

“Road Pricing, Tolling, Mega-Projects, and other Multi-Modal Opportunities: Strategically Positioning Public Transportation”

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Executive Summary

The rise of various forms of road pricing as techniques for transportation finance prompted this study to understand how these arrangements work and how public transportation can be integrated as part of a multi-modal approach.

Private sector investments in public surface transportation to provide increased capacity, manage congestion and/or simply to raise cash for public entities are a new reality that the public sector must address. Compared with prior laws, the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) gave broader flexibility to the states in determining how toll revenues can be applied in federally assisted capital projects, allowing the states the use of such revenues for both transit operating and capital purposed (both Title 23 and Title 49 projects are eligible). Increasingly, states are allowed to look to tolling as a way to address needs for transportation infrastructure, services, and overall system capacity.

The Bush administration has promoted increased use of private financing for transportation and is structuring policies and regulations to enhance private sector investment opportunities. Meanwhile, with an eye toward “public interest” considerations, Congressional leaders in transportation are expressing serious concerns about the extent and types of private sector activities in surface transportation investments. Many states are exploring private investments as they wrestle with the lack of public funding and the increasing demands from the public to address congestion and improve local mobility.

The positive revenue streams available through certain toll-road projects, and the absence of any comparable cash flow stream through transit, the attention of private sector investors has been on highways. The transit industry needs to understand the scope of this financial crisis; how it will affect transit systems and businesses, how public and private agencies are approaching this crisis, and how decision making is approached from the private sector perspective. The American Public Transportation Association (APTA) then needs to position transit systems to be ready to take advantage of new opportunities while being aware of the limitations of private investments in surface transportation. Finally, APTA needs to be in a position to help shape federal initiatives in ways that will be most beneficial to transit.

This report analyzes the issues, opportunities and limitations of current proposals and projects that either eliminate or ignore transit from being included in potential opportunities. It also suggests how APTA and its members should address emerging public-private investment in highways in order to benefit from those investments.

In addressing public-private investments transit needs to aggressively respond to at least seven key issues that are limiting transit's participation in Public-Private Partnership (P3) opportunities. The private sector and many departments of transportation (DOTs) don't understand or appreciate transit's enhancement value (energy conservation, air quality and better productivity of existing and new highway assists) to their toll or managed lane congestion/new capacity solutions. One of the essential efforts for the transit community is to demonstrate how transit adds value to their deals.

The following are the seven issues transit needs to address in P3 or toll/managed proposals to DOT:

A. Private investments may seek to limit public transportation alternatives to protect private investments from competition. This is primarily done through non-compete provisions in contracts between the private sector and the public sector. For example, Virginia Department of Transportation (VDOT) has agreed in the Pocahontas project not to provide any "transportation facility¹" that would compete with the new toll road. The agreement is for 80 years. If VDOT does provide or invests in a competing "transportation facility," then VDOT must make up the lost revenues to the private sector. The use of "transportation facility" is directed at transit and highway new investments. This means that a new competing light rail line could be opposed by VDOT because it could be viewed as a competing "transportation facility" to the Pocahontas tollway.

Transit Response: First, examine the proposals to find out if transit is included in the non-compete language. Educate the legislature, DOT and toll authorities that transit should not be included in the non-compete provisions. Point out that the transit needs today are likely to be very different in 20 to 80 years from now; and a corridor that lacks density for transit today could easily have the necessary density tomorrow. Work with Congress and the Federal Transit Administration (FTA) to bar the use of federal funds in a P3 highway investment that includes transit in a non-compete provision.

B. Key incentives for the private sector in toll and high occupancy toll (HOT)/managed lane projects are to maximize the number of single occupant vehicles (SOVs) within specific service performance guarantees. As entrepreneurs, private sector tolling interests are not likely view public transportation as being in their interest (except when transit contributes favorably to public/political acceptance for the project). The private sector motivation is to encourage as many vehicles as possible to the facility, and to minimize any competition. Bus transit, toll free or not, occupies between three and four car lengths of highway capacity that could be used by paying SOVs. In new Greenfield toll road project commuter rail in the corridor could be considered a major competitor to toll paying customers. For HOT/managed lanes transit and high occupancy vehicle (HOV3) activities providing time savings to transit riders who are not paying the full share of time value is antithetical to the concept of HOT/managed lanes.² The

¹ Most non-compete language is to prevent a new General Purpose lane or a new non-tolled highway. The use of "transportation facility" includes a transit facility in the same corridor.

² If auto demand continues to grow beyond the capacity of HOT Lanes or toll roads providing sufficient congestion relief, then the transit competition is not an issue. This can be a serious concern in the early years of a project for bond rating firms.

problems with transit are compounded if transit travels free of charge. Thus, the private sector will be inclined to see transit as a nuisance, i.e., taking potential toll-paying vehicles away, as decreasing highway capacity for potential paying customers, as a protected activity that will be prescribed to travel at no charge yet receive travel time benefits yet provide no revenues to investors.

Transit Response: Transit should travel freely for the public good. Toll and HOT/managed lanes require environmental analysis. Transit provides value to the project both in air quality and in energy benefits to the environmental analysis that could make the highway investment possible. Transit also helps projects achieve corridor mobility objectives and helps mitigate social equity and political concerns by providing persons an alternative to the increased costs imposed regressively through road tolls. Transit can also improve the productivity of the capital investment. Transit properties with the metropolitan planning organizations (MPOs) should also require a passenger miles traveled performance measure in any toll or HOT/managed lane deal in which public funds are invested.

For HOT/managed lanes, transit provides capacity for SOVs. For example, the new HOT Lanes for Virginia's Capital Beltway (I-495) provide new capacity for around 1700 vehicles. However, to insure that the roadway provides a guaranteed 45 miles per hour flow, the capacity must be constrained to 1500 vehicles. Price is one tool to maintain the capacity not exceeding 1500 vehicles. Too high a price could generate a backlash from users and public officials. Transit can help reduce corridor SOV demand by providing superior transit service at a reasonable price with significant time-savings.

C. Key federal policies, laws and regulations limit transit's ability to effectively participate in private sector highway investments. Currently transit investments are not eligible for private activity bonds (PABs). PABs allow the private sector to issue tax exempt debt on P3 investments. The exclusion of transit from PABs means that the inclusion of transit elements, e.g. a fixed guideway in a new toll road, is not eligible for tax exempt financing and thereby increases the cost of including transit in the project proposal. Transit new start investments are also treated differently than highway investments in the need for alternative analyses, cost benefit analyses, less federal participation (transit's 50/50 versus highway's 80/20), funding tied to federal appropriations from the US General Fund versus highways' contract authority from the Highway Trust Fund. These add up to a federal process that habitually makes transit projects take longer, cost more, remain uncertain about the amount and timing of funding and thereby less competitive than highway investments. For these reasons the inclusion of transit in P3 deals are more risky and more difficult.

Transit Response: Transit projects must be eligible for PABs. This could be achieved in the "Technical Corrections" bill working through Congress now. The reauthorization of SAFETEA-LU should provide a level playing field for transit and highway projects, so that transportation decisions are based on what is the best mobility investment and not what is easiest to do.

D. In most cases, transit will not be asked by the private sector to be part of P3 deals. The time lines on these deals are between 50 and 99 years. Over that timeframe it cannot be foreseen how these transportation corridors will evolve or what the public mobility needs in these corridors

will be in these time frames. Some of these projects will be Corridors of National Significance. These projects are Greenfield projects and transit isn't specifically viewed as an element in these corridors.

Transit Response: If transit brings value to the deal objectives, then there needs to be role for transit in the overall project. Transit must work with public officials to insure that P3 laws require transit options in all proposals and deals, including projects of National Significance. The P3 laws should also require highway productivity performance measures, like passenger miles traveled, to insure the best utilization of the public's investment in new toll facilities. Texas' Trans Texas Corridor can provide a model for including transit in new toll roads. Much of the Trans Texas Corridor has no transit value now, but could easily require transit solutions in the future. Consequently, the project should provide right-of-way (ROW) that includes the opportunity for transit in the future. The failure to provide for the ROW will make the difference in being able to provide transit services in the future. Once the toll road is open, development over time will make the ROW too expensive politically and financially to purchase or condemn for transit purposes.

E. During deal negotiations the private sector knows what it wants to achieve and brings to the negotiations well paid lawyers, financial advisors, bankers, transportation consultants and sometimes experience in managing and creating transportation facilities. In contrast, the public sector relies on its own people, consultants, and, advice from a variety of other public officials not specifically part of the deal negotiations. The negotiating table is not necessarily level for the public sector.

Transit Response: Transit needs to work with their respective MPOs, DOTs and governors' offices early to identify possible deals and determine ahead of time what the public sector wants to achieve from any deal, what they are willing to negotiate on and what is immutable. The earlier this is done, the greater opportunity to investigate how to position the public sector by bringing in other public individuals- such as Treasury staff to assist the transportation players.

F. Private sector partners view operating, demographic and performance data about their facility as proprietary. They do not share proprietary data unless they are required to in the initial contract. This could be a significant problem for future public decisions in a corridor. For example, the Virginia DOT (VDOT) is having considerable difficulty extracting hourly data from the Dulles Greenway. Virginia is seeking to extend Metro to the Dulles Airport. Hourly and other information is required to make the best public decisions. The Greenway is only responsible for providing daily vehicle information. They have the hourly information, and they are refusing to provide it.

Transit Response: Work with the governor, legislature, MPOs and other public transportation players to insure that all planning and performance data are available at no cost to the public transportation entities in any P3 law.

G. Private investments in the form of P3s, concessions and HOT/managed lanes are not a panacea to transit's new revenue requirements.

Transit Response: P3 opportunities can provide transit with opportunities, but transit properties need to understand how the private sector makes these types of decisions and how transit, working with other public entities, can maximize the public benefits in these deals. Transit must work with their public partners to craft P3 laws to leverage transit opportunities and remove state and local barriers. Transit must work with Congress and the FTA to eliminate or at least minimize the federal legal hurdles preventing transit from being a full partner at the table.

HOT/managed lanes provide transit with an excellent opportunity for significant Bus Rapid Transit (BRT) at no cost to transit. Viewing HOT/managed lanes as BRT providers means that transit users can receive real time savings and takes buses out of the general purpose lanes, thereby making bus travel more attractive to commuters. Transit needs to work with the private sector and their DOTs to preserve HOT/managed lane or toll road time-savings at exits and mergers with other roadway connections. Including transit in the design elements of the projects and/or inserting time performance measures in the contracts with the private sector can do this.

H. Corridors of National Significance: Language in the House SAFETEA-LU bill specifically and in the Senate, by inference to freight, view Projects of National and Regional significance as primarily highways of freight intermodal projects.³ The NATIONAL CORRIDOR INFRASTRUCTURE IMPROVEMENT PROGRAM (section 1302) supplements Corridors of

³House Bill Sec. 1301.

This section directs the Secretary to establish and implement a program to allocate funding to States for highway construction projects in corridors of national significance. A State must submit applications to the Secretary for funds.

The Secretary shall give priority to corridor projects that are part of, or will be designated as part of, the Dwight D. Eisenhower National System of Interstate and Defense highways and to any project that will be complete in five years. The Secretary shall consider such factors as mobility, economic growth, linking two existing segments of Interstate, commercial vehicle traffic due to NAFTA, reduction of travel time, value of the cargo traveling through the corridor, economic costs, and the financing associated with the project.

*Senate Bill
Sec. 1809.*

The program supports and encourages multistate transportation planning and facilitates both project development and decision-making for multistate corridors. State transportation departments or metropolitan planning organizations may receive and administer the funds provided under this section for multistate highway and multimodal planning studies and construction.

Freight demand is forecasted to increase significantly in the coming years. The committee's goal is to meet this growing demand by improving highways and intermodal connections in the nation's key corridors. Funds provided by the Corridor Program should supplement other public and private funding to support strategic improvements, expanding both capacity and efficiency.

The Secretary shall select studies and projects to be carried out under this program based on: (1) the existence and significance of binding agreements; (2) the endorsement of the study or project by elected representative; (3) prospects for early completion; and, (4) whether the study or project was listed in 1105(c) of ISTEA.

The committee expects that the Secretary will encourage States and other jurisdictions to work together and shall give priority to projects that increase mobility, freight productivity, access to marine or inland ports, safety and security, and reliability.

Conference Substitute

The Conference agrees to continue this program as current law with a modification for the funding to be as such sums as necessary out of the General Fund.

national significance and provides the contract authorization and funding for the projects of national significance. The 1302 program gives priority to the Interstate system improvements or expansions. These programs provide contract authority and 80% federal funding.

Transit Response: There are opportunities for the Corridors of National Significance program to be used for multi-modal purposes, as is being done for the CREATE rail facilities project in Chicago. Mega-projects of that magnitude are likely to include multi-modal elements. Texas' Trans Texas Corridor and Denver's T-Rex project are other examples. Beyond this, the transit community should seek to develop a new starts program in the Federal Railroad Administration (FRA) for intercity passenger corridors of national significance. The identification of high speed rail corridors already exists. These corridors rival the highway corridors of national significance and support regional alternatives to highway and rail corridors. The high speed rail corridors provide alternatives to regional auto and aviation congestion, as well as providing more energy and air quality solutions to building new highway or air space capacity. The carbon footprint of a typical short haul air flight from San Francisco to Los Angeles is .478 pounds of carbon per passenger mile, in an air corridor the FAA has already concluded can not absorb additional utilization in 2020. In contrast, a passenger traveling by high speed rail in the corridor has a .275 pounds of carbon per passenger mile. This is a serious carbon reduction.

Furthermore, high speed rail corridors provide additional capacity in corridors such as I-95, that if better utilized will reduce the demand for the very expensive new highway capacity needed to address congestion. High speed rail corridors connect our major urban centers and if integrated with common rail stations provide an integrated transit connection to travel.

The new intercity corridors could be created to have the same advantages as highway projects, such as contract authority, tax credit bonds that the highway program would have.

Introduction

The U.S. transportation system is facing a looming financial crisis that will significantly impact transit investments. In preparation for this crisis, federal, state and local governments are investigating a wide range of funding alternatives. APTA needs to understand the scope of this financial crisis and how public and private agencies are approaching the problem. After this understanding, APTA should then position transit systems in order to be ready to take advantage of new opportunities.

The objective of this analysis is to position transit systems to participate in the revenue streams from High Occupancy Toll Lanes (HOT/managed lanes), toll roads, concessions, congestion pricing and/or Public Private Partnerships (P3s). The analysis will also provide APTA and its members with ideas and strategies to:

- Understand private sector decision-making factors for P3s or private transportation facilities, in order for transit to be more successful in participating in P3, toll road or concessions;
- Enhance transit opportunities to participate in public policy shifts to allow for toll roads, concessions, HOT/managed lanes⁴, cordon fees⁵ and congestion pricing⁶ from a policy/legislative perspective. Establish policies and laws that require transit options and opportunities in proposals use non-traditional transportation financing mechanisms;
- Assist transit properties to identify opportunities to structure P3 agreements to increase transit usage and defray the cost of transit in corridors;
- Determine if there are overall revenue sharing opportunities for transit;
- Assist APTA in crafting related federal/state legislative strategies; and,
- Examine opportunities for transit to participate in federal transportation program efforts such as projects of National Significance and better participate in existing federal highway programs.

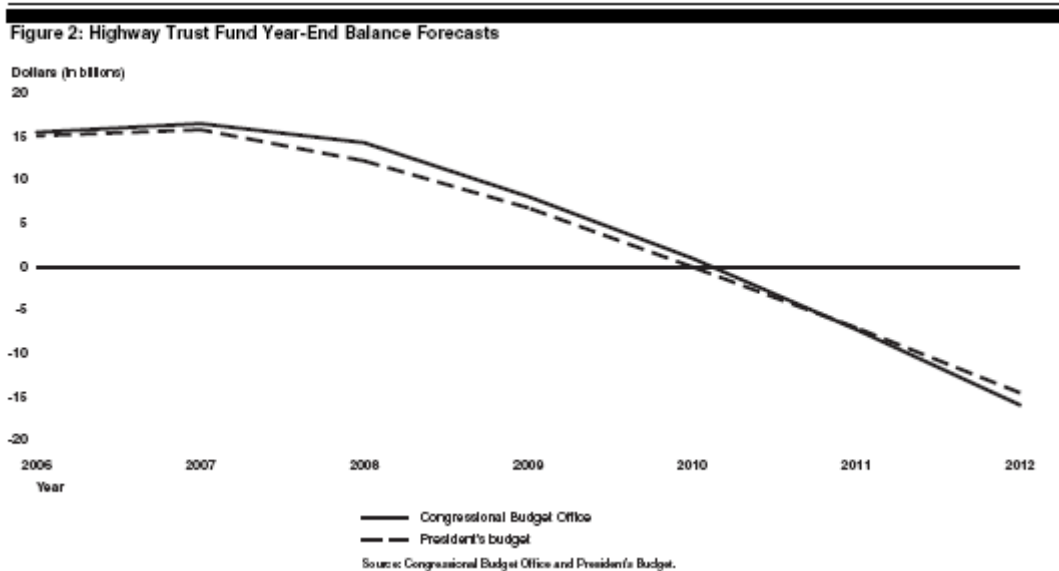
⁴ CA SR 91 was the first HOT/Managed lane toll facility in the United States. It is the first fully automated toll facility in the U.S. and it was the first American project to operate high occupancy toll (HOT) lanes. The 10-mile facility was opened to traffic in December 1995 at a cost of \$135 million. CA SR-91 was sold to the Orange County Transportation Authority (OCTA) in 2003 for \$207.5 million.

⁵ Cordon tolls are fees paid by motorists to drive in a particular area, usually a city center. For example: since February 2003, the city of **London** charged a £5 daily fee for driving private vehicles into an eight square mile central area during weekdays as a way to reduce traffic congestion and raise revenues for transit improvements. While initially controversial, the effort has worked well and is expanding. In January 2006 the city of **Stockholm, Sweden**, began charging vehicles entering the inner city area on weekdays between 6:30 a.m. and 6:30 p.m. between \$1.27 to \$2.54) per trip, with a maximum daily charge of \$8.00. **Norway**'s three major urban centers: Trondheim, Oslo, and Bergen have initiated cordon pricing or "toll rings" around downtown areas. Norway revenues are being used for, public transit, road infrastructure and pedestrian and bicycle facilities.

⁶ Congestion/Value Pricing refers to variable road tolls (higher prices under congested conditions and lower prices at less congested times and locations) intended to reduce peak-period traffic.

Financial Crisis

The U.S. transportation financial crisis is real and will heavily impact public transit investments. The Brookings Institution places the long-term federal budget deficit at nearly 11 percent of Gross Domestic Product (GDP) over the next 75 years. Eliminating this deficit is estimated to require either a 43 percent reduction in federal spending or a 45 percent increase in tax revenues.⁷ According to the GAO, the current Highway Trust Fund will be negative by FY 2011.



The Highway Account becomes negative in federal fiscal year (FFY) 2009 and the Transit Account in FFY 2011. With approximately 81% of the Highway Trust Funds' revenues coming from federal motor fuel taxes and the expected declines of those revenues from increased fuel efficiency and alternative fuels and transportation modes, a significant increase in new revenues will be needed simply to stay even.⁸

This means that the transportation community should not assume the next federal transportation reauthorization will take the lead in funding transportation, regardless of transportation's importance to the future economic growth of the nation or state and local governments. Indeed, in attempts to prop up the federal Highway Account to make it through September 30, 2009, the federal government is keeping flexed highway funds to transit that are intended to go into the Transit Account. Flexed transit account funds remain in the Highway Account. This allows the flexed transit funds to appear on the Highway Account books and promote the sense of

⁷ Gale, William G. and Peter R. Orszag. "New Estimates of the Budget Outlook," *The Brookings Institution*, February 2006. The GAO 2007 Report "Fiscal Stewardship: A Critical Challenge Facing Our Nation," concludes that the national "fiscal gap... Would require an immediate and permanent increase in federal tax revenues of more than 40% or the equivalent reduction of federal program spending." Page 19

⁸ The expectation that significant new revenues will be forthcoming in the next two years is highly unlikely due to the presidential and congressional elections next year and the considerable public opposition new or increased taxes.

solventy.⁹ The President's Budget is expected to request a transfer of \$3.5 billion from the Transit Account to the Highway Account for federal fiscal year 2009.

The federal financial crisis also means that in the future states and local governments will be required to finance many of the new transportation capacity projects, particularly congestion relief projects. At the same time, state and local governments are struggling to maintain their current transportation infrastructure while coping with increasing congestion on the existing network. Communities are finding that population growth and congestion negatively affect their economic vitality and competitiveness while the public is increasingly frustrated and hostile with the inability of government to resolve their problems.

Congestion and limited public resources are driving the public sector's financial conversation about alternative funding. States are looking at toll roads, long-term lease of transportation/highway assets and HOT lanes/managed lanes to supplement declining federal dollars and diminishing state fuel tax revenues. They are also seeking to harness new finance and funding resources from the private sector, through public-private partnerships (P3) and to better and more efficiently manage project and maintenance costs. The tremendous changes and number of transactions in the U.S. P3 sector in the last 18 months have radically transformed the P3 and HOT/managed lane debate and have raised fundamental questions.

Understanding risks and impacts on negotiations of any new financial arrangement are important for APTA and the transit industry, as they seek to participate in emerging deals. For example, the Chicago Skyway, Indiana Tollway and Texas' SH 121 deals have raised a number of P3 issues including adequate asset valuation; appropriateness of P3s for brownfield (existing) and greenfield (new) infrastructure; public conflicts between pro-P3 mayors and governors and their anti-P3 DOTs; public spending of concession proceeds; length of agreements; and increased local opposition to large national or international firms controlling state transportation assets. The deals have also increased the debate on transparency and focused public discussion on risk and the ability of the public sector to negotiate a deal.¹⁰ These and other issues increase project risks and their effect on the deal's structure.

APTA Response:

Faced with these emerging financial conditions and responses, APTA seeks to evaluate how its members and transit to be part these new dynamic financing strategies for transportation project, i.e., P3s, concessions, toll roads and managed lanes.

⁹ This has positive benefits for the transit projects financed from the Highway Account. The Account the federal funds are in drives the regulations and rules governing the funds. Consequently the highway rules/laws that don't have the added restrictions that FTA imposes, such as cost benefit analysis apply for the transit projects.

¹⁰ Virginia's P3 authorizing legislation prohibits the disclosure of the details of the deal until after the authorization of the deal. This is not uncommon with unsolicited proposals. Virginia DOT allows proposers to submit unsolicited proposals on transportation investments the private sector believes will help the Virginia transportation system. In order to protect unique and proprietary ideas and technology these ideas are protected throughout the negotiations between the public and private parties.

Historically, transit's participation in toll revenues has been limited. The participation was often restricted to strategies that sought free transit access to toll roads, creating exclusive bus lanes to tunnels and/or creating park and ride opportunities on toll roads. These strategies have worked reasonably well for transit, but only a limited number have allowed transit to directly participate in toll revenues or made transit operators a part of structuring the deal. An exception to the rule is the San Francisco region's passage of increased bridge tolls on the seven state-owned bridges to support the region's "Traffic Relief Plan" by permitting and encouraging increased toll revenues for such projects as expanding transit options, as well as improving transit connections and regional bottlenecks.

There are, however, a number of public sector arrangements where toll revenues have been made available to support transit when the toll operators have been public entities or quasi public authorities. In San Diego, the Inland Breeze express bus service is supported through a portion of toll revenues generated from the I-15 value priced HOT lanes. In Virginia, a substantial portion of the Metrorial Dulles corridor extension is to be financed through toll proceeds. In Minneapolis, MnPASS HOT lanes intend to use toll revenues for transit whenever revenues from the recently-opened project exceed costs. Further, toll facilities and transit have worked hand in hand for many years. New York City, San Francisco, Philadelphia, and other cities recognized long ago that the performance of toll bridges in heavily traveled corridors depends on some of the trip volume being picked up by transit programs operating in the same corridors.

Opportunities exist for transit to participate in toll or congestion pricing revenues as funding for transit infrastructure on the toll road; direct revenues for transit-profit sharing; and, transit cost offsets. Each of these opportunities has its own barriers and requires a different strategy for success. Additionally, there are opportunities for transit to be principals at the negotiating table, advisors to governors/mayors and joint venture partners with states and DOTs. Understanding the forces driving decisions should position transit to be part of the negotiations. Tolls, congestion pricing, HOT/managed lanes, P3s and/or concessions are an important part of a negotiation process.

Transit systems also need to determine how they want to participate in projects and potential revenue opportunities – i.e., how to be in the driver's seat. This analysis discusses various ways transit can participate in this new policy and revenue world and how to overcome barriers that restrict participation. The analysis will suggest opportunities for transit to participate in the projects of "National Significance" program. The analysis will also provide several templates for transit systems to participate in discussions with state and local governments contemplating the use of tolls, congestion pricing, HOT/managed lanes, P3s and/or concessions.

P3 Decision Making Factors

The literature on decision factors in P3s is extensive. Further, the author has conducted extensive interviews with public sector officials, banks, investment firms and contractors. The two major decision factors that emerge are *risk and return*. Certainty of project costs, revenues, returns and timing dominate private sector concerns in public sector infrastructure investments. Uncertainty will either kill a project or it will require considerable financial offsets to the private

sector to mitigate the risks created by uncertainty. The financial risks are real: the costs to undertake new highway and transit capacity projects, even toll roads, are exceedingly expensive. Publicly acceptable toll rates or fares may be insufficient in the short run for financing the toll road or new transit capacity/enhancements.

Risk

For all parties, the partnership issues center on the question of risk: What are the underlying costs, benefits, and consequences of moving to a P3? What risk does this pose to the public? What risks are transferred to the provider? Which risks remain as inherently governmental?

US DOT's 2004 *Report To Congress On Public-Private Partnerships* analyzed "Private-Sector Concerns" and impediments to P3s. The report listed four private sector concerns: financial viability, land acquisition, environmental expertise and tort liability.¹¹ The context of these concerns centered on highways, but they do have transit ramifications as well. Transit needs to understand these concerns and how they will affect plans for the future.

- **Financial Viability** - this is a primary focus. Can the project finance provide a reasonable return rate? To achieve a reasonable rate of return requires control of project costs, low and accessible borrowing costs, reasonable fare/toll rates and manageable capital maintenance and operating costs. The costs of toll road construction are escalating. Highway construction material costs (steel, concrete, asphalt, etc.) increased by 65% in the last three years¹² with some materials costs such as steel increasing by 200-300% percent. On the highway side the ability to insure financial viability for many new capacity projects – referred to as "Greenfields"¹³ -- underlie some of the requests to seek 50 or 75 year agreements, as seen in the Texas SH 121 and Virginia Capital Beltway Hot Lane proposal.

Transit Impacts: The more costly the highway project becomes the more resistant the highway and private side will be to any perceived increases in costs by adding transit investments to the project. Even if it takes 50–75 years to reach a rate of return sufficient to investors, there will still be resistance, even to mid-term transit investments. However, a 50-75-99 year facility lease to the private sector is a long time subject to considerable changes in markets and transportation usage.

- **Land Acquisition** – this is "critical to the development of a highway project."¹⁴ The volatility of prices and the ability of the private sector to pull together all of the parcels at market rates is a major concern. The private sector does not have "eminent domain" powers. The recent Supreme Court New London, Connecticut decision upholding the public sector use of eminent domain has sparked considerable legislative efforts in many

¹¹ US DOT's 2004 *Report To Congress On Public-Private Partnership*, Page

¹² Oman System State Transportation data from 2003-2006

¹³ "Greenfields" are new highway/transit capacity projects. "Brownfields" are the lease of existing transportation infrastructure.

¹⁴ US DOT's 2004 *Report To Congress On Public-Private Partnerships*, page

states to limit the public use of eminent domain even for infrastructure projects. Given these private sector limitations and the changing legal landscape, making the private sector responsible for the acquisition of real estate is a major risk. Some states such as Virginia expect the private sector to acquire the real estate and if there are problems such as holdouts or extravagant price demands, then the state will step in using their eminent domain powers.

Most of the toll highway projects will seek only the right-of-way they need for the highway activity. Transit activities such as adding a BRT, LRT or commuter will likely require additional right of way. However, the potential for new transit revenues will be from the development of the right of way along the transit or at transit nodes. This will require right of way that is often not eligible for federal funds.

Transit Impacts: First, cost is a critical issue for transit projects as well as for highways. Right-of-Way (ROW) purchased by the private sector could be more expensive and requires increased revenues to offset the additional costs. The second potential impacts adding a fixed route transit facility in the ROW of a toll road is the extra ROW and new design criteria within the ROW needed to accommodate transit. While the cost will be a major concern, acquiring even more real estate in densely populated corridors will be disruptive to the community and may not be politically possible. The third impact is that the use of federal funds for ROW complicates the issue for transit because of its impact on joint development. The railroads built passenger rail in the United States for economic development of the property along the rail ROW that the United States' government had given to them. Federal laws restrict or constrict such development and/or opportunities for joint ventures, today.

The 2004 report clarifies this change from early right-of-way development. "The contractor or builder cannot speculate in the land around the proposed new transit alignment because it may not win the bid. And, even if it took the chance of buying property in advance of making a bid, and the locally selected right-of-way went through the purchased property, the contractor would have to declare this in its bid for the project. Federal grant rules would prevent the contractor from gaining an unfair advantage through prior acquisition of the right-of-way¹⁵." These federal provisions limit P3 opportunities for joint development for transit and highway projects and only benefit the existing owners of the property who receive value from the P3 or public investment. Transit with the state DOTs should consider changing the federal policy for P3 and toll roads.

- **Environmental Expertise** - the early 1990s transportation P3 efforts in states, such as Washington, had the private sector responsible for the environmental reviews of the projects on which they bid. Each P3 project failed primarily because of the inability to complete the public environmental process. The result was the loss of millions of private dollars, aggravated communities and a private sector aversion to the federal environmental process. So consistent is the claim that the environmental process either kills or increases the cost of P3 efforts that it became a major issue in the last two

¹⁵ *Ibid*, page

transportation reauthorizations. Indeed, SAFETEA-LU's¹⁶ SEP-15¹⁷ and Public Private Partnership Pilot Program (Penta-P)¹⁸ are responses to "streamline the environmental process"¹⁹

Transit Impacts: The extra federal environmental processes that would be added to highway projects that have new transit capacity additions are one of the largest hurdles facing transit participation in toll roads, HOT/managed lanes and P3 projects. In contrast to highways, transit is required to undertake an Alternatives Analysis- a pre-EIS and an EIS process. Transit projects are also required to conduct a "cost benefit" analysis, which has often been the "Achilles' heel" in the process. The problem has gotten so bad that congressional supporters of the Dulles Corridor Metrorail Project enacted language in SAFETEA-LU to exempt the project from FTA's "New Starts Cost Allocation Calculator."²⁰ The FTA environmental requirement creates longer time horizons for the environmental process and greater uncertainties about a project's viability, increasing the risk for the private sector. These uncertainties and time impositions are not characteristic of a federal aid highway project. The increased time also creates cost uncertainty for the project.

- **Tort Liability** - the lack of a cap on public liability for accidents and deaths on U.S. roadways does not exist for the private sector. Tort liability remains a significant uncertainty.

¹⁶ **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users**

¹⁷ "SEP-15 is a new experimental process for FHWA to identify, for trial evaluation, new public-private partnership approaches to project delivery. It is anticipated that these new approaches will allow the efficient delivery of transportation projects without impairing FHWA's ability to carry out its stewardship responsibilities to protect both the environment and American taxpayers.

SEP-15 addresses, but is not limited to, four major components of project delivery: contracting compliance with environmental requirements, right-of-way acquisition, and project finance" FHWA's Public Private Partnership website, <http://www.fhwa.dot.gov/ppp/sep15.htm>. This pilot program is now closed as of February 2007

¹⁸ Penta-P refers to FTA's Public Private Partnership Pilot Program Docket No: FTA-2007-23697

¹⁹ Projects aggressively pursuing environmental and public outreach efforts in the front end of the process understand early on the project's environmental risks and the possibilities for mitigation, needed to continue the project to design. The public sector is often the best manager of the environmental and public outreach because it is their citizens and constituents that are involved in the process, and the public sector is the entity the public holds accountable. The major problems for delays in large transportation projects is the fact that the responsible parties are not brought into the process early enough. Both TEA-21 and SEPTTEA-LU have attempted to involve all the potential players early in the process with growing success. Often environmental issues do not cause the delay by the cost and financing of the project. The financial impact of large projects on everything else that could be done in a locality, region or state is difficult to negotiate in a TIP and provides a reason for the movement towards P3s.

²⁰ SAFETEA-LU addressed the cost effectiveness calculation as follows: in Section 5309 from SAFETEA-LU, last section before 5310:

"(f) Adjustments - The adjustments made in the Federal Transit Administrator's Dear Colleague Letter of April 29, 2005, to require a "medium" for the cost-effectiveness rating, in order for fixed guideway projects to be recommended for funding by the Federal Transit Administration, shall not apply to the following:
...(4) Dulles Corridor Metrorail Project - Extension to Wiehle Avenue. "

Transit Impacts: Ironically, transit projects have addressed this better than highways have.

However, there are other equally important risk factors that effect P3, toll, HOT/managed lane consideration. On May 10, 2007, the character of the P3 debate changed and brought forward the "political risk" concern to the forefront in the form of a letter sent to governors, state legislators and state transportation officials from House Transportation and Infrastructure Committee Chairmen James Oberstar and Highway and Transit Subcommittee chairman Rep. Peter DeFazio. They warned the recipients and the transportation industry against "rushing" into public-private partnerships that do not fully protect the public interest. "The Committee will work to undo any state PPP agreements that do not fully protect the public interest and the integrity of the national system." The letter was followed by a June 4 position paper²¹ that articulated both Congressmen's growing concerns about P3 long term leases, "unreasonably high toll rates and excessive profits;" prohibiting non-compete clauses; avoiding excessively long terms of PPP concessions and providing relief from high tolls to low-income drivers. They indicated some value in P3s but in very limited context a "supplement" but not as a "substitute for—public investments in transportation improvements." Representative Oberstar and the Committee are concerned about the public sector giving over policy control, not only for the transportation asset but also within the transportation corridor as a whole.

Reaction was strong and swift. The National Governors' Association (NGA), not known for public comment on individual member's comments, entered the dialogue with a June 15 open letter stating: "Fiscal pressures confronting the nation's transportation system have prompted governors to look beyond traditional funding mechanisms such as bonding and state tolling to help finance and deliver on transportation." The letter refers to congestion and transportation cost escalations in excess of public funds as primary contributors to the search for non-traditional funding. The letter concluded: "While some governors may choose not to partner with the private sector...we are concerned that your position on PPP agreements may have already hardened against them, which could make it more difficult for states to use this tool for transportation improvements."

The discussion of this issue will continue into the reauthorization of SAFETEA-LU. Privately, many feel the timing of the Oberstar letter was to send a warning shot to Pennsylvania's and New Jersey's governors' in response to their ideas for long-term concessions of the Pennsylvania and New Jersey turnpikes. If this was part of Oberstar's strategy, it worked. The New Jersey governor made it clear that any private partner would have only a 49% share in the deal. Policy control of the transportation asset would remain in the hands of the state.

In June 2007, the Texas legislature²² revised their broad P3 legislation to include a moratorium on four P3 projects and added a set of new rules to insure the opportunity for local toll authorities

²¹ "Preserving an Integrated National Surface Transportation System,"

²² Texas state legislation passed SB-792 in June 2007 The legislation contains various provisions aimed at limiting the execution of future Comprehensive Development Agreements (CDA's), the instrument for P3 transportation activities. Among the stipulations is a two-year moratorium on toll road CDA's. The bill contains ten (10) project exemptions to the moratorium. The legislation appears to be the extension of broad-based citizen dissatisfaction with Texas DOT's "aggressive" pursuit of private toll road projects statewide. (During the 2006 electoral cycle, both

to compete for the new toll roads. The series of events in the Dallas/Fort Worth area surrounding the transfer of tentative concession rights to the Colin and Denton County segment of SH-121 from Cintra to NTTA have sent "chills" through the private sector. The NTTA was able to bid on the SH-121 project after seeing the Cintra bid proposal. Not surprisingly they were able to better the deal.

Revenue

In addition to risks described above it is also critical to understand the private sector's or compensation views that are not unique to concessions, toll roads, HOT/managed lanes and, P3s. It is also an issue in other government procurements of non-commodity, technically challenging or complex goods and services such as military hardware or air traffic control systems. Unlike many of these other activities, concessions, toll roads, HOT/managed lanes and P3s return issues are compounded by the fact that compensation is paid over a long period of time, raising public fears that the transaction has been undervalued or politically-connected deals have been made.

Infrastructure assets historically possess a different risk-return profile than traditional asset classes, and a relatively low correlation with many segments of the market. From a public value standpoint, paying money to a private firm for transportation services is no different than if it had been paid to a public entity, so long as the price paid is the same or better, with the exception of ROW takings, liability and tax exempt debt. The latter is available to the private sector for highway and freight intermodal projects in the form of Private Activity Bonds (PABs), but PABs are not available for transit projects.

Understanding valuation factors for project revenue potential, like in the utility industry, reveals a fluid and competitive environment that could hold opportunities for public sector negotiation to benefit transit. Revenues to the public are only "lost" in a concession if, all things considered, the public is paying more than it would have paid otherwise. In fact, the superior argument on behalf of P3s is not the availability of new, otherwise-unavailable capital, but that the price/value equation is better than it would have been without the concession in that it will be built sooner, should be less costly and more efficiently maintained, and will be priced in a more market-appropriate fashion. Consequently, the issue of lost revenues revolves around both the cost of inputs and the effectiveness of the financial regulation. However, this issue can be more complex when revenue sources cross-subsidize other entities, such as when the New Jersey Turnpike Authority funds its state's transportation trust fund.

The private sector uses valuation factors to determine the price and the level of revenues they are willing to receive. Understanding these factors is critical to understanding the private sector's price proposal and better position the public sector during negotiations.

Republican and Democratic Party platforms opposed the Trans-Texas Corridor, the centerpiece of Gov. Perry's P3 agenda.)

Relevant factors that drive valuations include:

- **Investment Fund Push:** The entry of foreign financial investors, such as Australia's Macquarie in the transportation sector has changed the United States' private investment marketplace, which was dominated in the past primarily by strategic investors, such as construction firms, engineering firms, and equipment suppliers. These new players not only bring in new money, but also change the way business is done and increase the competitiveness of potential deals. However, the issue of transparency of the deals and their decisions becomes a more critical issue.
- **Market Creation:** The U.S. toll road P3 market is still fairly small, but it is increasing as new entries seek to establish a U.S. presence. Aggressive bids may be made not only based on the project, but with an eye toward increasing the size of the market. Indeed, high bids have forced officials nationwide to take note, and have probably increased the number of concession opportunities.
- **Market Share:** Given that the market is likely to expand, investors may be more concerned with maximizing market share and developing a strong reputation to increase their chances for other projects down the line. Established businesses also freeze out competitors.
- **Integrated Bidders:** Large, consolidated firms are able to profit from every service in a design/build/operate/maintain concession; thereby increasing the profitability of the whole. This is a relatively new experience in U.S. transportation projects that historically relied on the fragmented design bid/construction bid process with the parties forced to be separate and the public sector absorbing much of the design and construction risk. The benefits of design-build need to be examined not only in terms of their economic, efficiency and financial benefits but also in terms of their political costs.
- **Discount Rate:** The high concession upside that may last 50+ years enables bidders to set a base discount rate that ensures they cover debt service, while forecasting larger, but speculative, equity returns.
- **Risk Profile:** The risk profile, and hence return rate, of a long-term concession may change over time. For example, in the startup period, there is construction cost and traffic uncertainties and therefore, revenues in the early years are likely to be heavily discounted. However, once a road is up and running, and has a traffic history, the risk is greatly diminished and the investor will have the opportunity to refinance or sell the transaction. Once major rebuilding is needed in 30+ years, a different risk profile may come into play.
- **Tax and depreciation laws:** The financial profile of the investor, and the accounting rules under which it operates (which may differ by country), can affect the value of tax benefits from operating losses and depreciation. This can become a significant factor in the value of the project to the investor.
- **Exchange Rates:** The U.S. dollar/euro exchange rate appears to favor foreign participation in the U.S. P3 market right now. Although the theory of purchasing power parity dictates that

the long-term equilibrium exchange rate between two currencies converges to one (1:1), there exist significant short-to-medium-term swings in which market exchange rates can diverge significantly from the long-term equilibrium rate. This could provide foreign-based firms with an opportunity to sweeten their return for infrastructure over US currency-based firm/consortiums.

- **Treatment of Asset Revaluation:** Non-U.S. firms (IFRS-compliant) may use either a revalued amount or historical cost for the stated value of its real assets. The revalued amount is generally the fair value of asset at date of revaluation less subsequent accumulated depreciation and impairment losses. U.S. companies (GAAP) must record assets at historical cost. Revaluations are prohibited. The use of revaluations by European companies allows the recognition of unrealized gains as income,²³ and a potential opportunity over U.S. competitors.
- **Use of Special Purpose Entity Structures:** The use of a Special Purpose Entity (SPE) (“holding company”) in the corporate finance setting is well known. The strategic employment of this organizational structure by certain firms such as Macquarie facilitates their ability to act aggressively as investors in infrastructure assets. A parent firm can quickly create a holding company complex comprising several hundred controlled entities. While holding companies fulfill a wide array of functions, in toll road acquisitions, they critically hide the acquirers’ true debt profile. A parent firm’s holding companies obtain overlapping minority stakes in each other. By owning a minority stake in an entity, a firm is not required to report its debt related to the minority holding on the firm’s consolidated financial statements.²⁴ Holding companies can also shelter the parent company from bankruptcy or tort risks, as the holding company becomes the sole party for the assets. Public sector teams believing that the large multi-national company is on the hook for financial problems and failures could discover they can only go after the assets of the holding company and find that the holding has only one asset.

Public Sector Risk Factors

P3 deals are not without public sector risks. Understanding the public sector risks/concerns are important if transit wants to participate in the deals. The May 10, 2007 letter referenced above sent to governors, state legislators and state transportation officials from House Transportation and Infrastructure Committee Chairmen James Oberstar and Highway and Transit Subcommittee chairman Rep. Peter DeFazio warned the recipients against "rushing" into public-private partnerships that do not fully protect the public interest. This letter also raises the political risks for the public sector, by making sure that they retain policy control over their P3, concession, tollway and HOT/managed lane projects. Without such policy control the states and

²³ Deloitte Audit, IFRSs and US GAAP: A Pocket Comparison, 2007.

²⁴ From the perspective of the project sponsor, U.S. and international accounting rules generally require the consolidation of financial statements of a company and certain of its subsidiaries. If interest in a subsidiary is below 50 percent, the equity method of accounting is used whereby the investment in the subsidiary is shown as a one-line entry. Debt in such circumstances is not reported on the parent company’s financial statements. Hoffman, Scott, The Law and Business of International Project Finance, 2nd Ed. Ardsley, NY: Transnational Publishers, 2001.

local governments could risk future federal participation The Chairmen's policy concerns focused on protecting the public from "unreasonably high toll rates and excessive profits," prohibiting non-compete clauses, avoiding excessively long terms of PPP concessions, providing relief from high tolls to low-income drivers, and prohibiting unsolicited PPP proposals. These concerns and others are captured and addressed below.

- **Private Sector Excessive Rate of Return:** The issue of private sector compensation is very important and most perplexing to the public sector. This problem for private sector deals is compounded by the fact that compensation is paid over a long period of time, raising fears that the transaction has been undervalued.

"How much is my road worth?" This simple question has caused significant disagreements among transportation financial professionals and investment bankers. As is the case in any deal, the answer is "What is the customer willing to pay?" This answer is, however, a bit too glib. Traditional public capital asset management determines an asset's value by what it cost to design, build, acquire ROW, maintain, operate and replace. Our quasi-public toll road operators have been most astute in determining the value of their facilities to customers in the traditional way. Then came the Chicago Skyway at \$1.8 billion and Indiana Tollway at \$3.8 billion deals. These amounts exceeded traditional estimates many times over original estimates. Both citizens and public officials became concerned about how to value both the infrastructure and the financial deals. These significant amounts have raised concerns both of excessive payments to the private sector and of the public's ability to effectively determine the value of their assets. The California Riverside community was concerned that the public sector gave away a significant revenue producing asset in SR 91. They forced a very expensive buy-out of the private sector.²⁵

- **Protecting the Public Future Interest in P3/Concession/HOT/Managed lanes/Private Toll Road/Congestion Pricing Arrangements:** The recent experiences of Chicago Skyway at 75 years, Indiana Tollways at 99 years and Virginia's Pocahontas Highway at 75 years have raised concerns about whether we know enough about the future and about the ability of these private/public relationships to prosper and flourish into the future. Technology is likely to significantly alter the way we do business. Telecommuting applications and its effects on employment and transportation make these time-laden deals questionable. High gas prices, concerns about the environment and high real estate costs make telecommuting more attractive than ever before. The current estimate is that 12 million employees telecommute at least once a week and the forecast from the Gartner Dataquest is that 27.5% of American workers will be telecommuting by 2009.

In the age of dial ups and home phones telecommuting was more difficult. Today, with broadband, PBA, web cam, video conferencing links from home and improved and cheap conference calling technology is providing the tools to allow telecommuting to be effective. Add to the technology a work force such as Generation X that is tech savvy and the workforce elements are in place for a dramatic rise in telecommuting over the next decade.

²⁵ Despite the significant buy out cost the public asset is valued higher than the buy-out. Recently a consortium approached the public sector with an offer was for 49% partnership that was more than the public bought at the deal for 100%.

Federal policy encourages telecommuting; northern Virginia Representative Frank Wolf is an ardent advocate for telecommuting and wrote President Bush on October 2, 2007, citing a George Mason study that demonstrated that for every one percent of DC telecommuting there is a three percent reduction in traffic delays.

As real estate prices remain high in urban and suburban areas, companies can decrease their office costs and need for space by up to half through telecommuting. Additionally, telecommuting allows the companies to lower their “carbon footprints.” Lowering the “carbon footprint” could result in carbon credits for companies to sell, as proposed in several greenhouse gases bills in Congress.

The public infrastructure funding issues, discussed earlier, have the public sector looking for new revenue sources to finance transportation, as the gas tax becomes a non-viable source of long-term funding.

One potential substitute that is technologically feasible is being tested in Oregon—the use of “vehicle miles traveled” (VMT) to calculate charges. Today’s GIS technology allows us to know exactly where a vehicle is at any point in time. It is conceivable that a state would seek to impose a congestion pricing VMT fee on its roadways to act as a shadow toll on the Hot Lanes. If all travel on state roads are priced and/or priced in terms of time or usage, then what impact will that have on toll roads and their financial models? The key question is, over a period of 75-years, what political issues and technology can we anticipate that will impact these long-term deals?

- **Potential Revenues That May Be Lost by Ceding the Right to Collect Tolls:** From a public value standpoint, paying money to a private firm for transportation services is no different than if it had been paid to a public entity, so long as the price paid is the same or better. Revenues are only “lost” in a concession if, all things considered, the public is paying more than it would have otherwise. The private sector P3 argument is not the availability of new, otherwise-unavailable capital, but that the price/value equation is better than it would have been without the concession: built sooner, less costly, more efficiently maintained, and priced in a more market-appropriate fashion. Consequently, the issue of lost revenues revolves around both the cost of inputs and the effectiveness of the financial regulation. These are subtle points to the public and points the public needs to be better informed about.
- **The Appropriate Use of Fees Paid To the Public Sector:** State and local governments have a strong tradition of segregating enterprise funds collected as user fees. While many public works are financed with general tax revenues, it is very unusual for user fees to be diverted to uses unrelated to the service for which they were collected. Most gasoline taxes are rigorously protected from non-transportation uses. Behind this protection lies a “fairness” principle: An agency should not use its monopoly position in infrastructure to extract usurious monopoly rents, even if the excess would be used to pay for other legitimate public needs.

The Chicago Skyway lease upset this principle, with proceeds going to decidedly non-transportation uses. The City of Chicago argued that the Skyway was not part of their core

business and simply another under-utilized city asset, much like a vacant lot or surplus equipment, and that leasing it was simply taking the asset to a higher use for the greater benefit of the public.

- **Whether the Public Sector Could Borrow Funds More Cheaply Than the Private Sector:** Advocates and opponents of P3s have been discussing the P3 cost of capital issue since the early 1990s. On one hand, tax-exempt bonds offer lower interest rates than corresponding taxable bonds or bank financing. On the other hand, taxable bank financing combined with private equity can be more flexibly structured to accommodate the “hockey stick” pattern of revenue growth, especially for start-up, Greenfield projects. This issue is complicated by the fact that the rating agencies have different rating criteria for tax-exempt and taxable project financing. The cost of money can only be determined on a project specific basis within a specific time frame. Ironically, in August 2007 the cost of tax-exempt bonds were 50 basis points higher than U.S. taxable Treasury rate bonds.
- **Whether the Public Sector Could Operate a Facility More Cheaply Than the Private Sector:** Public toll agencies vary widely in their efficiency typically measured as operations and maintenance cost-per-lane-mile or per vehicle mile traveled (VMT). While some public toll authorities argue that they are less expensive than a private operator because they do not have to make a profit, private operators – especially concessionaires with long-term lease agreements -- point to how the absence of a profit motive in public authorities highlights the absence of incentives for efficiency, strategic asset management and investment and cost control. They also argue that public authorities, in part, simplify the cost of the capital provided by investors, not unlike the cost of debt issue profit. This issue involves analysis of labor contracts, DBE requirements, prevailing wage requirements, and issues of direct board or municipal control.

Whatever the theoretical arguments, there is a substantial body of information on the actual costs of public toll road operations and increasingly on private tollway operations. As with public-versus-private cost comparisons for individual projects, issues of risk valuation, service quality comparison and contract surety will arise, and the answers need to be determined on a case-by-case basis.

- **Whether Non-Compete Clauses Are Always Required:** Non-compete clauses in concession agreements are designed to protect the concessionaire from competing free roads that are not already planned by the state, and so are not built into the traffic and revenue forecasts relied upon by investors. They are also designed to reflect the state’s own approach to building and financing a toll road. Normally a state would not build a parallel free road²⁶ or fail to build a vital connecting road that would injure the financial viability of its own toll road, so why should it be permitted to do so to a private concessionaire’s road?

Difficulties in implementing non-compete clauses arise from two factors: (1) determining when the state can build a competing free road, such as when the toll road is approaching capacity, and (2) determining precisely what type of roads are unfairly competitive, as was

²⁶ Interstate 295 in New Jersey that parallels the New Jersey Turnpike in the lower part of the state is an exception.

the issue with the Dulles Greenway, facing partial competition from an improved state route. In the California AB-680 agreements, the “parallel-ness” and proximity of the proposed free road and the level of congestion service measured competition are the key competitiveness points. The much-longer terms of the most recent concessions exacerbate an already difficult analytic and political issue because so much can change over a 50-to-99 year lease.

Several recent state decisions illustrate how states are anticipating the non-compete issue. On the Indiana Tollway, the state of Indiana, promised not to build a competing roadway for 99 years or else to pay the private sector for lost revenues. Texas has taken a more flexible approach, but with a similar outcome to that in Indiana, by allowing TxDOT or others to add capacity to competing routes, but includes provisions to compensate the concessionaire if an independent study documents revenue losses Virginia’s DOT’s (VDOT) agreement with the private sector for the Capital Beltway (I-495) HOT Lane project has very strong and different non-compete language. VDOT can not build a competing free or toll “transportation facility” in the corridor for the next 80 years without compensating the Concessionaire for its revenue losses.

- **Whether the Private Sector Leaves Less Advantageous Facilities to the Public Sector:** The “cherry-picking” issue comes up especially with unsolicited bid programs as the Colorado Department of Transportation (CDOT) found with its P3 program. CDOT’s unsolicited P3 bid program resulted in submissions which were either ill-defined or used the P3 program to circumvent construction bid rules. Furthermore, this issue is related to a potential fragmentation of the transportation network. In contrast, in the “European” style of P3 procurement, a government invites P3 solicitations for specific projects in which the P3 benefits were clear, such as: large, technically challenging projects; projects with major financial challenges; and/or projects that involved commercial opportunities, such as adjacent real estate development.

The Capital Beltway HOT Lanes project, an unsolicited P3 submission, is perhaps the exception that proves the rule. This \$1.8 billion, 12-mile four-lane addition with open-lane electronic tolling along one of the most congested corridors in the U.S. using variable pricing technology is a tremendous technical and financial challenge. TxDOT planning officials agree that one of the reasons NTTA was able to compete (albeit belatedly) for the Texas SH 121 project was that the project was relatively straightforward.

- **Facility Maintenance and End of Concession State-of-Good-Repair Issues:** Facility maintenance and leaving the facility in a state-of-good-repair at the end of the project come up in many types of infrastructure P3s. While there are no perfect solutions to these challenges, several approaches have been successfully employed. Entities can employ asset management techniques that apply a life-cycle approach to infrastructure. They can also apply condition-based maintenance approaches. In P3 contracts, some of the better ways to monitor maintenance are *outcome or output-based measures* such as service interruptions, lane closures, potholes per mile, surface smoothness, etc., as opposed to *input measures*, such as inspections per month. This issue is made more complex by the long-term nature of the leases, making it difficult to predict how state-of-good-repair will be defined 75 years later.

- **Transparency and Trust:** Successful P3s are built on a reputation for trust, transparency, and confidentiality among all parties. Transparency with the public is particularly critical. The public and federal officials have come to rely on the open low bid process. P3 deals should be "best value," but not necessarily the lowest bid. A jaded public has concerns that the deals can be fixed during negotiations. A number of efforts are underway to protect the process and build public trust. Without public trust in the transparency of the deal, there will be continuous problems and concerns.

In order for a P3 to be truly effective, it must benefit all parties. This requires a competitive process to ensure that government receives a value-for-money return on its investment. Experts agree on one point: "It is essential in any proposed partnership arrangement that early thought is given to the market position on the delivery of the projected proposed."²⁷ Transparency also requires that the partners freely share information and discreetly protect sensitive information.

- **Leadership & Commitment:** The advocacy and commitment of leaders to foster a shared vision and ensure that resources and expertise are available is critical to the success of P3, concessions, toll roads and HOT/managed lane investments. The decision making leadership changes with the nature and advocate for the investment. For example, the concession investments for Chicago Skyway, Indiana Tollway and the New Jersey and Pennsylvania Turnpike efforts are being made at the executive office level, governors or mayors, and not at the DOTs. The DOTs are basically staff to the governors' offices. Greenfield projects remain in the DOTs with Florida, Texas and Virginia in the lead. This split decision making role is critical for transit systems to understand in order to know whom to negotiate with in the public sector.
- **Flexibility & Adaptability:** The partners are empowered and appropriately resourced to address core needs of the partnership. Participation stays current with the times, adjusting to new conditions (technologies, threats, policy).
- **Expertise:** Successful P3s require technically competent experts to generate timely, actionable, and defensible results. Subject matter experts and quality delivery produces valuable results for all partners. However, this issue remains a consistent concern to the DOTs, governors, mayors, legislators and the public. Reliance on consultants is an issue since consultants can find themselves on both sides of some deals. This concern can impact the trust issue raised earlier.
- **Xenophobia:** Many communities see P3 investments as an opportunity to get their highways built faster and funded sooner than if they had to rely solely on public funds. They do not see P3s as an opportunity to generate a return that can be used to support other non-revenue generating projects. They are concerned that large national or multi-national firms will build toll roads and if the economy falters and severely impacts the local economy, the private sector will only be interested in their toll road profits. In contrast, a local quasi-public toll

²⁷ Ghobadian, Abby Ed al. *Public -Private Partnerships: Policy and Experience*. Palgrave Macmillan: Great Britian, 2004. P 86.

road authority is part of the community and will work with the community through the rough patches.

Transit Opportunities

What does this mean for transit? The paper takes as a given that transit will be provided free passage on priced transportation facilities in the name of good public policy (even though that must not be assumed given the natural private sector motivation to maximize return on investment (ROI)). What other opportunities exist for transit? Each HOT/managed lane, toll road, concession, P3 project is different, but there are some commonalities in the different transportation investments, and all can provide transit opportunities if negotiated up front. It is essential for transit operators to know what they want, to be reasonable but forceful and to insist on being a part of the early discussions with the decision-makers.

HOT/Managed Lanes

HOT/managed lanes are an investment opportunity that is likely to proceed aggressively over the next decade. Virginia is pursuing the Capital Beltway HOT lane and is completing the environmental analysis on another HOT lane on I-95 by converting an HOV lane into a HOT lane. The success of SR 91 in California is likely to be repeated with up to three new HOT lanes in that state in the next 10 years. Florida, Texas with two new HOT lanes, Washington, North Carolina, Illinois, New York, Georgia, Maryland and New Jersey – all states with serious congestion -- are all considering HOT lanes as well.

All of the new and most of the old HOT/managed lane projects will be “open tolling,” meaning that there are no physical toll barriers and the vehicle operator will have a transponder to access the facility and to pay the toll. Some will replicate Virginia's Capital Beltway that will have multiple entrances and exits, in contrast to SR 91's single entrance and exit. All will seek 24-hour free flow conditions and will be priced accordingly. Most will have dynamic pricing and agreements to share future revenues. All projects will deploy technology solutions for incident management, violation enforcement, including HOV passenger number enforcement technology.

Numerous studies demonstrate the correlation of timesavings and reliability as the primary factors for choosing transit. HOT/managed lanes can and do provide significant timesavings over transit buses in the general-purpose highway lanes. Real timesavings of 45 minutes in California's SR 91 are being experienced in Hot Lane and expected 15 minutes for the proposed Virginia Capital Beltway HOT lane. Given the controlled traffic volumes of the single occupant vehicles (SOVs) through increased pricing, there is predictable transit reliability for the HOT lane user that the transit customer will achieve these timesavings. These time savings and reliability coupled with free passage for transit vehicles creates the best Bus Rapid Transit (BRT) opportunities in the country. The Poole/Orski Reason Foundation's Policy Study” HOT

Networks: A New Plan for Congestion Relief and Better Transit”²⁸ correctly identified the possibility of HOT/managed lanes as successful BRT opportunities for transit.

The beauty of many HOT/managed lanes is that most of the ROW is within the footprint of the existing roadway. The result is an easier and quicker environmental review process, and the project has lower costs from both the expedited environmental process and few if any ROW costs.

Key HOT lane issues that will have transit opportunities are free High Occupancy Vehicles (HOVs) - van/carpools travel, priced for maintaining free flow (Lexus Lanes vs. Environmental Justice), technology and violations.

- **Free HOV Activity** presents a major concern to concessionaires. HOT lanes are a consequence of congestion in the free lanes. As congestion builds in the non-tolled lane the expectation is that an increasing proportion of traffic will shift to the tolled lanes. The tolled lanes will manage the capacity by increasing the tolls dynamically to preserve the 45-55 mph service level and by counting vehicles not people²⁹, as is the case on California’s SR91. The unknown and potentially crippling element is the retention of free HOV activity in the HOT lanes. As congestion in the free lanes increases there will be a shift to HOT as an alternative. The extent to which there is a shift to HOV will impact HOT Lane capacity. If it becomes too great, then it will consume capacity; and therefore, will affect the 55 mph service levels for paying customers and revenues. SR91 managed lanes charge 50% of the price for HOV usage.

Transit Opportunities: Transit vehicles will likely go free and the free flow conditions will make bus travel more attractive. Costs should be lower for transit passengers and passengers will save time. The time savings could be greater if access to the HOT Lanes is made transit friendly at the entrances, exits and interchanges. Public sector negotiators should require the private sector to undertake transit friendly designs at the entrances and exits so that the time saving from the HOT lane are not lost in traffic congestion at the exit intersections or interchanges. Such investments will enhance transit time savings and reliability, making transit the BRT option of choice for many commuters.

Transit provides the solution to the pricing of HOVs. The state should seek improving not only the free flow of traffic in HOT lanes, but also passenger miles traveled. This seems incongruous for operations charging single occupant vehicles (SOV) for travel time savings. Improving passenger miles traveled insures the HOT lane capacity for SOVs; it offsets the impacts on HOVs as well as the consequences for clean air and energy consumption.

²⁸ Robert W. Poole, Jr. and Kenneth Orski, “**HOT Networks: A New Plan for Congestion Relief and Better Transit,**” Reason Foundation, **Policy Study 305, February 2003**

²⁹ In the VDOT Capital Beltway HOT Lane the two new lanes could handle 1700 vehicles per lane/per hour. However to insure a 45 mph the highway capacity is reduced to 1500 vehicles per lane/per hour. As traffic begins to approach the 1500 vehicle limits the travel price is projected to increase, in order to manage the service levels in the lanes.

Transit systems can request states and MPOs to set passenger miles traveled performance measures for HOT Lanes. Performance measures should be progressive in time of day and over the years, higher passenger miles traveled performance would be set and calculated annually against the congestion in the general-purpose lanes. The goal is to use the transit time and cost savings of the HOT lanes to provide alternatives to the congestion on the general-purpose lanes without increasing the capacity. This will encourage the private sector to become involved in making transit effective in the corridor. The involvement could include direct investments in transit and transit infrastructure.

Transit can also ask for the deal to include transit capital investments and purchases over the life of the contract. This could be difficult for the private sector at the front end, but the tradeoff is that it provides opportunities to improve person miles traveled and enhance capital investments later in the life of the project. It should be noted that in March 2005, Congress soundly defeated a proposal (the so-called Kennedy (R-MN) amendment) that would have prevented the use of toll revenues for transit or road maintenance. Indeed, solutions to congestion, mobility, and other transportation issues are not limited to roads. Neither should be the resources.

- **Private Incentives:** Policy control of toll facilities must remain in the hands of the public sector, and any toll operation must continue to serve public goals. Incentives need to be structured accordingly. One approach would be to follow the FAIR lane model, wherein operators of toll facilities would be given incentives based on the number of persons moved per hour, rather than the numbers of vehicles moved.
- **Pricing:** The revenue stream needed to offset debt and make a return will determine pricing. The environmental justice issue of the “Lexus Lanes” is that many lower middle class and poor commuters have been forced to live further and further from their work site because of housing prices. This population has less opportunity to take advantage of the HOT lane benefits or, if they do, it will be financially regressive.

Transit Opportunities: Transit provides environmental justice mitigation through transit price savings for longer distance travel. Mitigation support comes from the private sector HOT lane provider. Strategically placed Park and Ride facilities and reasonable transit costs can be an environmental justice mitigation measure for HOT lanes.

- **Technology** is the wild card. Telecommuting is growing in acceptance. The federal government, IBM, Dell, Gateway and other high tech firms are aggressively pushing telecommuting. The younger workers who are at home with technology and working alone will make the shift to telecommuting more common in the work place. As mentioned earlier in this paper, vehicle miles traveled (VMT) replacement is being tested as a replacement to the gas tax as the primary state/local revenue source for transportation. If VMT does replace the gas tax, then it could make all primary traffic lanes subject to congestion pricing. Technology has the potential to make HOT lanes possible, but could impact their ability to generate a viable return.

Transit Opportunities: Transit systems need to be exempt from the VMT or similar taxes or fees.

- **Violations:** EZPass made a critical mistake in expecting enforcement to be real and to become a dramatic source of revenue. Toronto's 407 and California's SR 91 experienced problems with violation enforcement, but turned these problems into small revenue generators. EZPass abandoned its revenue forecasts from violations and both 407 and SR91 built into their forecasts a tolerance for violations.

Transit Opportunities: There will be revenues generated from violations, providing transit with an opportunity for a share in the revenues. However, these revenues should not be over-estimated and others will stake claim to them.

New Toll Roads

Investments in new toll roads are most likely in states with high growth rates seeking congestion solutions through new highway capacity. Texas' Trans Texas Corridor, roads like SH 121 are intended to meet the intermodal needs of the state for the next 50 years. Texas is already planning to acquire sufficient ROW to meet highway, rail freight and rail passenger demands within the corridor. Other states like Florida, Georgia, Virginia, North Carolina, and Washington are looking at toll road strategies and investments.

Transit Opportunities: There are a number of opportunities, particularly if a state follows the Texas approach of intermodal investments. First, transit should seek ROW for transit dedicated purposes such as bus rapid transit (BRTs), light rail transit (LRTs) or commuter rail, depending on future transit demand forecasts. Second, the ROW should be along the outside of the toll road. This will allow the transit system to develop joint development or transit-oriented development. These developments should generate income for transit. The income should be negotiated in the front end, as part of what the public sector wants from the deal. Third, since the toll road is new roadway, it will include new interchanges with existing roadways. Transit should seek toll roadway designs that provide transit friendly access at interchanges to allow transit vehicles to skip ahead of the inevitable congestion at the merges. Fourth, for later years there should be revenue sharing component to the deal. Transit should seek a percentage participation of revenue sharing. It is unlikely that this revenue sharing will occur in the first 25 years.

Concessions

Concessions are long-term leases of existing infrastructure to the private sector. Both the Chicago Skyway and Indiana Tollway are concessions. No transit considerations other than existing provisions allowing free transit passage were provided in the agreements.

The desire in both of these deals -- and in the discussions of the future of the New Jersey and Pennsylvania turnpikes -- is to maximize returns for the state.

Transit Opportunities: Maximization of revenues should include transit investments. Transit investments that dramatically improve mobility could provide public purpose justifications for future deals in densely traveled corridors. Increasing highway productivity through transit improves the mobility of the roadways and the transportation system. For example, the long term lease of the New Jersey Turnpike could provide some state capital for the critical Access to the Region's Core Hudson River Rail Passenger Tunnel. Additionally, transit should consider infrastructure improvements on these roadways that will improve time savings for buses at the interchanges. Improvements that can provide 10-15 minute transit savings could result in significant bus ridership during peak periods.

Corridors of National Significance

The SAFETEA-LU language in the House specifically and in the Senate by inference to freight view Projects of National and Regional significance as primarily highways of freight intermodal projects.³⁰ The purposes of this program were to duplicate the transit new start program as it applies to the multi state trade corridors; create a framework for addressing multi state jurisdictional issue and the use of federal funds; and, to accelerate environmental analysis. The NATIONAL CORRIDOR INFRASTRUCTURE IMPROVEMENT PROGRAM (section 1302) supplements Corridors of national significance and provides the contract authorization and funding for the projects of national significance. The 1302 program gives priority to the

³⁰*House Bill Sec. 1301.*

This section directs the Secretary to establish and implement a program to allocate funding to States for highway construction projects in corridors of national significance. A State must submit applications to the Secretary for funds.

The Secretary shall give priority to corridor projects that are part of, or will be designated as part of, the Dwight D. Eisenhower National System of Interstate and Defense highways and to any project that will be complete in five years. The Secretary shall consider such factors as mobility, economic growth, linking two existing segments of Interstate, commercial vehicle traffic due to NAFTA, reduction of travel time, value of the cargo traveling through the corridor, economic costs, and the financing associated with the project.

*Senate Bill
Sec. 1809.*

The program supports and encourages multistate transportation planning and facilitates both project development and decision-making for multistate corridors. State transportation departments or metropolitan planning organizations may receive and administer the funds provided under this section for multistate highway and multimodal planning studies and construction.

Freight demand is forecasted to increase significantly in the coming years. The committee's goal is to meet this growing demand by improving highways and intermodal connections in the nation's key corridors. Funds provided by the Corridor Program should supplement other public and private funding to support strategic improvements, expanding both capacity and efficiency.

The Secretary shall select studies and projects to be carried out under this program based on: (1) the existence and significance of binding agreements; (2) the endorsement of the study or project by elected representative; (3) prospects for early completion; and, (4) whether the study or project was listed in 1105(c) of ISTEA.

The committee expects that the Secretary will encourage States and other jurisdictions to work together and shall give priority to projects that increase mobility, freight productivity, access to marine or inland ports, safety and security, and reliability.

Conference Substitute

The Conference agrees to continue this program as current law with a modification for the funding to be as such sums as necessary out of the General Fund.

Interstate system improvements or expansions. These programs provide contract authority and 80% federal funding.

Transit Opportunities: These programs, despite attempts to mimic the transit new starts program, are not inclusive of transit. The programs will also compete against transit new starts for US General Fund and appropriations. The US General Funds are subject to appropriations and extensive transportation incursion into the General Fund from both large highway and transit projects could result in appropriation choices between highways and transit. This situation is not in transit's best interest.

Intercity Passenger Rail Corridors of National Significance

Instead of Corridors of National Significance that excludes transit, the transit community should seek to develop a new starts program in the Federal Railroad Administration (FRA) for intercity passenger corridors of national significance. The identification of high speed rail corridors already exists.³¹ These corridors rival the highway corridors of national significance and support regional alternatives to highway and rail corridors. The high speed rail corridors provide alternatives to regional auto and aviation congestion, as well as providing more energy and air quality solutions to building new highway or air space capacity. The carbon footprint of a typical short haul air flight from San Francisco to Los Angeles is .478 pounds of carbon per passenger mile, in an air corridor the FAA has already concluded can not absorb additional utilization in 2020. In contrast, a passenger traveling by high speed rail in the corridor has a .275 pounds of carbon per passenger mile. This is a serious reduction.

The high speed corridors also interconnect or can utilize commuter rail facilities (parking, stations, etc.), right-of-way, etc. For example, the Amtrak Northeast Corridor has a major capacity impediment on the Northeast Corridor crossing the Hudson River. The current tunnel capacity is insufficient to meet existing commuter rail and Amtrak services effectively. A new passenger rail tunnel that could accommodate both commuter and high speed rail is proposed and would be an example of the type of investment this proposed new program would support.

One of the key transit benefits of creating an intercity new starts program in FRA is that it would reduce the tension for both intercity and commuter rail seeking to utilize the highly competitive FTA "New Starts" program. The FTA and proposed FRA could work together to improve local and regional transportation solutions to the auto and short haul flights.

The concept of a New Starts Intercity Passenger Rail program in FRA is in an embryonic form. The Passenger Rail Investment and Improvement Act of 2007 (S 294). S 294 has a \$1.8 billion dollar intercity for a new intercity grant program for certain projects completed by state railroad entities. Specifically authorizes "1) The Secretary of Transportation may make grants under this section to an applicant to assist in financing the capital costs of facilities, infrastructure, and equipment necessary to provide or improve intercity passenger rail transportation." The bill allows for to issue Grant Anticipation Notes (GANs): "(1) (A) The Secretary may issue a letter

³¹ See

of intent to an applicant announcing an intention to obligate, for a major capital project under this section, an amount from future available budget authority specified in law that is not more than the amount stipulated as the financial participation of the Secretary in the project.”

The companion House bill (H.R. 534) in (Sec. 26106) provides for \$1.3 billion for each of the fiscal years 2006 through 2015 in tax credit rail infrastructure bonds by modifying section 54 of the Internal Revenue Code of 1986. The bonds are: “for the purpose of financing projects that make a substantial contribution to providing the infrastructure and equipment required to complete or improve a rail transportation corridor (including projects for the acquisition, financing, or refinancing of equipment and other capital improvements, including the introduction of new high-speed technologies such as magnetic levitation systems, track or signal improvements, the elimination of grade crossings, development of intermodal facilities, improvement of train speeds or safety, or both, and station rehabilitation or construction), but only if the Secretary determines that the projects are part of a viable and comprehensive rail transportation corridor design for intercity passenger service included in a State rail plan under chapter 225 (except for bonds issued under paragraph (1)(D));...”

The foundation for a new approach is present and the transit community can benefit from Intercity Corridors of National Significance through the promotion of transit alternatives and the integration of high speed rail and commuter rail opportunities.

Transit Operations Opportunities

The creation of new toll roads and HOT lanes in congested corridors provides many advantages for transit operations. HOT/managed lanes as discussed provide the transit community with significant BRT capabilities without the infrastructure costs that provide significant time and cost savings, and reliability of service. In order to insure the travel time savings, HOT lane operators have extensive incident detection and mitigation programs to address the incident and quickly return the HOT lane capacity to traffic. These tools will also serve transit vehicles. If time savings from the HOT lanes are carried over to the exits and feeder roads, then transit time saving can be even greater providing additional value to commuter bus services.

If states are willing to add performance measures to their private sector providers of passenger miles traveled, then transit will be able to engage the private sector to promote transit in new and significant ways, including marketing, equipment purchases, park and rides, technology enhancements, signage, etc.

Unlike HOT/managed lanes that are often segments of the highway comprising 8 to 15 miles, toll roads have considerable distances. These distances allow for transit opportunities for longer trips, such as commuter or light rail in the framework of the toll road. These opportunities may not be immediately present, but transit needs to secure a position in the toll road design to provide sufficient right-of-way for commuter or LRTs, park and ride lots and/or stations to meet the future travel needs in the toll road corridor. The opportunity to increase the real estate taking to include the opportunity for economic development along the transit corridor can provide revenues for operating costs in the corridor. The addition of transit helps make the sale of these new toll roads more acceptable. APTA and the transit industry should develop a strong

relationship with the International Bridge, Tunnel and Turnpike Association (IBTTA) to encourage their efforts for toll roads to include a dynamic role for transit in support of transit's support of their members interests.

Policy and Legislative Changes

What role does federal funding or financing play in private sector transportation deals? Are there impediments that transit could overcome and garnish returns from the private sector?

Federal Issues

APTA has been very successful in increasing federal funding for transit, particularly in SAFETEA-LU. As transportation's federal financial crisis escalates, a new paradigm of private sector finance is starting to take hold. As discussed, financial interests are interested in reliable returns and minimum risk but are neutral about the type of transportation investment they make. Including transit investments in highway projects using federal funds is not a winner for the private sector. Transit increases risk with no financial or construction efficiency contribution in return. This conflict can be altered by improvements in federal laws and regulations for transit; changes that allow transit to compete on an equal footing with highways.

Comparing a federal aid highway project with a federal aid transit project reveals serious discrepancies between the two that will tilt investment income towards highways and away from transit since the differences increase uncertainty, delays and costs. The major discrepancies are:

- Two environmental processes (pre and formal) for new transit capacity compared to one process for highways. Transit projects require at least 2-3 years longer than comparable highway projects, assuming the transit project clears the cost benefit calculation.³²
- Cost benefit analysis for transit new capacity projects to proceed in contrast to no cost benefit analysis for highway new capacity.
- Fifty percent federal funding for transit compared to eighty percent federal funding for highways.
- Guaranteed funding agreements for transit projects that require annual federal appropriations from federal General Funds compared to "contract authority" from the Highway Trust Fund that allows the project to proceed immediately.

The discussion of these differences should not be on their appropriateness or what is the better public approach. The discussion needs to focus on parity that allows transit to be competitive in new private sector transportation financing deals. As presented earlier, increasing uncertainty makes transit a less attractive investment or co-investment. Adding a transit component into a toll road project will delay the project as it goes through the extra scrutiny needed for transit projects. The cost participation will also limit private sector interest in transit. Private sector scrutiny may result in a negative decision.

³² See

Public decision makers seeking to alleviate congestion during a normal eight-year reign are faced with undertaking transit projects that will require:

- Increased environmental costs and time to complete;
- Uncertainty from a cost benefit assessment that fails to consider the source of funding and often allows the minority federal fund contribution to hold hostage the other funds;
- Thirty percent more local funding; and
- Uncertainty about the availability of the funds and about ten years before the approved project begins.

This is in contrast with the highway environmental processes that, with streamlining, take approximately seven years to complete, cost less and assure funding. All other things being equal, in most cases there is no contest as to which approach will be embraced by decision makers seeking to accomplish something in their political lifetime?

Transit needs parity with highways. Whether a project goes through the transit process or through the highway process doesn't matter from an investor's perspective as long as they provide similar degrees of certainty and costs.

Other major federal changes that would benefit transit apply to ROW and joint development. Joint development around transit nexuses has the potential of providing long-term revenues to transit. The Washington Metro revitalized communities in Maryland, Virginia and the District of Columbia and made other communities in the region viable as bedroom or commercial centers. If Metro had received some of the increased value it provided to the communities, then Metro's constant need for new revenues would be lessened. Transit-oriented development tries to address the relationship between economic development and transit investments. However, the real estate issues and the use of public funds to acquire property beyond a project's foot print limits transit's ability to capture the value it creates. This is ironic in light of the detailed cost benefit and transit usage studies required to justify new transit capacity. The studies demonstrate a market for transit investment that will increase the value of the surrounding real estate, but the instrument that creates the enhanced value cannot participate in the profits because it does not own the property. Revising joint development regulations with respect to property acquisitions outside the project footprint would help transit be more attractive to private investors in new toll way or concession deals.

Private Activity Bonds (PABs) need to be amended to include transit projects. PABs will play an increasing role in financing P3 projects. The inability to use these resources for transit will severely limit the inclusion of transit improvements in projects, because they will need to be financed with other dollars.

Corridors of National Significance program should be broaden to include high speed rail corridors, intercity passenger rail and key transit projects, like the Access to the Regions Core (ARC) project in New Jersey/New York that will add passenger rail capacity by means of a rail tunnel under the Hudson River, The justification is that transit provides a viable means for the corridors to provide mobility in an energy and environmental positive way that will increase

highway capacity in the corridors. For projects like ARC the justification is the ability of this investment frees up considerable capacity on a corridor of major national significance. Transit projects should receive the same authority of contract authority, accelerated environmental analysis and 80% federal funding. If transit is not included in projects for National Significance, then efforts to return highway projects to the Highway Account and away from the US General Fund in order to avoid conflicts between new starts and projects of national significance.

Recognizing transit's contribution in lowering the "carbon footprint" of P3, HOT/managed lanes, toll roads and concessions highway deals allows transit to add value to the project. Providing carbon credits to the deals that provide transit opportunities is a way to enhance and justify transit's inclusion in these types of private sector highway projects.

State Law Changes

The sovereignty of the states needs to be protected. There are several categories of state law that impact public-private opportunities, and therefore transit opportunities. Some of these areas are:

- *Design-Build*: Key to any of the P3 type investments is the ability to undertake design-build projects. Forty percent of the states do not have design-build laws. Many of those that have the legal authority only have it within a limited pilot program, often for just two or three projects. The issue is highly charged as state construction industries are concerned those large national or regional firms will come in and displace smaller local construction companies, or that the smaller companies will continually be relegated to subordinate roles. The battle in California is emblematic of this debate.

Transit systems could require that the design-build legislation for major new highways require a decision about the feasibility and desirability of adding a transit component to the project.

- *State Motor Fuel Taxes*: Fifty-one percent of the states restrict the use of state motor fuel taxes to highway purposes. Many of the P3 investments will require some public investment to be viable for private participation. The restriction on state gas taxes for transit could limit opportunities for transit participation because of the lack of state funds.
- *Profits*: The public sector is not prohibited in most states from earning a profit, even if the proceeds are used to support other public transportation investments. Transit profits generated from joint development need to be protected.
- *Refinancing of the Deal*: The Chicago Skyway saw the private sector quickly refinance a portion of the deal to lower the equity position of the investor. States could require that transit and highways participate in the revenues generated in the refinancing(s). The exact percentage will be determined through negotiations in the deal.

Conclusion

Toll roads, HOT/managed lanes, P3s and concessions are not a source of significant new revenue for transit. They are activities that provide various degrees of opportunity for transit systems to benefit from in varying degrees. Transit can benefit from the free-flow provided by such facilities, from the competitive advantage brought on by the higher cost of driving, from transit infrastructure improvements that can be integrated into tolling facilities, and from obtaining a share of the revenues generated by tolling. This won't happen however, without transit interests understanding the new way projects are being developed and negotiated, and speaking out for their best interests.

Public officials and private investors can mitigate many of the public objections to new highway projects, be they HOT Lanes or toll road, by including transit because transit addresses other public policies such as energy, clean air, compatible land use and environmental justice. Transit also provides toll and HOT/managed lane advocates with increased capacity for their facilities without new capital costs.

HOT/managed lanes represent the best opportunities for promoting transit in major corridors. These lanes are allowed on existing interstates as tolled facilities and are often cheaper to construct than new toll facilities. Transit needs to actively seek involvement in developing the state's position on HOT/managed lanes. Two key transit requests are free passage and a performance criteria in the agreement for an escalating passenger miles traveled in the HOT/managed lanes. The performance measure makes the private sector a partner in promoting transit during the course of the contract.

Executive Summary	1
Introduction.....	7
Financial Crisis	8
P3 Decision Making Factors.....	10
Risk	11
Revenue.....	15
Public Sector Risk Factors	17
Transit Opportunities	23
HOT/Managed Lanes.....	23
New Toll Roads	26
Concessions.....	26
Corridors of National Significance	27
Intercity Passenger Rail Corridors of National Significance	27
Transit Operations Opportunities.....	29
Policy and Legislative Changes	30
Federal Issues.....	30
State Law Changes.....	32
Conclusion	33

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