridges constructed, maintained, or operated by **NCTA**. The executive director or his designee appoints, employs, dismisses, and, within the limits approved by the Authority Board, sets the salary of administrative employees as the executive director deems necessary. **NCTA** may use officers, employees, agents, and facilities of NCDOT upon the terms as may be mutually agreeable. Also, **NCTA** may contract for the services of consulting engineers, architects, attorneys, real estate counselors, appraisers, and other consultants. Employment of administrative staff is left to the judgment of the Authority. The Authority is required to report the hiring of all administrative employees to the General Assembly's Joint Legislative Transportation Oversight Committee within 30 days of the date of employment. **NCTA** has 11 employees. **NCTA** reported spending more than one year searching for an operations manager because of the fierce competition for professional staff with toll experience. Accordingly, **NCTA** recommends that TDOT set up its toll agency to allow autonomy in hiring and setting salaries in order to ensure competitiveness for quality staff and management.



TTA has 27 customer service center employees, three contract administrators plus the executive director (who is an engineer) and deputy director.

Appendix D includes organizational charts for **FTE**, **SRTA**, and **TTA**.

Project Development

A few of the peer agencies did offer their experiences with regards to the timeline of project development. The ICC, in which **MdTA** is in final stages of development, was first studied decades ago. The Texas Turnpike Authority suggested a 10-year window from project conceptualization to open-to-traffic.

In North Carolina, turnpike authorizing legislation was passed in 2002, the board was appointed in 2004, the executive director took office in 2005, the first project feasibility studies ensued the same year, and the first Level 3 comprehensive study will be complete in mid-2007. Financing will need to be obtained before construction can begin on the project.

Neither **SRTA** nor **FTE** could confidently offer advice about the amount of time consumed in planning, developing, and delivering a toll project. This is likely the case because roadway and bridge projects can be in various stages of development when they are identified as potential toll projects. The farther along in the planning and development phases, the more quickly it may progress to finance and construction. However, even such advanced projects can encounter delays resulting from environmental review, public opposition, or procedural set-backs in state and regional planning.

Transportation Planning

Other than federal mandates for regional transportation planning, the laws that created many of the peer agencies do not prescribe a specific interaction with MPOs. **MdTA** reports that its involvement with MPOs is minimal because federal funds are not used for **MdTA** projects. However, **MdTA** projects must be included in TIPS/STIPs if they are deemed regionally significant or if the project is located in an air quality non-attainment area.

NCTA enters into memorandums of understanding with MPOs as it relates to regional planning. **NCTA**'s approach to MPOs can be characterized as delicate upon experience that the North Carolina General Assembly nearly enacted forced and required involvement of local transportation agencies. The legislation did not pass but caused the **NCTA** Board to govern itself through the implementation of several requirements that create more formal relationships with MPOs. Local endorsement of the proposed turnpike projects is required as is the allowance for public comment and review of feasibility study results. **NCTA** also enters into memorandums of understanding with MPOs to provide assurance that toll booths are removed when bonds are paid off, revenue from projects stay within the region they are generated, and that NCDOT engineering and safety standards are kept in the design and construction of turnpikes.

In Texas, toll facility planning and management occurs via a statewide interoperability agreement that stipulates the roles of various transportation agencies including **TTA**, RTAs, local governments, and private entities. If a **TTA** toll project is located in an air quality non-attainment or maintenance region, it must be included in an MPO's TIP/RTP. **TTA** therefore interacts with MPOs on an as-needed basis yet is ever-conscious of the need for local governments to be involved and in control of projects in their region.



Except in metropolitan areas with air quality attainment requirements, MPO involvement is not mandated but **FTE** involves itself in the local planning process. **SRTA** interacts regularly with the Atlanta region MPO, as well as other MPOs around the state on an ad hoc basis.

Public Involvement

Georgia's State Road and Tollway Authority and Texas Turnpike Authority are the only two of the five peer review agencies whose statutes require public involvement activities as part of the toll project development process. **TTA** is required to hold a public hearing for **TTA** turnpike projects but only if existing "free" lanes are converted to tolls. Also, before designating a route for a segment of the Trans-Texas Corridor, **TTA** must hold at least one public hearing in each county through which the segment may pass. **SRTA** reports that public hearings are held to educate the constituency and obtain buy-in as the need for policy decisions arise.

Even though the other peer agencies' statutes do not expressly dictate public involvement (PI) undertakings, they do engage the public in various forms. This typically takes the form of public relations and public education, which is described in this report under Toll Agency Communications. Because Maryland is a design leader in context-sensitive transportation solutions, **MdTA** engages in PI frequently. The board's monthly meetings are open to the public. **MdTA** is teaming with the State Highway Administration (SHA) of the Maryland DOT to administer PI for the ICC, which is being constructed by the SHA.

Environmental Review

Most existing toll facilities did not use federal funds to support their construction, and are therefore not subject to the federal NEPA process. Many toll facilities currently under development include federal funding in the form of GARVEE bonds or TIFIA loans in the financial plan, which makes them subject to NEPA requirements. Even without federal funding, toll roads are subject to applicable state environmental requirements.

NCTA follows the NEPA process as it is likely that some federal funds will be used. Environmental review is required by Texas law for the Trans-Texas Corridor and the process is underway for TTC-35. State statutes require **SRTA** to undergo the NEPA process before projects are constructed.

State law requires **FDOT/FTE** to follow the state environmental process even if no federal funds are used. According to **FTE**, Florida's state environmental review is a full oversight process but the federal NEPA process can add three years to the planning and engineering phase of project development.

In Maryland, state law does not require environmental review but because the ICC will use federal funds in the finance package, federal NEPA standards were followed.

Operations

Toll Collections

Once a toll facility is completed the single most important responsibility of a toll agency is to ensure that tolls are collected in sufficient levels to fund debt service, operations and maintenance, and a reserve for capital replacements such as repaving. There are generally three forms of toll collection currently used in the United States: cash through a manned toll booth, unmanned automatic coin machines, and electronic toll collections through the use of a transponder. Video tolling, where a picture is taken of a license plate,



is widely used in Australia and on the ETR 407 in Toronto, and to a lesser degree in Europe and Asia, but only now is being introduced in this country.

Tolls on the **FTE** system are collected by three methods: electronic toll collections, manual toll collection, and unmanned toll collection at ramps. **FTE** raised tolls for cash transactions while maintaining the same toll rate for electronic transactions in 2004. Typically electronic transactions cost 25 cents less than cash transactions. **FTE** has arrangements with Publix grocery stores and CVS pharmacies to sell their transponders, known as SunPass. **FTE** has also marketed SunPass through billboards, TV, and radio advertisements.

SunPass may now be used at the Orlando Airport to pay for parking. This development was initiated by the Orlando-Orange County Toll Authority, which approached **FTE** about methods to improve SunPass penetration into the market. Similar arrangements will be available at airports in Tampa, Fort Lauderdale, and Miami. The purpose of implementing such interoperability is less for improving revenues but more for adding value for the customer and increasing the utilization of SunPass.

SRTA collects tolls on the GA 400 toll plaza using both ETC and cash collections. Seven cash collection lanes are operational in each direction, with some of the lanes accepting exact change through an automatic collection machine while the other cash lanes have manned toll booths. Currently, **SRTA** does not have any discount in place for those customers paying by ETC. The design of the collection lanes at the GA 400 toll plaza essentially creates an open-road-tolling configuration for ETC users and this provides an incentive for drivers to avoid the cash lanes. ETC penetration is 42% in the peak periods and 39% in the off-peak periods. The cost per transaction for ETC and cash is 6 cents and 27 cents, respectively.

Tolls at each of **MdTA**'s seven facilities are collected by both cash and ETC. Currently **MdTA** provides a commuter discount for those customers paying by ETC (**MdTA** is a member of the E-ZPass network in the northeast) on all of its facilities. E-ZPass can be obtained online or at customer service centers. At aged facilities not designed for ETC, having both cash and electronic collections has proven to be cost ineffective. Bond trust agreements do not allow E-ZPass to be used on non-**MdTA** facilities in Maryland. Three staff members are dedicated to the administration of the E-ZPass program.

NCTA is not operating any turnpikes in the state. In anticipation of opening toll roads, **NCTA** is beginning to deliberate on its operational needs and the resultant facilities. As part of this exercise, **NCTA** will examine cash and ETC. **NCTA** advised that because technology advances so rapidly and is essentially a moving target, it should not be considered in earnest until final planning stages are underway.

The Texas Transportation Commission wants to implement ETC and eliminate cash as payment on the Trans Texas Corridor and Central Texas Turnpike System projects. However, the financial community has some concerns about the impact an all ETC system will have on revenues. Therefore, cash toll collections will be included in TTC projects. However, since **TTC** is developing its toll roads through 3Ps, and most of the projects awarded to date have been to overseas developers with greater familiarity with ETC and open road tolling, it is anticipated that there will be a push to eliminate cash collections on future projects.



Electronic Toll Collection

ETC, or Open Road Tolling, enables drivers to use toll facilities without stopping or slowing down for toll booths. No cash is accepted as payment; vehicles maintain free flow speeds when passing under electronic gantries. The gantries are equipped with readers that read transponders located either on the inside or outside of a vehicle. Once read, the account corresponding to that transponder is charged the applicable toll. Generally, the account is opened with a minimum amount and the account is automatically replenished from a credit card when the account is drawn down to a certain level. While each toll agency operates differently, it is common to charge a minimal monthly administration fee, often depending on account balance and usage. Agencies also choose differently as to charging customers for a transponder, requiring only a deposit, or supplying the transponder without charge.

As implemented in Australia and Canada, drivers do not need to have a transponder. Instead, video cameras take a picture of the vehicle's license plate and the toll is charged to the appropriate account. **FTE**, in conjunction with the Tampa Hillsborough Expressway Authority, is preparing a demonstration project to test video tolling on the THCEA's Crosstown Expressway.

Obvious advantages to such configuration are less costly toll collections because manned booths are not required. Traffic congestion around toll booths is eliminated, improving customer service and alleviating the air quality concern of "hot spots." Disadvantages include a lower number of potential customers, especially in a toll facility's ramp-up years as market penetration of ETC transponders increases. Also, there is a potential loss of revenues as out-of-town visitors are unlikely to purchase transponders and violation rates can be higher.

MdTA chartered an in-depth study of existing ORT facilities and found that the ability to collect tolls without booths is cost efficient and improves the ease of collections. The design of the lanes at the GA 400 toll plaza, which are situated adjacent to the cash collection lanes, is similar to an open-road-tolling configuration.

Toll Rate Differentials

Many toll facilities around the United States assign differential toll rates for various reasons. Electronic toll collections often are more cost efficient than cash collections, so a discount for ETC users is justified. A few toll agencies have implemented a discount for frequent users of toll facilities, and even more are considering implementing time-of-day variable pricing to manage demand.

FTE has differential rates for ETC. A time-of-day variable tolling was studied in Orlando for a new capacity project (would be HOT lanes), but politics has proven to be a boundary to implementation.

SRTA does not provide a discount for ETC because the toll rate of 50 cents (charged for every vehicle regardless of the toll schedule) is prohibitively low to effectively allow a discount. **SRTA** is currently examining the feasibility of time-of-day variable pricing.

MdTA has a commuter discount in place for toll facility users that pay by either cash (by issuance of shopper's tickets) or ETC. **MdTA** is phasing out cash/tickets issuances because they are administratively cumbersome. **MdTA** recommends that any commuter discount be set on a percentage of the toll rather than an absolute dollar/cent amount, which will allow any toll increases to be applied to both regular tolls and discounted tolls. **MdTA** also warned about the competing goals of congestion management and public service via the discount.



NCTA is considering varying tolls by time-of-day or vehicle classification, but is in the very early stages of consideration and have no advice on the subject. **NCTA** is heavily considering implementing a commuter discount of 10 to 20% for frequent turnpike users.

Toll Violations Enforcement

The increased deployment of ETC has lead to increased instances of toll evasion. In addition to the loss of operational revenues, the financial community is increasingly focused on violation enforcement systems,, both legal remedies and agency policy. Most toll agencies not only levy the unpaid toll, but have the ability to assess administrative fees. As a result, violation enforcement appears to be revenue neutral. An interesting tactic used by certain toll agencies to add customers is waiving administration fees if violators register for an ETC account.

FTE has noticed that toll violations have increased as ETC penetration has increased. Unpaid tolls equate to approximately \$100 million in project funding. To lower the violation rate, **FTE** recently received the authority to use administrative tools to improve toll collections, which include the accrual of uniform traffic citations that **FTE** ultimately files with the state if tolls are not paid over a specified period of time. Other penalties involve prohibiting violators from registering their cars and renewing driver's licenses.

SRTA reports that effective violations processing on its facility have been impeded by certain clauses in its authorizing statutes. **SRTA** is investigating a legislative repair to the deficit.

MdTA reports that violations are becoming a bigger issue now with rating agencies reviewing violation rates as part of bond indentures. **MdTA** has received additional tools for decreasing violations, which allow **MdTA** to file with the Motor Vehicle Administration to disallow violators' car registration and deducting from state income tax refunds to pay outstanding violations fees and tolls.

Communications and Marketing

Because toll agencies must be responsive to the needs of their customers and often participate as partners in the development of a state's transportation system, communications and marketing are a critical function. Many methods and mediums are used to convey key messages to the public and to toll facility users. The following describes issues that the peer agencies find critically important to their successful efforts. Examples of publications and communications material are included as Appendix E.

SRTA reports that critical topics are (1) using toll collection revenues to subsidize transit operations in the corridor, (2) assisting local communities to pay for arterials when no other fund sources are available, (3) filling funding gaps in the regional plan, and (4) sole sourcing all toll revenue profit to the private sector (the state of Georgia is not willing to go in this direction at this time).

MdTA's website provides a wealth of information about the agency, its facilities, and its administrative functions (www.MdTA.state.md.us). Its intended audience is the public, elected officials, and the media. Currently, **MdTA** is considering changing its name and implementing branding.

NCTA's communications include messages on the need for tolling and explanation of why funds are not available for proper transportation investment, including cost inflation as a reason that the gas tax is no longer sufficient. **NCTA** also tries to convey that constituents' and travelers' interests and needs are important to the toll authority, including time savings and congestion relief. **NCTA** holds that communication with local governments is paramount to the implementation of turnpikes in a state that currently has no toll facilities.



TTA reports that its success with public communications and marketing efforts results from conveying the message that tolling facilities enable significant time savings for project delivery, whereas traditional funding mechanisms like a region's construction dollars from the state are allocated slowly over time. Detractors to toll system development in Texas argue double taxation, tolling as a perpetual program, and the potential of private firms from Europe and Australia owning and operating Texas' roads.

Finance

One rationale for creating toll agencies is to provide a mechanism to fund roadways that could not be funded through traditional funding means. This often requires the issuance of toll revenue bonds, whether the bonds are actually issued by the toll agency or by another agency of the state. It should also be noted that not all toll projects are supported solely by toll revenues. Particularly in the start-up period, state toll facilities are often supported by funds that are granted or loaned by state DOTs, the Federal Highway Administration, or other funding sources. Once toll revenues begin to flow to a new toll agency, stipulations can surround the allowable uses of those funds depending on state law and agency policy.

As part of the Florida Department of Transportation, the **FTE**'s budget is subject to review and approval by the state legislature. The **FTE** as part of the Department of Transportation is eligible to accept and administer any federal highway or transit funds available to the department. However, the **FTE**'s primary funding source for the construction of new capacity is the issuance of revenue bonds.

State law authorizes **FTE** to issue a maximum of \$4.5 billion in toll revenue debt backed by revenues from approved projects. Annually, **FTE** has to report to the legislature about the economic feasibility of each of its existing and planned projects. This feasibility test is a strict requirement designed to ensure that projects can support themselves and contribute to the system. In **FTE**'s experience, tolls must be collected on new alignment projects for 34 years to achieve break-even finances. Therefore, for a project to pass the feasibility test it must fund its own operations and maintenance by year 12 of operations and after 20 years a project must also pay for its bond indebtedness.

Toll collections from each facility are not required to stay within the region but regional balance in the medium-term is the goal. Bond indentures include a system-based pledge of funds for debt service payments. Florida state law does not require the discontinuance of tolls on facilities once their bond indebtedness is paid off.

SRTA's toll earnings on each project, in conjunction with other funds available to **SRTA**, must exceed annual debt service plus the actual maintenance, repair, and normal reserve requirements of such projects. Once debt is retired, **SRTA** is not required by state law to remove tolls from a turnpike project. Existing free roads may not be tolled.

Fund sources used to support the administrative functions of **SRTA** include interest income on tolls and advances that are required for customers to acquire a Cruise Card. **SRTA** performs all of its studies using grants, which typically require an 80/20 match. **SRTA** collected \$21 million in toll revenues in FY 2006.

MdTA's toll earnings are pooled to cover financing, construction, operating, maintenance, and law-enforcement costs, thus providing security for financing transportation improvement projects throughout the state's toll system. No other fund sources are being used to support the facility operation or administrative functions of **MdTA**.



MdTA's annual budget for FY 2006 was approximately \$180 million. **MdTA** does not publish individual facility's costs/revenues because the Authority is selling better operations and value added as a toll system rather than by facility. The result is that half of the cost of the planned ICC will be financed by revenues on existing toll facilities, increasing the project's bonding capacity and lowering the effective interest rate. The balance of the funding is expected to come from GARVEE bonds and TIFIA loans.

NCDOT is authorized by law to assist with funding the cost of preconstruction activities, construction, maintenance, or operation of a turnpike project. Funds available for use are only those applied to a turnpike project from the State Highway Fund, State Highway Trust Fund, or federal aid funds that might otherwise be used for other roadway projects within the state, and are otherwise already subject to the state's prescribed distribution formula. Other revenue from the sale of the Authority's bonds or notes, project loans, or toll collections does not have to be included in the distribution formula. In connection with the issuance of revenue bonds, **NCTA** has all powers of a municipality. Revenue bonds issued by the Authority are entitled to the protection of all provisions of municipal bonds in the state of North Carolina.

Certain stipulations on **NCTA's** use of funds are prescribed in its authorizing legislation. Toll revenues may only be used for **NCTA** administration costs, project development, right-of-way acquisition, construction, operation, and maintenance, and debt service. **NCTA** is allowed to spend as much as 5% of total revenue derived from all turnpike projects for its administration costs. **NCTA** may issue its own bonds or notes.

Upon fulfillment of and subject to any restrictions included in the agreements entered into by **NCTA** in connection with the issuance of toll revenue bonds, **NCTA** is required by state law to remove tolls from a turnpike project. By policy, **NCTA** does not allow the cross-subsidy of one turnpike's revenues to support another turnpike's operations, maintenance, or construction costs. A portion of the funding for each of the new facilities is anticipated to come from federal, state, and local funds to make up for the gap that toll revenues cannot fund.

NCTA's annual budget for FY 2006 was \$5 to 6 million. **NCTA** reports that the ramp-up time is the most difficult period for a start-up project, so strong support from the top of the political and administrative chain-of-command is critical. A line-item in NCDOT presently funds **NCTA**, and will do so into the foreseeable future, even beyond the opening years of the first turnpike facility.

TxDOT issues debt on behalf of **TTA**, which does not have separate debt issuance authority. In addition to funding **TTA** projects, TxDOT's statutory authority allows it to provide financial assistance for the acquisition, construction, maintenance, and operation of a toll facility. TxDOT may loan or grant funds for those purposes, as well as clarify that the development of a project requires the preparation of project plans, specifications, an engineer's estimate, right of way acquisition and utility relocation, and necessary or incidental administrative, legal, and other expenses. A primary purpose of TxDOT's financial participation is to accelerate the funding and building of toll facilities by leveraging other sources of project funds, particularly bond proceeds.

TxDOT requires a requestor to submit basic information as part of a request that describes the project to be financed and the requested financial assistance. Information provided with the basic request must include a description of the need for the project and its potential impact on traffic congestion and mobility, the proposed use of the requested financial assistance and a list of all funding sources proposed for the project, the requested financing terms if loan financing is requested, potential changes to the state



highway system necessitated by the project, and information, to the extent available, regarding community support for the project.

In order to ensure compliance with state and federal requirements, prior to receiving final approval for the loan or grant of funds, the requestor must complete a study of the social, economical, and environmental impacts of a project consistent with the spirit and intent of federal and state environmental laws and regulations. In order to ensure that financial assistance is only provided to a successful project and that loan financing will be repaid, the requestor must obtain an investment grade traffic and revenue report for the project. These requirements can be waived at the discretion of the executive director of TxDOT.

Prior to the issuance of bonds for a project, a requestor is required to comply with various terms and conditions in the trust agreement or indenture securing the bonds or in other financing documents. These terms and conditions include provisions relating to project accounting and audits. These provisions generally require an issuer to maintain its books and records in accordance with generally accepted accounting principles (GAAP) and to have an audit of those books and records performed annually in accordance with generally accepted auditing standards. The issuer is also required to report detailed financial information and audits, and to disclose other information to institutions required by federal laws and regulations that is relied on by investors to protect their investment in a project.

Public Private Partnerships

Public private partnerships (3Ps) are contractual arrangements that can bring the efficiency and innovation of the private sector to bear on the development of transportation infrastructure development. Twenty three states in the United States authorize 3Ps in various forms and different levels of private sector involvement. This section includes the perspectives that peer agencies shared on 3Ps for toll facilities. A survey and description of 3P statutes in other states is included as Appendix F.

According to the Maryland Attorney General, the **MdTA** has all the necessary powers in its authorizing legislation for solicited 3Ps. However, unsolicited 3Ps are expressly prohibited. **MdTA** currently uses 3Ps for the reconstruction, finance, and operation at its top volume travel plazas.

For the purpose of financing the cost of acquiring, constructing, equipping, operating, or maintaining any turnpike, state law allows **NCTA** to enter into partnership agreements, agreements with political subdivisions of the state, and agreements with private entities. **NCTA** recommends including 3P legislation as part of the toll agency enabling legislation because it offers another mechanism as appropriate for delivering projects. North Carolina law does not explicitly disallow **NCTA** from embarking upon 3P arrangements for turnpike project developments. Along with the broad powers included in its authorizing statutes, **NCTA** is likely going to move forward with a concession with a private developer for improvements to I-95 on the Virginia border.

Texas has some of the most comprehensive and substantial laws authorizing public-private partnerships, or comprehensive development agreements, for the development, operation, and ownership of transportation facilities. **TTA** embarked upon CDA development in 2002 when it received an unsolicited proposal for what is now considered the Trans-Texas Corridor. Since then, **TTA** has sorted through competing proposals, entered a CDA with Cintra (a private developer of transportation infrastructure), and undertaken an environmental review that is due for completion next summer. **TTA** has not yet entered a full CDA on the Trans-Texas Corridor but is in a pre-CDA arrangement that gives the Cintra



group first rights in negotiations. On the \$6 billion construction project in San Antonio, **TTA** is anticipating a \$1.2 billion concession be paid to TxDOT.

Florida state law allows the Florida Department of Transportation to accept solicited and unsolicited proposals for public private initiatives (PPI). The Turnpike Enterprise has partnered with a municipality and a private developer on the construction of an interchange and **FTE** also has partnered with developers for interchanges. Additionally, **FTE** partnered with Disney for the Western Beltway, with Disney's contributions including a donation of a right-of-way. All proposed new alignments on the Florida state road system have designated **FTE** as the developer, and **FTE** has the option of turning to a 3P development arrangement if it chooses.

Georgia state law allows the Georgia Department of Transportation to accept solicited and unsolicited proposals for public-private initiatives. By law, **SRTA** is included on GDOT's committee that evaluates such proposals. So far, one such proposal has resulted in a Development Services Agreement, which may lead to a full design-build contract with the private proposer for managed/tolled lanes alongside I-75 in the Atlanta region. The state law does not appear to allow **SRTA** to enter into public-private arrangement on its own. **SRTA** participates in GDOT's PPI task meetings but does not have a vote because the process is so heavily controlled by GDOT. Georgia's original PPI statutes were modeled on those in Virginia, whose toll agency is housed within VDOT. Subsequent revisions to Georgia's law did not include remedies to this structure, which essentially renders **SRTA** toothless with regards to PPI-developed projects that **SRTA** may ultimately operate upon opening.

Lessons Learned

The peer review agencies were very gracious in the frankness of their comments during these interviews. While each one dealt with specific issues, WSA also asked each agency for its lessons learned. Though each expressed these lessons differently, they are surprisingly uniform. The five agencies echoed four common issues for TDOT to consider. On the fifth issue, a stand alone agency versus a division of the DOT, four preferred autonomy. The four common lessons are presented below.

- **Customer Service.** All five agencies felt that responsiveness to customers was critical to their mission and ultimate acceptability. Failure of a toll agency to be perceived as "adding value" increases the difficulty of the agency to develop and manage an efficient toll road network.
- **Toll System.** All five agencies felt that it was important to develop a system or network of toll facilities, instead of creating separate stand alone toll roads.
- **Planning Process.** In order to successfully develop toll roads, all five agencies emphasized the need for an open and transparent process that is inclusive of all stakeholders.
- **Education.** The five agencies felt it was very important to educate customers, legislators, other elected officials, and stakeholders about the role of, and need for, toll roads in a state's transportation plan. A specific message needing emphasis is a lack of federal funding to add new capacity, and how tolls help to fill this funding gap. They also agreed that it is important to emphasize that tolls can fill only a portion of this gap and that they should not be considered a panacea for all transportation needs.

The fifth lesson learned concerned whether it was better to have a separate toll agency or to be part of a DOT. The factors cited in favor of a separate agency include:



- A single focus, which makes the agency more responsive to customer needs;
- Better adaptability to manage changes in construction, technology, and financial requirements; and,
- More flexible personnel practices that allow for the recruitment and retention of key personnel.

TTA expressed the minority opinion and felt that inclusion as a division of TxDOT provided it with a larger role in the state strategic planning process. In addition, being a division of TxDOT facilitates funding of the early years of the agency's life. Most importantly, **TTA** felt that as a division of TxDOT it had full access to TxDOT's imbedded expertise in planning, engineering, procurement, legal, construction, and maintenance.

APPENDIX A

Tennessee Department of Transportation Toll System Feasibility Study

Candidate Agencies for Task 1 Peer Review

State	State revenues from tolls (2004)?	Public Private Partnerships Authorized?	Type of Transport Facilities Authorized Under PPP			Operating Agency	Number of Toll Facilities in Operation	Suggested Toll Facility for Examination	Is the responsible agency state or local/regional?	Developed via a PPP?	Age of Facility	Length of Facility	Website
			Roads	Bridges/Tunnels/Ferries	Transit								
1. California	Yes	Yes	Yes	Yes	Yes	San Joaquin Hills Transportation Corridor Agency	1	San Joaquin Hills Toll Road (Route 73)	Local/Regional	No	14 years	15 miles	www.thetollroads.com
					Yes	Foothill/Eastern Transportation Corridor Agency	2	Foothill Toll Road (Route 241)	Local/Regional	No	7 years	27.7 miles	
2. Florida	Yes	Yes	Yes	Yes	Yes	Tampa-Hillsborough County Expressway Authority	1	Lee Roy Selmon Crosstown Expressway	Local/Regional	No	30 years	15 miles	www.tampa-xway.com/
3. Georgia	Yes	Yes	Yes	Yes	Yes	State Road and Tollway Authority	1	Georgia 400	State	No	13 years	6.2 miles	www.georgiatolls.com
4. Illinois	Yes	No	n/a	n/a	n/a	Illinois State Toll Highway Authority	4	North-South Tollway	State	No	17 years	20 miles	www.illinoistollway.com
5. Maryland	Yes	Yes	No	No	Yes	Maryland Transportation Authority	7	Harry W. Nice Memorial Bridge	State	No	~60 years	1.7 miles	www.mdta.state.md.us
6. New Jersey	Yes	expired	expired	expired	expired	New Jersey Turnpike Authority	2	Garden State Parkway	State	No	~50 years	172.4 miles	www.state.nj.us/turnpike/
7. North Carolina	No	Yes	Yes	No	No	North Carolina Turnpike Authority	0	<i>Under study: Two toll roads in the Charlotte area, two toll roads in the Raleigh area, and two toll bridges on the coast</i>	State	No	n/a	n/a	www.ncturnpike.org/
8. Oregon	No	Yes	Yes	Yes	Yes	Oregon Department of Transportation	0	<i>Under study: Newberg-Dundee Bypass, Sunrise Corridor, & I-205 South Corridor</i>	State	Yes	n/a	n/a	www.oregon.gov/ODOT/HWY/OIPP/innovative.shtml
					Yes	Texas Turnpike Authority	0	<i>Under study: Trans-Texas Corridors</i>	State	Yes	n/a	n/a	www.dot.state.tx.us/services/txas_turnpike_authority/default.htm
9. Texas	Yes	Yes	Yes	Yes	Yes	Harris County Toll Road Authority	6	Sam Houston Tollway - East & Southeast	Local/Regional	No	10 years	32 miles	www.hctra.com
10. Virginia	Yes	Yes	Yes	Yes	Yes	Virginia DOT	7	Pocahontas Parkway	State	Yes	4 years	8.8 miles	www.pocahontasparkway.com/

APPENDIX B



Tennessee Toll System Feasibility Study Peer Review Conversation Guide, Questionnaire, and Notes

New Toll Agency: North Carolina Turnpike Authority
Interview Date: September 22, 2006

The Tennessee Department of Transportation (TDOT), with the assistance of Wilbur Smith Associates, is undertaking a Toll System Feasibility Study. As part of the study, TDOT has selected five existing toll agencies for Peer Review to glean best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. The North Carolina Turnpike Authority (NCTA) has kindly agreed to participate in the study as one of the Peer Review agencies. Following is a Conversation Guide and Questionnaire that provides background information and questions about topics that TDOT is hoping to learn about. In attendance were Teresa Estes of TDOT, David Joyner of NCTA, David Danforth and Jannine Miller of WSA.

Organizational Structure

Charter

The North Carolina Turnpike Authority (NCTA) was created by an act of the General Assembly in 2002. A sunset provision is not present in the law.

The Authority originally only had the ability to construct and operate up to three turnpike projects and execute preliminary engineering on only additional three projects. However, the law was amended in 2005 to enable NCTA to plan, design, construct, and operate up to nine new turnpike projects around the state, with minor stipulations related to population size of the counties the projects reside within. In 2005, the law was also amended to enable NCTA to toll existing interstate facilities on the borders of the state if authorized by the U.S. DOT.

The statutes are prescriptive in some senses, such as dictating the number of projects that may be undertaken. Although the statute itself is long, NCTA seems to have a great deal of flexibility to execute its tolling authority.

1. Were any other modifications made since origination of NCTA? **No.**
2. As NCTA has studied and planned for toll roads thus far, has the law allowed for the flexibility needed to be effective? **NCTA indicated that its enabling statutes are very effective. In particular, there are three operating constraints that build public support: 1) existing roads cannot be tolled, 2) a free alternate route must be provided, and 3) toll booths must be removed after debt is paid.**
3. Do you foresee that the law will allow such continued flexibility while authorizing a level of accountability that is desired by the General Assembly, the Governor, and the citizens? **Yes. There are a number of reporting requirements including an end-of-year report to the Transportation Legislative Oversight Committee on contracts let and employees hired.**

Administrative Placement

The Authority is administratively located within the North Carolina Department of Transportation for administrative purposes but exercises all of its powers independently of the Department of Transportation

except as otherwise specified by state law. NCTA's offices are not located in the same building of NCDOT.

1. What has been the level of interaction NCTA has had with NCDOT thus far and does NCTA anticipate an increased level of integration as construction then operations begin on turnpike projects? NCTA is an authority operating independently of NCDOT. Organizationally, there is a "dotted line" affiliation with NCDOT because it receives an appropriation from NCDOT. Otherwise it is autonomous, including its exemption from state employment classifications and procedures.

Governing Board

Members of the Board: The NCTA is governed by a nine-member Authority Board consisting of two members appointed by the General Assembly upon the recommendation of the President Pro Tempore of the Senate in, two members appointed by the General Assembly upon the recommendation of the Speaker of the House of Representatives, four members appointed by the Governor, and the Secretary of Transportation. Each appointing authority is required to appoint members who reside in diverse regions of the State. The Chair of the Authority is selected by the Authority Board. No more than two members of the North Carolina Board of Transportation may serve as members of the Authority Board. The Secretary of Transportation serves as an ex officio voting member of the Board.

Members serve four-year staggered terms of service. One of the initial appointments to the Authority Board by the General Assembly upon the recommendation of the President Pro Tempore of the Senate, one of the initial appointments to the Authority Board by the General Assembly upon the recommendation of the Speaker of the House of Representatives, and three of the initial appointments of the governor shall be appointed to terms ending January 14, 2007. One of the initial appointments to the Authority Board by the General Assembly upon the recommendation of the President Pro Tempore of the Senate, one of the initial appointments to the Authority Board by the General Assembly upon the recommendation of the Speaker of the House of Representatives, and one of the initial appointments of the governor was appointed to a term ending January 14, 2005. Thereafter, at the expiration of each stipulated term of office, all appointments shall be to a term of four years from the date of the expiration of the term. The original appointing authority appoints a member to serve out the expired or unexpired term of any member.

NCTA is required by law to consult with and report to the Joint Legislative Transportation Oversight Committee and the Joint Legislative Commission on Governmental Operations prior to the study, planning, development or design of any turnpike project.

1. Are any of NCTA's Board members locally elected officials? If not, do you believe that NCTA's planning and operations would be impacted by having a more locally-focused oversight? No. NCTA urges TDOT not to include locally elected officials in any oversight board structure because of potential conflicts of interest. Good community leaders are recommended for appointment to a toll agency's board.
2. Meeting schedule: how often does the Board meet? Will this change upon the opening of toll facilities? The NCTA Board meets roughly once per month yet certain months are skipped because of scheduling constraints with the IBTTA Annual Meeting and other pertinent events.
3. Have prescribed consultations taken place as prescribed and have they been highly productive meetings? (not discussed)

4. What has been the Board's level of involvement in agency planning, operations, funds management? Does NCTA foresee this changing upon the opening of toll facilities? All projects NCTA is currently studying were proposed by board members. Board members anticipated that "their project" was fully feasible as a self-supporting toll facility. A board retreat organized early in 2005 helped build trust among members and with NCTA staff. Along with this get-to-know exercise and the experience with overseeing four plus traffic and revenue feasibility studies, the board members have become more realistic in their expectations about toll projects and therefore are more educated with regards to planning facilities.

Executive Director and Administrative Employees

1. The Authority Board appoints the executive director, whose salary is set by the Authority. David Joyner is the current executive director and serves as the Authority's chief administrative officer. He is responsible for the daily administration of the toll roads and bridges constructed, maintained, or operated by NCTA. The executive director or his designee appoints, employs, dismisses, and, within the limits approved by the Authority Board, sets the salary of administrative employees as the executive director deems necessary. The Authority is required to report the hiring of all administrative employees to the General Assembly's Joint Legislative Transportation Oversight Committee within 30 days of the date of employment.
2. How many employees does NCTA have currently? Eleven, two of which are recent staff additions including a chief operating officer and a chief engineer who came to NCTA from NCDOT. NCTA spent more than one year searching for an operations manager because of the competitive employment environment for professional staff with toll experience. Accordingly, it is recommended that TDOT formulate a set-up for its toll agency that will allow autonomy in hiring and setting salaries to ensure its competitiveness for quality staff and management.
3. Can NCTA provide TDOT with a copy of its organizational chart? NCTA is in the process of developing its organizational structure and does not have a functioning organizational chart.

Infrastructure Planning

NCTA is undertaking feasibility studies of four possible turnpike projects as well as a comprehensive investment-grade traffic and revenue study for one turnpike project that was deemed feasible (combined Triangle Parkway and Western Wake Toll Road in the Raleigh area). As part of the feasibility studies, NCTA contracted the services of Wilbur Smith Associates to perform traffic and revenue studies. HNTB performs the cost estimates and preliminary design portions. As the general engineering contractor for NCTA, HNTB internal planning is overseen by David Joyner and executed by Gail Grimes. TDOT is interested in learning about the following topics as they relate to planning for infrastructure:

1. Procedures: is the internal process for planning regimented or flexible? Flexible and informal would be the better way to characterize the planning process at NCTA. NCTA is moving away from its original provincialism. What is being discovered is that for projects selected thus far, even though a significant traffic demand is demonstrated, revenues generally can only support about 70% of project costs. NCTA has not established a standardized threshold for feasibility, instead taking the approach of assessing each project on its own merits. NCTA will proceed with consulting with state transportation and local government officials on possible methods to fill the funding gap.

2. Consultants: does NCTA have consultants on a retainer-type contract for planning, feasibility analysis, preliminary engineering, and design? Or are RFPs/RFQs issued as needed? NCTA has three consulting firms serving three distinct functions in the study and planning for toll facilities. A general engineering contractor (HNTB) is on retainer for PE, EIS, capital and operating cost analysis. Wilbur Smith is NCTA's traffic and revenue study consultant. Public Financial Management is NCTA's finance advisor who develops financial structures based on cost and revenue estimates from by the other two consultants.
3. Frequency: does NCTA anticipate cyclical planning or will NCTA undergo structured planning and research as need arises for improvements, extensions, or new facilities in response to demand? NCTA follows the traffic and revenue study sequence consisting of three levels: Level 1 - a "sketch" analysis; Level 2 - planning-level feasibility analysis, and Level 3 - a comprehensive study designed to support financing.
4. The state statutes that created NCTA do not appear to stipulate specific public involvement (PI) undertakings for turnpike projects. What have been NCTA's PI efforts thus far? Does NCTA contract the execution of public involvement to consultants or is any PI managed in-house? (not discussed)
5. The law also does not appear to prescribe a specific interaction with MPOs, other than what is required by federal law for regional transportation planning. NCTA enters into Memorandums of Understanding with MPOs as it relates to regional planning. What is typically covered by the MOUs with MPOs for inclusion of toll facility projects in the regional transportation plan? The NC General Assembly nearly enacted legislation requiring the involvement of local transportation agencies. The legislation did not pass. However, the NCTA Board implemented several requirements that create more formal relationships with MPOs. First, local endorsement of the proposed turnpike projects is required as is the allowance for public comment and review of feasibility study results. NCTA also enters into memorandums of understanding with MPOs that ensure that toll booths are removed when bonds are paid. NCTA requires that revenue from projects stay within the region they are generated. Finally, NCDOT engineering and safety standards are kept in the design and construction of turnpikes.
6. Timeline: How long after NCTA was created in law in 2002 did it take for the Authority to hire the Executive Director and begin studying the feasibility of potential projects? What is the anticipated elapsed time to get a turnpike project operational - from the initiation of the first study of the Triangle Parkway to its expected open-to-traffic date? The enabling legislation passed in 2002, the board was appointed in 2004, the executive director took office in 2005, the first project feasibility studies ensued in the same year, and the first Level 3 comprehensive study will be complete in mid-2007.
7. Of course, the NEPA process is required for use of federal transportation funds. The NEPA process is nearly complete for the Western Wake Toll Road system in the Raleigh/Durham area as well as the Monroe Connector southeast of Charlotte. For these two projects that already had the NEPA process underway when NCTA began studying them as turnpikes, how has NCTA been involved in the NEPA process? Does the state of North Carolina require NEPA for projects that do not spend federal funds? NCTA will follow the NEPA process as it is likely that some federal funds may be used.

Facility Operations under Consideration

NCTA is not currently operating any turnpikes in the state but is undergoing preliminary considerations for operations of the facilities as it relates to planning for infrastructure. TDOT is interested in gaining insight on the following subjects that NCTA may be considering for facility operations:

1. Toll collection: is NCTA planning to accept cash as payment at the toll gantries? Will this be by manual or automatic collection machines? Is NCTA considering implementing electronic toll collections? If so, what is the anticipated method for distributing transponders? Is NCTA considering implementing differential rates (discounts) for electronic toll collections versus cash? Is NCTA considering Open Road Tolling (ORT)? Why or why not? **NCTA is considering cash and non-cash electronic collections. NCTA advised that technology is advancing so rapidly that it should not be considered in earnest until the final planning stages are underway. NCTA is heavily considering implementing a commuter discount of 10% to 20% for frequent turnpike users.**
2. Violations: Regarding general traffic enforcement on turnpikes, all law enforcement and emergency personnel has the same powers and duties on the Turnpike System as on any other highway or public vehicular area. Has NCTA already begun consideration of how to provide enforcement of toll collections? Is NCTA planning for in-house processing of violations or via contractors? **(not discussed)**
3. Toll gantry management: is NCTA planning for in-house processing or via contractors? **(not discussed)**
4. Toll rate scheme: does NCTA anticipate that the toll rate scheme in the bond indentures allow for automatic increases in rates? Is NCTA considering varying tolls by time-of-day or vehicle classification? **Yes. NCTA is in the very early stages of consideration.**
5. Vehicle Eligibility: has NCTA yet considered a configuration of the toll collection gantries? If so, are specified and separate collection lanes for trucks being considered? **(not discussed)**
6. Service disruptions: has any planning been done yet for how disruptions will be handled in cases of incidents/collisions, gantry repair/maintenance, and special events? **(not discussed)**
7. Communications and marketing: what has been included in NCTA's communications plan with the public thus far, such as the medium for conveying information to the public and to elected officials? Can NCTA provide TDOT with copies of NCTA's brochures, flyers, advertisements, etc.? What are the top three "hot topics" that NCTA is attempting to get out the message about and what are the desired outcomes of the communications plan? **1) Need for tolling and explanation of why no funds are available for proper transportation investment including cost inflation as a reason that the gas tax is no longer sufficient, 2) Constituents/travelers interests and needs are important to the toll authority including time savings and congestion relief, and 3) communication with local governments is paramount.**

Funds Usage and Management

The Department of Transportation is authorized by law to assist with funding the cost of preconstruction activities, construction, maintenance, or operation of a turnpike project.

Public funds: Only those funds applied to a turnpike project from the State Highway Fund, State Highway Trust Fund, or federal-aid funds that might otherwise be used for other roadway projects within the State, and are otherwise already subject to the state's prescribed distribution formula must be included in the distribution formula. Other revenue from the sale of the Authority's bonds or notes, project loans, or toll collections do not have to be included in the distribution formula.

Issuance of bonds: The Authority is considered a "municipality" for purposes of NC's General Statutes regarding the issuance of bonds and therefore may issue revenue bonds to pay all or a portion of the cost of a turnpike project or to refund any previously issued bonds. In connection with the issuance of revenue bonds, the Authority has all powers of a municipality and revenue bonds issued by the Authority are entitled to the protection of all provisions of municipal bonds in the state of North Carolina.

Certain stipulations on NCTA's use of funds are prescribed in its authorizing legislation. Revenues derived from turnpike projects may be used only for Authority administration costs, turnpike project development, right-of-way acquisition, construction, operation, and maintenance; and debt service on the Authority's revenue bonds or related purposes such as the establishment of debt service reserve funds. NCTA may use up to 100% of the revenue derived from a turnpike project for debt service on the Authority's revenue bonds or for a combination of debt service and operation and maintenance expenses of the turnpike projects. NCTA is allowed to spend as much as 5% of total revenue derived from all turnpike projects for Authority administration costs.

Upon fulfillment of and subject to any restrictions included in the agreements entered into by the Authority in connection with the issuance of the Authority's revenue bonds, NCTA is required by state law to remove tolls from a turnpike project. By Authority policy, NCTA does not allow the cross-subsidy of one turnpike's revenues to support another turnpike's operations, maintenance, or construction costs.

1. Since toll revenues are not yet being collected, is NCDOT currently supporting the costs for NCTA administrative operations and the studies/plans for new toll facilities? Are any other fund sources being used currently? *NCTA is being funded through a line-item in NCDOT budgets.*
2. What was NCTA's annual budget for FY 2006? *\$5 to 6 million*
3. How much of the financing plan for any of the imminent projects does NCTA anticipate will include federal and state funds from these sources? *A portion of the funding is anticipated to come from federal, state, and local funds to make up for the gap that toll revenues cannot fund.*
4. What about regional or local fund sources as part of the finance plan? *Yes.*
5. Has NCTA been in contact with private companies that execute the sale of the bonds that will be issued in the future? If not, what is the timeline for contacting or going to contract with private bond sellers in relation to turnpike projects that have been deemed feasible? *(not discussed)*
6. Does NCTA foresee that the 5% cap will be problematic in covering administrative costs once toll revenues begin to stream in? *(not discussed)*
7. For the ramp-up periods of the first few turnpikes, does NCTA anticipate continued financial support from other entities to cover administrative costs? *The ramp-up time is the most difficult period for a start-up project, so strong support from the top of the political and administrative chain-of-command is critical.*

8. How might the requirement to remove toll booths upon debt retirement impact the structure of debt that might be formulated? (not discussed)

Public Private Partnerships

For the purpose of financing the cost of acquiring, constructing, equipping, operating, or maintaining any Turnpike, state law allows NCTA to enter into partnership agreements, agreements with political subdivisions of the state, and agreements with private entities.

1. Is NCTA exploring such arrangements with other entities or public-private partnerships (3P)? Why or why not? NCTA recommends including 3P legislation as part of the toll agency enabling legislation because it offers another mechanism as appropriate for delivering projects. NC law does not explicitly disallow NCTA from embarking upon 3P arrangements for turnpike project developments. NCTA is likely going to move forward with a concession for improvements to I-95 on the Virginia border.

Lessons Learned

TDOT would appreciate any general or specific insights or advice NCTA would be able to provide regarding general lessons learned in starting up a toll agency and planning for toll road projects. These may relate to organizational structure, administrative procedures, planning, finance, public policy, or any topic not yet discussed.

1. Educate policy-makers and elected officials about the funding gap and give them an understanding that the transportation funding problem is not unique to Tennessee but is occurring throughout the U.S.
2. Ensure that stakeholders understand that tolling is one critical piece in the toolbox for transportation funding solution but is not a panacea
3. Ensure that the newly-formed toll agency has the ability to hire management and staff at-will and has the authority to pay competitive salaries
4. If possible, work toward implementing an entire toll "system" with multiple facilities that are interoperable as opposed to single isolated facilities
5. Join IBTTA (International Bridge Tunnel and Turnpike Association) because it is a wealth of information and resources



Tennessee Toll System Feasibility Study Peer Review Conversation Guide, Questionnaire, and Notes

Established Toll Agency: Georgia State Road and Tollway Authority
Interview Date: October 2, 2006

The Tennessee Department of Transportation (TDOT), with the assistance of Wilbur Smith Associates, is undertaking a Toll System Feasibility Study. As part of the study, TDOT has selected five existing toll agencies for Peer Review to glean best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. The Georgia State Road and Tollway Authority (SRTA) has kindly agreed to participate in the study as one of the Peer Review agencies. Participating in the conference call will be Rosa Rountree of SRTA, Teresa Estes of TDOT, and Jannine Miller and Bob Torello of Wilbur Smith Associates. The following is a Conversation Guide and Questionnaire for the conference call that provides background information and questions about topics that TDOT hopes to learn about. In attendance was Teresa Estes of TDOT, Rosa Rountree and David Weir of SRTA, and Jannine Miller and Jerry Stump of WSA.

Organizational Structure

Charter

Although the State Road and Tollway Authority, as it is currently known, was originally created by an act of the Georgia General Assembly in 1953 as a division within the Georgia Department of Transportation, it did not begin operating in earnest until after changes were made to the law in 1972. Shortly after, planning and design began on the widening of the F.J. Torras Causeway on the Georgia coast, making the once toll-free passage into a tolled causeway. It wasn't until 2001 when additional changes were made to the law, including the authorization to issue GARVEE bonds, that SRTA became its own agency separate from the Georgia DOT. The following is a sample of the authority's conveyed powers found in Georgia code:

1. To have a seal and alter the same at its pleasure;
2. To purchase, lease, exchange, or otherwise and to hold, lease, and dispose of real and personal property of every kind and character for its corporate purposes;
3. To acquire in its own name by purchase or by condemnation in accordance with any and all existing laws applicable to the condemnation of property for public use real property or rights or easements or franchises necessary or convenient for its corporate purposes;
4. To make such contracts, leases, or conveyances as the legitimate and necessary purposes of its charter, including but not limited to contracts for construction or maintenance of projects, provided that the authority considers the possible economic, social, and environmental effects of each project (this includes a NEPA requirement);
5. To construct, erect, acquire, own, repair, maintain, add to, extend, improve, operate, and manage projects, the cost of any such project to be paid in whole or in part from the proceeds of revenue bonds of the authority, from other funds available to the authority, or from any combination of such sources;
6. To do all things necessary or convenient to carry out the powers expressly given in this article.

The statutes are prescriptive in some senses, such as in the processing of toll violations. Yet even though the statute itself is long, SRTA seems to have been given a great deal of flexibility to execute its tolling authority. TDOT has the following questions as they relate to SRTA's charter:

1. As SRTA has studied and planned for toll roads thus far, has the law allowed for the flexibility needed to be effective? Is there any language missing from the SRTA-authorizing statutes that would assist you

in administering the Authority or advancing its purposes? As written, the law allows a functional amount of flexibility and autonomy. In practice, the governor and GDOT have significant input into the planning for new facilities. As it relates to operational aspects, the state code does not appear to allow SRTA to process toll violations in the context of recent technological innovations.

2. Do you foresee that the law will allow such continued flexibility while authorizing a level of accountability that is desired by the General Assembly, the governor, and the citizens? (not discussed)

Administrative Placement

The Authority is “attached” to Georgia Department of Transportation for administrative purposes but exercises all of its powers independently of the Department of Transportation except as otherwise specified by state law. SRTA’s offices are not located in the same building as GDOT.

1. What has been the nature of interaction SRTA has had with GDOT thus far (meetings or phone conversations regularly or ad hoc, staff interactions at what level of the organizations)? SRTA and GDOT have delineated their responsibility for transportation planning and financing via a memorandum of agreement. This plays out in daily duties with staff and management at all levels corresponding and meeting as project development progresses. SRTA recommends this MOA arrangement if Tennessee’s toll agency is an authority separate from TDOT. Previously, SRTA was “administratively attached” to GDOT, with administrative functions such as human resource management and benefits administration being provided for SRTA by GDOT. As of July 1, 2006 SRTA was a fully independent agency with the authority to hire staff outside of the constraints of GDOT’s organizational and compensation structure.

Governing Board

The members of the authority are ex officio the Governor, the Commissioner of the Georgia DOT, the director of the Governor’s Office of Planning and Budget, one member to be appointed by the Lieutenant Governor and to serve during the term of office of the Lieutenant Governor and until a successor is duly appointed and qualified, and one member to be appointed by the Speaker of the House of Representatives and to serve during the term of office of the Speaker of the House of Representatives and until a successor is duly appointed and qualified; and membership shall be a separate and distinct duty for which they shall receive no additional compensation. The authority elects one of its members as chairman, which is currently Governor Sonny Perdue. It also elects its secretary and a treasurer, who need not necessarily be members of the authority Board. The authority may make such bylaws for its government as is deemed necessary but it is under no duty to do so. Currently none of SRTA’s Board members are locally elected officials.

SRTA is not required by law to consult with or make any special reports to the General Assembly yet prior to the study, planning, development or design of any tollway project; however any streetcar projects must be approved by the General Assembly before state funds are expended.

1. If any future board members were locally-elected officials, how do you believe that SRTA’s planning and operations would be impacted by having a more locally-focused oversight? While SRTA advises that many of its projects require the participation of local governments and local community leaders, it does not recommend intentionally placing local officials on the board of a toll agency. Also, SRTA advises that the size of its board is manageable and warns that the larger the size of the board, the greater coordination required on critical issues, which can be challenging.
2. How often does the board meet? Will this change upon the opening of more toll facilities in the future? The SRTA board meets on an ad hoc basis to review and approve management’s major decisions such as annual budgets, strategic plans, RFPs over \$250,000 and bond issuances.

Executive Director and Administrative Employees

The Authority Board appoints officers, who need not be members of the Authority Board, as the authority deems advisable and employs such experts, employees, and agents as may be necessary to carry on properly the business of the authority. The SRTA board also has the authority to fix compensation and to promote and discharge employees. There is no requirement for SRTA to report the hiring of administrative employees to the General Assembly or governor's office.

1. How many employees does SRTA have currently? How many are on the management team versus toll plaza operations versus "back-room" administration? SRTA has 52 state employees on staff including an "executive team" that consists of the CEO (executive director), COO (deputy executive director), shared services director (oversees HR, IT, and accounting), communications director, strategic director, and a treasurer. SRTA also employs two year-round graduate (or senior college level) interns to assist the management team. SRTA also advises that subject matter experts in the toll industry are key to successful toll facility and toll agency operations.
2. Is SRTA able to provide TDOT with a copy of its organizational chart? Yes, see attachment.

Infrastructure Planning

The governor, in his discretion or upon the recommendation of the Georgia DOT Board, is authorized and empowered to call a joint meeting of the SRTA Board and the Georgia DOT Board for the purpose of initiating all projects that may be considered under the authority of the state's toll statute. Upon the concurrence of the Governor, a majority of the SRTA Board, and the Georgia DOT Board, either is authorized to commence the study of any given project or projects and to provide for their construction. An appropriate resolution of such joint meeting is to provide for divisions of duties and responsibilities between SRTA and Georgia DOT in connection with such studies.

SRTA is currently undertaking Value Pricing Pilot Program (VPPP) studies that are funded by FHWA on two potential new facilities and the possible reconfiguration (to value pricing) of the tolling scheme for GA 400. SRTA is also participating in the evaluation committee for Georgia DOT's Public Private Initiatives. As part of the feasibility studies, SRTA has contracted the services of three different firms to perform traffic and revenue studies, preliminary design, cost estimates, and equity analysis. TDOT is interested in learning about the following topics as they relate to planning for infrastructure:

1. Procedures: is the internal process for planning regimented or flexible? How has the planning process either suited the needs as they arose or impeded possible progress toward the implementation of improvements or additional toll facilities? Relatively flexible. SRTA is a full member of Georgia's transportation planning partners, which includes GDOT, Georgia Regional Transportation Authority, and the Atlanta Regional Commission (Atlanta's MPO). This entails serving on multi-agency planning teams, which mutually determine the best projects to advance.
2. Consultants: in addition to the consultants on contract for the VPPP studies, does SRTA have any consultants on a retainer-type contract for planning, feasibility analysis, preliminary engineering, and design? Are RFPs/RFQs issued as such services needed? SRTA hires consultants as necessary.
3. Frequency: does SRTA engage in cyclical planning activities or does SRTA undergo structured planning and research as need arises for improvements or new facilities? See #1 above.
4. So far, what has been the Board's level of involvement in agency planning, operations, funds management? As described earlier, only as necessary for major decisions.

5. The state statutes that created SRTA stipulate specific public involvement (PI) undertakings before acquiring rights of way and initiating construction. What have been SRTA's PI efforts thus far? **As the need for policy decisions arise, public hearings are held to educate the constituency and obtain buy-in.**
6. The law also does not appear to prescribe a specific interaction with MPOs other than what is required by federal law for regional transportation planning. What has been the nature of the interaction with MPOs when studying toll concepts and toll projects? **As mentioned above, SRTA interacts regularly with the Atlanta region MPO, as well as other MPOs around the state on an ad hoc basis.**
7. Timeline: In your experience, what is the anticipated elapsed time to get a tollway project operational - from the initiation of the first study to its expected open-to-traffic date? **(not discussed)**
8. State statutes require SRTA to undergo the NEPA process before projects are constructed. In your experience, is the toll agency typically solely responsible for the NEPA process (and contracting firms to complete the NEPA work) or is the NEPA process embarked upon in conjunction with another state or local transportation agency? **(not discussed)**
9. Communications and marketing: what has been included in SRTA's communications plan with the public thus far, such as the medium for conveying information to the public and to elected officials? Can SRTA provide TDOT with copies of SRTA's brochures, flyers, advertisements, etc.? What are the top three "hot topics" that SRTA is attempting to get out the message about and what are the desired outcomes of the communications plan? **Hot topics are (1) using toll collection revenues to subsidize transit operations in the corridor, (2) assisting local communities to pay for arterials when no other fund sources are available, and (3) filling funding gaps in the regional plan.**

Facility Operations

Tolls on the GA 400 toll plaza are collected via two electronic, open-road-type lanes and via cash. Seven cash collection lanes are operational in each direction, with some lanes accepting exact change via an automatic collection machine. Other cash lanes have an attendant in the toll booth. Passenger cars and other two-axle vehicles pay 50 cents and the toll rate schedule for other vehicles is as follows:

Axles	Toll
3	\$1.50
4	\$2.00
5	\$2.50
6	\$3.00
7	\$3.50
8	\$4.00
9	\$4.50

Currently SRTA does not have any discount in place for those customers paying by ETC (a.k.a. Cruise Card). As mentioned earlier, violations fees rates and the collection of violation fees are set in state statute. This includes a \$25 administration fee to cover costs of toll collection recovery plus the cost of the toll itself. As related to the GA 400 facility and other facilities that you (Rosa) have managed operations for, TDOT is interested in gleaning insight on the following subjects:

1. Electronic Toll Collection (ETC): Other than via the Cruise Card application on SRTA's website, does SRTA employ any other method for distributing Cruise Card applications or the transponders themselves (via retail or other outlet)? Has SRTA ever considered implementing differential rates (discounts) for electronic toll collections versus cash? In your experience, what are the positive and

negative effects of differential rates? Is SRTA considering Open Road Tolling (ORT) for any possible future toll facilities? Why or why not? A discount is not given for ETC because the toll rate of 50 cents (which is charged for every vehicle regardless of the toll schedule) is prohibitively too low to effectively allow a discount. Also, the design of the lanes at the GA 400 toll plaza creates an open-road-tolling configuration for ETC users and this provides adequate incentive for drivers to avoid cash lanes. ETC penetration is 42% in the peak periods and 39% in the off-peak periods. The cost per transaction for ETC and cash is 6 cents and 27 cents, respectively. SRTA is examining the feasibility of time-of-day variable pricing.

2. Violations: other than video/photograph enforcement for violations in the ETC lane, are law enforcement personnel on post at the toll plaza? If so, is law enforcement present at all times or just select/random times? No. Effective violations processing is impeded by certain clauses in SRTA's authorizing statutes and SRTA is currently investigating a legislative repair to the deficit.
3. Toll gantry management: is GA 400 toll collections managed in-house? Does SRTA employ contractors for any portion of the toll collection process? SRTA outsources toll collections to a contractor that employs 35 to 40 toll collectors.
4. Service disruptions: how are service disruptions handled in cases of incidents/collisions, gantry repair/maintenance, and special events? Georgia DOT's traffic notification website, "Georgia NaviGator," currently does not display congestion on the tolled portion of GA 400. Is ITS for GA 400 operational or planned for the future? (not discussed)

Funds Usage and Management

SRTA's toll earnings on each project in conjunction with other funds available to SRTA must exceed the actual maintenance, repair, and normal reserve requirements of such projects, together with monthly or yearly sums needed for the sinking fund payments upon the principal and interest obligations of financing such project or projects. However, subject to all bond resolutions, trust indentures, and all other contractual obligations of the authority, the authority is charged with the duty of the operation of all projects in the aggregate at the most reasonable possible level of toll charges; and, furthermore, the authority is charged with the responsibility of a reasonable and equitable adjustment of such toll charges as between the various classes of users of any given project. Following is an enumeration of the financial capabilities of SRTA as found in state statute:

1. To accept and administer any federal highway or federal transit funds and any other federal highway or transit assistance received from time to time for the State of Georgia;
2. To borrow money for any of its corporate purposes, to issue negotiable revenue bonds payable from revenues of such projects, and to provide for the payment of the same;
3. To exercise any power usually possessed by private corporations performing similar functions, which power is not in conflict with the Constitution and laws of Georgia;
4. To covenant with bondholders for the preparation of annual budgets for each project and for approval by engineers or other representatives designated by the bondholders of each project;
5. To pledge, mortgage, convey, assign, hypothecate, or otherwise encumber any property of the authority, including but not limited to real property, fixtures, personal property, intangible property, revenues, income, charges, fees, or other funds and to execute any lease, trust indenture, trust agreement, resolution, agreement for the sale of the authority's bonds, loan agreement, mortgage, deed to secure debt, trust deed, security agreement, assignment, or other agreement or instrument as may be necessary or desirable to secure such bonds.

SRTA is not required by state law to remove tolls from a turnpike project. By Georgia DOT Board rules, existing roads that are used free-of-charge may not be tolled. TDOT is interested in understanding the following items as it relates to funds management:

1. Other than toll collections on GA 400, are any other fund sources being used to support the administrative functions of SRTA? **Interest income on the tolls and advances that are required for customers to acquire a Cruise Card. SRTA performs all of its studies using grants, which typically require an 80/20 match.**
2. What was SRTA's annual budget for FY 2006? **\$21 million in toll collections**
3. Were any federal, state, or local funds used to construct GA 400 or was its construction funded entirely by guaranteed revenue bonds? **(not discussed)**
4. SRTA recently issued GARVEE bonds for GDOT. What might be any advantages or disadvantages to encapsulating state DOT bond issuances in the role of the state toll agency? **(not discussed)**

Public Private Partnerships

Georgia state law allows the Georgia Department of Transportation to accept solicited and unsolicited proposals for public private initiatives (PPI). By law, SRTA is included on GDOT's committee that evaluates such proposals. So far, one such proposal has resulted in a Development Services Agreement, which may lead to a full design-build contract with the private proposer for managed/tolled lanes alongside I-75 in the Atlanta region. The state law does not appear to allow SRTA to enter into public-private arrangement on its own.

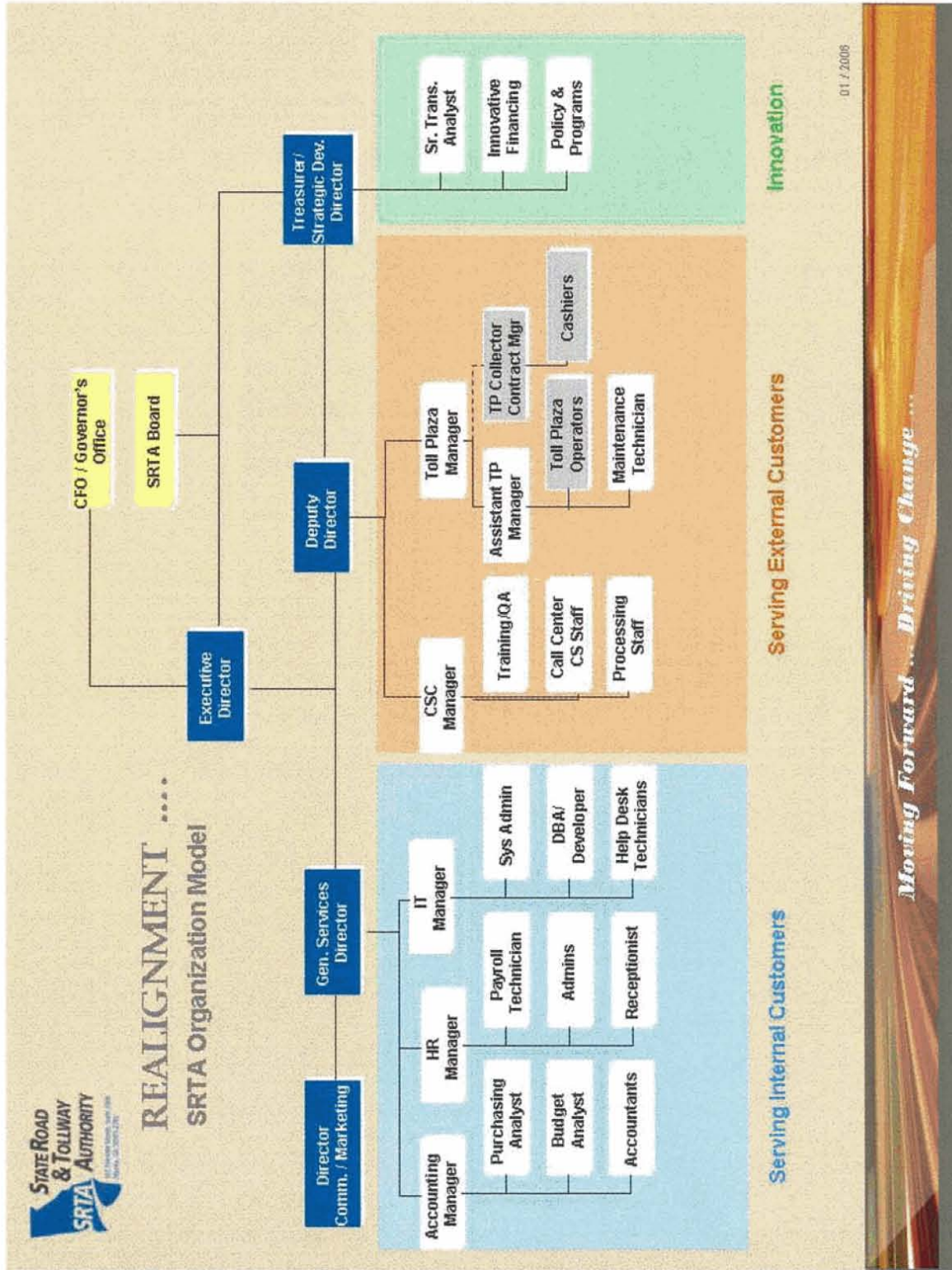
1. How has SRTA's involvement on GDOT's PPI evaluation committee resulted in positive outcomes for the state and the potential toll facility? **SRTA participates on GDOT's PPI task meetings but does not have a vote.**
2. Is this a satisfactory level of involvement or would a more prominent role in the early stages of PPI planning and development be advantageous? **Georgia's original PPI statutes were modeled on those in Virginia, whose toll agency is housed within VDOT. Subsequent revisions to Georgia's law did not include remedies to this structure, which essentially minimizes SRTA's involvement with PPI-developed projects. However, SRTA may ultimately operate PPI projects.**
3. If and when the Development Services Agreement with the private developer becomes an operation toll facility, will SRTA operate the managed/tolled lanes facility? **SRTA is presently the only state agency that is allowed by law to operate toll facilities.**

Lessons Learned

TDOT would appreciate any general or specific insights or advice SRTA can provide regarding general lessons learned in starting up a toll agency and planning for toll road projects. These may relate to organizational structure, administrative procedures, planning, finance, public policy, or any topic not discussed.

1. **Ensure that the toll facility itself and its operation add value to customers/drivers**
2. **Include all stakeholders in major planning and policy decisions**
3. **Communicate and educate the public and legislators after the toll facility plan has been drafted**
4. **Educate the public on the benefits of tolling**

5. When deciding whether Tennessee's toll agency will be part of the DOT or a separate authority, consider that a separate organization better ensures its adaptability for effectively managing changing demands in construction, technology, and finance requirements
6. Focus efforts on developing a system of toll facilities rather than creating separate and individual toll facilities
7. With regards to transit, synergy can be found between tolling and transit not only in planning and facility operations, but with "back-office" administration with unifying the collection of tolls and fares
8. Tolling is not a panacea but is a valuable new tool in the transportation finance toolbox



Tennessee Toll System Feasibility Study Peer Review Conversation Guide, Questionnaire, and Notes

Established Toll Agency: Maryland Transportation Authority

Date of Interview: October 2, 2006

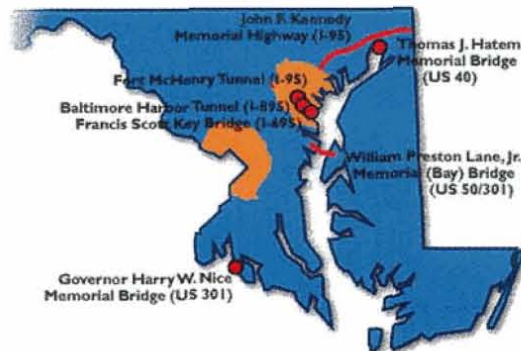
The Tennessee Department of Transportation (TDOT), with the assistance of Wilbur Smith Associates, is undertaking a Toll System Feasibility Study. As part of the study, TDOT has selected five existing toll agencies for Peer Review to glean best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. The Maryland Transportation Authority (MdTA) has kindly agreed to participate in the study as one of the Peer Review agencies. The following is a Conversation Guide and Questionnaire for the conference call that provides background information and questions about topics that TDOT hopes to learn about. In attendance was Teresa Estes of TDOT, Trent Kittleman and Greg Brown of MdTA, and Jerry Stump and Jannine Miller of WSA.

Background

The Maryland Transportation Authority began its operations in 1971 and currently manages 49 linear miles on four toll bridges and two toll tunnels. They are listed below in by the rank of annual traffic volumes as recorded in 2004 followed by a state map of their locations:

Toll Facility Name	Toll Facility Length	Annual Traffic Volume (combined directions)	Range of Cash Toll Rates*
Fort McHenry Tunnel	1.5 miles	42.7 million	\$2 - \$10
John F. Kennedy Memorial Highway	50 miles	30.3 million	\$5 - \$25
Baltimore Harbor Tunnel	1.5 miles	25.9 million	\$2 - \$10
William Preston Lane Memorial Bridge	4.3 miles	25.8 million	\$2.50 - \$15
Francis Scott Key Bridge	10.9 miles	12 million	\$2 - \$10
Thomas J. Hatem Memorial Bridge	1.3 miles	10 million	\$5 - \$10
Harry W. Nice Bridge	1.7 miles	6.3 million	\$3 - \$15

**Commuter discounts are available under certain conditions described later in this document.*



In addition to creating and maintaining toll facilities, MdTA provides conduit financing for revenue-producing transportation projects like parking garages and a new rental car facility at Baltimore/Washington International Thurgood Marshall Airport (BWI) as well as for other aviation, transit, and port projects.

The William Preston Lane Memorial Bridge bifurcates the state and is currently undergoing redecking. MdTA is also nearing the opening of the Inter County Connector (ICC) in the northern suburbs of Washington, D.C. and is examining ten miles of managed lanes on I-95.

Organizational Structure

Charter

The Maryland Transportation Authority was originally created by an act of the Maryland General Assembly in 1957. Amendments were made to the MdTA's authorizing legislation at various times between 1977 and 1996.

The MdTA has powers and duties relating to the supervision, financing, construction, operation, maintenance, and repair of transportation facilities projects as are granted to it by the authorizing state statute and other provisions of state law. Following is a sample of the authority's conveyed powers found in Maryland code:

- a. General supervision over all tolled transportation facilities projects in the state of Maryland.
- b. Finance, construction, operation, repair, and maintenance of all tolled transportation facilities projects.
- c. Acquire, hold, and dispose of property in the exercise of its powers and performance of its duties.
- d. Make any contracts and agreements necessary or incidental to the exercise of its powers and performance of its duties after providing a description of the proposed project, a summary of the contract or agreement, and a financing plan that details to the Senate Budget and Taxation Committee, the House Committee on Ways and Means, and the House Appropriations Committee, for review and comment, and to the Department of Legislative Services. Included in this requisite description are the estimated annual revenues from the issuance of bonds to finance the project and the estimated impact of the issuance of bonds to finance the project on the bonding capacity of the Authority.
- e. Apply for and receive grants from any federal agency for the planning, construction, operation, or financing of any transportation facilities project and may receive aid or contributions of money, property, labor, or other things of value from any source, to be held, used, and applied for the purposes for which the grants, aid, and contributions are made.
- f. Adopt rules and regulations to carry out the provisions of its authorizing statute.
- g. Condemn property for any transportation facilities project authorized to be financed with revenue bonds of prior issues.
- h. Do anything else necessary or convenient to carry out the powers granted in its authorizing statute.

No state agency, including the Maryland Transportation Authority, may construct any toll road, toll highway, or toll bridge in nine specific counties enumerated in state law without the express consent of a majority of the governments of those affected counties.

The statutes are prescriptive in some senses, such as in the processing of toll violations and the restriction on constructing toll facilities in specific counties. Although the statute itself is long, MdTA seems to have

a great deal of flexibility to execute its tolling authority. TDOT has the following questions related to MdTA's charter:

1. As MdTA has studied and planned for toll roads thus far, has the law allowed for the flexibility needed to be effective? *The decision to create MdTA as the only state agency able to assess tolls has worked out well. Its independent nature allows for pooling of revenues from the toll facilities which equates to a better bond rating.*
2. Is there any language missing from the MdTA-authorizing statutes that would assist you in administering the Authority or advancing its purposes? *MdTA is bound by the state's laws and rules for procurement and hiring personnel. This slows the process and is particularly burdensome when trying to hire engineers whose salaries must stay within state compensation ranges.*

Administrative Placement

MdTA is an independent state agency that acts on behalf of but is separate from the Maryland Department of Transportation. MdTA's offices are not located in the same building of Maryland DOT.

1. What has been the nature of interaction MdTA has had with Maryland DOT (meetings or phone conversations regularly or ad hoc, staff interactions at what level of the organizations)? *The Maryland DOT Commissioner serves on MdTA's Board and the staffs of both agencies interact regularly with regards to specific projects.*

Governing Board

Members of the MdTA include the chairman, who is the Secretary of Maryland Department of Transportation. In addition to the chairman, the Authority consists of six members appointed by the governor with the advice and consent of the Senate. Each appointed member serves for a term of three years and until his successor is appointed and qualifies. The terms of one third of the appointed members expire each year. A member appointed to fill a vacancy in an unexpired term serves only for the remainder of that term. A member of the Authority is entitled to the compensation provided in the State budget; and reimbursement for expenses, in accordance with the Standard State Travel Regulations of the Department of Budget and Management.

The MdTA Board holds monthly meetings which are generally open to the public except for an optional closed-door executive session.

1. If any future board members were locally-elected officials, how do you believe that MDTA's planning and operations would be impacted by having a more locally-focused oversight? *Its current membership stems from the geographic regions around its toll facilities, including the Eastern Shore, Southern Maryland, the Baltimore-metropolitan region and Montgomery County (future site of the ICC). MdTA recommends a board with its size and structure made up of community leaders and citizens. Prior to January 2006, no selection criteria were in place for the appointment of MdTA board members. However, recent changes to the law now require that members have engineering, planning, and/or finance expertise. Its current membership stems from the geographic regions around its toll facilities, including the Eastern Shore, Southern Maryland, the Baltimore-metropolitan region and Montgomery County (future site of the ICC).*

Executive Director and Administrative Employees

MdTA is granted the authority to employ and fix the compensation of attorneys, consulting engineers, accountants, construction and financial experts, superintendents, managers, and any other agents and employees that it considers necessary to exercise its powers and perform its duties. The compensation

established by MdTA for executive management positions must be consistent with the compensation of comparable positions in the Maryland Department of Transportation. The compensation established by MdTA must be reported to the General Assembly each year as part of MdTA's presentation of its budget; and therefore MdTA is entitled to the staff provided in the state budget. The expense of employing these persons may be paid only from revenues or from the proceeds of revenue bonds issued by MdTA. MdTA employees 1,600 staff for toll collections, facilities maintenance, administrative functions, and management.

1. What is the proportion of staff on the management team versus toll plaza operations versus "back-room" administration versus facilities maintenance? **Police staff is 600 and the E-ZPass group has three staff.**
2. Is MDTA able to provide TDOT with a copy of its organizational chart? **No response.**

Infrastructure Planning

MdTA has concluded the final comprehensive, investment-grade traffic and revenue study for the Intercounty Connector, located in the northern Washington D.C. region (<http://icstudy.org/index.php>). The EIS was completed, with a Record of Decision issued in May 2006, for this proposed new toll facility (toll revenue bonds will be issued shortly) allowing the completion of preliminary engineering, the procurement of right of way, and the commencement of construction. MdTA is participating in the evaluation of Express Toll Lanes along with Maryland DOT. TDOT is interested in learning about the following topics as they relate to planning for toll infrastructure:

1. Procedures: is the internal process for planning regimented or flexible? How has the planning process either suited the needs as they arose or impeded possible progress toward the implementation of improvements or additional toll facilities? **MdTA has a \$3 million strategic plan and a 6-year capital plan for rehabilitation and expansion of its facilities. A long-range plan for the Authority was completed about 3 to 4 years ago. Projects are brought to MdTA from various sources including the governor and the Maryland DOT, all of whose new alignment facilities have a "toll alternative."**
2. Frequency: does MdTA engage in cyclical planning activities or does MdTA undergo structured planning and research as need arises for improvements or new facilities? **MdTA does planning on an ad hoc, as needed basis.**
3. Consultants: in addition to the consultants on contract for feasibility studies, does MdTA have any consultants on a retainer-type contract for planning, feasibility analysis, preliminary engineering, and design? Or are RFPs/RFQs issued as such services needed? **MdTA advises that consultants on retainer are more efficient than issuing RFPs for all contract procurements. However, certain jobs will require RFPs and in such cases, MdTA typically chooses a firm from Maryland DOT's prequalified list. Also, it does issue RFPs for the sale of bonds.**
4. So far, what has been the board's level of involvement in agency planning, operations, funds management? **The board meets monthly to review MdTA activities as appropriate and approve recommended actions when necessary.**
5. The state statutes that created MdTA does not seem to stipulate specific public involvement (PI) undertakings. What has been MDTA's level of involvement in the PI efforts on the Intercounty Connector and other major construction or facility improvements thus far? **Maryland is a design**

leader in context-sensitive transportation solutions and it engages in PI frequently. The board's monthly meetings are open to the public. MdTA is teaming with the State Highway Administration (SHA) of the Maryland DOT to administer PI for the ICC, which is being constructed by the SHA.

6. The law also does not appear to prescribe a specific interaction with MPOs other than what is required by federal law for regional transportation planning. What has been the nature of the interaction with MPOs when studying toll concepts and toll projects? **Minimal because federal funds are not used for MdTA projects. However, MdTA projects must be included in TIPS/STIPs if they are deemed regionally significant.**
7. Timeline: in your experience, is the anticipated elapsed time to get the ICC project operational - from the initiation of the first study in the spring of 2004 to its 2012 expected open-to-traffic date - typical for toll facilities? **Maryland is "not an easy place to build a toll facility." The ICC, which is in its final stages of development, was first studied decades ago. The ICC and the upgrading of the Bay Bridge finally went in motion because the governor became a champion of both projects.**
8. The EIS for the Intercounty Connector was chartered by the Maryland State Highway Administration. Do state statutes require MdTA to undergo the NEPA process before projects are constructed? In your experience, is the toll agency typically solely responsible for the NEPA process (and contracting firms to complete the NEPA work) or is the NEPA process embarked upon in conjunction with another state or local transportation agency? **The SHA took the lead on the EIS administration because it was that agency's project, even though MdTA will provide the financing and operating of the toll facility when it opens. MdTA is assisting with the EIS. MdTA is working with Virginia on the I-95 improvements.**
9. Communications and marketing: other than the wealth of information available on MdTA's website (www.mdta.state.md.us), what else has been included in MdTA's communications plan with the public thus far, such as the medium for conveying information to the public and to elected officials? Other than the facility fact sheets available on the MdTA website, can MDTA provide TDOT with copies of MdTA's brochures, flyers, advertisements, etc.? What are the top three "hot topics" that MdTA is attempting to get out the message about and what are the desired outcomes of the communications plan? **MdTA's website contains valuable information on projects, processes, and activities for the public, elected officials, and the media. MdTA is considering changing its name and implementing branding.**

Facility Operations

Tolls at each of MdTA's seven facilities are collected both via electronic methods (E-ZPass system) and cash. MdTA provides a commuter discount for customers paying by ETC (a.k.a. E-ZPass) on all of its facilities. Other than via the E-ZPass application on Maryland's E-ZPass website (www.ezpassmd.com), E-ZPasses may also be obtained at select retail outlets in the state.

To promote safety for users of vehicular crossings, MdTA has adopted rules and regulations governing traffic using the vehicular crossings. A vehicle may not be driven on any vehicular crossing if the vehicle or its load exceeds the maximum weight, width, or height permitted by the regulations of MdTA for that vehicular crossing.

Enforcement of traffic and toll violations on MdTA's facilities as well as at BWI and the Port of Baltimore is the responsibility of the Maryland Transportation Authority Police. With more than 500 sworn and civilian law-enforcement professionals, it is the seventh-largest police force in the state. The MdTA have broad police powers.

As related to MdTA's toll facilities operations, TDOT is interested in gaining insight on the following subjects:

1. Electronic Toll Collection (ETC): how much more efficient and cost effective is it to collect tolls via ETC/EZ Pass? Do the benefits of administering differential rates (discounts) for electronic toll collections outweigh the revenues lost if cash rates were collected? *At aged facilities not designed for ETC, having cash and electronic collections has been cost ineffective. Bond trust agreements do not allow E-ZPass to be used on non-MdTA facilities in Maryland. A commuter discount is in place for toll facility users that pay by either cash (by issuance of shopper's tickets) or ETC, although they are phasing out the cash/tickets issuances because they are administratively cumbersome. MdTA recommends that any commuter discount be set on a percentage of the toll rather than an absolute dollar/cent amount, which will allow any toll increases to be applied to both regular tolls and discounted tolls. MdTA also warned about the competing goals of congestion management and public service via the discount.*
2. How many staff members are dedicated to the administration of the E-ZPass program? *Three.*
3. What factors led to MdTA considering Open Road Tolling (ORT) for the Intercounty Connector? *MdTA chartered an in-depth study of existing ORT facilities and found that the ability to collect tolls without booths is cost efficient and improves the ease of collections.*
4. What are the advantages of MdTA overseeing its own police force? In your professional opinion, is there a threshold for the number of toll facilities or number of tolled lanes miles that justifies a toll agency administering its own enforcement? *The MdTA police force was created with the creation of the Authority itself for the purpose of patrolling the toll facilities and assisting with apprehending toll violators. A mission creep has occurred since then and the MdTA police serve much broader purposes as transportation police for the entire state including patrolling at the ports, Homeland Security duties, and issuing citations for moving violations. MdTA has 450 sworn police officers, yet this amount is far more than is needed for the toll and traffic violations duties on the MdTA facilities.*
5. Toll gantry management: are toll collections on all facilities managed in-house? Does MdTA employ contractors for any portion of the toll collection process? *In house. Violations are becoming a bigger issue with rating agencies now reviewing violation rates as part of bond indentures. Of course, the violators also make the system unfair to those drivers who pay the tolls. MdTA has recently been given additional tools for decreasing violations, which allow MdTA to file with the Motor Vehicle Administration to disallow violators' car registration and deducting from state income tax refunds to pay outstanding violations fees and tolls.*
6. Service disruptions: other than notifications on MdTA's website, how are service disruptions will be communicated to the motoring public in cases of incidents/collisions, gantry repair/maintenance, and special events? *(not discussed)*

Funds Usage and Management

1. MdTA's toll earnings are pooled to cover financing, construction, operating, maintenance and law-enforcement costs, thus providing security for financing transportation improvement projects throughout the state's toll system. No other fund sources are being used to support the facility operation or administrative functions of MdTA.
2. Except for water and sewer charges imposed by this state or any of its agencies or political subdivisions, MdTA, its activities, and the property it owns or controls are exempt from all taxes, assessments, and charges, whether federal, state, or local, now or subsequently levied or imposed.

TDOT is interested in understanding the following items as it relates to funds management:

1. What was MdTA's annual budget for FY 2006? *Approximately \$180 million.*
2. Has MdTA met with much resistance to continuing to collect tolls on its facilities even though any original indebtedness has been retired? Does the public generally understand that toll revenues are required for the continuing operation and maintenance of the toll facilities? *The cost to paint the Bay Bridge (currently underway) will be more in absolute dollars than it did to construct the bridge. MdTA does not publish one facility's costs/revenues because the Authority is selling better operations and value added as a toll system rather than by facility.*
3. Will any federal, state, or local funds be used to construct the Intercounty Connector or will its construction be funded entirely by toll revenue bonds? *About half of the funds will come from bond finance and about half will come from GARVEE bonds, perhaps with some supplementation from a TIFIA loan.*
4. What might be any advantages or disadvantages to encapsulating state transportation finance in the role of the state toll agency? *Pooling funds. For bond financing purposes, MdTA has all of its existing facilities in its primary tier and the new ICC in the secondary tier, which allows half of the cost of the new facility to be funded up front by the existing toll facilities, lowering the amount of bonds that must be issued and therefore interest rate costs.*

Public Private Partnerships

Maryland state law allows the Maryland Department of Transportation to accept solicited and unsolicited proposals for public private partnerships (3Ps) for transit projects only.

1. Are there any plans for 3Ps for roads and bridges to be authorized in Maryland? *According to the Maryland Attorney General, MdTA has all the necessary powers in its authorizing legislation for solicited 3Ps and that formal statements in the vein of alternative procurement methods are not required. Unsolicited 3Ps are expressly prohibited, though. Therefore, MdTA is entering 3Ps for the reconstruction, finance, and operation at its top volume travel plazas.*

Lessons Learned

TDOT would be appreciative of any general or specific insights or advice MdTA would be able to provide regarding general lessons learned in starting up a toll agency and planning for toll road projects.

These may relate to organizational structure, administrative procedures, planning, finance, public policy, or any other topic that may not have yet been discussed.

MdTA advises TDOT to “get ahead of the game” with regard to authorizing the activities of the toll agency to ensure that autonomy is protected. MdTA also urges TDOT to give plentiful attention to stakeholders in the toll facility study corridor as well as the trucking industry and the state legislature. Membership in IBTTA is also recommended because it is the only professional toll industry group with an international focus.



Tennessee Toll System Feasibility Study Peer Review Conversation Guide and Questionnaire

New Toll Agency: Texas Turnpike Authority

Date of Interview: October 13, 2006

The Tennessee Department of Transportation (TDOT), with the assistance of Wilbur Smith Associates, is undertaking a Toll System Feasibility Study. As part of the study, TDOT has selected five existing toll agencies for Peer Review to glean best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. The Texas Turnpike Authority (TTA) has kindly agreed to participate in the study as one of the Peer Review agencies. Following is a Conversation Guide and Questionnaire that provides background information and questions about topics that TDOT is hoping to learn about. In attendance was Teresa Estes of TDOT, Doug Woodall of TTA, and Jannine Miller of WSA.

Background

The Texas Turnpike Authority is a division within the Texas Department of Transportation and generally operates within the auspices of TxDOT and under the approval of the Texas Transportation Commission (the Commission) except as prescribed otherwise by state statute and rules. According to TTA's website, its mission is to "improve mobility and safety through the development and operation of safe, reliable, and cost-efficient system of toll roads using alternative financing and delivery methods to accelerate projects." As of yet, TTA is not responsible for the operation of any toll facilities but is working in conjunction with a regional tollway and mobility authorities toward the development and financing of several toll roads around the state. Additionally, TTA is leading the planning and development of the Trans-Texas Corridor projects under public private partnerships, known as "comprehensive development agreements" (CDAs) in Texas.

Organizational Structure

Charter

The Texas Turnpike Authority (TTA) was created by an act of the General Assembly in 1995. A sunset provision is not present in the law. The law has been amended several times to refine the original statutes.

Generally, TTA is provided broad authority to enter into agreements with public entities (typically regional tollway authorities), governments, and private entities for the development, finance, operation, and ownership of toll facilities. The statutes are prescriptive in some senses, relating to approval of such facilities by the Commission and dictating how toll revenues may be used. Yet even though the statute itself is long, TTA seems to have been given a great deal of flexibility to execute its tolling authority.

1. Were any of the statutory modifications made since origination 1995 requested by TTA to refine processes and procedures? If so, which subchapters/sections were they and would TTA recommend that TDOT include such provisions in original legislation or acquire a certain degree of administrative and planning experience before including such refinements? **Originally TTA was an independent authority governed by a three-member Board of Directors, which was subsequently replaced by a governance simply by administrative rules, and finally in 1995, TTA was subsumed as a division of TxDOT. TTA advises that the best Texas statutes regarding tolling**

are found in the CDA chapters (which allow a full spectrum of arrangements from design-build to concessions) as well as the RMA (which allows local projects to be handled locally and enables the region's other transportation projects to benefit from toll revenues).

2. As TTA has participated in the study and planning for toll roads thus far, has the law allowed for the flexibility needed to be effective? (not discussed)
3. Do you foresee that the law will allow such continued flexibility while authorizing a level of accountability that is desired by the General Assembly, the Governor, and the citizens of Texas? (not discussed)

Administrative Placement

The Authority is administratively located within TxDOT for administrative purposes and exercises most of its powers with the approval of the Texas Transportation Commission, except as otherwise specified by state law. TTA's offices are not located in the same building as TxDOT.

1. What has been the level of interaction TTA has had with TxDOT's other division thus far with planning and construction and does TTA anticipate an increased or decreased level of integration as toll facility operations begin on turnpike projects? TTA is a fully functional division of TxDOT that interacts regularly with other divisions and the Texas Transportation Commission. The disadvantages to being part of a state transportation agency is that the toll division must adhere to the DOT's rules, policies, and procedures, which can inhibit optimal efficient toll project development.

Governing Board

Members of the Board: as a division within TxDOT, the TTA is governed by the TxDOT Board.

1. How often does TTA report to the Commission? Will this change upon the opening of toll facilities?
2. What has been the Commission's level of involvement in agency planning, operations, funds management? Does TTA foresee this changing upon the opening of toll facilities?

Executive Director and Administrative Employees

1. How is the TTA executive director appointed and is there a limitation on his/her term? Not directly discussed but there do not appear to be restrictions on the term of service. Initial staffing was drawn from of TxDOT.
2. How many employees does TTA have currently? 27 customer service center employees, 3 contract administrators plus the executive director and deputy director. Only one staff member has direct toll road experience.
3. Can TTA provide TDOT with a copy of its organizational chart? Yes, attached here.

Regional Tollway Authorities and Regional Mobility Authorities

According to Texas statutes enacted in 1997, the purposes of regional tollway authorities are the expansion and improvement of transportation facilities and systems in this state, the creation of regional tollway authorities to secure and acquire rights-of-way for urgently needed transportation systems and to plan, design, construct, operate, expand, extend, and modify those systems, and the reduction of burdens

and demands on the limited money available to the commission and an increase in the effectiveness and efficiency of the commission. Upon ultimate approval by the Texas Transportation Commission, RTAs may be formed by two or more counties (one of which must have a population of 300,000 or more) per the direction of the counties' commissioner's courts. Once formed, RTAs have broad authority to study, develop, own, operate, and lease out turnpike projects and turnpike systems, generally independent of state oversight.

Regional Mobility Authorities, formed by one or more counties upon the approval of the Commission, were more recently enacted in 2001 in Texas statutes to construct, maintain, and operate transportation projects in a defined region of the state. Transportation projects that may be pursued by RMAs include turnpike projects, passenger or freight rail facilities, major roadways, ferries, airports, pedestrian or bicycle facilities, intermodal hubs, air quality improvement initiatives, and public utility facilities. RMAs may impose tolls, fares, fees, or other usage charges and such collections are not subject to supervision of regulation by any agency of the state or another governmental entity.

1. What are the advantages and disadvantages of each different regional toll agency set-up and does TTA recommend TDOT authorized one of these types of arrangements for toll agencies? TTA only interacts with the RMAs when they are newly formed, when the RMA's toll facility will connect with the state system, and when RMAs request financing assistance. RMAs are allowed to enter into CDAs but RTAs are not.

Infrastructure Planning

The Commission designates one or more lanes of a segment of the state highway system as a toll project or system. TTA is currently executing the planning and development of the Trans-Texas Corridor projects and collaborating with regional mobility authorities in planning for new toll facilities. TTA is required to adopt and include in TxDOT's unified transportation program a list of transportation projects in each department district that the department considers to be eligible and feasible for tolling; a transportation project that is included in the list is not required to be operated as a toll project. Texas laws states that one or more municipalities, one or more counties, a combination of municipalities and counties, or a private group or combination of individuals in this state may pay all or part of the expenses of studying the cost and feasibility and any other expenses relating to the preparation and issuance of toll revenue bonds for the construction of a proposed toll project or system, the improvement, extension, or expansion of an existing project or system, or the use of private participation.

TDOT is interested in learning about the following topics as they relate to planning for infrastructure:

1. Process/procedures: what is the internal and external process for planning with regards to selecting transportation projects to study for feasibility as toll roads? How does TTA's planning mirror and/or interact with planning that occurs within the TxDOT districts? Do most toll projects (other than the TTC) originate from local governments? TTA analyzes facilities for toll projects at the behest of TxDOT districts and the Texas Transportation Commission. Texas's tight funding situation dictates that new limited-access alignments have to be funded by toll collections. With the financial support allocated to it by TxDOT through "Fund 6," TTA has analyzed over 600 roadways for toll feasibility. If a local government participates in funding the feasibility of its region's toll project, the local government may receive a prorated percentage of the toll revenues.
2. Texas law prescribes certain stipulations that, if followed, would allow TxDOT to convert existing "free" lanes to tolled lanes as well as toll exclusive lanes, i.e. truck-only lanes. Has TTA exercised this authority and if so, how has it handled any reaction from the public? As prescribed

by Texas law, only under certain circumstances can existing or currently planned facilities be tolled. These include the following: 1) the road was designated a toll road prior to commencement of construction, 2) the facility was open to traffic as a toll prior to September 1, 1995, 3) the project was in the RTP as a toll facility prior to September 1, 1995, 4) free parallel lanes provided in the same number have always been free, and 5) a county-wide referendum is passed allowing designated free lanes to be tolled. As of yet, TTA has not acted upon any of these allowances because such activity is viewed as too controversial.

3. Consultants: does TTA have consultants on a retainer-type contract for planning, feasibility analysis, preliminary engineering, and design? Or are RFPs/RFQs issued as needed? TTA has each of the three primary traffic and revenue study firms (WSA, Volmer, and URS) under contract. TTA staff manages more than \$1 billion in contracts including consultants of all types; however construction is handled by other TxDOT divisions. Prior to becoming part of TxDOT, construction was handled by TTA.
4. The state statutes that created TTA stipulate the holding of a public hearing for TTA turnpike projects but only if existing “free” lanes are converted to tolls. Before designating a route for a segment of the Trans-Texas Corridor, TTA must hold at least one public hearing in each county through which the segment may pass. Have the public hearings held thus far been effective in educating the public and receiving feedback on the projects under consideration, and what factors have made the hearings successful? Does TTA contract the execution of public involvement to consultants or is any PI managed in-house? (not discussed)
5. The law prescribes that turnpike projects must be included in a region’s TIP. What has been the nature and level of interaction with MPOs? In Texas, toll facility planning and management occurs via a statewide interoperability agreement that stipulates the roles of various transportation agencies including TTA, RTAs, local governments, and private entities. If a TTA toll project is located in an air-quality non-attainment or maintenance region, it must be included in an MPO’s TIP/RTP. TTA therefore interacts with MPOs on an as needed basis yet is ever-conscious of the need for local governments to be involved and in control of projects in their region.
6. Timeline: How long after TTA was created in law in 1995 did it take for the Authority to hire the Executive Director and begin studying the feasibility of potential projects? What is the anticipated elapsed time to get a turnpike project operational? Approximately 10 years.
7. The NEPA process is required for use of federal transportation funds. Environmental review is required by Texas law for the Trans-Texas Corridor and the process is underway for TTC-35. Are there any projects that TTA develops that do not require environmental review and has TTA been able to affect any streamlining of the environmental review steps for toll projects? (not discussed)

Facility Operations under Consideration

As of yet, TTA is not currently operating any turnpikes in the state but is undergoing preliminary considerations for operations of the facilities as it relates to planning for infrastructure. Through the agreements with public and private entities for the development and operation of toll facilities, TTA is authorized to fix toll rates with the approval of the Commission. Operation of a toll facility may be executed by any of an assortment of entities, public and private, in accordance with contracts and agreements TTA enters. According to Texas law, TTA “may engage in marketing, advertising, and other activities to promote the development and use of toll projects and may enter into contracts or agreements necessary to procure marketing, advertising, or other promotional services from outside service

providers.” TDOT is interested in gaining insight on the following subjects that TTA may be considering for facility operations:

1. Toll collection: is TTA planning to accept cash as payment at the toll gantries? Will this be by manual or automatic collection machines? **Yes, see #3 below.**
2. TTA will be implementing electronic toll collections via the TxTAG. Other than via the website or telephone, are there any other anticipated methods for distributing transponders? **(not discussed)**
3. Is TTA considering implementing differential rates (discounts) for electronic toll collections versus cash? Is TTA considering Open Road Tolling (ORT)? Why or why not? **The Texas Transportation Commission wants to implement ORT without accepting cash as payment on the Trans Texas Corridor and Central Texas Turnpike System projects. This policy has yet to be implemented due to concerns about the impact on revenues. Therefore, cash toll collections will be included in TTC projects.**
4. Toll rate scheme: does TTA anticipate that the toll rate scheme in the bond indentures allow for automatic increases in rates? Is TTA considering varying tolls by time-of-day or vehicle occupancy for the RTA or TTC facilities? **(not discussed)**
5. Communications and marketing: what has been included in TTA’s communications plan with the public thus far, such as the medium for conveying information to the public and to elected officials? Can TTA provide TDOT with copies of TTA’s brochures, flyers, advertisements, etc.? What are the top three “hot topics” that TTA is attempting to get out the message about and what are the desired outcomes of the communications plan? **TTA has succeeded with its public communications and marketing efforts because the message is that tolling facilities enables significant time savings for project delivery, whereas with traditional funding mechanisms, a region’s construction dollars from the state are allocated slowly over time. Detractors to toll system development in Texas use the arguments of double taxation, tolling as a perpetual program, and warnings that private firms from Europe and Australia will own and operate Texas’s roads.**

Funds Usage and Management

Certain stipulations on the use of toll revenues and toll-backed bonds are prescribed in Texas law. These include the following:

1. Toll revenue or other revenue derived from a toll project or system that is collected or received by the department under this chapter, and a payment received by the department under a comprehensive development agreement for a toll project or system shall be deposited in the state highway fund.
2. Payments received by TTA under a comprehensive development agreement may be used by the department to finance the construction, maintenance, or operation of a transportation project or air quality project in the region in which the toll facility is located.
3. The Commission authorizes the use of surplus revenue of a toll project or system to pay the costs of a transportation project, highway project, or air quality project within a department district in which any part of the toll project is located.

4. The Commission is not permitted to revise the formula as provided in the department's unified transportation program in a manner that results in a decrease of a district's allocation because of a payment under Texas state law.
5. With regards to toll lanes, revenue generated from toll charges and collection fees assessed by an entity with whom the department contracts under must be allocated as required by the terms of the agreement.
6. The Commission may not take an action that violates, impairs, or is inconsistent with a bond order, trust agreement, or indenture governing the use of the surplus revenue.
7. Bonds or other debt obligations of a political subdivision reviewed under this subchapter are obligations of the issuing entity and are not obligations of the state.
8. The department may impose tolls for the use of each toll project or system and the different segments or parts of each project or system and, notwithstanding other stipulations in state law to the contrary, contract with a person for the use of part of a toll project or system or lease part of a toll project or system for a gas station, garage, store, hotel, restaurant, railroad tracks, utilities, and telecommunications facilities and equipment and set the terms for the use or lease. The tolls shall be set so that, at a minimum, the aggregate of tolls from the toll project or system:
 - a. provides a fund sufficient with other revenue and contributions, if any, to pay the cost of maintaining, repairing, and operating the project or system and the principal of and interest on the bonds issued under Subchapter C (conversion of free lanes to toll lanes) for the project or system as those bonds become due and payable, and creates reserves for specific purposes.
 - b. The tolls are not subject to supervision or regulation by any other state agency.
 - c. The tolls and other revenue derived from the toll project or system for which bonds were issued, except the part necessary to pay the cost of maintenance, repair, and operation and to provide reserves for those costs as may be provided in the order authorizing the issuance of the bonds or in the trust agreement securing the bonds, shall be set aside at regular intervals as may be provided in the order or trust agreement in a sinking fund that is pledged to and charged with the payment of interest on the bonds as it becomes due, principal of the bonds as it becomes due, necessary charges of paying agents for paying principal and interest, and the redemption price or the purchase price of bonds retired by call or purchase as provided by the bonds.
9. The revenue and disbursements for each toll project or system shall be kept separately. The revenue from one project may not be used to pay the cost of another project except as authorized other sections of the state Transportation Code.

TTA is not required by state law to remove tolls from a turnpike project once bond indebtedness is expired. By Authority policy, TTA does not allow the cross-subsidy of one turnpike's revenues to support another turnpike's operations, maintenance, or construction costs.

1. Can TTA provide some further clarification as to how it is determined that tolls from different projects/agreements get disbursed to the Texas Mobility Fund, used specifically for the region in which the toll revenues are generated, and/or provided directly to TTA? *An RMA's surplus revenue is allocated to the MPO for funding other transportation projects in the region. The SH 121 project is estimated to have a 560% bond capacity because the costs for ROW, NEPA, and pre-construction were funded previously from non-bond proceed funds.*
2. Since toll revenues are not yet being collected, how is TxDOT currently supporting the costs for TTA administrative operations and the studies/plans for new toll facilities? Are any other fund sources being used currently? *Previously, TTA received support directly from the Texas Mobility Fund (gas tax revenues) but currently it functions from loans from TxDOT that will be paid back*

with toll revenues once toll collections begin. TTA also is using funds from the CTTS bond sale for planning, design, and environmental work on that project and it receives support from local governments and authorities in the form of right-of-way donations. Some of its funding originates from the Trans-Texas Corridor concession fee. TTA submitted an application for a TIFIA loan.

3. What was TTA's annual budget for FY 2006? (not discussed)
4. Has TTA already been in contact with private companies that execute the sale of the bonds that will be issued in the future? If not yet, what is the timeline for contacting or going to contract with private bond sellers in relation to turnpike projects that have been deemed feasible? CTTS bonds have been sold. TTA is working with the private development consortium in the context of the pre-CDA to plan for financing for the Trans-Texas Corridors.
5. For the ramp-up periods of the first few turnpikes, does TTA anticipate continued financial support from other entities to cover administrative costs? Yes, TTA will likely be receiving support from TxDOT as long as the Texas Transportation Commission continues to request studies of newly proposed toll facilities. Over time the proportion of TxDOT support will decline as toll revenues become part of TTA's budget.

Public Private Partnerships – Comprehensive Development Agreements

Texas, of course, has some of the most comprehensive and liberal laws authorizing public private partnerships, or comprehensive development agreements, for the development, operation and ownership of transportation facilities. TTA embarked upon CDA development in 2002 when it received an unsolicited proposal for what is now considered the Trans-Texas Corridor. Since then, TTA has sorted through competing proposals, entered a CDA with Cintra (a private developer of transportation infrastructure), and undertaken an environmental review that is due for completion next summer.

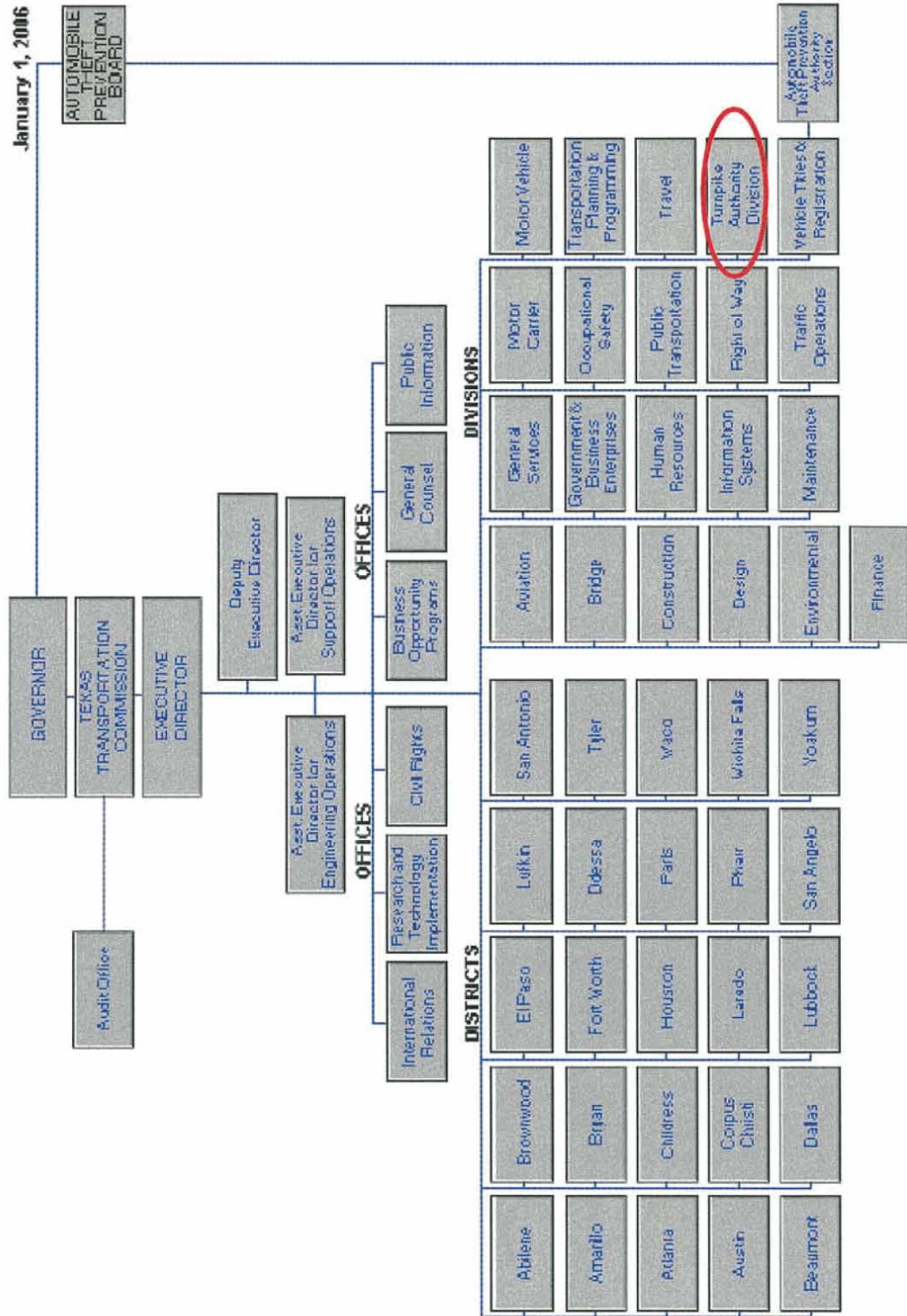
1. What are the top three lessons learned thus far in formulating CDAs that TxDOT advises other departments of transportation and toll authorities to give heed to? TTA has not yet entered a full CDA on the Trans Texas Corridor yet but is in a pre-CDA arrangement that gives the Cintra group first rights in negotiations. On the \$6 billion construction project in San Antonio, TTA is anticipating a \$1.2 billion concession be paid to TxDOT.

Lessons Learned

TDOT would be appreciative of any general or specific insights or advice TTA would be able to provide regarding general lessons learned in starting up a toll agency and planning for toll road projects. These may relate to organizational structure, administrative procedures, planning, finance, public policy, or any other topic that may not have yet been discussed.

TTA recommends a set-up with the toll agency as part of the DOT because the larger strategic picture for the state's transportation system is retained and with it the connection to statewide planning. TTA also recommends developing and broadcasting a clear message on the construction time savings that is afforded when transportation facilities are financed by tolls. TTA also emphasizes the importance of local involvement and buy-in.

TxDOT Organization Chart





Tennessee Toll System Feasibility Study Peer Review Conversation Guide, Questionnaire, and Notes

Established Toll Agency: Florida's Turnpike Enterprise (FTE)

Interview Date: October 18, 2006

The Tennessee Department of Transportation (TDOT), with the assistance of Wilbur Smith Associates, is undertaking a Toll System Feasibility Study. As part of the study, TDOT has selected five existing toll agencies for Peer Review to glean best practices, organizational arrangements, and lessons learned from those with experience in planning and operating toll facilities. Florida's Turnpike Enterprise (FTE) has kindly agreed to participate in the study as one of the Peer Review agencies. In attendance was Teresa Estes of TDOT, Chris Warren of FTE, and Jannine Miller of WSA.

Organizational Structure

Background and Charter

Florida's Turnpike Enterprise was initially established as the Florida State Turnpike Authority by the State Legislature in 1953. The primary purpose of the Authority was to construct the Sunshine State Parkway, using bonds. Since that time the Turnpike Mainline has grown to over 400 miles with the Turnpike Enterprise operating another approximately 200 miles of roadway as well as operating additional facilities on behalf of other FDOT Districts and local agencies.

The Authority was integrated into the Florida Department of Transportation in 1969. In 1988 the state legislature created the Office of the Florida's Turnpike within the Department of Transportation. At this time the legislature also established economic feasibility tests, and authorized bonds and toll rate increases for expansions of the Turnpike System.

The state legislature approved the financing of the Turnpike System's expansion including the acquisition of the Sawgrass Expressway in 1990. In 1994 the Office of the Turnpike became the FDOT Turnpike District with the Turnpike's District Secretary responsible to the Secretary of the Department of Transportation. In 1999 Governor Bush requested a study of the potential privatization of the Turnpike District. The recommendation of the study was that the Turnpike District should remain a public agency working to achieve the Department of Transportation's mission to improve mobility while using the methods of a private agency. This recommendation was implemented in 2002 in HB 261, which created the turnpike executive director within FDOT and integrated the Office of Toll Operations into the Turnpike Enterprise.

As part of the Florida Department of Transportation, FTE is required to follow the same environmental regulations as the rest of FDOT in constructing new facilities. The legislation did change the Turnpike's financial feasibility test and it redefined the procedures the Turnpike Enterprise would have to follow.

“It is the intent of the Legislature that the turnpike enterprise be provided additional powers and authority in order to maximize the advantages obtainable through fully leveraging the Florida Turnpike System asset. The additional powers and authority will provide the turnpike enterprise with the autonomy and flexibility to enable it to more easily pursue innovations as well as best practices found in the private sector in management, finance, organization, and operations. The additional powers and authority are intended to improve cost-effectiveness and timeliness of project delivery,

increase revenues, expand the turnpike system's capital program capability, and improve the quality of service to its patrons, while continuing to protect the turnpike system's bondholders and further preserve, expand, and improve the Florida Turnpike System.”

The following is a sample of the Turnpike Enterprise's authority as revised in the 2002 legislation and in later legislation:

1. The Turnpike Enterprise is exempt from following the rules, procedures, and standards of the Florida Department of Transportation subject to the decision of the Secretary of Transportation to apply such standards.
2. At the discretion of the Secretary of Transportation, the Turnpike Enterprise may promulgate rules that will allow it to utilize best business practices.
3. The Turnpike Enterprise's debt service cap was increase to \$4.5 billion.
4. It is the express intention of the Florida Turnpike Law that the Florida Turnpike Enterprise be authorized to plan, develop, own, purchase, lease, or otherwise acquire, demolish, construct, improve, relocate, equip, repair, maintain, operate, and manage the Florida Turnpike System; to expend funds to publicize, advertise, and promote the advantages of using the turnpike system and its facilities; and to cooperate, coordinate, partner, and contract with other entities, public and private, to accomplish these purposes.
5. The turnpike enterprise shall be a single budget entity and shall develop a budget...The turnpike enterprise's budget shall be submitted to the Legislature along with the department's budget.
6. The department is authorized to incur expenses for paid advertising, marketing, and promotion of toll facilities and electronic toll collection products and services. Promotions may include discounts and free products.
7. The department is authorized to receive funds from advertising placed on electronic toll collection products and promotional materials to defray the costs of products and services.
8. The Turnpike Enterprise is authorized to utilize design-build construction practices.

TDOT has the following questions as they relate to the Turnpike Enterprise Legislation:

1. How has the Turnpike Enterprise legislation improved the delivery of the Turnpike's transportation product? *Customer satisfaction has increased from 81% to 91% in the four years since the structure changed, rate of project delivery has doubled, and 140 new lane miles of capacity has been added within the \$4.5 billion bond cap.*
2. What internal changes were instituted as a result of the 2002 legislation? What additional changes would assist you in administering the Enterprise or advancing its purposes? *Previously the Turnpike organization was an office within FDOT, then an FDOT district, and now the FTE functioning as a division. The capital plan has become more aggressive, the bond cap has increased, and the rigor of bureaucratic procedures that was inhibiting turnpike system improvement has been removed.*
3. Do you foresee that the law as it is currently written will continue to allow necessary flexibility? *Yes, although FTE is examining implications of a further refinement to the statute that would free FTE of some of the administrative responsibilities that still inhibit some innovations and efficiencies. This would include raising the bond cap, which has prohibited the fourth and fifth year work-program projects from progressing.*
4. Have the statutory changes that improve the Enterprise's flexibility and autonomy affected its responsiveness to the public? *Yes, see question 1.*

Administrative Placement

The Turnpike Enterprise is a part of the Florida Department of Transportation, however is governed by more flexible regulations and operates within the jurisdiction of several FDOT districts.

1. How has the placement of the Turnpike Enterprise within FDOT impacted the Turnpike's operations, particularly in collaborating with the other FDOT Districts, to develop needed transportation improvements? Has the recently added flexibility allowed the FTE to reduce production time? *By design, FTE maintains its public motive and protects the role of FDOT's chief executive in transportation infrastructure development. Of primary importance is the link with FDOT that remains for project delivery. Indeed, a vast majority of the new alignment on the state system in the past several years has been turnpike facilities.*

Executive Director and Administrative Employees

The Turnpike Enterprise staff is composed of FDOT employees and employees of various consulting firms. FDOT employees comprise approximately 10% of the Turnpike Enterprise's staff with consultants making up the remaining 90% of the staff. The consultants and their subcontractors are selected to perform specific functions for the Turnpike Enterprise. The primary functions performed by consultant teams are: operations, maintenance, general engineering, planning and finance, communications and marketing, tolls, and concessions. In addition to these areas the Turnpike Enterprise also has Troop K of the Florida Highway Patrol dedicated to law enforcement on the Turnpike System.

The executive director of the Turnpike Enterprise appoints staff. Among the staff is a chief financial officer, who must be a proven, effective administrator with demonstrated experience in financial management of a large bonded capital program and must hold an active license to practice public accounting in Florida. The Turnpike Enterprise staff must also include the Office of Toll Operations.

1. How many employees does FTE have currently? How many are on the management team versus toll plaza operations versus "back-room" administration? *Management staff was capped at a level of 100 employees with other legislative changes that were enacted in 1988. Other recent statutory changes added 380 employees to the FTE roster, yet these employees are dedicated to toll plaza and service plaza operations. About 90% of FTE's 4,600 total employees are actually contract employees, some of which are empowered to make management decisions.*
2. How are the consultant teams that operate the Enterprise selected? *(not discussed)*
3. Is FTE able to provide TDOT with a copy of its organizational chart? *(not discussed)*

Infrastructure Planning

FTE currently performs the planning function for new facilities and improvements to existing facilities internally using consultants housed within the Turnpike. These consultants are employed on a retainer basis for planning and feasibility analysis. Preliminary engineering studies are sometimes performed in house depending on the size of the project.

1. Procedures: Is the internal process for planning regimented or flexible? How has the planning process either suited the needs of FTE as they arose or impeded possible progress toward the implementation of improvements or additional toll facilities? *FTE will perform sketch-level "snapshot" studies of any project brought to its attention. About one in 15 advance to full-blown planning level studies. Per statutory requirement, FTE's planning must fit in the context of FDOT's five-year work program. By policy, FTE's planning must also fit within the revenue and*

financial plans of FDOT. Internally, FTE has a 20-year conceptual plan of strategic capital investments. FTE regularly keeps the Transportation Secretary apprised of its work program. All proposed new alignments on the Florida state road system have designated FTE as the developer.

2. Consultants: In addition to the consultants in house does FTE have any additional consultants on a retainer-type contract for planning, feasibility analysis, preliminary engineering, and design? Are RFPs/RFQs issued as such services are needed? **Most consultant work is performed by the in-house consultants.**
3. Do FTE public involvement activities differ significantly from the activities required of other FDOT Districts? **(not discussed)**
4. State law requires FDOT/FTE to follow the state environmental process if no federal funds are utilized, and the NEPA process if federal funds are used. How do the activities required of FTE under the state environmental process differ in practice from the activities required under the NEPA process? **Florida's state environmental review is a full oversight process but the federal NEPA process can add three years to the planning and engineering phase of project development.**
5. The law also does not appear to prescribe a specific interaction with MPOs other than what is required by federal law for regional transportation planning. What has been the nature of the interaction with MPOs when studying toll concepts and toll projects? **Except in metropolitan areas with air quality attainment requirements, MPO involvement is not mandated but FTE involves itself in the local planning process.**
6. Timeline: In your experience, what is the anticipated elapsed time to get a tollway project operational - from the initiation of the first study to its expected open-to-traffic date? **(not discussed)**
7. Communications and marketing: How successful has the marketing program (as allowed under the new legislation) been in attracting new customers to using electronic tolling? **(not discussed)**

Facility Operations

Tolls on the FTE system are currently collected by three methods, electronic toll collections, manual toll collection, and unmanned toll collection at ramps. FTE instituted raised tolls for cash transactions while maintaining the same toll rate for electronic transactions in 2004. Typically electronic transactions cost 25 cents less than cash transactions. The Turnpike Enterprise has arrangements with Publix grocery stores and CVS pharmacies to sell their transponders. The Turnpike Enterprise has also marketed SunPass transponders through billboards, TV, and radio advertisements.

1. Electronic Toll Collection (ETC): Has the FTE considered distributing SunPass Transponders at locations other than Publix and CVS? **(not discussed)**
2. How much did the differential rates (discounts) for electronic toll collections alter SunPass participation? Did FTE take any actions to improve electronic toll collection operations prior to implementing the differential with cash toll collections? Are there any plans to further increase the differential between cash and electronic toll collection? **Differential rates for ETC were implemented when toll rates increased, which applied only to tolls paid by cash. A frequent user discount of 25% was in place but was removed. Time-of-day variable tolling was studied in**

Orlando for a new capacity project (would be HOT lanes) but politics has been a boundary to implementation.

3. Are there any plans to expand the use of SunPass transponders for purchases beyond the collection of tolls? The SunPass may now be used at the Orlando Airport to pay for parking. This development was initiated by the Orlando-Orange County Toll Authority, which approached FTE about methods to improve SunPass penetration into the market. Similar arrangements will be available at airports in Tampa, Fort Lauderdale, and Miami. The purpose of implementing such interoperability is less for improving revenues but more for adding value for the customer.
4. How does FTE define open road tolling (ORT)? Is FTE considering Open Road Tolling (ORT) for any possible future toll facilities? Why or why not? (not discussed)
5. Violations: Other than video/photograph enforcement for violations in the ETC lane, are law enforcement personnel on post at the toll plaza? If so, is law enforcement present at all times or just select/random times? Troop K of the Florida State Patrol is made up of 120 officers designated to enforcing traffic laws on FTE's facilities. FTE has noticed that toll violations have increased as ETC penetration has increased. Unpaid tolls equate to approximately \$100 million in projects that could be funded. To lower the violation rate, FTE has recently been given the authority to use administrative tools to improve toll collections, which include the accrual of uniform traffic citations that FTE ultimately files with the state if tolls are not paid over a specified period of time. Other penalties involve prohibiting violators from registering cars and renewing drivers' licenses.
6. Service disruptions: how are service disruptions handled in cases of incidents/collisions, gantry repair/maintenance, and special events? Has the Turnpike Enterprises incident clearance incentive program been successful? (not discussed)

Funds Usage and Management

As part of the Florida Department of Transportation, the FTE's budget is subject to review and approval by the state legislature. As part of the DOT, FTE is eligible to accept and administer any federal highway or transit funds available to the department. However, the FTE's primary funding source for the construction of new capacity is the issuance of revenue bonds. Excerpts from state law on FTE funding follow:

- a) Legislative approval of the department's tentative work program that contains the turnpike project constitutes approval to issue bonds... Turnpike projects approved to be included in future tentative work programs include, but are not limited to, projects contained in the 2003-2004 tentative work program. A maximum of \$4.5 billion of bonds may be issued to fund approved turnpike projects.
- b) The department is authorized to use turnpike revenues, the State Transportation Trust Fund moneys allocated for turnpike projects... federal funds, and bond proceeds, and shall use the most cost-efficient combination of such funds, in developing a financial plan for funding turnpike projects. The department must submit a report of the estimated cost for each ongoing turnpike project and for each planned project to the Legislature 14 days before the convening of the regular legislative session. Verification of economic feasibility and statements of environmental feasibility for individual turnpike projects must be based on the entire project as approved....

1. How has the Turnpike's bond cap impacted the delivery of services and new capacity on Turnpike facilities as well as the construction of new facilities? Would you explain how paying off Turnpike bonds impacts the availability of funding for new Turnpike projects? *See question 1 on page 2.*
2. What is the impact of the feasibility test on improvements? Has the feasibility requirement been successful in filtering out suboptimal projects while moving projects that would significantly improve the operation of the transportation network? *This strict requirement has ensured that projects can support themselves and contribute to the system. In FTE's experience, tolls must be collected on new alignment projects for 34 years to achieve break-even finances. Therefore, for a project to pass the feasibility test it must fund its own operations and maintenance by year 12 of operations and after 20 years a project must also pay for its bond indebtedness. Before these milestone dates, toll collections on the Turnpike mainline support new projects.*
3. Given the financial flexibility resulting from recent changes to FTE's authorizing statutes, has there been any significant co-mingling of funds from different sources to construct new projects? *Toll collections from each facility are not required to stay within the region but regional balance in the medium-term is the goal. Bond indentures include a system-based pledge of funds for debt service payments.*
4. Florida state law does not require the discontinuance of tolls on facilities once their bond indebtedness is paid off. Has this enabled FTE to meet its goals and mission? Has it raised any issues with the public? *See question 2 above.*
5. What was FTE's annual budget for FY 2006? *(not discussed)*

Public Private Partnerships

Florida state law allows the Florida Department of Transportation to accept solicited and unsolicited proposals for public private initiatives (PPI). The Turnpike Enterprise has partnered with a municipality and a private developer on the construction of an interchange. *FTE has partnered with developers for interchanges and the Western Beltway with Disney whose contributions included ROW donation.*

1. How is the joint project to construct a new interchange at Becker Road progressing? Has this been a successful effort from the FTE's perspective? Would you recommend approving this type of project in the future? *(not discussed)*
2. When the private developer funded facility becomes an operational toll facility, will FTE operate the facility? *All proposed new alignments on the Florida state road system have designated FTE as the developer.*
3. What other private public partnerships is the Turnpike Enterprise working on? Can you identify the elements necessary for a successful project developed through a public private partnership? *(not discussed)*

Lessons Learned

TDOT would appreciate any general or specific insights or advice FTE would be able to provide regarding general lessons learned in starting up a toll agency and planning for toll road projects. These

may relate to organizational structure, administrative procedures, planning, finance, public policy, or topics not yet discussed.

Responsiveness to the customer is the primary goal of a toll agency, which can be achieved more expeditiously if the toll agency is not bound by DOT administrative and procedural requirements. Always frame changes by how they will make customers' rides better.

APPENDIX C



Tennessee Peer Review Summary of Enabling Statutes Peer Review Agencies November 1, 2006

Florida's Turnpike Enterprise

FTE, which began operating its first toll facility in 1957, was integrated into the Florida Department of Transportation in 1969. In 1988 the State Legislature created the Office of the Florida's Turnpike within the Department of Transportation. At this time the legislature also established economic feasibility tests, authorized bonds and toll rate increases for expansions of the Turnpike System. The State legislature approved the financing of the Turnpike System's expansion including the acquisition of the Sawgrass Expressway in 1990. In 1994 the Office of the Turnpike became the FDOT Turnpike District with the Turnpike's District Secretary responsible to the Secretary of the Department of Transportation.

In 1999 Governor Bush requested a study of the potential privatization of the Turnpike District. The recommendation of the Study was that the Turnpike District should remain a public agency working to achieve the Department of Transportation's mission to improve mobility while utilizing the methods of a private agency. This recommendation was implemented in 2002 in HB 261, which created the Turnpike Executive Director within FDOT and integrated the Office of Toll Operations into the Turnpike Enterprise. At this time, FTE's status within FDOT changed from being a district to becoming a division of FDOT. The legislation changed the Turnpike's financial feasibility test and it redefined the procedures the Turnpike Enterprise would have to follow. The stated purpose of this legislation is to:

"It is the intent of the Legislature that the turnpike enterprise be provided additional powers and authority in order to maximize the advantages obtainable through fully leveraging the Florida Turnpike System asset. The additional powers and authority will provide the turnpike enterprise with the autonomy and flexibility to enable it to more easily pursue innovations as well as best practices found in the private sector in management, finance, organization, and operations. The additional powers and authority are intended to improve cost-effectiveness and timeliness of project delivery, increase revenues, expand the turnpike system's capital program capability, and improve the quality of service to its patrons, while continuing to protect the turnpike system's bondholders and further preserve, expand, and improve the Florida Turnpike System."

Following is a sample of the Turnpike Enterprises authority as revised in the 2002 legislation and in later legislation:

1. The Turnpike Enterprise is exempt from following the rules, procedures, and standards of the Florida Department of Transportation subject to the decision of the Secretary of Transportation to apply such standards,
2. At the discretion of the Secretary of Transportation, the Turnpike Enterprise may promulgate rules that will allow it to utilize best business practices;
3. The Turnpike Enterprise's debt service cap was increase to \$4.5 billion.
4. It is the express intention of the Florida Turnpike Law that the Florida Turnpike Enterprise be authorized to plan, develop, own, purchase, lease, or otherwise acquire, demolish, construct, improve, relocate, equip, repair, maintain, operate, and manage the Florida Turnpike System; to expend funds to publicize, advertise, and promote the advantages of using the turnpike system



and its facilities; and to cooperate, coordinate, partner, and contract with other entities, public and private, to accomplish these purposes.

5. The turnpike enterprise shall be a single budget entity and shall develop a budget...The turnpike enterprise's budget shall be submitted to the Legislature along with the department's budget.
6. The department is authorized to incur expenses for paid advertising, marketing, and promotion of toll facilities and electronic toll collection products and services. Promotions may include discounts and free products.
7. The department is authorized to receive funds from advertising placed on electronic toll collection products and promotional materials to defray the costs of products and services.
8. The Turnpike Enterprise is authorized to utilize design-build construction practices

Since implementation of the 2002 legislative changes, customer satisfaction has increased from 81% to 91% in the four years since the structure changed, rate of project delivery has doubled, and 140 new lane miles of capacity has been added within the \$4.5 billion bond cap. Also contributing to FTE's success in recent years was the 2002 removal of rigorous bureaucratic procedures which was previously inhibiting turnpike system improvement. As the statutes are written, FTE foresees that the law as it is currently written will continue to allow necessary flexibility, although it is examining implications of a further refinement to the statute that would free FTE of some of the administrative responsibilities that still inhibit some innovations and efficiencies. This would include raising the bond cap, which has prohibited the fourth and fifth year work-program projects from progressing.

Georgia State Road and Tollway Authority

The statutes authorizing include basic elements necessary for developing and operating toll facilities. The changes that were enacted in 2001 originated from the governor's attempt to shift the balance of transportation planning and finance away from the Georgia Department of Transportation, which is an agent of the Georgia General Assembly by lines of Board appointment and accountability. Following is a sample of the authority's conveyed powers found in Georgia code:

1. To have a seal and alter the same at its pleasure;
2. To purchase, lease, exchange, or otherwise and to hold, lease, and dispose of real and personal property of every kind and character for its corporate purposes;
3. To acquire in its own name by purchase or by condemnation in accordance with any and all existing laws applicable to the condemnation of property for public use real property or rights or easements or franchises necessary or convenient for its corporate purposes;
4. To make such contracts, leases, or conveyances as the legitimate and necessary purposes of its charter, including but not limited to contracts for construction or maintenance of projects, provided that the authority considers the possible economic, social, and environmental effects of each project (this includes a NEPA requirement);
5. To construct, erect, acquire, own, repair, maintain, add to, extend, improve, operate, and manage projects, the cost of any such project to be paid in whole or in part from the proceeds of revenue bonds of the authority, from other funds available to the authority, or from any combination of such sources;
6. To do all things necessary or convenient to carry out the powers expressly given in this article.

The statutes are prescriptive in some senses, such as in the processing of toll violations, although SRTA is given a great deal of flexibility to execute its tolling authority. According to SRTA, its statutes as written, allow a functional amount of flexibility and autonomy yet in practice, planning for new facilities is tied



closely to the will of the Governor and GDOT. As it relates to operational aspects, SRTA has discovered a deficit in the state code that does not allow it to process toll violations in the context of recent technological innovations.

Maryland Transportation Authority

The Maryland Transportation Authority (MdTA) was originally created by an act of the Maryland General Assembly in 1957. Amendments were made to the MdTA's authorizing legislation at various times between 1977 and 1996.

In general, MdTA has powers and duties relating to the supervision, financing, construction, operation, maintenance, and repair of transportation facilities projects as are granted to it by the authorizing state statute and other provisions of state law. Following is a sample of the authority's conveyed powers found in Maryland code:

- a. General supervision over all tolled transportation facilities projects in the state of Maryland.
- b. Finance, construction, operation, repair, and maintenance of all tolled transportation facilities projects.
- c. Acquire, hold, and dispose of property in the exercise of its powers and performance of its duties.
- d. Make any contracts and agreements necessary or incidental to the exercise of its powers and performance of its duties after providing a description of the proposed project, a summary of the contract or agreement, and a financing plan that details to the Senate Budget and Taxation Committee, the House Committee on Ways and Means, and the House Appropriations Committee, for review and comment, and to the Department of Legislative Services. Included in this requisite description are the estimated annual revenues from the issuance of bonds to finance the project and the estimated impact of the issuance of bonds to finance the project on the bonding capacity of the Authority.
- e. Apply for and receive grants from any federal agency for the planning, construction, operation, or financing of any transportation facilities project and may receive aid or contributions of money, property, labor, or other things of value from any source, to be held, used, and applied for the purposes for which the grants, aid, and contributions are made.
- f. Adopt rules and regulations to carry out the provisions of its authorizing statute.
- g. Condemn property for any transportation facilities project authorized to be financed with revenue bonds of prior issues.
- h. Do anything else necessary or convenient to carry out the powers granted in its authorizing statute.

No state agency, including the Maryland Transportation Authority, may construct any toll road, toll highway, or toll bridge in nine specific counties enumerated in state law without the express consent of a majority of the governments of those affected counties.

The statutes are prescriptive in some senses, such as in the processing of toll violations and the restriction on constructing toll facilities in specific counties. Yet even though the statute itself is long, MdTA seems to have been given a great deal of flexibility to execute its tolling authority. All developments considered MdTA reports that, as the only state agency able to assess tolls, simplicity of administration and synergy of the entire state's toll system is achieved. One such tangible benefit is the achievement of a favorable bond rating and resulting lower borrowing costs for system improvement and expansion.



On the other hand, MdTA reports that critical processes are slowed by its authorizing statutes because it is bound by the state's laws and rules for procurement and hiring personnel. This slows the process and is particularly burdensome when trying to hire engineers whose salaries must stay within state compensation ranges.

North Carolina Turnpike Authority

The Authority originally only had the ability to construct and operate up to three turnpike projects and execute preliminary engineering on only additional three projects. However, the law was amended in 2005 to enable NCTA to plan, design, construct, and operate up to nine new turnpike projects around the state, with minor stipulations related to population size of the counties the projects reside within. In 2005, the law was also amended to enable NCTA to toll existing interstate facilities on the borders of the state if authorized by the U.S. DOT.

The Authority is a corporate body, which includes the power to sue and be sued, to make contracts, to adopt and use a common seal, and to alter the adopted seal as needed. NCTA is empowered to study, plan, develop, and undertake preliminary design work on up to nine Turnpike Projects. At the conclusion of these activities, the Turnpike Authority is authorized to design, establish, purchase, construct, operate, and maintain up to nine Turnpike Projects. One of the Turnpike Projects must be located in whole or in part in a county with a population equal to or greater than 650,000 persons, according to the latest decennial census, and one Turnpike Project shall be located in a county or counties that each have a population of fewer than 650,000 persons, according to the latest decennial census. One of the Turnpike Projects shall be a bridge of more than two miles in length going from the mainland to a peninsula bordering the State of Virginia – this clause is referring directly to the Mid-Currituck Bridget, currently under study. A Turnpike Project selected for construction by the Turnpike Authority must be included in any applicable locally adopted comprehensive transportation plans and shall be shown in the current State Transportation Improvement Plan prior to the letting of a contract for the Turnpike Project.

NCTA is authorized to fix, revise, charge, and collect tolls and fees for the use of the Turnpike Projects. Prior to the effective date of any toll or fee for use of a Turnpike Facility, the Authority must submit a description of the proposed toll or fee to the Board of Transportation, the Joint Legislative Transportation Oversight Committee and the Joint Legislative Commission on Governmental Operations for review.

The Authority is also enabled to adopt, alter, or repeal its own bylaws or rules and adopt its own procedures to govern its procurement of services and delivery of Turnpike Projects. NCTA is also empowered to contract for the construction, maintenance, and operation of a Turnpike Project and to enter into partnership agreements, agreements with political subdivisions of the State, and agreements with private entities, and to expend such funds as it deems necessary, pursuant to such agreements, for the purpose of financing the cost of acquiring, constructing, equipping, operating, or maintaining any Turnpike Project.

The statutes are prescriptive in some senses, such as dictating the number of projects that may be undertaken. Yet even though the statute itself is long, NCTA seems to have been given a great deal of flexibility to execute its tolling authority. None of the statutory modifications made since its origination were made at the behest of NCTA. The Executive Director holds that the law as written is excellent because it includes three operating constraints that help build public support: (1) existing roads cannot be tolled, (2) a free alternate route must be provided, and (3) toll booths must be removed after debt is paid. A number of reporting requirements including an end-of-year report to the Transportation Legislative



Oversight Committee on contracts let and employees hired will provide continued flexibility while authorizing a level of accountability that is desired by the General Assembly, the Governor, and the citizens.

Texas Turnpike Authority

The Texas Turnpike Authority (TTA) was created by an act of the General Assembly in 1995. A sunset provision is not present in the law. The law has been amended several times since then to refine the original statutes. Generally, TTA is provided broad authority to enter into agreements with public entities (typically regional tollway authorities), governments, and private entities for the development, finance, operation, and ownership of toll facilities. TTA seems to have been given a great deal of flexibility to execute its tolling authority yet the statutes are prescriptive in some senses, relating to approval of such facilities by the Commission and dictating how toll revenues may be used.

Originally TTA was an independent authority governed by a three-member Board of Directors, which was subsequently replaced by governance simply through administrative rules, and finally in 1995, TTA was subsumed as a division of TxDOT. TTA advises that the best Texas statutes regarding tolling are found in the CDA chapters (which allow a full spectrum of arrangements from design-build to concessions) as well as the RMA (which allows local projects to be handled locally and enables the region's other transportation projects to benefit from toll revenues).

Unique to Texas is that its statutes explicitly allow toll roads to be implemented by several local and regional public entities including county governments, Regional Tollway Authorities (RTAs), and Regional Mobility Authorities (RMAs). According to Texas statutes enacted in 1997, the purposes of regional tollway authorities are the expansion and improvement of transportation facilities and systems in this state, the creation of regional tollway authorities to secure and acquire rights-of-way for urgently needed transportation systems and to plan, design, construct, operate, expand, extend, and modify those systems, and the reduction of burdens and demands on the limited money available to the commission and an increase in the effectiveness and efficiency of the commission. Upon ultimate approval by the Texas Transportation Commission, RTA's may be formed by two or more counties (one of which must have a population of 300,000 or more) per the direction of the counties' commissioner's courts. Once formed though, RTAs have broad authority to study, develop, own, operate, and lease out turnpike projects and turnpike systems, generally independent of state oversight.

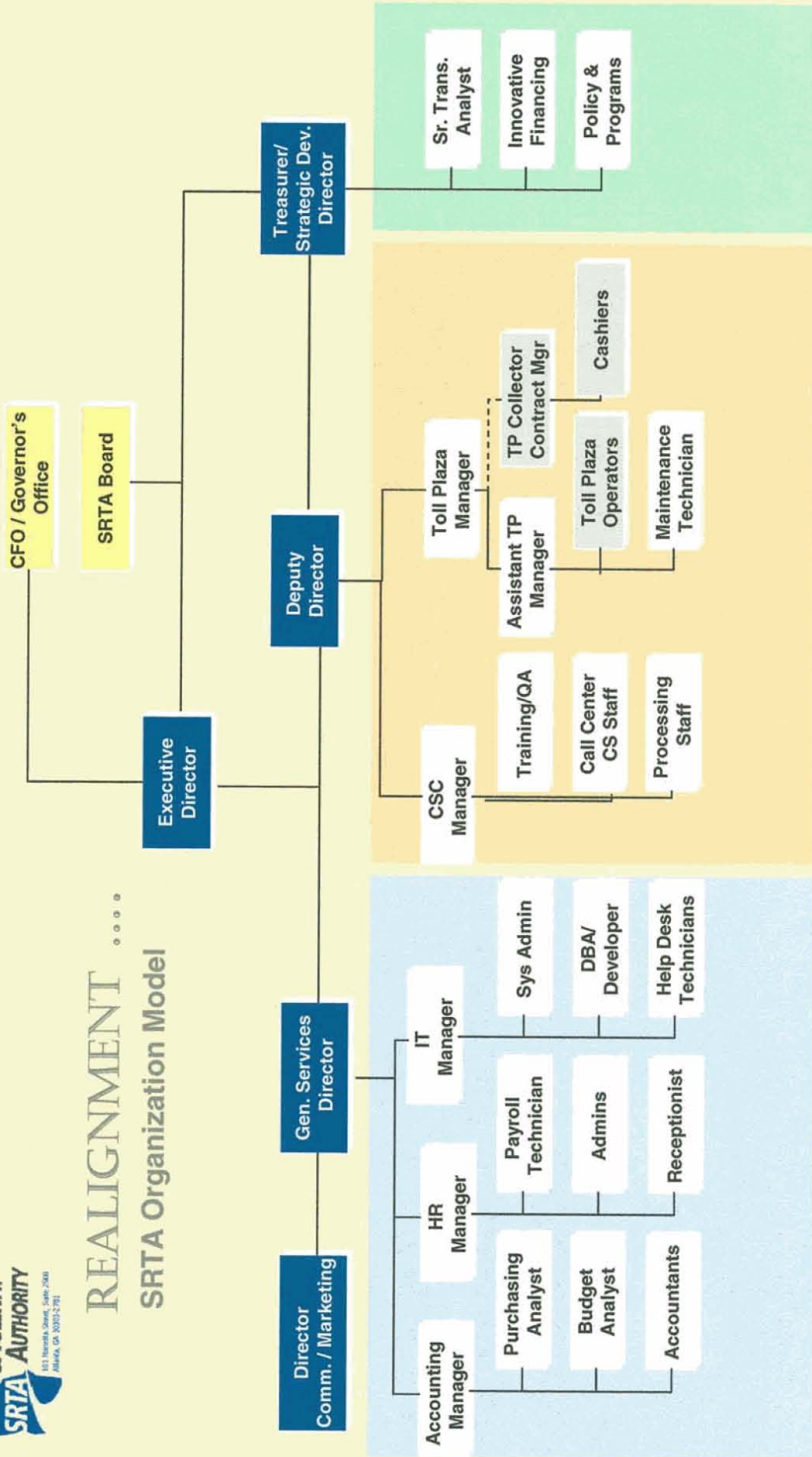
Regional Mobility Authorities, formed by one or more counties upon the approval of the Commission, were more recently enacted in 2001 in Texas statutes to construct, maintain, and operate transportation projects in a defined region of the state. Transportation projects that may be pursued by RMAs include turnpike projects, passenger or freight rail facilities, major roadways, ferries, airports, pedestrian or bicycle facilities, intermodal hubs, air quality improvement initiatives, and public utility facilities. RMAs may impose tolls, fares, fees, or other usage charges and such collections are not subject to supervision of regulation by any agency of the state or another governmental entity. TTA only interacts with the RMAs when they are newly formed, when the RMA's toll facility will connect with the state system, and when RMAs request financing assistance. RMAs are allowed to enter into CDAs but RTAs are not.

APPENDIX D

FTE Org Chart



REALIGNMENT
SRTA Organization Model



Serving Internal Customers

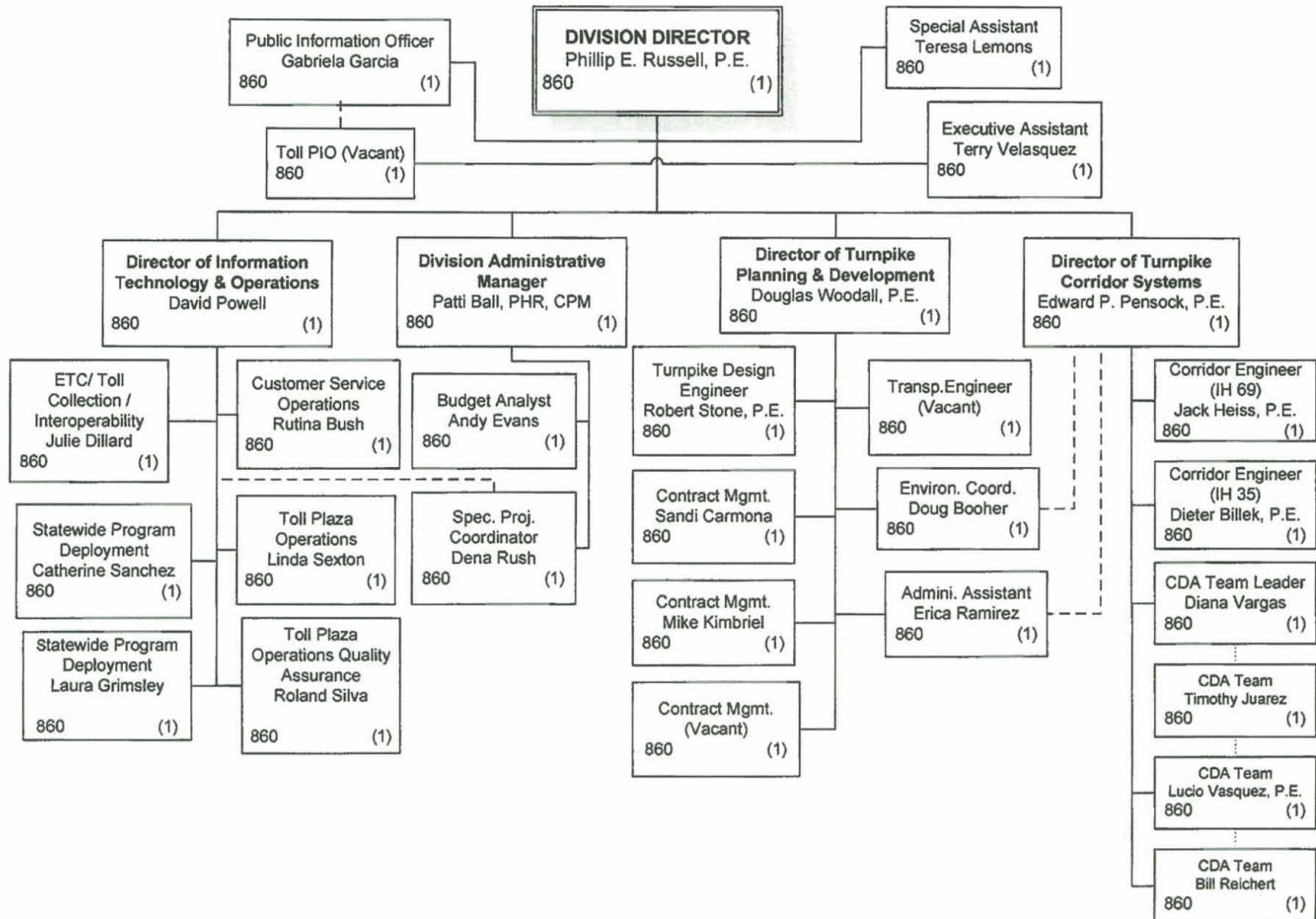
Serving External Customers

Innovation

Division Director: Original signed by Division Director _____
 Director, Turnpike Authority Division
 Date Approved: 09/01/06
 Payroll Unit 860

Phillip E. Russell, P.E.
TTA Division Director

Texas Turnpike Authority Division



APPENDIX E

Intercounty Connector Study

Focus On... Travel Benefits



Building an Intercounty Connector (ICC) would provide a more reliable, safer travel choice to serve existing land uses and connect the growth corridors of I-270 and I-95/US 1, when compared to a No Action alternative. That's the result of a travel demand analysis conducted as part of the ICC Study. The analysis found that if an ICC were built, the highway would improve travel options for as many as 300,000 people per day.

A Note on Travel Forecasting

Traffic forecasts depend on mathematical models of how and when people travel, predictions of other improvements to the highway network, forecasts of future (in this case, the year 2030) demographic and economic conditions, and other facts. Estimates of future traffic, therefore, are always only approximations of future conditions and not precise measurements.



Robert L. Ehrlich, Jr.
Governor of Maryland

ICC Travel Goals and Study Approach

The proposed ICC is intended to link existing and proposed development areas between the I-270 and I-95/US 1 corridors within central and eastern Montgomery County and northwestern Prince George's County with a state-of-the-art, multi-modal, east-west highway. Today, traveling within portions of the study area is difficult because of unreliable travel times, congested conditions, and safety concerns. Without an ICC, traffic conditions will continue to deteriorate.

As a result of preliminary planning analyses and public comments, the State Highway Administration (SHA) recommended two build alternatives, Corridors 1 and 2, and a No Action alternative to be the subjects of detailed study (see maps on inside). While there are two alternative corridors and many sub-options being considered, if a build option is chosen, an ICC would:

- Be six lanes (three each way) with shoulders;
- Have a median or barrier between eastbound and westbound traffic;
- Be accessible only by interchanges (ramps instead of intersections with stoplights);
- Accommodate trucks and express buses; and
- Be a tolled highway, with tolls collected 100% electronically at highway speeds.

Key Travel Analysis Findings – Choices for Safer, More Reliable Travel

If built, an ICC would have significant travel benefits – benefits that go far beyond simply providing additional highway capacity. According to travel demand forecasting performed as part of the ICC Study, an ICC would¹:

- **Improve mobility and secure travel time savings for area motorists.** A trip from Shady Grove to BWI Airport, for example, could take approximately 35 minutes less using an ICC – a 33% time savings. Further, by using tolls to manage traffic, travel times on an ICC would be predictable.
- **Provide better access to jobs and other destinations.** As many as 156,000 (or 27%) more jobs could be reachable within a 45-minute commute with an ICC than without it.

¹Unless otherwise stated, all projections are for the year 2030.

- **Lessen the impacts of traffic congestion on bottlenecked local roads.** An ICC would help to slow congestion growth on local roads and provide much-needed relief. An ICC would improve performance of more than 40 of 51 key intersections studied and reduce the hours that local roads operate under congested conditions.
- **Facilitate express bus service.** Designed to include convenient and reliable express bus service and convenient links to Metrorail, MARC, and parking, an ICC would increase the reliability and attractiveness of transit as a travel option and increase transit ridership in the study area.
- **Improve safety of local area roads.** By removing through-traffic, including trucks, an ICC is expected to reduce the number of crashes on local roadways and return these roads to their communities.
- **Provide homeland security support.** Not only would an ICC provide a critical alternative east-west route but, as a state-of-the-art managed facility, an ICC could be effectively utilized to move emergency response personnel and area residents in an emergency.

Mobility and Access – Getting You Where You Want to Go

According to the Federal Highway Administration (FHWA), mobility means "connecting more people...in less time with their work, schools, community services, and each other." If built, an ICC would increase mobility for about 100,000 trips per day that would use the ICC, translating into increased mobility for as many as 300,000 people per day.

Travel Time Improvements, Compared to No Action
(based on AM peak in Year 2030)

Trip	Corridor 1		Corridor 2	
	Minutes Decreased	% Decrease	Minutes Decreased	% Decrease
Olney to Rockville	13	25%	12	24%
Rockville to BWI	29	28%	26	25%
Colesville to Gaithersburg	20	43%	14	30%
Shady Grove to Laurel	32	50%	30	47%
Olney to Laurel	16	31%	14	27%
BWI to Gaithersburg	31	29%	26	25%

Increased Mobility

In addition to supporting additional travel on the new roadway, building an ICC would provide increased mobility on many existing east-west roads in the study area. By providing traffic relief to local roadways, an ICC could allow these local roads to accommodate other trips, taking advantage of freed-up capacity. Depending on the selected alternative, building an ICC is projected to result in as much as a 17% increase in east-west trips when compared to the No Action alternative, meaning **expanded travel opportunities for personal and business trips for Marylanders.**

Shorter and More Reliable Travel Times

Projected travel times for trips between activity centers would improve with an ICC. For example, a **morning rush-hour trip from Colesville Road to Shady Grove could be 8-14 minutes shorter with an ICC, a 22% - 38% improvement** (see accompanying table for other examples).

In addition to reduced travel time, improved travel *reliability* provides users with an important benefit. For businesses, reliability is critical to delivery activities, scheduling service visits, and logistics management. For individuals, improved travel reliability makes it possible to get to doctors' appointments on time, pick up children from school, and complete daily trips with a reasonable level of certainty.

Improved Access to Jobs and Other Destinations

Study area residents rely on reaching quality jobs to provide for their families. Each of the ICC build alternatives would increase the distance that study area residents can cover in a 45-minute commute during peak travel periods and, therefore, increases the number of jobs and other destinations that can be reached in a reasonable travel period.

Building an ICC would improve access to jobs, with approximately 156,000 more jobs (a 27% increase) accessible within the 45-minute commute range under the Corridor 1 alternative and 107,000 under the Corridor 2 alternative (an 18% increase). This would lead to improvements in quality of life by giving area residents access to a greater number of high-quality jobs AND more time to spend with family and friends and in recreational activities.

Express Bus Service as a Viable Travel Alternative

An ICC would provide a route for high quality east-west express bus service. The ICC Study demonstrates that offering commuters a convenient and reliable travel option on an ICC could encourage increased transit usage in the study area. Based on preliminary ridership analysis (and not detailed route planning), **express bus routes are projected to carry as many as 11,500 passengers per day with Corridor 1 and 9,100 passengers per day with Corridor 2.** Approximately 38% (Corridor 1) to 54% (Corridor 2) of projected ridership represents transit trips that would not be made without an ICC.

Freed-up Capacity on the Capital Beltway

Fewer people will be discouraged from driving on the Beltway because some existing traffic will be diverted from the Beltway to an ICC. In other words, vehicles that get off the Beltway to use an ICC will enable others who currently use local roads or do not travel due to congestion to gain access to the Beltway.

Reduced Congestion – Minimizing Driver Frustration and Delay

Traffic studies completed as part of the ICC Study show that in addition to providing travel choices, an ICC would help alleviate growing congestion throughout the study area. If an ICC were not built, traffic on some roads would be expected to drastically deteriorate as a result of population growth and increased travel. In fact, the situation would approach gridlock at many locations.

Less Traffic on Local Roads

The ICC Study demonstrates that many local roads which serve east-west travel – e.g., Norbeck Road, Bel Pre Road, Briggs Chaney Road – would benefit from a significant traffic reduction if an ICC were constructed. **According to the ICC Study, approximately 50 miles of the local roadway network would experience a reduction of average weekday traffic of 10% or more.** As an example, MD 28 (Norbeck Road) west of MD 97 is projected to have 4,800 – 5,600 fewer vehicles on an average weekday with an ICC. Similarly, Briggs Chaney Road just west of Old Gun Powder Road would see reductions of 4,000 – 4,800 vehicles per average weekday. A few north-south oriented roads would experience an increase in traffic, nearly all being associated with interchanges with the ICC.

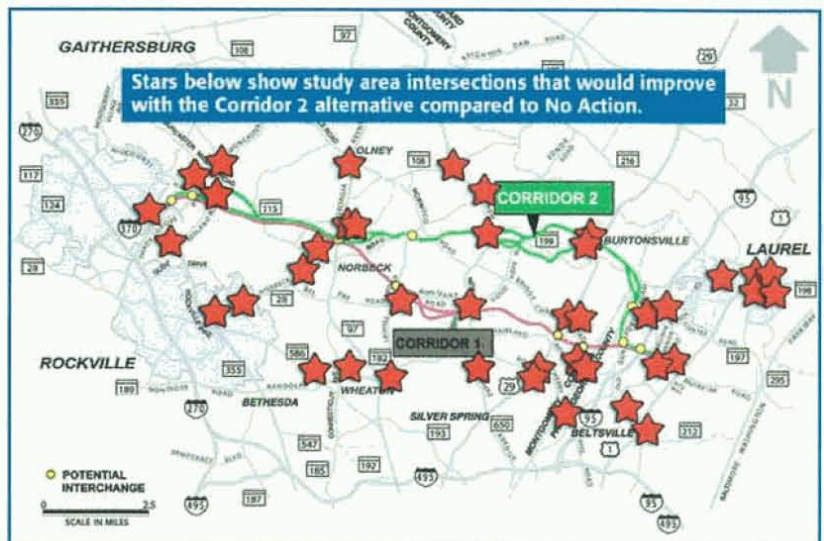
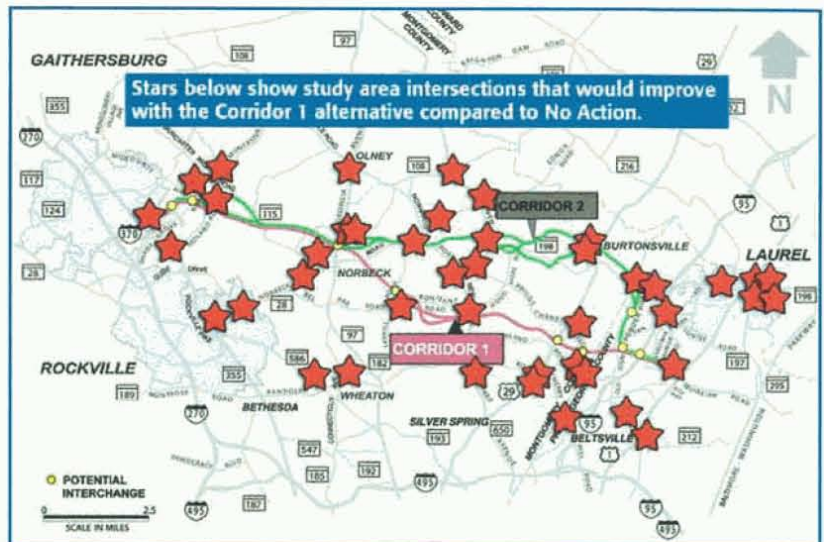
Measurement of Roadway Performance

The Level of Service (LOS) rating is like grades received in school. An LOS of "A" is best, and as the volume of vehicles grows and operations worsen, the LOS rating decreases to "B", "C", and so forth. In most cases, LOS A through E is acceptable. In urban settings, LOS F can sometimes be considered acceptable.

A savings of 10% in traffic volume to roadway capacity ("V/C") can roughly be attributed to the next higher or lower LOS letter grade (i.e., a LOS E intersection that is improved by 10% would operate at LOS D). The ICC study area is in an urban location and many intersections currently operate at, above, or approaching LOS F.

Improved Intersection Performance

While none of the ICC alternatives are expected to eliminate peak period congestion in the study area, each alternative is expected to result in reduced use of local roads and congestion at key intersections. Based on review of 51 intersections, the ICC Study finds that building an ICC would generally improve level of service (LOS) at intersections, often drastically. **The majority of the 51 key intersections are expected to experience reduced congestion and improved traffic flow under the build alternatives.**



It's About Time... for Solutions

Of 23 Corridor 1 intersections operating at Level of Service "E" or "F" in the morning peak hour with No Action, 11, or nearly half, are expected to improve by 10% or more. For Corridor 2, 7 intersections are expected to improve by 10% or more.

Only so many vehicles can pass through an intersection in any given hour. Traffic planners, therefore, also look at intersection performance over a 24-hour period to assess the benefits beyond traditional rush hour periods. An ICC is projected to reduce hours of congested conditions at study area intersections by 26%-28%, compared to No Action.

Improved Safety – Protecting Your Community's Roads

Trips on an ICC would be made on a high quality, relatively congestion-free highway with a significantly lower crash rate than many of the roadways currently being used for east-west travel today. Also, by removing through traffic – including trucks – from local roads, an ICC would improve travel and safety for school buses and other local roadway users.

An ICC would remove a substantial number of vehicles from local roads and put them on the ICC, which would have a much lower accident rate (approximately 50 crashes per million vehicle miles of travel, compared to in excess of 300 crashes per million vehicle miles on some local roads).

By diverting non-local traffic from local roads, building an ICC could reduce the number of crashes on local roadways in the study area by approximately 350 – 425 crashes per year.

Homeland Security – Providing a Secure Route in an Emergency

A key goal of adding a new east-west highway and applying roadway management techniques to that highway is to be able to use the facility in an emergency. An ICC could be utilized to quickly and efficiently move authorized vehicles in dedicated lanes or, if needed, to switch lanes so that all traffic moves in one direction.

An ICC – Offering More Than Increased Capacity

As envisioned, an ICC would have travel benefits that go beyond simply providing additional highway capacity. An ICC would provide travelers, including transit and highway users, a more reliable, safer travel choice – allowing a substantial number of additional trips to move throughout the study area without a significant degradation of the network. In addition to the added convenience and improved quality of life for area residents, this translates directly into economic benefits for the study area and the State.

Robert L. Ehrlich, Jr.
Governor of Maryland

Robert L. Flanagan
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of Transportation

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Maryland State Highway
Administration

Trent M. Kittleman
Executive Secretary
Maryland Transportation
Authority



Maryland State Highway
Administration
707 N. Calvert St., MS-C301
Baltimore, MD 21202

E-mail:
iccstudy@sha.state.md.us

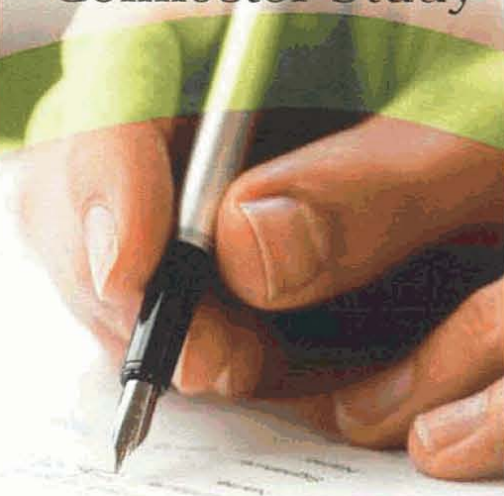
Web:
www.iccstudy.org

Toll-free Phone:
1-866-462-0020



Intercounty Connector Study

Focus On... Funding



The proposed Intercounty Connector (ICC) – intended to link I-270 and I-95/US 1 within central and eastern Montgomery County and northwestern Prince George's County with a state-of-the-art, multi-modal toll highway – can be funded in a manner that preserves the State's ability to fund and make progress on other needed transportation projects.

Governor Robert L. Ehrlich, Jr.'s landmark transportation funding package, passed in the 2004 legislative session, provides an additional \$237 million annually to address safety and congestion relief improvements in every region of the State. It is the first increase in transportation funding in 12 years and will allow the Ehrlich Administration to invest \$11.5 billion in the State's transportation network through 2010.



Robert L. Ehrlich, Jr.
Governor of Maryland

ICC Capital Cost Estimate

Preliminary estimates of the cost of constructing an ICC range from \$1.8 billion to \$2.1 billion* (in 2004 dollars), depending on the alternative and options in the study. This estimate range is based on the best professional judgment of project planners at the State Highway Administration (SHA), input from the Federal Highway Administration (FHWA), and all currently available information.

The ICC Study is examining two build alternatives and a No Action (or No Build) alternative. The preliminary capital cost estimate for the two build alternatives reflects the costs of building an 18-20 mile multi-modal highway in an urban area, state-of-the-art tolling and traffic management technology, and substantial environmental stewardship and enhancement features.

Preliminary estimates include the following major project elements:

- Construction of an ICC from I-370 to US 1, including design and right-of-way acquisition
- Electronic toll system, including variable tolling
- Environmental stewardship costs in addition to standard mitigation costs
- Construction of a maintenance facility
- Park-and-ride lots and other transit capital costs
- Weigh-in-motion technology and pull-off area for trucks
- Cost contingencies for construction (25%) and right-of-way acquisition (40%)

The capital cost estimate is expressed in 2004 dollars and does not include inflation between today and when costs would be incurred or financing costs (i.e., interest and other costs associated with bonding).

There are a number of key factors that will affect the ultimate cost of building an ICC and that are not fully known at this time, most notably:

- The selected alignment (i.e., Corridor 1 or Corridor 2) and options within each major alignment; and
- Specific market conditions, such as the market value of property and contractor labor and roadway material costs at the time of construction.

Once a preferred alignment is chosen and additional planning work is completed, SHA will refine the preliminary capital cost estimate.

* This range includes Corridor 1 Northwest Branch Option A, which was developed to minimize environmental impacts and costs \$100 million less than Northwest Branch Option B. The analysis in the Draft Environmental Impact Statement includes both options for comparison purposes.

It's About Time... for Solutions

ICC Funding Strategy

In 2003, the Maryland Department of Transportation (MDOT) and Maryland Transportation Authority (MdTA) announced a concept-funding plan for constructing an ICC. The plan allows maximum funding for other needed transportation projects and, by relying on a variety of funding sources, allows flexibility to address changing project and market conditions. The basic outline of this funding plan remains intact.

The financing plan was developed to include project costs as well as the cost of inflation. An ICC would draw funding from several sources, including:

- **Maryland Transportation Authority revenue bonds;**
- **Bonds to be repaid with a portion of federal formula highway funds, referred to as Grant Anticipation Revenue Vehicle, or GARVEE bonds;**
- **Limited funding from the Maryland Transportation Trust Fund; and**
- **Special federal funds** earmarked for the project by Congress.

Most of an ICC's cost will be paid with bonds, which spread the cost of the project over a 15-30 year period. Using bond financing to fund an ICC is similar to using a mortgage to finance the purchase of a house; it makes the purchase affordable by keeping annual payments to a minimum, thus allowing funding for other expenses – in this case, other transportation projects. It also advances the time by which an ICC could be constructed, allowing project benefits to be realized much earlier than otherwise would be possible and minimizing additional costs due to inflation (approximately \$100 million per year).

The University of Maryland has estimated that the user benefits associated with improving travel conditions in the study area are more than \$250 million per year (equaling \$5 to \$7 billion over a 20-year period) and that an ICC would result in 14,000 to 17,000 additional jobs in Montgomery and Prince George's counties alone. Each year the project is accelerated, therefore, would have tremendous economic value for the study area and the State.

Maryland Transportation Authority Revenue Bonds

A primary source of funding for the ICC would be the Maryland Transportation Authority, which owns and operates seven toll highways, bridges, and tunnels. An ICC would become the 8th Authority facility. The Authority, whose financial strength places it among the best toll agencies in the nation, is authorized to issue bonds backed by toll revenues from its facilities. Using Authority bonds preserves the Maryland Transportation Trust Fund for other needed projects across the State.

Tolling and an ICC

As currently envisioned, an ICC would be owned and managed by the Maryland Transportation Authority as part of the Authority's overall toll facility system.

Project planners envision using state-of-the-art tolling technology, including 100% electronic collection and variable tolling. Tolls would be collected through a combination of electronic (*E-ZPass*SM transponder) and video toll collection.

See *Focus on Tolling* fact sheet and www.iccstudy.org for additional information on plans to toll an ICC.

GARVEE Bonds

Approximately \$1 billion of ICC costs would be funded with GARVEE bonds, repaid with future federal highway funds received over a 15-year period. Under the plan, annual payments for principal and interest on the GARVEE bonds would utilize no more than 20% of Maryland's annual federal highway funds, which are anticipated to be more than \$500 million per year. The \$100 million per year cost of GARVEES roughly matches the additional cost that would be incurred annually due to inflation, were the ICC's construction delayed.

Using GARVEES helps to accelerate the many travel and economic benefits of an ICC, which was the expressed purpose of the law passed by the General Assembly in 2002. GARVEE bonds have been used by as many as 15 other states to apply federal funds to major transportation projects similar to the ICC.

Overall Funding Package

The ICC funding approach ensures sufficient resources for an ICC and for other needed transportation facilities. It provides flexibility to adjust to federal funding and financial market conditions – and to get the project built in the most cost-effective and fiscally responsible manner.

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**Maryland State Highway
Administration**
707 N. Calvert St., MS-C301
Baltimore, MD 21202

E-mail:
iccstudy@sha.state.md.us

Web:
www.iccstudy.org

Toll-free Phone:
1-866-462-0020

The Baltimore Harbor Tunnel

A Toll Facility Of The Maryland Transportation Authority

When the Baltimore Harbor Tunnel (Interstate 895) opened to traffic on Nov. 29, 1957, it was an event of national importance. The new tunnel was heralded widely as breaking the “Baltimore Bottleneck” for the first time ever. For years, traffic had crawled through Baltimore’s narrow streets, then the only direct route between Philadelphia and the South.

The traffic situation peaked in the mid-1940s, when a federal official referred to Baltimore as “the worst city in the United States, as far as I know, on the matter of taking care of its through-traffic.”

The need to break this bottleneck was apparent, and Maryland’s State Roads Commission - - predecessor of the Maryland Transportation Authority -- initiated plans under Maryland’s Primary Bridge Program.

The program, which was developed and approved in 1937, called for crossings of the Potomac, Susquehanna and Patapsco rivers and the Chesapeake Bay.

After a debate about the planned crossing’s location, the State Roads Commission decided on a Canton-Fairfield crossing as the best solution to address the City and State’s local- and through-traffic needs. Officials selected a tunnel, rather than a bridge, to carry the traffic after experts were convinced that the costs of a twin-tube tunnel could be supported by the toll revenues it would generate. Construction began in January 1955.

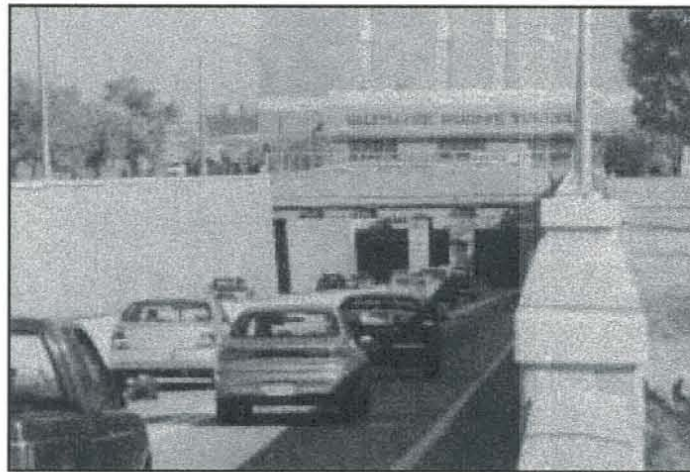
At the time, the tunnel was considered an engineering marvel. Each of the tunnel’s 21 twin-tube sections is 300 feet long (the size of a football field)

and was built in ship-yards and launched like a ship. Tugs then towed the sections to the construction site. The tunnel was built using the open-trench method -- prefabricated sections were sunk in a trench dredged in the Baltimore Harbor’s bottom, and the sections were joined under water.

An integral part of the tunnel is its ventilation system -- the means for removing the exhaust fumes of thousands of vehicles daily and constantly replenishing the tunnel with fresh air.

The system includes one ventilation shaft and building over each end of the tunnel. Fresh air is supplied through a duct under the tunnel roadway and distributed through air flues. These flues are located just above the roadway on each side of the tunnel.

Air in the tunnel tube is drawn off into a duct above the tunnel ceiling and then dispersed into the atmosphere. The two ventilation buildings house gigantic fans that supply fresh air and remove stale air. Carbon-



Background (continued)



Approximately 25.9-million vehicles traveled through the tunnel during Fiscal Year 2004.

About the Authority

Fort McHenry Tunnel (I-95)

Harry W. Nice Memorial Bridge (US 301)

Francis Scott Key Bridge (I-695)

Baltimore Harbor Tunnel (I-895)

Thomas J. Hatem Memorial Bridge (US 40)

John F. Kennedy Memorial Highway (I-95)

William Preston Lane Jr. Memorial (Bay) Bridge (US 50/301)

monoxide levels in each tube are monitored around the clock.

The tunnel was an instant success. It eliminated 51 traffic signals for through-traffic in downtown Baltimore, provided a cross-harbor route for local commuters and diverted up to 40 percent of commercial-vehicle traffic from local streets.

Today, the Baltimore Harbor Tunnel handles more than 25.9-million vehicles annually. Along with the Fort McHenry Tunnel (Interstate 95) and the Francis Scott Key Bridge (Interstate 695), the Harbor Tunnel is part of a network of Baltimore Harbor crossings that provides convenient and safe transportation for local and interstate traffic.

The Maryland Transportation Authority is a group of six citizens appointed by the Governor with the advice and consent of the State Senate. Representing Maryland's diverse population and geographic regions, this group serves as our policy-setting, decision-making and governing body. Maryland's Secretary of Transportation serves as the Authority's Chairman.

Each Member serves a three-year term, with two of the Members' terms expiring each year. Members are eligible for reappointment to the Authority.

Daily operations of the seven facilities are carried out by the Authority's 1,500 employees. Overall management of Authority operations is handled by the agency's Executive Secretary.

The Transportation Authority oversees the State's seven toll facilities and the Maryland Transportation Authority Police. The agency has statutory authority to act on behalf of the Maryland Department of Transportation to supervise, finance, construct, operate and maintain transportation facilities.

Maryland's toll facilities were financed and constructed through revenue bonds. The outstanding principal and interest due each year is paid from toll revenues. Toll revenues are the primary source of funds. The Authority's toll receipts are pooled, and revenues from all seven facilities are combined to pay for operating, maintaining and making capital improvements to these facilities.

A Commitment to Safety

The Maryland Transportation Authority Police is a nationally accredited force with more than 500 sworn and civilian employees. Specialized K-9, motorcycle, all-terrain-vehicle, marine and anti-aggressive-driving units help provide maximum safety and security at Authority facilities, the Baltimore/Washington International Airport and the Port of Baltimore. To maintain the highest level of professionalism and ethics, Transportation Authority Police officers remain true to their mission of safeguarding life and property, preserving peace, preventing and detecting crime, enforcing the law and protecting the rights of citizens.

The force has received local and national recognition for its roadway-safety efforts, which include child-passenger-safety awareness programs, anti-aggressive-driving initiatives and sobriety checkpoints. These efforts have been successful due to the continued teamwork among Authority Police and Operations personnel.

This same teamwork drives the Authority's Traffic Safety Committee, headed by the Chief of Police, Director of Engineering and Director of Operations. The committee provides leadership of Authority efforts to help ensure safe roadways for Maryland's citizens and visitors. One such effort is the courtesy-patrol and vehicle-recovery program, which enhances safety and service for motorists while reducing the effect of disabled-vehicle-related congestion on Authority facilities.

E-ZPassSM Maryland

The Maryland Transportation Authority is a member of the *E-ZPass* InterAgency Group (IAG), which continues to develop a seamless electronic-toll-collection system throughout the northeastern United States. *E-ZPass* Maryland has grown to include more than 250,000 active transponders and has reduced significantly typical, peak-hour congestion at Maryland toll plazas. More than 11-million *E-ZPass* customers from IAG agencies throughout the Northeast can pay tolls electronically in Maryland. As more motorists use *E-ZPass*, convenience will increase; traffic congestion in and around toll-plaza areas will decrease; and engine-idling time will be reduced, resulting in reduced vehicle emissions. For additional information about the *E-ZPass* Maryland program and its standard, commuter and business plans, visit www.ezpassmd.com.

Intelligent Transportation Systems (ITS)

The Authority continues to use ITS technology to improve safety and reduce congestion through enhanced incident detection and response, while informing motorists of real-time roadway and travel conditions and alternative routes. The Authority is an active partner in the Coordinated Highways Action Response Team (CHART). Through a series of variable-message signs and highway-advisory-radio messages, the CHART system advises motorists of traffic conditions along major routes and suggests alternatives to avoid delays and congestion. This information, as well as real-time traffic images are available on CHART's website at www.chart.state.md.us.

Your Toll Dollars At Work

Fast Facts

Construction Dates

January 1955 - November 1957

Cost

\$130 million

Location

Interstate 895: 17 miles of four-lane divided highway, including 64 bridge structures; dual two-lane tunnels 1.5-miles long and 101 feet below the water surface

Toll Rates

Commuter discount with valid Maryland-issued *E-ZPass*: up to 80-percent savings per trip

2 axles: \$2

3 axles: \$4

4 axles: \$6

5 axles: \$8

6 axles: \$10

Annual Traffic

25.9-million vehicles

Contact Us

The Authority reminds its customers to stay alert and exercise caution when traveling through workzones, toll plazas and around police vehicles.

For more information about the Maryland Transportation Authority, please call the Office of Media & Customer Relations at 410-537-1017, or, toll-free, at 1-866-713-1596.

E-mail: mdta@mdtransportationauthority.com, or visit us at www.mdtransportationauthority.com



Robert L. Ehrlich, Jr., Governor
Michael S. Steele, Lt. Governor

Robert L. Flanagan, Chairman

Trent M. Kittleman, Executive Secretary
Gary W. McLhinney, Chief, Maryland Transportation Authority Police
Curtis V. Esposito, Director of Operations

Maryland Transportation Authority
2310 Broening Highway, Suite 150
Baltimore MD 21224
410-537-1000 • TTY 410-355-7024 • 1-866-713-1596

David L. Roehmer, Facility Administrator
Baltimore Harbor Tunnel
1200 Frankfurst Avenue
Baltimore MD 21226
410-537-1310 • 1-888-754-0185

The Maryland Transportation Authority is an Equal Opportunity Employer and fully complies with all provisions of the Americans with Disabilities Act of 1990.





state highway 45 north and loop 1

PROJECT FACT SHEET

SPRING 2006

- **Construction Schedule**
page 2

- **Project Photos**
page 2

For more information about the SH 45N and Loop 1 project, contact:

Texas Department of Transportation
Austin District Public Information Office
1421 Wells Branch Parkway, Suite 107
Pflugerville, TX 78660

512.225.1300
www.texasollways.com

Project Description

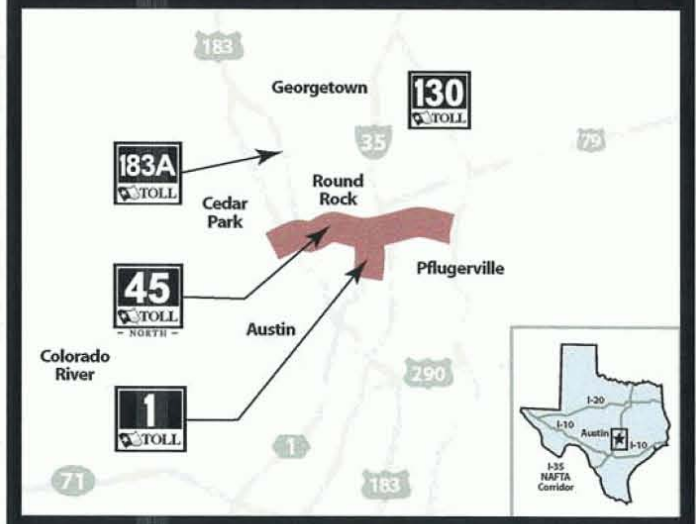
The SH 45N and Loop 1 projects are a combination of new roadways and expansion of existing facilities. The two projects will connect the cities of Austin, Pflugerville, Round Rock, and neighboring communities, improving mobility and providing an efficient route between northwestern Travis and southern Williamson counties.

SH 45N is approximately 13 miles in length and will provide a major east-west facility for the region. The Loop 1 extension is approximately three miles in length from Parmer Lane north to SH 45N. SH 45N and the Loop 1 extension will be six-lane divided tollways, except in the eastern section of SH 45N between County Road 172 and SH 130, which will be four lanes divided. Major interchanges will occur at US 183, SH 45N/Loop 1, I-35, and SH 130. Together, the roads will include three mainline toll plazas, 13 entrance/exit ramp toll plazas, and 66 bridges.

Cost

The estimated cost for completion of SH 45N and Loop 1 is \$1.4 billion. With SH 130, SH 45N and Loop 1 are being financed utilizing a combination of federal loans, bond sales, funding by TxDOT and by local contributions.

STATE HIGHWAY 45N AND LOOP 1 PROJECT LOCATION



SH 45N/LOOP 1 FACTS

- 8 million cubic yards of earthwork
- 90 miles of pipe and box culverts
- 1.7 million square yards of concrete pavement
- 869,000 tons of asphalt pavement
- 1.6 million square feet in retaining walls
- 66 bridges
- 218 lane miles

SH 45N and Loop 1
PROJECT
FACT SHEET

page 1





Construction Schedule



The SH 45N/Loop 1 project has eight sections. As of June 2003, all sections are under construction and on schedule for completion by December 2007.

Project Photos



ABOVE: Loop 1 Extension, Mainlane Toll Plaza, January 2006



ABOVE: SH 45N @ I-35, Section 4, April 2006



ABOVE: SH 45N @ US 183, Section 8, January 2006



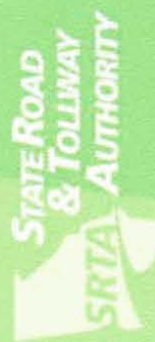
ABOVE: Ramp Construction, SH 45N, Section 6, January 2006



ABOVE: SH 45N/Loop 1 Interchange, April 2006



Innovation for Progress



101 Marietta Street
Suite 2500
Atlanta, GA 30303

Customer Service Center Phone: (404) 893-6161
SRTA Executive Offices Phone: (404) 893-6100
www.georgiatolls.com



Mission, Vision and Values

VISION

SRTA is an essential partner in the transportation industry providing cutting-edge solutions through financial, technological and service innovations.

MISSION

SRTA maintains and operates safe and efficient toll facilities, provides innovative transportation finance opportunities and identifies user-financed facilities to enhance the mobility of Georgians.

VALUES: CARE IS IT!

SRTA employees are customer focused, accountable, respectful and efficient. We ensure the smooth working process of our organization through integrity, safety, innovation and teamwork.

Table of Contents	
A Catalyst for Transportation Innovation	2
Mobility Through User-Fee Financed Infrastructure	4
Convenience Through Leading-Edge Technology	6
Innovation in Project Financing ...	8
Innovation in Project Planning ...	10
Customer-Focused Operations ...	12
Proven Performance	15
Organization	16



Georgia State Road and Tollway Authority
101 Marietta Street, Suite 2500
Atlanta, GA 30303

As Chairman of the State Road and Tollway Authority (SRTA), I am pleased to present the agency's first annual report. SRTA was created over 50 years ago, and this first annual report signals a renewed commitment by the agency to improving management practices.

Since becoming Governor, I have asked all state agencies to constantly evaluate the way they are doing business, searching for areas of improvement. SRTA has been a leader in this effort by utilizing cutting-edge solutions in finance, technology and customer service. In Fiscal Year 2005, SRTA implemented the latest in Cruise Card technology and launched an interactive Web site with a performance-based customer service center.

As we plan for the future, SRTA will continue exploring innovative new approaches in fulfilling their mission of operating safe and efficient toll facilities. The agency will also continue to emphasize customer service, always remembering that we serve the people of Georgia through accountability, respect and commitment to efficiency.

I am immensely proud of the positive strides SRTA has made in the past few years and look forward to celebrating future successes. SRTA and its fellow state agencies have helped Georgia become what I believe is the best managed state government in the nation.

Sincerely,
Sonny Perdue
Sonny Perdue, Governor
SRTA Chairman of the Board

Transportation Innovation

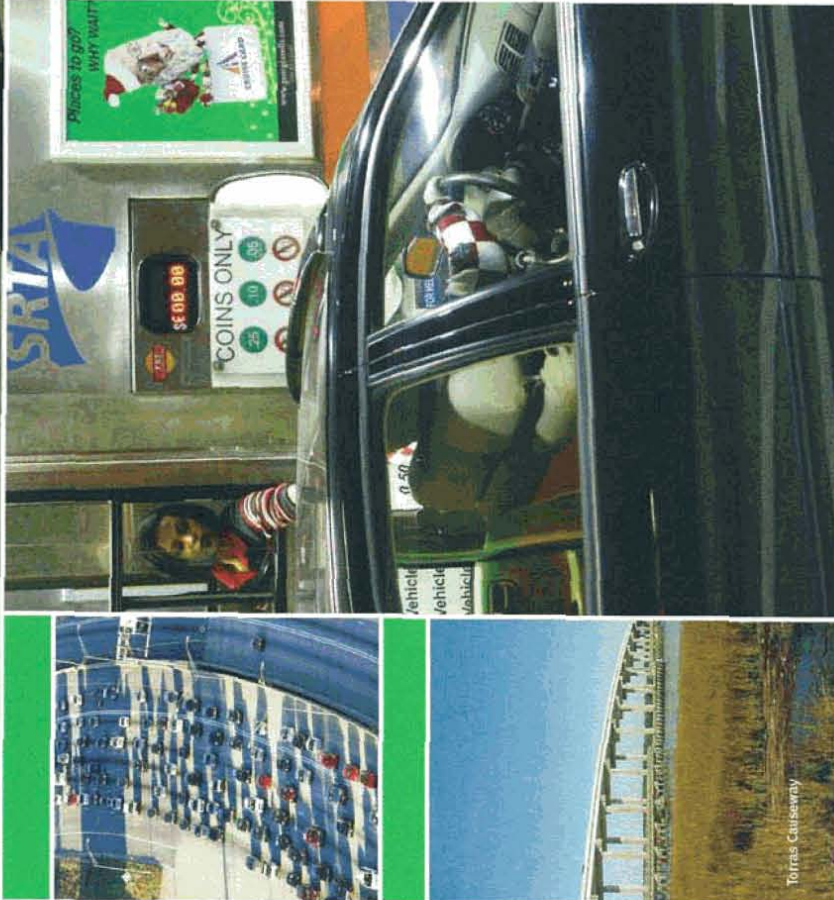


With five major interstates, the Southeast's most extensive rail system, and the world's busiest passenger airport, Georgia's transportation infrastructure has been the foundation of the state's economic growth. Since 1953, the Georgia State Road and Tollway Authority (SRTA) has supported the state's land mobility needs, operating Georgia's first user-fee facility, the Sidney Lanier Bridge to the Torras Causeway bridging the mainland to St. Simon's Island, and the critical commuter system, the Georgia 400 (GA 400) Extension in the city of Atlanta.

A Catalyst for Transportation Innovation

Today, in keeping with Governor Sonny Perdue's goal of inspiring and empowering innovation and productivity, SRTA has strategically positioned itself to support a progressive, forward-thinking approach to the state's future transportation needs. In fiscal year (FY) 2005, SRTA moved ahead with innovative initiatives that will not only enhance its service to existing customers, but will also find creative solutions to increase mobility within the state.

Mobility



Torras Causeway

Mobility Through User-Fee Financed Infrastructure

With the rising costs of building, operating, and maintaining transportation infrastructure across the nation, many states and communities are turning to user-fee financed facilities as a strategy to bridge the gap created by funding shortfalls. To date, there are more than 5,000 miles of these user-financed roads and bridges in 31 states – a number expected to grow substantially in the future.

SRTA is a state-level, independent authority created by the Georgia General Assembly to operate tolled transportation facilities within the state. Through SRTA, user fees have been successfully utilized to build the Sidney Lanier Bridge over the Brunswick River and the Torras Causeway, the “gateway” to the St. Simons community. Today, many of Atlanta’s commuters rely heavily on the GA 400 Extension, completed in 1993, to facilitate commutes between work and home. In FY 2005, approximately 120,000 people used the 6.2-mile system every day.

Convenience

6



7

Convenience Through Leading-Edge Technology

Since its beginning, SRTA has sought ways to bring added convenience to motorists. The GA 400 Extension got its start with funding through the 1987 Federal Highway Act, which provided \$98 million for a "High Technology Demonstration Project" that would bring electronic toll collection (ETC) using automated vehicle identification to the area. It was the first project of its kind in the United States. Today, SRTA remains one of the few toll agencies in the nation to develop its own ETC software, including the lane, host, violation enforcement, and Customer Service Center back-office systems. In FY 2005, SRTA implemented enhancements to the software as well as its violation enforcement system and Customer Service Center operations.



Today, approximately 39 percent of all vehicles traveling the GA 400 Extension use the windshield-mounted "Cruise Card," for cashless payment of tolls. SRTA was one of the first in the nation to implement "drive-through,"

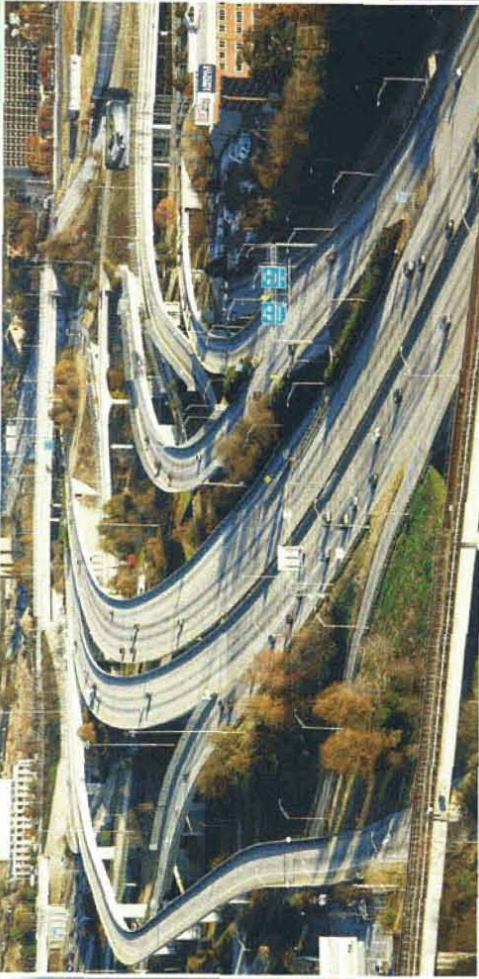
high-speed tolling using in-vehicle toll-tag technology. Drive-through tolling helps to reduce commute times for customers and supports air quality improvement initiatives by minimizing standstill traffic at toll plazas.

In FY 2005, groundwork was laid for the next generation of Cruise Card technology: TransCore's new eGo wireless communications tag. Paper-thin and requiring no battery, the eGo radio frequency identification product provides a high-performance electronic toll collection solution at significantly less cost than traditional radio frequency identification transponders. In 2006, it is SRTA's goal to begin marketing the new window-sticker device through popular retail outlets and an educational campaign that includes billboard advertising, radio, news releases, and brochures.



Financing Innovation

8



Innovation in Project Financing



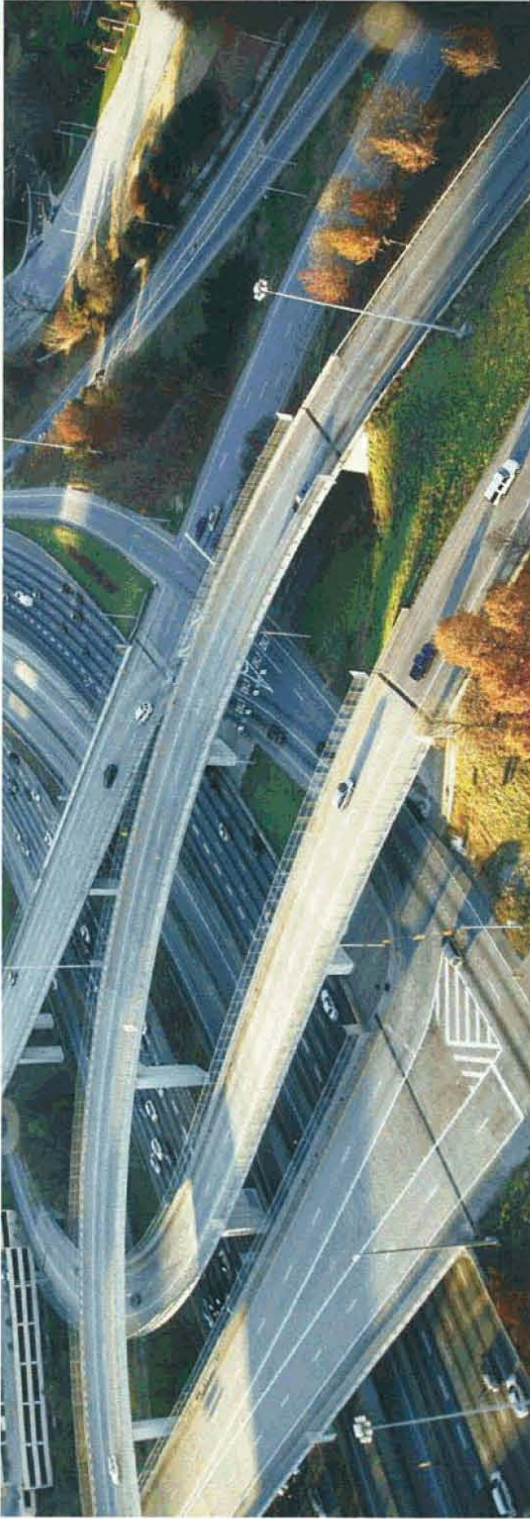
One of the most important aspects of SRTA is its financing ability. With a AAA bond rating from the rating agency of Standard & Poor's and a solid understanding of transportation infrastructure development, SRTA is positioned to serve as the financing arm for state and local transportation agencies across Georgia.

SRTA has the authority to finance any type of transportation improvement using traditional methods of financing such as bonds, loans, notes, and equity partnerships. In recent years, SRTA has issued bonds on behalf of non-toll projects undertaken by the Georgia Department of Transportation (GDOT). Seeking innovative strategies for funding land transportation improvements, Georgia has set the stage for making greater use of this capability.

In April 2004, Governor Perdue introduced his *Fast Forward* transportation plan – a six-year, state transportation investment strategy to relieve traffic congestion and expand economic development in urban and rural Georgia. Under the *Fast Forward* strategy, SRTA may issue up to \$3 billion in Grant Anticipation Revenue Vehicle (GARVEE) bonds, underwritten by a portion of the state's future federal transportation revenues. GARVEE bonds are a new funding mechanism for Georgia and an additional revenue stream that will primarily fund congestion-relief projects.

As a result of the federal government's follow-up of the Transportation Equities Act – SAFETEA-LU, which passed in November 2005 – the *Fast Forward* strategy sets the stage for new initiatives that will likely involve SRTA.





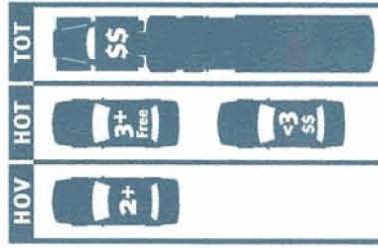
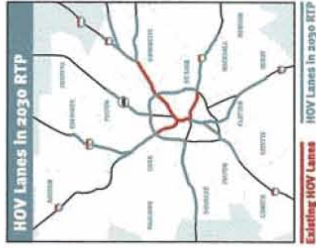
Innovation in Project Planning

In FY 2005, SRTA began working with GDOT, the Georgia Regional Transportation Authority (GRTA), and the Atlanta Regional Commission (ARC) on several major studies that will provide benchmark information for future transportation initiatives. Of particular significance are the "Getting More From Our Roads: HOT and TOT Opportunities" studies, completed in response to Georgia Senate Resolution 575. These studies examined different ways of achieving the best use of the region's current and future high occupancy vehicle (HOV) system. Several different HOV, high occupancy toll (HOT), and truck only toll (TOT) lane concepts were studied for possible implementation along the highways of metropolitan Atlanta.

The studies concluded that numerous potential benefits could result from the use of HOT and TOT lanes, including:

- ▲ Greater reliability and travel time savings for transit vehicles.
- ▲ Significant reductions in congestion during rush hours for travelers in general purpose lanes.
- ▲ Significant reductions of truck travel on local roads.
- ▲ The potential to save the freight industry over \$900 million annually.

GDOT and ARC are now incorporating these promising results by evaluating the concepts in greater detail in several major new corridor studies.



Customer Focus

12



Customer-Focused Operations

At the heart of SRTA's operations is the goal of providing superior client service. From the organization's Customer Service Center to its toll plazas, SRTA is committed to meeting the needs of motorists – today and in the future.



Responding to public input, SRTA discontinued in FY 2005 the required deposit for out-of-state license plate holders and initiated plans to reduce the amount required for account replenishment from \$40 to \$20.

A new phone system not only accommodates calls to SRTA's Customer Service Center today, but also will support an interactive voice response feature in the future.

13

In FY 2005, SRTA's Customer Service Center was led by a manager, two assistant managers, and a team of customer service representatives working to support customer correspondence, violation enforcement, and account maintenance for the approximately 120,000 Cruise Card accounts. Service center employees remain focused on SRTA's values, mission, and vision through participation in a "Foundations" training program created by an SRTA employee. As part of this program, a "GOLD Card" campaign stresses goals accomplished, organization commitment, leadership skills, and dynamic customer service. Ongoing training is also facilitated, including the cross training of employees. In FY 2005, service center employees attended government accounting classes to bring additional knowledge and skills to the team.

SRTA toll facilities consist of 36.6 lane-miles that converge at a toll plaza with nine northbound and nine southbound toll lanes. Four of these lanes (two in either direction) are dedicated open road tolling lanes, while all lanes have Cruise Card or ETC capability.

The toll facility is in operation 24 hours a day, 7 days a week under the direction of the SRTA toll plaza manager, who is supported by a team that includes an assistant manager and toll supervisors that manage a staff of subcontracted toll collectors. Information technology staff are available to handle issues that may arise with tolling equipment. The toll plaza manager and his team are responsible for the management of the toll facilities, management of revenue collection, and the coordination of roadway maintenance and repairs. With the support of GDOT and maintenance contractors, the system offers a safe travel experience to commuters.

SRTA has established a model for the management of future toll or roadway projects throughout Georgia. As traffic congestion continues to grow on Georgia corridors, SRTA looks to support the transportation projects that will help Georgia improve the level of transportation services throughout the state.

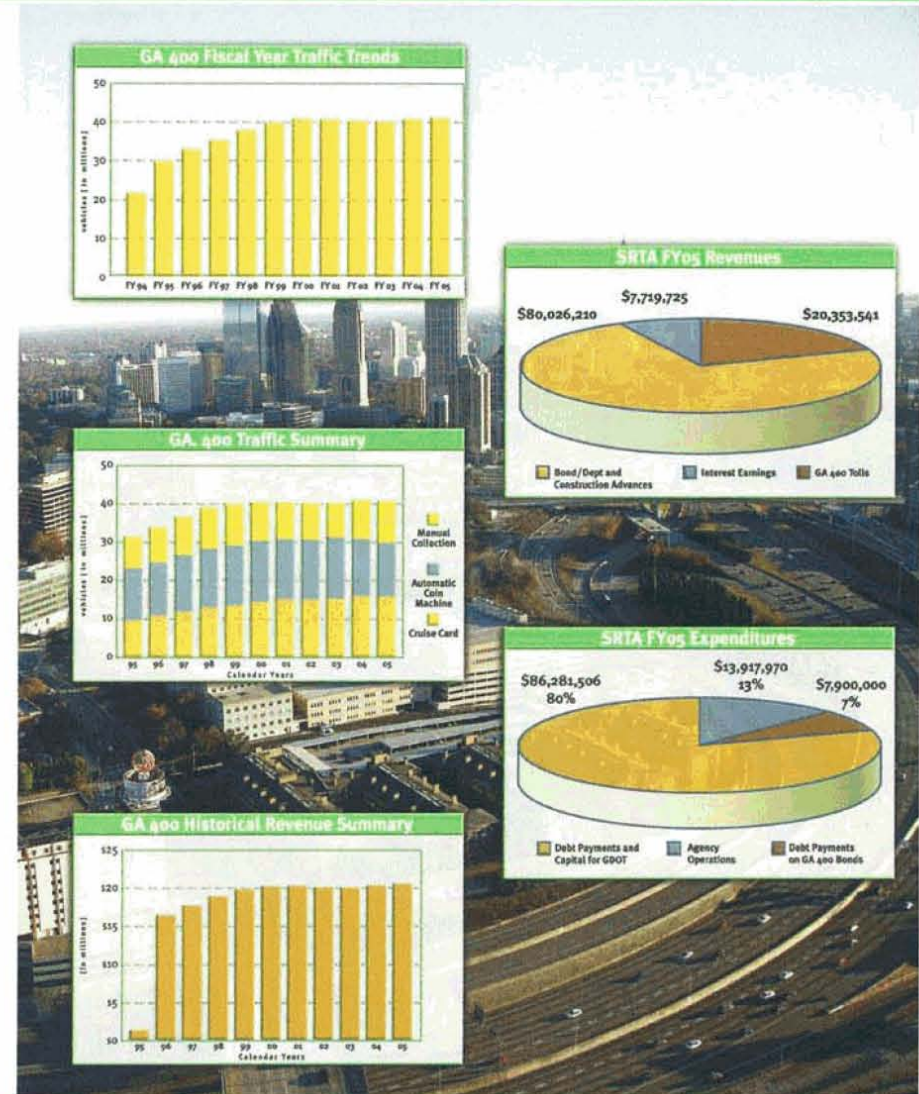
Traffic & Revenue

Proven Performance

FY 2005 traffic on SRTA's GA 400 Extension reached an all-time high of 41,205,758 vehicles, reflecting an increase of 437,377 vehicles over FY 2004 and an increase of 19,379,151 since FY 1994.

Although the number of vehicles using SRTA's Cruise Card decreased slightly (by 43,643) between calendar years 2004 and 2005, ETC accounted for the largest percentage (approximately 38%) of toll revenue collections on the GA 400 Extension during 2005. Automatic coin machine collection accounted for approximately 34% of all collections, and manual collection accounted for approximately 27% of all collections during the calendar year. Manual toll collection continues to be an important means of toll collection, increasing in calendar year 2005 by more than \$770,000 over 2004 revenue.

Revenues for SRTA reached more than \$108 million in FY 2005, with toll revenue from the GA 400 Extension accounting for 18% of that amount. Payments from GDOT accounted for 74%, and interest earnings accounted for approximately 7% of all FY 2005 revenue. Construction funds and debt payments for GDOT accounted for approximately 80% of SRTA's FY 2005 expenditures, while agency operations accounted for approximately 13%. Debt service principal and interest on the GA 400 Extension debt accounted for approximately 7%.



Organization

16



Douglas Hooker
Executive Director



Lisa Thompson
Director of Communication



Rosa Clausell Rountree
Executive Deputy Director



Dan Guimond
Treasurer



Terry Rogers
Director of Toll
Administration



Daniel Drake
Director of Policy
& Programs



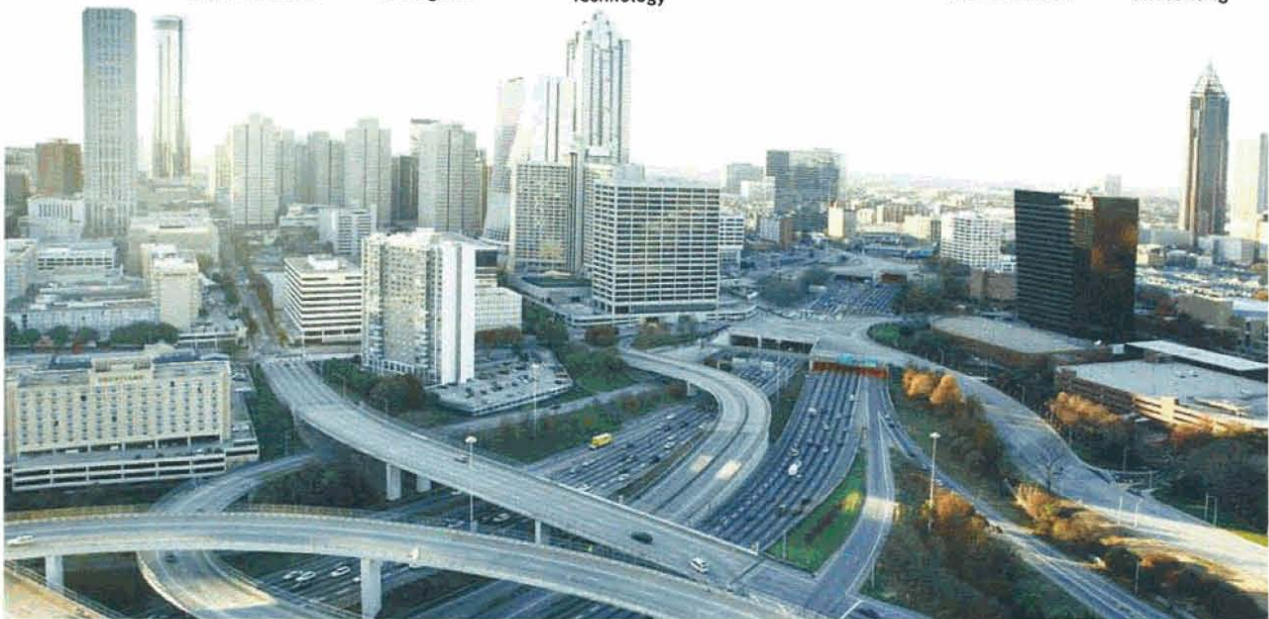
Yousif AbouHarb
Director of Information
Technology

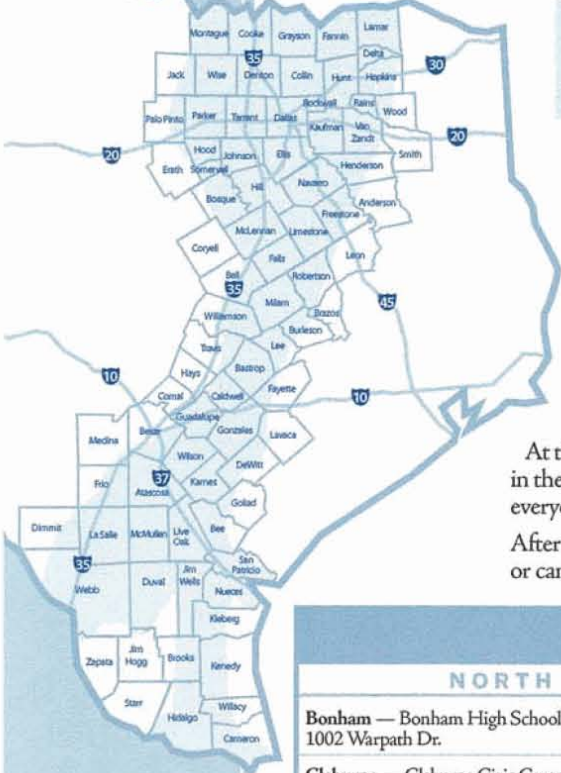


Lynda Conner
Director of
Administration



Guy Johnson
Director of
Accounting





STUDY AREA

Thank you for joining us and participating in the decision-making process on TTC-35, a proposed project from Oklahoma to Mexico/Gulf Coast. Public input is an important part of the environmental study. Between July 10 and August 10, 2006, the Texas Department of Transportation will hold 54 public hearings throughout the study area.

■ **WHAT IS THE PURPOSE OF THE PUBLIC HEARING?**

The public hearing is for TxDOT to listen to Texans comment on the draft environmental study for TTC-35. At the hearings, the public will learn more about the narrowed study area and the other alternatives, find out why TTC-35 is needed, review the project maps and submit official comments.

Before the hearing, the public will have an opportunity during the open house to get their questions answered by TxDOT staff and review project maps and other materials.

■ **HOW DO I SUBMIT COMMENTS?**

There are several ways to provide comments on the draft environmental impact statement for TTC-35. Most importantly, all comments must be received by TxDOT no later than **August 21, 2006**.

At the public hearing, transcribers, comment boxes and computer stations will be available beginning at 5 pm in the meeting room. The public can also sign up to give oral comments during the hearing. In an effort to give everyone a chance to speak, oral comments should be limited to three minutes.

After the public hearing, comments can be sent in through the project website, www.keeptexasmoving.org, or can be mailed to TTC-35, P.O. Box 14707, Austin, TX 78761-4707.

PUBLIC HEARING SCHEDULE

NORTH	CENTRAL	SOUTH
Bonham — Bonham High School Cafeteria 1002 Warpath Dr. July 11	Bastrop — Bastrop Middle School Cafeteria 709 Old Austin Hwy. Aug. 2	Alice — Knights of Columbus Hall 1050 Cecilia St. Aug. 8
Cleburne — Cleburne Civic Center 1501 W. Henderson St. July 12	Caldwell — Caldwell High School Auditorium 550 County Road 307 July 20	Beeville — Beeville Community Center 111 E. Corpus Christi St. July 31
Corsicana — Drane Intermediate School Auditorium, 100 S. 18th St. July 20	Cameron — Cameron ISD Performing Arts Center, 303 E. 12th St. July 18	Brownsville — City of Brownsville Events Center 1 Event Ctr. Blvd. Aug. 10
Dallas — Grauwlyer Community Center 7780 Harry Hines Blvd. July 27	Clifton — Clifton High School Cafeteria 1101 N. Avenue Q July 19	Calallen — Calallen High School Cafeteria 4001 Wildcat Dr. Aug. 2
Decatur — Decatur Civic Center 2010 W. US 380 July 11	Georgetown — Georgetown ISD Klett Center for the Performing Arts, 2211 N. Austin Ave. July 24	Falfurrias — Sacred Heart Parish Hall 201 W. Blucher Aug. 7
Denton — Univ. of North Texas Gateway Ctr. Ballroom, 801 N. Texas Blvd. July 11	Giddings — Sons of Hermann Hall 1031 Country Road 223 July 26	Flatonia — Flatonia ISD Cafetorium 400 E. 4th St. July 31
Ennis — Knights of Columbus Hall 850 S. Interstate 45 July 10	Groesbeck — Groesbeck High School Auditorium 1202 N. Ellis St. July 20	Floresville — Floresville High School Gymnasium 1832 Highway 97 East Aug. 3
Fort Worth — Will Rogers Memorial Center, Exhibits Hall, Round Up Inn, 3400 Burnett-Tandy Dr. July 17	Hearne — Hearne Junior High School Auditorium 401 Wheelock St. July 19	George West — George West High School Cafetorium, 913 Houston St. Aug. 9
Gainesville — Gainesville Civic Center 311 S. Weaver St. July 10	Hillsboro — Hill College Performing Arts Center Auditorium, 112 Lamar Dr. July 13	Gonzales — Gonzales High School Cafeteria 1801 Sarah DeWitt Dr. Aug. 1
Granbury — GISD Pearl Street Conference Center 205 E. Pearl St. July 18	Lockhart — Lockhart High School Cafetorium #1 Lion Country Dr. July 31	Harlingen — Casa de Amistad 1204 Fair Park Blvd. Aug. 9
Greenville — Fletcher Warren Civic Center 5501 S. Bus. Hwy. 69 July 17	Manor — Manor High School Cafeteria 12700 Gregg Manor Rd. Aug. 1	Kingsville — King Ranch Museum 405 N. 6th St. Aug. 1
McKinney — McKinney High School Cafeteria 1400 Wilson Creek Pkwy. July 13	Marlin — Marlin High School Auditorium 1400 Capps July 25	Laredo — TAMU Western Hemispheric Trade Ctr., Rm. 111, 5201 University Blvd. Aug. 7
Mesquite — Poteet High School Auditorium 3300 Poteet Dr. July 18	McGregor — McGregor High School Auditorium 903 Bluebonnet Pkwy. July 17	McAllen — McAllen Convention Center 1300 S. 10th St. Aug. 8
Paris — Love Civic Center 2025 S. Collegiate Dr. July 12	Rockdale — Knights of Columbus Hall 655 US Highway 79 E July 27	Pearsall — Pearsall High School Cafeteria 1990 Maverick Dr. Aug. 7
Sherman — Sherman Municipal Ballroom 405 N. Rusk St. July 10	Seguin — Seguin-Guadalupe County Coliseum 810 S. Guadalupe St. Aug. 9	Pleasanton — Pleasanton High School Cafeteria 1100 W. Adams St. Aug. 2
Terrell — Terrell ISD Performing Arts Center 400 Poetry Rd. July 19	Smithville — Smithville High School Cafeteria 285 State Highway 95 Aug. 3	San Antonio — East Central High School Cafetorium, 7173 FM 1628 Aug. 8
Waxahachie — Waxahachie Civic Center Ballroom 2000 Civic Center Ln. July 12	Taylor — Taylor High School Auditorium 3101 N. Main St. July 25	Yorktown — Yorktown Community Mess Hall 60 Community Hall Rd. Aug. 10
Weatherford — Weatherford College, Alkek Fine Arts Center, 225 College Park Dr. July 13	Temple — Frank W. Mayborn Civic & Convention Center Main Hall, 3303 N. 3rd St. July 26	
	Waco — Waco Convention Center, Brazos Room 100 Washington Ave. July 24	

■ **WHAT IS TTC-35?**

TTC-35 is a proposed multi-use, transportation project that could incorporate existing and new highways, railways and utility right of ways.

As envisioned, it may include separate lanes for passenger vehicles and large trucks, freight railways, high-speed commuter railways, and infrastructure for utilities including water lines, oil and gas pipelines, and transmission lines for electricity, broadband and other telecommunications services.



ABOVE: Trans-Texas Corridor Public Meeting.

■ **WHAT IS THE PURPOSE OF TTC-35?**

The purpose of TTC-35 is: *To improve international, interstate and intrastate movement of goods and people; address the anticipated transportation needs of Texas from the Texas/Oklahoma state line to the Texas/Mexico border and /or Texas Gulf Coast along the I-35 corridor for the next 20 to 50 years; and, sustain and enhance the economic vitality of the State of Texas.*

■ **WHAT IS THE NEED FOR TTC-35?**

Based on analysis included in the draft environmental impact statement, TTC-35 is needed to meet the state's long-term transportation demands. It will compliment the existing highway system by providing alternatives to I-35. Some of the findings in the DEIS are:

- Nearly 45 percent of 21 million Texans live within 50 miles of I-35.
- Current traffic volumes for most segments of I-35 exceed design capacity.
- By 2025, I-35 would need to be expanded to 16 lanes in the metro areas and 12 through Central Texas, according to previous studies.
- Commercial trucks on Texas roads are projected to increase by 403 percent from 1998 to 2060.

TTC-35 is intended to relieve congestion on Interstate 35. Rapid population growth and a substantial increase in the number of vehicles using I-35 have left many segments of the interstate overloaded, particularly through Central and North Texas. Sizable growth in both population and traffic are expected to continue indefinitely.

■ **WHERE WILL TTC-35 BE LOCATED?**

A final route location will be determined through the ongoing environmental process, which includes public input.

Generally, TTC-35 will parallel I-35 and extend from

Oklahoma to Mexico with possible connections to the Gulf Coast. The first step is to focus on narrowing the study area. Final project routes will be determined in the next set of environmental studies.

■ **WHEN WILL TTC-35 BE CONSTRUCTED?**

Plans call for TTC-35 to be built in phases over the next 50 years with the development of specific projects to be prioritized according to Texas' transportation needs.

Before right of way and construction can begin, TTC-35 must first gain federal environmental approval for a final route alignment. The first step is to complete the ongoing environmental study that focuses on narrowing the study area. A decision from the Federal Highway Administration is expected as early as Summer 2007.

After that, additional studies will further refine the narrowed study area into the final route alignment for roads, rail and utilities. It is not until a final route alignment has been federally approved that right of way and construction could begin.

■ **DESCRIBE THE ENVIRONMENTAL PROCESS USED TO STUDY TTC-35.**

The environmental studies for TTC-35 follow the stringent federal rules of the National Environmental Policy Act of 1969. The process is the same as for any other transportation project. However, the only difference is that the studies for TTC-35 are being conducted in two tiers.

The goal of Tier One, which is currently ongoing and began in February 2004, is simply to narrow the broad study area from 50-60 miles wide to approximately 10 miles wide. This is considered a corridor-level decision rather than a route-alignment decision.

To identify a narrowed study area, a detailed environmental analysis is being conducted in Tier One. This started with a thorough documentation establishing the project's need and purpose. Subsequent analysis focused on land use, engineering and design, traffic flow, public input and potential impacts on environmental factors (such as wetlands, farmland soils, cultural resources and socio-economic issues.) Throughout the environmental study, a no-action alternative is always considered.

The analysis was completed and a draft environmental impact statement was prepared, which identified the narrowed study area (technically called a preferred alternative.) The draft report was approved by the Federal Highway Administration and hearings are scheduled to give the public a chance to review the draft report and all the alternatives so that they can provide comments before a final report is submitted.

Should the result of Tier One be a narrowed study area, then Tier Two studies would be initiated to determine a final route alignment. Tier Two studies would address

site-specific details, potential project impacts, costs and mitigation for alternatives.

Tier Two studies can take the form of categorical exclusions, environmental assessments or environmental impact statements (EIS). On average, an EIS can take between 3 – 5 years to complete.

■ **WHAT DECISION WILL BE MADE IN THE TIER ONE STUDY?**

The goal of Tier One is to identify a preferred alternative by comparing the corridor alternatives including the no-action alternative. Approval of Tier One would not establish final route alignments or result in right of way or construction-related activities.

■ **HOW IS THE NO-ACTION ALTERNATIVE DEFINED?**

The no-action alternative simply means that a narrowed study area would not be identified and the TTC-35 project as envisioned would not proceed.

■ **HOW WAS THE NARROWED STUDY AREA (PREFERRED ALTERNATIVE) SELECTED?**

The analysis is based on 12 Reasonable Corridor Alternatives (RCAs) that were identified and reviewed for potential environmental impacts. None of the 12 RCAs were eliminated based on potential environmental impacts. Next, the 12 RCAs were reviewed for how well each met TTC-35's need and purpose. Two RCAs made this cut. These two were then reviewed for planning and engineering criteria, such as length, area, slope and existing infrastructure. Of the two RCAs, one scored substantially higher because it contained 195 miles of existing highway and 214 miles of existing rail. There was strong public input that existing highways and rail should be used where possible. Cumulatively, this resulted in RCA 5 being recommended as the narrowed study area.

■ **WHAT DID THE DEIS RECOMMEND AS THE NARROWED STUDY AREA (PREFERRED ALTERNATIVE)?**

On April 4, 2006, the FHWA approved the DEIS which recommended RCA 5 as the narrowed study area for TTC-35. The narrowed study area extends from Gainesville to Laredo, generally 10 miles wide and within close proximity to I-35 and metropolitan centers, except where it is centered on I-35 south of San Antonio to Laredo.

■ **WHY WAS THE REASONABLE CORRIDOR ALTERNATIVE 5 RECOMMENDED AS THE PREFERRED ALTERNATIVE?**

This narrowed study area was recommended because it best meets the need and purpose of TTC-35, which is to improve the flow of traffic on I-35 over the next 50 years.

Based on the traffic analysis, RCA 5 was identified as the

best performing alternative at relieving congestion on I-35 and within the study area. The traffic analysis demonstrated that under a tolled scenario RCA 5 and RCA 7 had the two highest scores compared to other alternatives, 40 and 47 percent respectively. RCA 5 and RCA 7 also had the highest scores under the non-tolled scenario, 44 and 30 percent respectively.

Based on the environmental criteria, RCA 5 was comparable to other RCAs.

Another factor considered was the incorporation of existing highways and railways, a comment frequently made during the environmental process. Based on this data, RCA 5 was selected because it contained the most existing highways and rail — 195 miles and 214 miles respectively.

Therefore, RCA 5 was recommended as the preferred alternative.

■ **WHY WAS THE NO ACTION ALTERNATIVE NOT RECOMMENDED AS THE PREFERRED CORRIDOR ALTERNATIVE?**

The analysis of the no action alternative showed that the planned transportation projects within the study area are not expected to reduce congestion levels projected for 2030. In addition, expanding existing transportation facilities alone would not relieve congestion on I-35 and meet the state's long-term transportation needs for the next 20 to 50 years along the I-35 corridor.

■ **WHAT PUBLIC OUTREACH EFFORTS HAVE BEEN CONDUCTED FOR TTC-35?**

The environmental process began in February 2004 and thus far three series of public meetings were held, totaling more than 117 public meetings and more than 4,000 comments. To inform the public of these meetings, display ads were published in local newspapers in addition to the required legal notices. In addition, meeting flyers were mailed to more than 34,000 businesses, property owners, civic organizations, schools, regional planning groups and local, state and federal officials.

By the end of this summer, 54 public hearings will be held.

Also, project updates on the environmental process and project milestones are posted on the website (www.keeptexasmoving.org), and project information has been provided to numerous media inquiries.



ABOVE: Trans-Texas Corridor Public Meeting.

Continued on reverse.

Continued from previous page.

■ **WHAT ARE THE NEXT STEPS FOR TTC-35?**

After the 54 public hearings are completed, TxDOT staff will review the comments and make any necessary adjustments to the narrowed study area. This will be compiled into the Tier One Final Environmental Impact Statement (FEIS) which will be made available to the public for at least 30 days. Notice of the FEIS availability will be listed in the Federal and Texas Registers and will be posted on the TTC website.

The Tier One FEIS is expected to be completed by Winter 2006.

Next, the Tier One FEIS will be submitted to FHWA for a decision. The FHWA may issue a Record of Decision on the narrowed study area as early as Summer 2007. Since Tier One does not authorize right of way or construction activities, federal approval of Tier One would only allow Tier Two studies to be initiated.

Tier Two environmental studies could begin as TTC-35 projects for roads, rail and utilities are identified based on transportation need.

■ **WHAT IS THE RIGHT OF WAY PROCESS FOR TTC-35?**

Right of way for TTC-35 will be acquired in the same way it's acquired for all other roads. There will be an

independent appraisal, an offer and opportunity for negotiation, and the same due process rights to a jury trial if the property owner is not satisfied with the TxDOT offer.

Since the completion of the Tier One study does not identify a final route alignment, right of way acquisition nor condemnation can be authorized. The only form of property acquisition available at the conclusion of Tier One is a purchase option. TxDOT may only enter into a purchase option with a willing landowner.

■ **WHAT IS A PURCHASE OPTION?**

To preserve future transportation corridors, TxDOT may enter into an agreement with a willing landowner for an option to purchase the property at a future

date. For this option, the landowner will be paid a fee and forgo additional development on the property. If TxDOT chooses to buy the land, the landowner would be paid an additional sum based on the fair market value of the property.

— **TTC-35 TERMINOLOGY** —

TIERING — A two-phased environmental process allowed under the National Environmental Policy Act that is typically used for large-scale projects. The Tier One study addressed broad issues. Tier Two studies focus on individual projects and the site-specific environmental impacts.

STUDY AREA — Established in 2004, the 77-county area delineated for the DEIS to evaluate and determine the most Reasonable Corridor Alternatives that met the TTC-35 need and purpose.

MODAL TRANSITION ZONES — Areas to be studied in Tier Two that will focus on how locally-developed transportation facilities within these zones could be incorporated into a TTC-35 facility(ies) in cooperation with elected officials and planning organizations.

POTENTIAL CONNECTION ZONES — Areas to be studied in Tier Two that will focus on the best way to connect to existing or future border facilities should TTC-35 advance to Tier Two environmental processes. In the DEIS, the connections zones are in Gainesville, Sherman-Denison and Laredo.

REASONABLE CORRIDOR ALTERNATIVES (RCA) — For TTC-35, there are 12 reasonable alternatives that were developed from 180 preliminary corridor alternatives that could best meet the need and purpose of the project. These 12 RCAs and the No Action Alternative were evaluated in detail in the DEIS.

RECOMMENDED PREFERRED ALTERNATIVE — The alternative recommended in the DEIS as the preferred corridor (narrowed study area) for future study for TTC-35 that outperformed all other alternatives based on the environmental, planning and engineering, and traffic analyses.



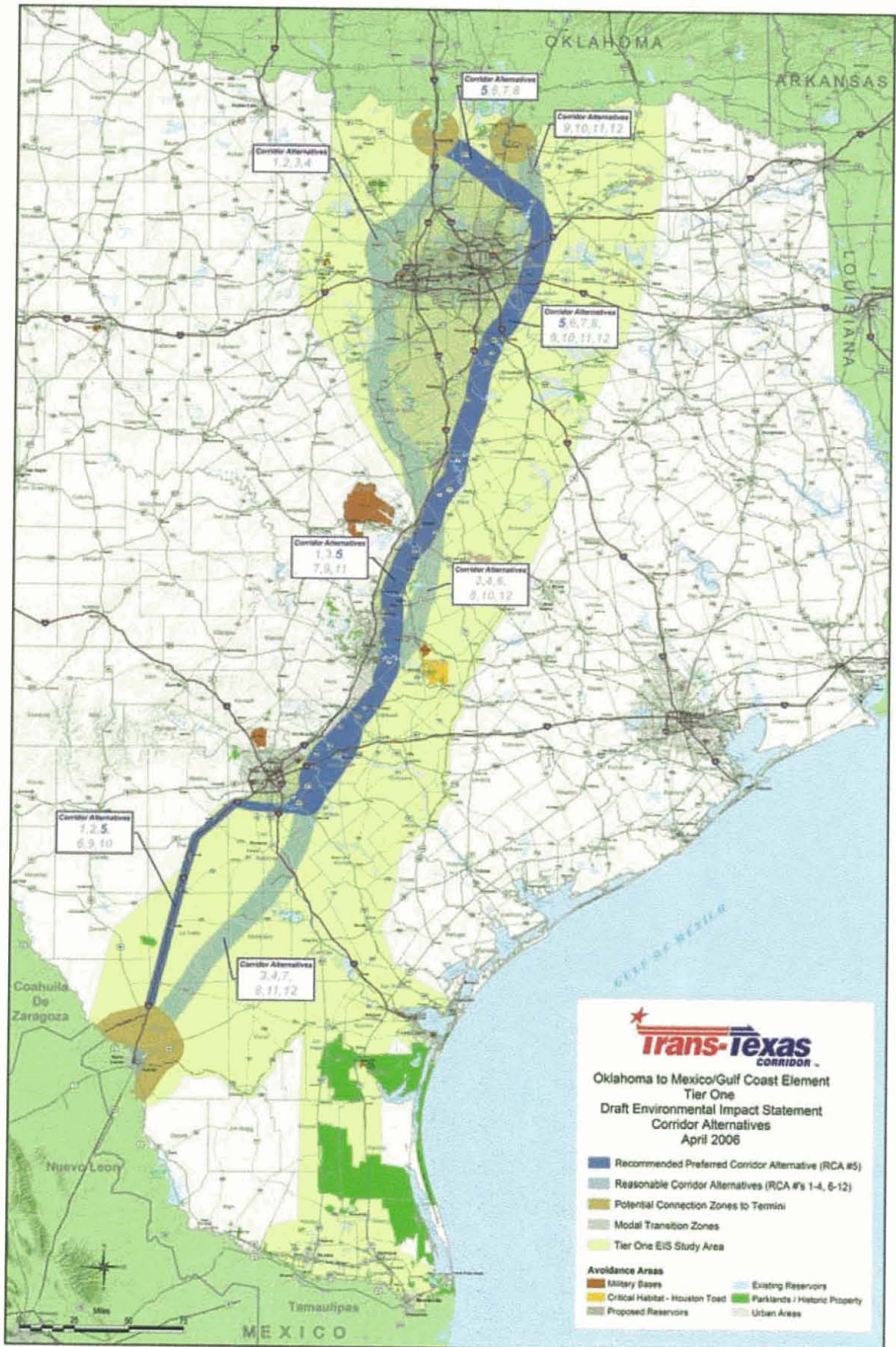
ABOVE: Trans-Texas Corridor Public Meeting.

Contact the TTC-35 Project

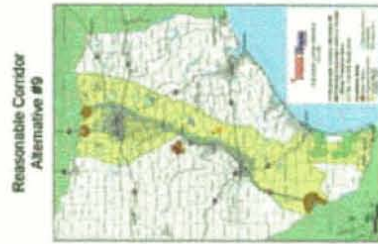
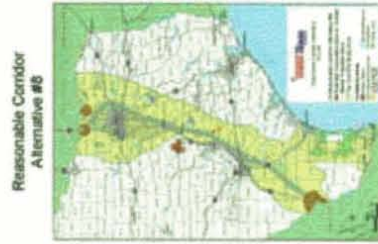
Toll-Free: 1-877-872-6789
Website: www.keeptexasmoving.org
U.S. Mail: TTC-35
 P.O. Box 14707
 Austin, TX 78761-4707

To be included in the official record of the public meeting process, comments must be received by August 21, 2006.

corridor alternatives — april 2006



Oklahoma to Mexico/Gulf Coast Element Tier One Draft Environmental Impact Statement
Reasonable Corridor Alternatives 1 through 12



Map Element Definitions:
Study Area - The 77-county area delineated for the DEIS to evaluate and determine the most reasonable corridor alternatives that met the TTC-35 need and purpose.
Reasonable Corridor Alternatives (RCA) - The 12 reasonable corridor alternatives (labeled RCA 1 through RCA 12) that are the most reasonable alternatives out of the 180 preliminary corridor alternatives developed and shown to the public during the TTC-35 Spring 2005 public meetings. These 12 RCAs and the No Action Alternative were evaluated in detail in the DEIS.
Recommended Preferred Corridor Alternative - The alternative recommended in the DEIS as the preferred corridor for future study for TTC-35 because it outperformed all other alternatives based on the environmental, planning and engineering, and traffic analyses conducted and described in the DEIS.
Modal Transition Zones - Zones for future study during Tier Two environmental processes within which the various transportation modes (auto, truck, rail, and utilities) would be routed to best serve their respective destinations. During Tier Two, locally-developed transportation facilities within these zones could be incorporated into a TTC-35 facility(ies) in cooperation with local elected officials and planning organizations.
Potential Connection Zones - Zones at Gainesville and Sherman-Denton (northern end) and at Laredo (southern end), which are common to all preliminary corridor alternatives approaching these termini. Because an alignment is not being proposed during the Tier One environmental process, it is not possible to identify alignment-specific logical endpoints (or termini) or connections to infrastructure at the northern and southern ends of proposed TTC-35. Therefore, these zones were established to allow for the identification of the best connection to existing or future border facilities should TTC-35 advance to Tier Two environmental processes.

APPENDIX F

Overview of Public Private Venture Laws in the United States

This following is a list of states that currently authorize 3Ps along with the statutory reference and a brief commentary on the provisions. Note that, even though these states have laws enabling 3Ps, they are in varying degrees of implementation with some never having examined 3P projects (Utah) to some that have 3P projects open to traffic with many years of operation already passed (Virginia).

A reading of these summaries provides insight into how states have adopted legislation to govern the 3P process. This summary also evidences an evolution as the necessities of 3Ps become better defined.



Alabama

Statute: Section 23-1-81

The Alabama DOT and County Commissions are authorized to license “any individual, group of individuals, partnership, corporation, association, or any other legal entity to establish or to operate toll roads, toll bridges, ferries, or causeways.” Three toll bridges are privately owned, financed, and operated by United Toll Systems: Emerald Mountain Expressway, Alabama River Parkway, and Black Mountain Parkway. A fourth toll facility is the Foley Beach Express, owned and operated by the Baldwin County Bridge Company.



Alaska

Statute: Section 19.75.011 through 19.75.990

The Knik Arm Bridge and Toll Authority Act was amended in 2006 by HB 471 to allow the facility to be financed, designed, constructed, maintained, and/or operated under a public private partnership arrangement. This includes incurring indebtedness. The Authority is granted the exclusive power to determine and fix fees, rents, tolls, rates, and other charges.



Arizona

Statute: Sections 28-7701 to 28-7758

Originally passed in the early 1990s, ADOT is authorized to solicit and accept unsolicited proposals for the design, construction, and operation of transportation facilities by private entities. A very comprehensive statute originally adopted during the first round of transportation 3Ps in the late 1980s, early 1990s. The statute has been amended several times since its initial passage. Since its passage there have been six or seven solicited and/ or unsolicited toll road proposals submitted to ADOT. None have been successful.



California

Statute: Chapter 32, Section 143 (amended) and Section 149.7 (added)

Effective May 2006 to January 2012, California's law regarding 3P for transportation was amended to allow CalTrans, when working jointly with regional transportation agencies, to enter into comprehensive development lease agreements with public and private entities, or consortia of those entities, for certain transportation projects that may charge certain users of those projects tolls and user fees. Private sector proposals can be either solicited or unsolicited. These new provisions are subject to several specific terms and requirements, including a limitation to four total projects (two in Northern California and two in Southern California).

All lease agreements or concessions negotiated with alTrans and regional authority to be subject to approval by state legislature. Additionally, lease agreements or concessions will establish specific toll rates. Existing free (general purpose) lanes cannot be converted to tolled facilities. Another anomaly of the law is that truck only toll lanes and passenger high occupancy toll lanes are both authorized in one clause but another clause states that tolls cannot be charged on vehicles with less than three axle vehicles.



Colorado

Statute: Title 43-3-202 to 43-3-322

The statutes authorize CDOT to enter into 3Ps for the development of new turnpikes, plus the modernization and improvement of existing turnpikes. These statutes provide for both public and private ownership of turnpikes, while allowing 3Ps to be used under both scenarios. While the statute does not explicitly address procurement process, language within statute does suggest both solicited and unsolicited proposals. In 1999 the legislature passed legislation requiring CDOT to solicit proposals for the conversion of HOV lanes into HOT lanes. CDOT is currently implementing the conversion of HOV lanes on I-25 north of Denver to HOT lanes under a FHWA Value Pricing Grant. This work is being undertaken by the Colorado Tolling Enterprise.

Colorado Tolling Enterprise is the entity established within CDOT by the State Legislature to develop, implement, and administer a statewide toll network in 2002. CTE has broad powers to design, build, finance, and operate toll facilities within Colorado, including the explicit authority to pursue 3P projects pursuant to the 1995 Public Private Initiatives Act, and its expressed authority to be the sponsoring entity for non-profit corporations wishing to issue debt to finance 3Ps.



Delaware

Statute: Title 2; Chapter 20

Amended in 2003, this amendment authorizes DeIDOT to accept both solicited and unsolicited proposals for 3P projects for new and existing transportation facilities. The new legislation establishes a Public-Private Initiatives Program Revolving Loan Fund that can either lend money directly to a project for authorized purposes, including to study feasibility, and to provide guarantees for project bonds.



Statute: Section 334.30

Passed in early 1990s, this statute authorizes FDOT to accept both solicited and unsolicited proposals. As originally passed, this statute required separate legislative approval for each project. In 2004, the statutes were amended to eliminate the requirement for legislative approval of each project. 3P authority was also extended to the State's various toll authorities. At the time of passage, it was thought that this requirement would prove to be prohibitive and that the private sector would not pursue 3P projects in Florida. It is not clear whether this has subsequently held true since a number of small toll authorities have been created by the legislature since the passage of this statute.



Statute: Code Sections 32-2-78 through 32-2-80

Passed in 2003, this statute authorizes GDOT to accept only unsolicited 3P applications. Guidelines were adopted on November 30, 2003. The statutes were subsequently amended to address procedural deficiencies in the initial legislation. These changes included a provision for a letter of intent to negotiate, extended periods for competing proposals, and a more defined approval process.

Amendments in 2005 also included the ability of GDOT to solicit for private sector proposals, the creation of a 63-20 corporation, and specifications on the confidentiality of private proposals.



Statute: IC 8-15.5 through IC 8-15-2-17.2(a)(10)

HB 1008 became law in March 2006, amending the current laws concerning toll roads and tollways and adding new provisions to authorize the Indiana Finance Authority to enter into public-private agreements with private entities concerning toll road projects; and INDOT to enter into agreements with operators concerning tollway projects, roads, and bridges.

The new law also imposes certain conditions on the ability of the authority to enter into a public-private agreement after August 1, 2006, if the agreement would authorize the imposition of tolls. Public-private agreement may concern any combination of the planning, acquisition, construction, improvement, extension, operation, repair, maintenance, and financing of projects. Public-private agreements are subject to the approval of the governor after review by the budget committee.



Louisiana

Statute: RS 48:2037 and RS 48:2067

Authorizes private entities to own, design, finance, construct, maintain, and operate tollways as well as creates the Louisiana Transportation Authority, which can enter into contracts with public and private entities to do the same.



Maryland

Statute: Title 11, Subtitle 7, Chapter 6

The state's Transportation Public Private Partnership Program authorizes the Maryland Transportation Authority to enter into agreements with private entities to acquire, finance, construct, or operate a new transportation facility, or complete a rehabilitation or expansion of an existing transportation facility. Roads and bridges are not included in the statutory definition of transportation facility; the program is only applicable to ports, airports, railroads, and transit facilities. Maryland statutes give MdTA broad powers to execute its duties, which could be interpreted to provide tacit authority to enter into 3Ps.



Massachusetts

Statute: Chapter 53; Section 6

This legislation authorizes a design/build/finance/maintain project for the expansion of Route 3 North from Worcester to the New Hampshire line. The statute prohibits the use of tolls. The project is a sale/leaseback with the Commonwealth. Awarded to a Modern Continental/URS team, the NTP was issued on August 17, 2000 with a 42-month schedule. Initially established as project specific legislation, the statute required the MassHighways to report to the legislature about procurement effectiveness and recommend extending the process to other projects.



Minnesota

Statute: Chapter 160.84 to 160.93

The statute authorizes MnDOT, county boards, and town boards to enter into 3P agreements with public entities. However the DOT Commissioner has to approve the final agreement. Prior to the execution of a development project, every governing body through which the proposed project passes has 30 days to veto the project. Three proposals were submitted in the 1990s. None were successful due to the local veto. Within last two years, new section 160.93 was added authorizing HOT lanes.

On December 1, 2003 a team of Ames Construction, Wilbur Smith, and Cofiroute was awarded a HOT lanes project on I-394 in the Minneapolis area.



Statute: [Chapter 238; Section 238.300 through 238.367](#); [Chapter 227.600 through 227.669](#)

These statutes allow three or more natural persons who are registered voters within the state to submit proposals for the creation of a non-profit transportation corporation to the Highway and Transportation Commission. These are project specific corporations and appear to require a detailed plan for the project. It is believed that a couple of 3P projects have been done under this statute, most notably the Lake of the Ozarks Toll Bridge. Interestingly, there does not appear to be a mechanism within the law for competing proposals. Any private entity may propose a partnership agreement to finance, develop and/or operate a toll bridge to connect the City of St. Louis with the state of Illinois. The Missouri Highways and Transportation Commission has the authority to approve such an agreement upon a competitive procurement process using criteria including the potential private partner's preliminary estimate of project cost and its financing plan and the proposed plans for developing and/or operating the project.



Statute: [NRS Chapter 338 and Section 408](#)

These two sections authorize the submittal of proposals for transportation facilities to a "public body" (Section 338) or to NDOT (Section 408). Transportation facilities are defined as "... a road, railroad, bridge, tunnel, overpass, airport, mass transit facility, parking facility..." Both statutes explicitly exclude toll bridges and toll roads from the definition of transportation facilities.

These statutes were passed last session and appear to be targeted for mass transit facilities.



Statute: [Chapter 27.1D-1 to 27.1D-9](#)

Originally passed in 1997, this statute authorizes NJDOT to solicit seven transportation projects to act as "demonstration" projects within the first five years after the legislation's enactment.

This statute does not authorize unsolicited proposals. To date, it appears that no projects have been undertaken pursuant to this authorization. It also appears that though the statute is still on the books, it may be ineffective since the five year period for the demonstration projects has expired.



North Carolina

Statute: Article 6H; Sections 136-89.180 to 136-89.197

Legislation creating the North Carolina Turnpike Authority was passed in 2002. The Authority has the ability to construct and operate up to three turnpike projects. In addition, the Authority can undertake preliminary engineering on an additional three projects, but cannot move to design and construction without further legislative authority.

The language concerning 3P is somewhat ambiguous. It authorizes the Authority to enter into partnership agreements with public subdivisions and private entities, however, the language may restrict these agreements to financing only.



Oregon

Statute: ORS 367.015 and 367.060

Legislation was passed in 2003 creating the Oregon Innovative Partnerships Program. Under this legislation, ODOT can either solicit or accept unsolicited proposals for transportation projects from private entities. In addition, the legislation created the State Transportation Enterprise Fund to act as a revolving fund to assist in financing 3Ps.

The legislation also authorizes use of the Oregon Transportation Infrastructure Fund to provide guarantees for 3P projects. ODOT drafted rules in late 2004.



South Carolina

Statute: Section 57-3-200

This one paragraph section authorizes SCDOT to enter into 3P agreements with public and private entities. This section does not allow for unsolicited proposals. To date two projects have been done pursuant to this statute - the Conway Bypass and the Southern Connector.



Texas

Statute: Multiple

First proposed in 2001 by Governor Perry, the TransTexas Corridor Plan involves the creation of 1,200 foot wide transportation corridors with limited access roadways, both passenger and freight high-speed rails, commuter rail, and a dedicated utility zone. The plan encompasses approximately 4,000 miles and is estimated to cost between \$145 and \$183 billion over the next 20 plus years. The plan designates four priority corridors.

In 2003 the state legislature passed omnibus legislation to facilitate the implementation of the TransTexas Corridor Plan. The implementation plan relies heavily on the private sector for developmental and financing expertise. This mega-legislation provides for solicited and unsolicited proposals to Regional Mobility Authorities, the Texas Turnpike Authority, and the Texas Department of Transportation. The legislation authorizes very broad ranging developmental agreements that provide the private sector with extensive discretion.

In 2005 Texas amended its legislation to provide local entities greater participation in 3P projects. These amendments also allow local entities to utilize gas tax revenues to reduce or eliminate tolls. Also in 2005, HB 2702 added protections for local property owners and ensured that existing toll-free transportation facilities cannot be tolled.



Statute: [Chapter 72-6-118 and 72-2-120; 72-2-201 through 72-2-206](#)

The Utah state statutes authorize the Department of Transportation, with approval of the Transportation Commission, to enter into public-private partnerships for tollway facilities. The department and the commission may accept solicited and unsolicited proposals. The new laws require the department to engage outside counsel and consultants for advice on developing rules and guidelines for public-private partnerships and for evaluating the risks of a tollway development agreement proposal.

Toll rates for 3P projects must be established in the tollway development agreement. Utah DOT must submit reports to the legislature on the status and progress of 3P tollways.



Statute: [Title 56-556 through 56-575 and 33.1-664](#)

Since its passage in 1996, Virginia's PPTA has fostered the most successful 3P program in the country. The PPTA has also served as the model for other 3P legislation around the country. Amendments passed in 2005 incorporate three significant concepts. The introduction of an Interim Agreement includes the recognition of the role of a developer in the 3P process. To date statutes have been written specifically requiring the private sector to acquire, design, construct, finance, and operate a proposed project. While these are integral parts of a 3P, it is by no means a comprehensive list of tasks. The use of the umbrella word "develop" recognizes that the 3P process is a much greater effort and that codification of a complete list of required tasks is impractical. The third major concept is the acknowledgement that the process of developing a 3P project has value and the private sector needs to be compensated for its efforts when 3P projects are successful. Virginia authorizes the payment of a "reasonable development fee" for the private sector's risk in moving a project forward.

Under the authority of a multi-state "Compact Commission," the Commonwealth may enter into agreements with a private entity to fix, revise, and collect a schedule of toll rates to provide for the design, acquisition, construction, reconstruction, operation, and maintenance of any Interstate project undertaken by the signatory states. This law was passed primarily for the purpose of tolling planned

expansions to I-95 in Virginia and North Carolina, but the law does not place limitations on the location of other possible public private partnership projects.



Washington

Statute: RCW 47.46.010 to RCW 47.46.900

Passed in 1993, this authorized WsDOT to solicit 3P proposals for up to six projects. Six projects were awarded. Subsequent legislative actions created a cumbersome public approval or advisory process that resulted in five of the projects being withdrawn. The remaining project, Bechtel's Tacoma Narrows Bridge Project, was issued on September 25, 2002.

In 2005, Washington passed three pieces of 3P legislation. HB 1864 amends the existing 3P statutes to require citizens review committees to consider such items as a) discounts for frequent users, electronic transponder users, senior citizens, and students; b) lowering tolls versus early debt retirement; and c) variable pricing. HB 1179 authorizes WsDOT to undertake a high- occupancy toll lane project on SR 167. Though the HOT lanes will not be done as a 3P, it will open the door for other potential HOT lane projects within the state.

The most significant piece of 3P legislation passed by Washington in 2005 is HB 1541, which creates the Transportation Innovative Partnerships Program. It is designed to replace the existing statute once the Tacoma-Narrows Bridge is completed. The changes adopted under this new act include making the Transportation Commission the lead entity for 3Ps, authorizing the acceptance of unsolicited proposals, allowing the state to participate financially in 3Ps, and greatly streamlining 3Ps public participation requirements.



Wisconsin

Statute: Section 84.01(30)

1997 statute authorizes the use of build-operate-lease or transfer agreements for transportation projects. Does not authorize tolls, nor does it authorize unsolicited proposals. To date no projects have been initiated pursuant to this statute.