Role of the Private Sector in U.S. Transportation Finance

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Significant resources have been devoted to increasing private-sector participation in the financing and development of transportation infrastructure in the United States. The federal government has pursued several strategies, ranging from modifying certain laws and regulations that prohibited or discouraged private involvement in federal-aid highway projects to offering federal credit assistance to private sponsors of eligible surface transportation projects. A number of states have adopted special legislation that allows transportation agencies to seek private development teams for specific improvements or to consider unsolicited proposals from private entities that want to develop projects or provide certain services.

Efforts to facilitate and promote "privatization" and "public-private partnerships" (the terms are often used interchangeably) are undertaken for several reasons. Some proponents believe that the private sector has greater flexibility and incentive to build projects faster and at lower cost than governmental entities. Others see private involvement as a way to help public agencies that have been downsized or constrained financially. They argue that outsourcing is an efficient way to supplement in-house staffing and expertise and that it enables certain risks to be transferred to private parties better suited to manage the exposure.

The primary motivation for the privatization policy initiatives, however, may be the desire for greater private investment in public infrastructure. Given the huge gap between identified funding needs and available revenue, policy makers are actively seeking private financing for transportation facilities. There is some question, though, as to whether the private sector is willing or able to answer that call.

To gain a better understanding of the factors that influence the scope and nature of private-sector participation in transportation finance, this paper will examine some of the issues associated with start-up toll facilities, an area that has seen significant private-sector activity in recent years. Brief profiles of six toll projects are provided that highlight situations where the private sponsors were responsible for obtaining the majority of the construction financing. The examples serve as data points for the discussion that follows. The paper concludes with some general observations about the challenges and opportunities associated with an enhanced private-sector role in transportation finance.

Pioneers in the Private Development of Toll Facilities

Private-sector participation in the financing of transportation infrastructure is not uncommon in the United States. Developers often donate land or services to facilitate the construction of certain public improvements, such as new highway interchanges or transit stations. Property owners will voluntarily create special tax assessment districts or agree to pay certain impact fees if the pledged revenue will expedite a desired project. Though some of those private entities may have altruistic motives for providing such assistance, most will realize an indirect return on their "investment" if the new or enhanced access stimulates business activity,

increases property values, or promotes local economic development.

Tolling provides an opportunity for the private sector to realize a more direct return on an investment. Giving private parties the legal ability to own and operate toll facilities, however, does not guarantee that projects will be developed. Several private and public-private ventures involving toll financing have been initiated in recent years, but few have been able to overcome political resistance to charging tolls or, in some cases, opposition to building the proposed project.

The examples below describe some of the pioneers who made it through the initial development phase and obtained construction financing for a start-up toll project. The list is not exhaustive—there are other private toll facilities that could have been included—and it excludes many projects developed by public toll authorities that benefited from significant private-sector involvement. The goal, however, is not to provide models for developing toll facilities, but rather to determine whether the projects and sponsors described below share any attributes that helped them to attract private capital. That insight may be useful in developing and implementing future policy initiatives.

Camino Colombia Toll Road (Laredo, Texas)

Project Description

The Camino Colombia Toll Road, approximately 34 km (21 mi) long, will link the Colombia-Solidarity International Bridge, which crosses the Rio Grande northwest of downtown Laredo, Texas, with Interstate Highway 35, the primary artery for truck traffic between Texas and Mexico. The scope of work includes construction of a two-lane roadway, two interchanges, a toll plaza to be located at the southern end of the road, and a truck transfer station for freight-handling operations.

Private-Sector Role

Camino Colombia, Inc. (CCI), a private toll road corporation created in March 1991, financed the development and construction of the project and will own and operate the toll road when it is opened to traffic in October 2000.

CCI is one of eight groups formed before the repeal of a state law adopted in 1913 that granted private toll road corporations various powers, including the right to charge and collect tolls and the ability to condemn right-of-way. The 1913 private toll road statute (which was enacted prior to the creation of a state department of highways in Texas and had never been used) was replaced with a new law authorizing the Texas Turnpike Authority to work with private entities.

CCI was formed by several families who were advised to form a toll road corporation to prevent their land from being acquired by a developer operating under the 1913 statute. The families subsequently became convinced that building a direct link between the Colombia-Solidarity International Bridge and Interstate Highway 35 would create development opportunities for them in the corridor. CCI was structured as a limited partnership, and the shareholders conveyed approximately 1,200 acres of undeveloped land (mostly used for hunting or agricultural purposes) to CCI for the toll road right-of-way.

Public-Sector Support

After several years of analysis and negotiation, the Texas Transportation Commission granted CCI's request for a final construction permit in February 1997. The approval included the terms of a detailed memorandum of understanding between CCI and the Texas Department of Transportation outlining the rights and responsibilities of each party.

CCI has developed strong working relationships with all of the public entities that may have some influence over the construction and operation of the toll road, including the U.S. Customs Service, the Texas Department of Public Safety, and the Webb County Sheriff's Department.

Financing

Development and construction costs of approximately $85 million were financed privately through bank loans secured by the shareholders of CCI and taxable project revenue bonds. There is no public-sector investment in the construction of the project, but the Texas Department of Transportation will be responsible for maintaining certain property, primarily the IH-35 interchange, that CCI will transfer to the state of Texas on completion.

Current Status

The design-build contractor was given notice to proceed in June 1999. The project is expected to open to traffic on or before October 2000, with toll rates ranging between $12.00 and $20.00 for trucks, depending on their size, and $3.00 for passenger cars. Toll rates are not regulated.

Project Contact

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United Toll Systems Bridges (Alabama)

Project Description

United Toll Systems, LLC (UTS), a private corporation based in Alabama, owns and operates three private toll bridges:

- Emerald Mountain Expressway Bridge—a two-lane bridge, 116 m (380 ft) long, connecting the city of Montgomery and Montgomery County to Elmore County and the community of Emerald Mountain;
- Alabama River Parkway Bridge—a four-lane bridge, 328 m (1,075 ft) long, connecting the Montgomery outer loop (Northern Bypass) to Alabama State Route 143 and Interstate 65; and
- Black Warrior Parkway Bridge—a four-lane bridge, 300 m (1,000 ft) long, connecting the city of Tuscaloosa to the city of Northport and certain industrial parks.

Private-Sector Role

The President and CEO of UTS, Jim Allen, was a developer in the Emerald Mountain residential community in Wetumpka, Alabama, when he was approached by local officials to help develop a badly needed connector between the fast-growing community and the city of Montgomery, Alabama. When it became clear that the state and local governments would not be able to allocate funds for the project for several years, he decided to finance and build it himself. The Emerald Mountain Expressway Bridge was completed in less than 15 months.

Mr. Allen's success led to calls from several other communities seeking assistance with similar projects. He eventually formed UTS and put together successful public-private partnerships for two other toll bridges in Alabama. UTS managed all aspects of the development effort for its projects, including permitting and right-of-way acquisition, and helped to coordinate the design and construction of related public improvements. In addition, UTS created a unique toll collection and data capture system that facilitates management and operation of the toll bridges.

Public-Sector Support

UTS worked closely with local officials and community leaders on each project. Once consensus was reached on the overall strategy for addressing the identified transportation problem, responsibility for discrete elements of the plan was allocated among the public and private partners.

Financing

UTS financed each of its projects privately with equity contributions and bank debt. Total private investment on the three bridges was approximately $38 million. No public funds were used on the UTS bridges, and no tolls are collected on any portion of the related roadway network that was upgraded or built with state or local funding.

Current Status

The Emerald Mountain Expressway Bridge opened to traffic in December 1994. Construction of the other two toll bridges was completed in 1998. The average toll for passenger cars on each facility is $0.75. Toll rates are not regulated.

UTS has been approached concerning development opportunities in several other states, and its toll management and operating systems are of significant interest to private and public entities in the United States and abroad. UTS systems are being installed on the Camino Colombia Toll Road and the Foley Beach Express, another privately owned toll bridge in Alabama (www.foleybeachexpress.com).

Project Contact

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Dulles Greenway (Loudoun, Virginia)

Project Description

The Dulles Greenway is a four-lane limited-access highway that connects with the Dulles Toll Road [built and operated by the Virginia Department of Transportation (VDOT)] and extends approximately 23 km (14 mi) from Washington-Dulles International Airport northwest to Leesburg, Virginia.

Private-Sector Role

Toll Road Investors Partnership II, LP (TRIP II), a Virginia limited partnership, owns and is responsible for the operation of the Dulles Greenway.

TRIP II is the successor to a private investor group that proposed extending the Dulles Toll Road past Dulles International Airport and into the rapidly growing areas to the west soon after the toll road opened in 1984. The group was successful in getting legislation passed in 1988 that authorized VDOT to enter into comprehensive agreements with private entities for the construction and operation of private toll roads with toll rates to be regulated by the Virginia State Corporation Commission.

By late 1991, all required approvals from state and local authorities needed to construct the private toll road extension were in hand. Construction financing was obtained in November 1993, and in September 1995 TRIP II opened the Dulles Greenway to traffic.

Public-Sector Support

TRIP II was responsible for all aspects of the development effort. Agreements with Loudoun County and the Metropolitan Washington Airports Authority concerning certain easements and other right-of-way considerations, however, were critical to the success of the project.

Financing

The partners of TRIP II and certain of their affiliates invested approximately $61 million before and during construction of the Dulles Greenway. TRIP II also borrowed $57 million under loan agreements with certain commercial banks and sold approximately $253 million of notes to institutional investors.

In June 1996, TRIP II defaulted on certain obligations under its loan agreements. As a consequence, standby equity of $80 million was drawn to pay overdue interest and outstanding principal. TRIP II and the lenders then entered into a standstill agreement while various refinancing options were considered.

In April 1999, TRIP II issued $332.7 million of taxable nonrecourse project revenue bonds to refinance its outstanding debt and satisfy all outstanding creditor claims. The transaction achieved underlying investment grade credit ratings from three agencies. Payment of debt service on the senior bonds is backed by a financial guaranty insurance policy.

Current Status

Passenger car toll rates at the mainline toll plaza on weekdays are $2.00 for drivers paying cash and $1.75 for drivers with SmartTag transponders. Approximately 70 percent of the trips on an average weekday are SmartTag transactions. On the weekends, all passenger cars pay $1.50.

Average weekday traffic on the Dulles Greenway currently exceeds 45,000 vehicles. Growth in traffic is due in part to an extensive marketing effort and introduction of the VIP Miles Frequent Rider Program, which provides cash rebates to members. The first phase of an expansion project involving the construction of an additional eastbound lane along 8 km (5 mi) of the project was initiated in June 2000.

Project Contact

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Website: www.dullesgreenway.com.

State Route 91 Express Lanes (Orange County, California)

Project Description

The State Route 91 Express Lanes are a 16.7-km (10.4-mi) long, four-lane (two in each direction) limited-access toll facility that was constructed in the median of California State Route 91 between the Costa Mesa Freeway (SR-55) and the Orange–Riverside County line. There are no intermediate exit ramps; all vehicles entering the toll lanes travel the full length. Other unique features include the following:

- All tolls are collected electronically through the use of transponders, battery-powered radio devices that customers mount on their windshields. The transponder identifies the account and is read by toll recording equipment installed at the entrances to the facility that deducts the appropriate toll from the prepaid account. If a vehicle does not have a valid account or transponder, a video image of the license plate is reviewed, and appropriate administrative or legal action is taken.
- Toll rates are varied throughout the day according to a schedule that reflects general congestion levels on the toll-free lanes. Current toll rates range from $0.75 in the off-peak hours in both directions to $3.50 during the peak hours for eastbound travel on Fridays.

Private-Sector Role

The California Private Transportation Company, LP (CPTC), developed, financed, built, and currently operates the 91 Express Lanes, pursuant to a 35-year franchise agreement with the California Department of Transportation (Caltrans). CPTC was formed by subsidiaries of Level 3 Communications, Inc. (formerly Kiewit Diversified Group), Compagnie Financiere et Industrielle des Autoroutes, and Granite Construction, Inc.

The project was developed under legislation enacted in California in 1989 (Assembly Bill 680) that authorized Caltrans to negotiate agreements with private parties to finance, build, and operate four demonstration projects. After evaluating approximately 75 potential opportunities, a predecessor company to CPTC submitted a proposal to Caltrans to develop the 91 Express Lanes. Factors that contributed to the selection of that project included the following: (*a*) no additional right-of-way had to be acquired, (*b*) substantial environmental work had been undertaken by the local governments as part of an effort to construct high-occupancy vehicle (HOV) lanes in the median, and (*c*) existing traffic demand in the corridor was very strong.

CPTC was awarded the franchise in 1990, but the environmental permits and local approvals needed to begin construction were not obtained until 1993 because of extensive negotiations with the local transportation agencies regarding the tolling of HOVs and other operational issues. Notice to proceed was given to the contractors on July 20, 1993, and the facility was opened to traffic on December 27, 1995.

Public-Sector Support

The high level of support and cooperation from Orange County officials was a key contributor to the success of the project. The county underscored the need for private development by acknowledging that public funds would not be available to construct the additional capacity for several years, and it agreed to accept approximately $7 million of subordinated debt as consideration for certain environmental and preliminary design work completed by the local transportation authority.

Financing

The total cost of developing and constructing the 91 Express Lanes exceeded $131 million. Approximately $100 million of that amount was financed with construction and term loans from commercial banks and institutional note purchasers. The remainder was funded through equity and subordinated debt provided by the partners of CPTC. In addition to the cash contributions, the partners provided a $17 million contingent funding commitment supported by a letter of credit that can be drawn during operations.

The franchise agreement with Caltrans does not regulate tolls or other charges for the use of the 91 Express Lanes. The return on investment that CPTC is entitled to earn, however, is limited to 17 percent per annum. CPTC retains all revenue generated by the facility until the permitted return is achieved.

Current Status

Average daily traffic on the 91 Express Lanes currently exceeds 20,000 vehicles, with users saving 20 to 40 min in travel time during peak periods. The eight adjacent toll-free lanes carry approximately 200,000 daily trips. Net operating income in 1999 (revenue available after payment of all direct operating expenses, including maintenance and law enforcement) exceeded $10 million.

CPTC has considered various refinancing options, including a sale of the franchise to a nonprofit organization, but currently operates under the capital structure established in 1993.

Project Contact

Greg Hulsizer, California Private Transportation Company, 180 North Riverview Drive, Suite 290, Anaheim, CA 92808, 714-637-9191.
Website: www.91expresslanes.com.

Southern Connector (Greenville, South Carolina)

Project Description

The Southern Connector is an approximately 26-km (16-mi), four-lane limited-access toll highway being constructed in the southern portion of the Greenville, South Carolina, metropolitan area. The project links two major Interstate highways and serves several fast-growing residential and industrial development areas.

Private-Sector Role

In 1995, a private development team (Interwest Carolina Transportation Group, LLC) and a local nonprofit corporation (the Connector 2000 Association,

Inc.) formed a joint venture to respond to a solicitation from the South Carolina Department of Transportation (SCDOT) for conceptual proposals to plan, design, finance, construct, and operate the Southern Connector as a toll road.

The development team included a developer/program manager based in Arizona and local design and construction firms. The primary role of the nonprofit organization, formed by a group of Greenville County residents who were strong advocates of the project, was to facilitate construction financing by serving as the issuer of tax-exempt bonds secured solely by toll revenues to be generated by the project.

In 1996, after an SCDOT proposal review committee selected the joint venture over two consortiums led by national engineering and construction firms, the parties agreed to an interim development phase to validate the assumed project costs and toll revenue projections. The scope of work included shared responsibility for funding the design and engineering work needed to enable the general contractor on the development team to prepare a guaranteed maximum construction price.

Opponents of the project subsequently filed two lawsuits challenging various aspects of the proposed financing plan and the state's role in the development effort, but the South Carolina courts ultimately ruled in favor of SCDOT in late 1997. Final environmental approvals were received in January 1998, and the construction financing closed 3 weeks later.

Public-Sector Support

The state of South Carolina facilitated development of the Southern Connector project in several ways:

- In the early 1990s, SCDOT used federal funds to prepare location, preliminary design, and environmental studies even though a source for construction financing had not been identified for the project.
- The state formed a citizen advisory group to assess statewide transportation needs and priorities and followed the resulting recommendation to consider toll financing for the Southern Connector project. Using traditional highway funding methods, sufficient funds would likely not have been available for the project until well after 2010.
- SCDOT negotiated a license agreement with the nonprofit organization that, among other things, obligated the state to assist in right-of-way acquisition, provided for maintenance of the completed facility by SCDOT (with reimbursement of associated expenses from project revenues), and protected investors from the development of competitive transportation facilities by SCDOT that could negatively affect toll collections.

Financing

The Connector 2000 Association issued approximately $200 million of tax-exempt nonrecourse toll revenue bonds for the project in February 1998. The senior lien bonds, totaling approximately $154 million, received an investment grade credit rating from Standard & Poor's. Other funding sources are $5.3 million of federal funds and approximately $17 million of expected investment earnings on fund balances during construction. SCDOT also agreed to pursue, and subsequently obtained, $17.5 million of state funding for the design and construction of a 2.4-km (1.5-mi) extension of a feeder road to the project.

SCDOT, which is responsible for setting toll rates for the facility, has agreed to set toll rates at the levels assumed through 2036 in the traffic and revenue study prepared for the project.

Current Status

As of April 2000, construction was slightly ahead of schedule and within budget. The project is expected to open to traffic in spring 2001 with a $0.75 toll rate for passenger cars at the mainline plaza. It is anticipated that the Connector 2000 Association will contract with a private operator for the initial 3 to 5 years of operation.

Project Contact

Robert Farris, Interwest Carolina Transportation Group, LLC, 265 Pine Drive, Piedmont, SC 29673, 864-422-9499.

Route 895 Connector (Richmond, Virginia)

Project Description

The Route 895 Connector is an approximately 14-km (9-mi), four-lane limited-access tollway connecting to I-95 southeast of Richmond, Virginia, including two parallel high-level bridges crossing the James River.

Private-Sector Role

In November 1995, FD/MK LLC, a joint venture of two of the largest construction firms in the United States, submitted an unsolicited proposal to VDOT under Virginia's Public-Private Transportation Act of 1995. The firms proposed to complete the Route 895 Connector, a project

that had been on hold for more than 10 years because of a lack of funding, as a tolled facility. Construction of the project is a local, regional, and state transportation priority because it will link two Interstate highways, improve access to the Richmond International Airport, and facilitate continued economic development in the area.

Key elements of the FD/MK proposal were parent company guarantees that the project would be completed within 45 months for a fixed contract price and a financing strategy that enabled the bulk of the project to be funded from the proceeds of tax-exempt bonds secured solely by project revenues.

Pursuant to its implementation guidelines, VDOT announced receipt of the proposal and provided time for other entities to submit competing proposals. When that time period expired without any response, VDOT invited the private consortium to submit a more detailed proposal, which was subsequently accepted in 1996. The joint venture then invested significant time and money in completing the preliminary engineering and design work required to negotiate a fixed-price construction contract with a guaranteed completion date. The design-build contract between VDOT and the private consortium that was ultimately executed included risk-sharing provisions related to right-of-way acquisition, utility relocation, permitting, and differing site conditions.

Public-Sector Support

Extensive traffic and toll revenue analyses completed by the private consortium indicated that a fairly high toll rate would be required to provide sufficient debt service coverage on the publicly offered tax-exempt toll revenue bonds. To reduce the anticipated toll rate, Virginia agreed to provide an $18 million subordinated loan from its state infrastructure bank and to defer repayment of approximately $9.4 million of funds it had invested in preliminary engineering work on the project. Interest on those obligations will accrue at a rate equal to the average monthly yield on investments in the Virginia Transportation Trust Fund until repaid.

To strengthen the security for the bonds, VDOT also agreed to operate and maintain the project and, subject to certain conditions, to fund those expenses to the extent project revenues are not sufficient to pay such costs. The contractor agreed to provide a contingent loan to the project, up to $5 million, which will be drawn if project revenues are not sufficient to pay debt service.

Financing

In June 1998, the Pocahontas Parkway Association, a nonprofit corporation created to serve as a financing conduit, issued $353 million of tax-exempt toll revenue bonds for the project. The senior lien bonds, totaling approximately $318 million, received investment grade credit ratings from three agencies. Moody's Investors Service rated the $35.8 million of subordinate bonds Ba1. The tax-exempt bonds are payable solely from project revenues and are not an obligation of VDOT or any other political subdivision of the commonwealth of Virginia.

Current Status

As of April 2000, construction was slightly ahead of schedule and within budget. The project is expected to open to traffic in spring 2002 with a $2.00 toll rate for passenger cars at the mainline plaza.

Though toll rates are set by the association and are not subject to regulation, the consent of VDOT is required for certain changes, such as modifications to the classification and categories of users. The association has agreed to set toll rates at the levels assumed through 2030 in the traffic and revenue study prepared for the project.

Project Contact

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Issues and Opportunities

The individual examples described above reflect unique situations, but by examining the group as a whole, one can make general observations that may help in developing more effective and focused strategies for involving the private sector in infrastructure development. To that end, the discussion below draws on the experiences in the toll road sector to try to address some frequently asked questions:

1. Are public infrastructure projects attractive investments for private sponsors?
2. Can private financing compete with lower-cost tax-exempt debt?
3. Are there any differences between publicly and privately developed transportation facilities?

Who Wants to Own a Toll Road?

On the basis of the examples given above, it appears that construction companies and developers are the only pri-

vate entities interested in financing toll facilities in the United States. That conclusion may be premature, however, given the limited number of investment opportunities to date and the relatively small size of the projects. Many potential project sponsors, such as international infrastructure companies and some utilities, will be reluctant to devote resources to the sector since it currently appears to have limited growth potential. The relatively short term of toll franchises in the United States (usually 35 to 50 years) and provisions regulating toll rates and equity returns may also inhibit interest.

Contractors and developers are willing to sponsor such projects because they are motivated by the need to secure construction work or generate development fees. They are successful during the development phase because they have relevant expertise and have experience working with public transportation agencies, but most are not prepared to keep large assets on their balance sheets. In addition, their skills and resources become less useful as the project evolves from a start-up enterprise to a customer service–driven operation.

The long-term viability of projects developed by private sponsors without a strong interest in operating the facility can be addressed by placing ongoing responsibility in the hands of a private, nonprofit corporation or by having an appropriate governmental entity purchase the completed project. Some have expressed concerns about the level of financial discipline and political accountability in such arrangements, but those problems can be mitigated.

To broaden the pool of potential sponsors beyond the contractor/developer community, policy makers have to address the "supply" issues, not the demand side. Steps must be taken to increase the number and quality of development opportunities. Some of the toll projects described in this paper, for example, were able to move forward only after consensus was reached that the public sector was unable or unwilling to complete the work on a comparable schedule. As long as private development or toll financing in the United States is supported only as a last resort, it will be difficult to attract new entrants.

Taxable Versus Tax-Exempt

Discussions concerning the financial viability of privately developed transportation facilities in the United States often focus on the difference between the cost of private financing versus tax-exempt bonds. The cost of capital, however, is just one variable in the investment decision. Internationally, private sponsors often borrow at rates significantly higher than the sovereign government, but they have the opportunity to invest in transportation infrastructure projects that are the equivalent of the Interstate highways and urban beltways in the United States. As a result, the overall level of private infrastructure investment in some countries is relatively high.

Project characteristics also have a strong influence on investment decisions in the United States. The four toll projects described above that were successfully financed with equity and taxable debt (CCI, UTS, TRIP II, and CPTC) had relatively manageable right-of-way needs and are located in areas that have a significant amount of existing traffic. The two projects that were funded primarily by private investors who purchased tax-exempt bonds (the Southern Connector and Route 895) needed to acquire some right-of-way through condemnation and will compete with local freeways that will not be at capacity for several years. These distinctions are important for the following reasons:

- It is difficult to justify taking private property when a for-profit entity is a primary beneficiary. Therefore, if condemnation is the only way to obtain the necessary right-of-way for a particular project, the private sponsor may have to consider going the nonprofit route.
- Traditional equity investors and purchasers of corporate debt have a relatively short-term investment horizon and heavily discount future cash flows. To finance projects dependent on future growth, sponsors may have to access the tax-exempt market, where investors have more experience evaluating long-term traffic and revenue forecasts and are comfortable with backloaded debt structures that include deferred interest and zero-coupon securities with maturities exceeding 20 years.

If one accepts the premise that private financing is not a "one-size-fits-all" proposition, it makes sense to try to identify and create opportunities that will be attractive to different types of private investors. High-occupancy toll lanes, for example, may be ideal investments for pension funds and other institutions that are not interested in purchasing tax-exempt debt. There are few right-of-way problems because the facilities are built in HOV lanes or in the median of existing highways, and the sponsor is actually encouraged to increase toll rates periodically to maintain free-flow travel.

Public Versus Private

News that a start-up Internet firm is losing money does not generally lead people to conclude that similar companies are doomed to failure. Reports that some private toll projects did not meet the owner's initial financial expectations, however, are often cited as proof that such ventures cannot work in the United States. The fact that those private toll projects enhance mobility in

the overall transportation network and generate sufficient revenue to properly operate and maintain the facility is often overlooked.

Other aspects of the private ventures that deserve attention include the following:

- Use of technology: The private toll road sponsors have an excellent track record when it comes to the development and implementation of electronic toll collection systems. The relatively smaller scope of the private projects versus the large public toll systems in the United States may contribute to that success, but it is also clear that the private sector is very proactive in this area and does not simply seek the lowest bidder. Two of the private ventures, TRIP II and CPTC, included European toll operators in their ownership to ensure that they had full access to their expertise. UTS developed a proprietary toll collection system that allows managers to access and evaluate real-time data on their toll facilities over the Internet. CCI is considering various options for integrating its toll collection system with the freight transfer station it will also operate.
- Marketing and customer service programs: Since many public toll authorities do not increase toll rates to keep pace with inflation, the cost of using their facilities is relatively low. As a result, demand is strong and the organizations do not have to devote significant resources to attracting more traffic. Sponsors of start-up toll facilities do not have that luxury. They have to convince drivers that they are getting fair value for their money in the form of a faster, safer trip.

All of the projects described above that are in operation have active marketing and customer service efforts. They have been successful in getting customers to focus on the value of the time saved by using the facilities rather than the cost per mile driven. In addition, some of the marketing strategies being pursued are innovative, such as finding other ways customers can use their toll transponders and encouraging businesses to provide toll vouchers as an employee benefit.

Where Do We Go From Here?

State transportation agencies outsource a significant amount of their work to the private sector. Almost all construction activity is contracted out, and an increasing percentage of the planning, design, and inspection effort for transportation facilities is done out-of-house. It is relatively easy to leverage private-sector expertise and resources in those areas because there are a number of potential providers to choose from and performance objectives can be defined and evaluated.

The private-sector role in transportation finance cannot be managed in the same way. As demonstrated by the experiences in the start-up toll road sector, transportation officials have to actively support private financing initiatives by creating development opportunities and facilitating certain activities, such as land acquisition and permitting. Other potential contributions include the following:

- Enhancing the ability of transportation staff to execute "best value" procurements and to respond to unsolicited private proposals: Potential private sponsors will respond to and initiate opportunities if they know that public transportation agencies are prepared to work with them. As private involvement in infrastructure development increases, though, care needs to be taken to avoid potential abuses of the closer relationship between public officials and private sponsors.
- Developing local advocates for nontraditional funding and development strategies: Top-down mandates to pursue innovative financing are rarely successful. As long as a community believes that federal or state grants might be available, it will resist any financing solution that involves user fees or a dedicated local revenue stream. The consequences of waiting for public funding, however, are often not understood at the local level. Not only can project costs escalate dramatically over time, but the resulting congestion, accidents, and missed development opportunities can have a real effect on a community.