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The Devolution of Transportation Funding How Innovative Financing Is Putting Local Communities Back in the Drivers Seat

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When President Dwight D. Eisenhower signed the Federal Aid Highway Act of 1956, it signaled a turning point in the funding of transportation in the United States. For the first time in U.S. history, the federal government now had a reliable revenue stream allowing it to assume a greater role in providing infrastructure and services to the nation.

Prior to the passage of the federal income tax and the federal motor fuel tax, most states relied on private companies and public authorities to fund major transportation infrastructure projects. In poorer states, funding was frequently inadequate and facilities were often substandard. The interstate system held the promise of reducing this inequality by providing states with 90% of the funds necessary to build the nationwide interstate highway system. While the interstate highway system proved to be an economic boon for the nation, the federal funding process was ultimately unsustainable. Soon, the needs of state and local communities began outpacing federal funding, and local communities struggled to overcome increased vehicular travel and growing congestion. Those who couldn't or chose not to keep up with growth suffered consequences.

Central Texas got the following wakeup call in 1999. For years, local politics were heavily influenced by limited growth supporters. While the Central Texas area haggled over how to address the issue of additional roadway capacity and seemed to adopt an "if we don't build it (infrastructure), they won't come" attitude; other areas of the state swept in and took available funds to their region. New residents still came, by the tens of thousands, and the transportation system was completely overwhelmed. Between 1960 and 2000, the Central Texas region grew by 380%. Dell computer, heavily dependent on just-in-time delivery of

components and finished project shipment, realized that congestion in Central Texas was costing them too much money and was not being addressed. They decided to locate their next expansion in Nashville, Tennessee. That one day lost 10,000 jobs for Central Texas.

The root of the problem, for all levels of government, is the federal motor fuel tax and the politics that surround its collection and distribution. Problems with the fuel tax developed soon after passage of the Highway Act. Elected officials, recognizing the economic benefits of highway construction, began adding dozens of hometown projects to the interstate highway system. By the early 1970's, with Americans clearly married to their cars, the system had grown from 26,700 miles to 46,726 miles. With program costs ballooning out of control, Congress decided it was time to apply the brakes and limit once and for all the size and scope of the system. It was perhaps the first warning sign of the coming devolution (surrender of powers to local authorities by a central government) of transportation funding. This also came at a time when progressive communities matured to the idea that commerce and economic well being were dependent upon a viable transportation network.

One example in the Central Texas County of Williamson fully reveals this dichotomy of cause and effect. Taylor and Round Rock, Texas are only about 20 miles apart. In the 1950s, when decisions were being made on specific routes for Interstate 35, Taylor successfully fought against the interstate's close proximity to town for the same reason communities fight against new infrastructure today, reluctance to change and the fear of an adverse impact to their quality of life. The highway eventually moved west and split the small railhead village of Round Rock. In 1960, Taylor had a population of 9,434 and Round Rock 2,458. By routing Interstate 35 through Round Rock, it brought immense economic vitality to the small village that can now be called a burgeoning city. Table 1 compares the "then and now" statistics of both Taylor and Round Rock. In today's troubled world of roadway funding, communities across America are realizing that they too

could go the way of Taylor, Texas if new methods of financing critically, important transportation infrastructure projects, that link them to the state and global economy, are not found.

Table 1 – Vitality Statistics Comparison of Round Rock and Taylor

| | Round Rock | Taylor |
|------------------------------------|-------------------|---------------|
| Population in 1960 | 2,458 | 9,434 |
| Population in 2005 | 86,316 | 14,636 |
| Unemployment Rate in 2005 | 4.0% | 4.67% |
| Taxable Assessed Valuation in 1985 | \$1,293,007,032 | \$245,015,038 |
| Taxable Assessed Valuation in 2005 | \$5,667,029, 945 | \$663,515,000 |
| Sales Tax Revenue in 1983 | \$991,345 | \$489, 365 |
| Sales Tax Revenue in 2005 | \$60,128,584* | \$2,768,356 |

* *Sales tax impact:* The City of Round Rock ranks 7th among cities in the state of Texas for sales tax collections due in large part to the impact of Dell's Texas sales.

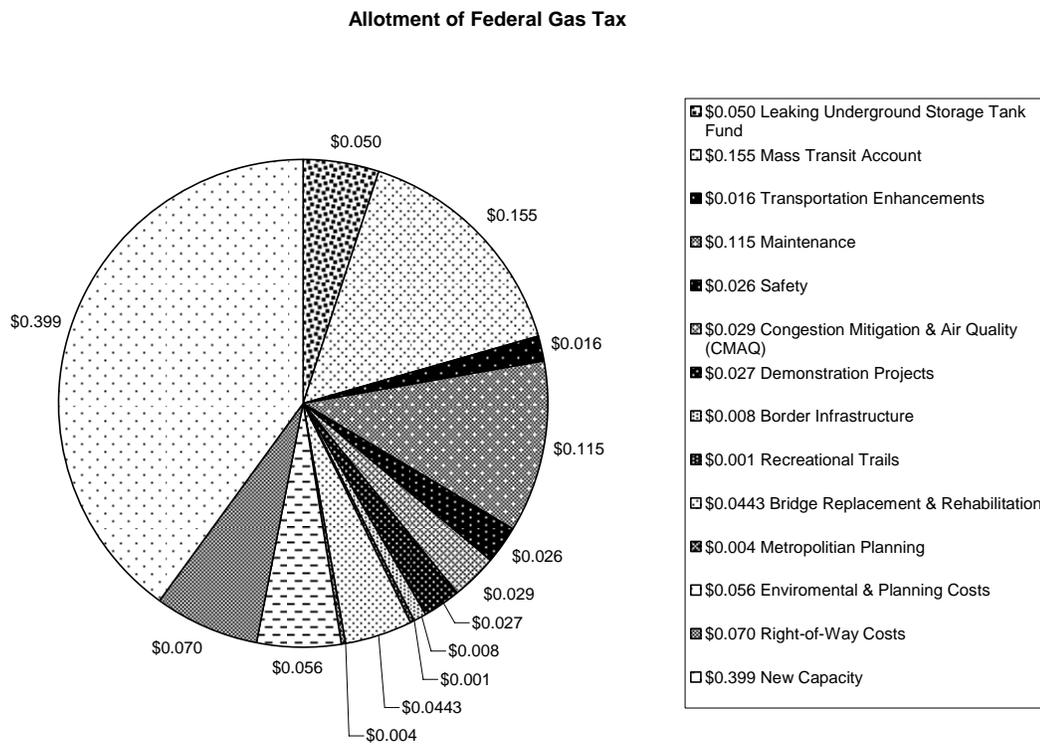
The gas crisis of the 1970's pointed out another flaw of motor fuel tax funding. As Americans bought smaller, more fuel efficient cars, and high inflation plagued the nation, motor fuel tax collections began to stagnate, and Congress was forced to increase the tax. Meanwhile, Congress was diverting an ever greater share of motor fuel tax revenue to non-highway projects and earmarking funding for specific uses such as highway safety.

While many of these programs have merit, they may not be equally important in every state. By earmarking money to specific programs, Congress has limited flexibility and left local communities scrambling to find money for new roads. The problem has been particularly bad in fast growing states like Texas, where only about a third of federal highway funding can be used on new capacity highway projects with the rest destined for programs mandated by Congress. This breakdown can be seen in Table 2.

Elected officials, in fast growing Central Texas over the past 25 years, have seen the gradual erosion of help from the national and state levels of government.

Twenty-five years ago, most of the road projects that included the state system received 90-100% of the funding needed for the projects. Gradually that number declined to 70-50%, and now in some cases, no assistance in state and federal dollars is available. In fact when one takes the total combined gas tax revenue – 18.4¢ derived from the Texas state gas tax and 20¢ Federal gas tax – only 30¢ of the total per \$2.00 tax is available for new capacity, or in other words: 15% of all gas tax funding sources are available for new capacity projects.

Table 2 – Allotment of Federal Gas Tax¹

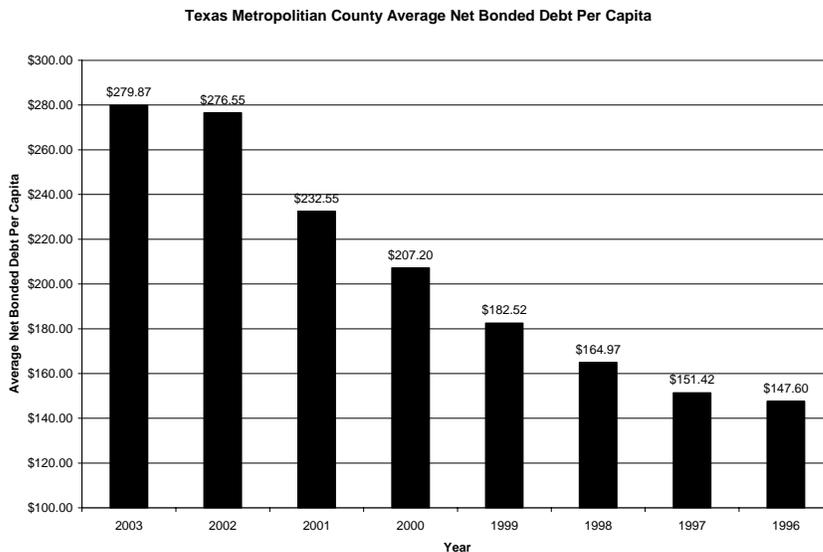


Yet the diversion problem is not solely a federal issue. In Texas, 25% of the revenue generated from the motor fuel tax is diverted to education, and the remainder barely covers the cost of maintaining the state’s aging roadway system. Meanwhile, funding new highway capacity has grown increasingly difficult as lawmakers at both the federal and state level face constant public pressure to hold the line on new taxes. The impact in Texas has been significant. The 20¢ motor fuel tax passed in 1991 today has an inflation adjusted value of

¹ TxDOT, GBE Division “The Unreliability of Federal Funding”

less than 15¢. To meet statewide transportation needs, it has been estimated the gas tax would need to increase to at least 55¢ a gallon, a highly unlikely scenario. Recent state revenue and expenditure data reveal for the first time in the history of the Texas gas fuel tax collection, the cost of maintaining Texas roadways exceeded the total annual revenue from the gas tax. The prospects aren't much better at the federal level. The 18.4¢ federal fuel tax has not been raised since 1993, and there are no plans to raise it. As a result, the Highway Trust Fund is projected to begin running a deficit as early as 2009.²

Table 3: The Average Texas Metropolitan Net Bonded Debt Per Capita



With the motor fuel tax unable to meet the demand for new highways, local communities are struggling to find alternative ways to finance construction. One method has been to sell bonds backed by property taxes. While this funding mechanism can provide additional financial resources for transportation, it has its weaknesses and limitations. In Texas, most such bond issues require a public vote, which makes it difficult to develop a consistent and reliable funding source. Furthermore, many Texas cities, including Austin, have explicitly ruled out new capacity projects as candidates for capital improvement bond elections.

² TxDOT, GBE Division “The Unreliability of Federal Funding”

There are also limits as to how much money any taxing entity can raise using this method. Roadway projects can be extremely expensive, frequently outstripping the financial resources of an individual city or county; right-of-way, while once dedicated by owners of land who saw the value of new roadways, now must be bought by the square foot for larger urban projects. Property taxes also place the financial burden for roads on individuals who may not necessarily ever use them. Property tax calculations are of course based on property values; owners with more value fund a greater share of the bill for roadway construction, creating issues of equity. Ultimately, the funding of highway projects with property taxes leads to higher property tax bills and in turn makes housing less affordable. In fact, in just this past legislative session, Texas passed a new education bill that lowered the property tax on all ad valorem taxes and set a cap on future increases. The prevailing sentiment in Texas, a state with no income tax, is that tax payers are already overwhelmed by their heavy load of property taxes, and future increases will be highly scrutinized.

With voters resistant to higher taxes, the idea of development impact fees has become popular. Development impact fees are charges assessed on new development to help pay for public infrastructure required to accommodate the development and are generally charged at the issuance of a project's building permit. They are limited to new infrastructure and cannot be used for operation, maintenance, repair, alteration or replacement of capital facilities.³ In 2003, the Merced County Association of Governments (MCAG) in California developed a comprehensive plan for improvements that will be required on their regional road network through the year 2025. This plan proposes a Regional Transportation Impact Fee (RTIF) which assesses new development throughout the county. Projections indicate that in twenty-five years, the RTIF would collect \$91 million of the \$530 million necessary to construct ten improvement projects.⁴

³ Lawrence W. Libby and Carmen Carrion, Ohio State University, "Development Impact Fees"

⁴ Merced County Association of Governments, "Regional Transportation Impact Fee Study"

This property tax burden debate also extends to commercial property in the state. With an ad valorem based system, major employers face significant increases in property tax when considering relocation or expansions in Texas. The effect has been that these employers then seek abatements of taxes in return for future expansions and locations.

The problem with trying to meet the increasing demand of expansion through the use of development impact fees is that they are frequently opposed by development interests who want to maximize profit and keep expenses to a minimum. Passing along these fees to consumers drives up the cost of living, making communities more expensive to new businesses and residents. Additionally, impact fees may sometimes be dedicated to non-transportation infrastructure needs. Many capital infrastructure needs compete for development fee funds, limiting the amount of money available specifically for roads. There is also the question of equity when dealing with development fees. Highways built to serve new development are frequently used by a wide range of drivers, not just new residents.

Development fees are also subject to economic fluctuations making them a less predictable funding source, and they generate a finite amount of money that is incapable of funding large infrastructure projects on their own. The unpredictability of development fee revenue makes bonding difficult. As a result, development fees are often most useful as a supplement to other funding mechanisms.

In Texas, as with most of the country, there is a convergence of two distinct trends, the requirements by state DOTs for mandates on the leveraging of state dollars and the diminution of available resources. With the gas tax failing to meet the demand for transportation facilities and many alternative funding sources considered inappropriate or unable to fill the gap, user funding through tolls has emerged as an alternative method. Tolls provide a reliable revenue source that is

sustainable and less prone to the weaknesses of traditional tax based financing. Specifically user based financing provides:

- **Fairness:** only users of a toll road pay for it, and directly in proportion to their use
- **Large Scale:** a toll revenue stream permits large sums to be raised in the capital markets, making it possible to build large-scale projects in a short period of time
- **Better Maintenance:** bondholders insist on legally enforceable requirements for proper ongoing maintenance⁵
- **Leveraging:** regional systems provide a funding source necessary to leverage and draw down scarce state dollars

With the advent of the Federal Aid Highway Act, tolls, which were once a common source of infrastructure funding, fell out of practice and favor. But with the looming crisis and changes to legal and institutional frameworks, they have once again been deemed as a reliable alternative to federal funding. In fact for the first time, SAFETEA-LU, the legislation enacted to govern the flow of federal highway transit funds to the states from 2005 to 2009, includes the option of tolling interstates for the purpose of financing interstate construction and reconstruction, promoting efficiency in the use of highways, and supporting congestion reduction.

After realizing the potential benefits of a reliable toll revenue stream, Texas legislators put together the needed legislation to make tolling viable statewide. The first piece of legislation to pass was Proposition 15, which citizens voted in on November 6, 2001. The proposition created the Texas Mobility Fund, which gave power to the Texas Transportation Commission (TTC) to issue bonds to fund new highway projects, especially start-up toll facilities.

⁵ Samuel, Peter; "Putting Consumers in the Driver's Seat: The Case for Tolls"

Senate Bill 342, which passed in 2001, provided for the establishment of Regional Mobility Authorities (RMA) capable of bringing multi-modal transportation improvements to various areas of the state. SB 342 was a hasty response to local governments coming to the state and pleading for more resources to address the looming financial crisis. However, the legislation failed to provide all of the tools necessary to fulfill the mission, including the ability to issue bonds or acquire needed right-of-way through eminent domain proceedings. To ensure RMA's had the powers necessary to operate effectively, the Texas Legislature passed House Bill 3588 in 2003. HB 3588 authorized the RMAs to issue revenue bonds backed by tolls and to enter into comprehensive development agreements with private entities to design, construct, and possibly operate toll road facilities.

HB 3588 also introduced two innovative new features: it authorized the TTC to convert state highways to toll facilities and to transfer them to RMAs for operation and maintenance, and it provided for the concept of pass through financing. With pass through financing, an RMA (as well as any local municipality) can front the money for a project and then be repaid by the Texas Department of Transportation over time based on the number of vehicles using the highway facility. The furor over the conversion of existing roadways eventually led to HB 2702 in 2005 that strictly limited an RMA's power to convert existing roadways into toll roads.

The Central Texas Regional Mobility Authority (CTRMA) was the first RMA to be created under this new authority. It was formed by Travis and Williamson Counties and was approved by the TTC on October 31, 2002. Projects financed by the CTRMA, along with all other Texas RMAs, can be constructed by Public-Private Partnerships (PPP). These contractual agreements, formed between a public agency and private sector entities, allow for greater private sector participation in the delivery of transportation projects. Traditionally, private sector participation had been limited to separate planning, design, or construction

contracts on a fee for service basis – based on the public agency’s specifications. By expanding the private sector role, public agencies are able to tap private sector technical, management, and financial resources in new ways, to achieve public agency objectives.

The private partnership element has been incorporated into RMA projects with the initiation of comprehensive development agreements (CDA). These agreements give one private sector entity the authority to exclusively provide a menu of services involved in the development and operation of a transportation facility. Some of these activities include design, property acquisition, construction, financing, operation, and maintenance. In Texas, CDAs are limited by state law and can only be utilized by RMAs and TxDOT.

The CDA process provides several key benefits. First, CDAs facilitate lower costs and provide for faster project construction. Second, CDAs shift design and construction risk to the private sector and away from the public entity. At the time the CTRMA’s first project was financed, the agency had virtually no money in the bank and could not have guaranteed design and construction risk on the project. Developing a contractual structure to shift those risks to the private sector and to build financing upon that risk transfer was a key aspect of the arrangement. RMAs using CDA’s present a classic example of risk being most effectively allocated to the party best able to accept it.

The CTRMA entered into its first CDA for the design and construction of 183A. 183A is an 11.6 mile toll road running parallel to the existing US 183 northwest of Austin. Construction began in March 2005 and is scheduled for completion in March 2007. In this instance the CDA involved a more traditional design/build approach leaving the CTRMA to handle financing.

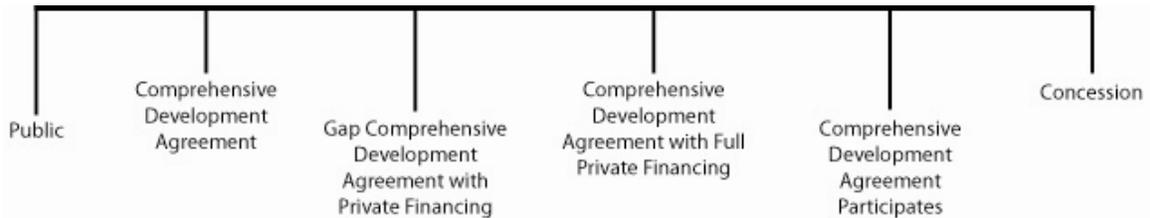
CTRMA was able to secure financing through the development of a multi-source bond package whose participants included private bond placement, USDOT, TxDOT, Williamson County, and local municipalities. Costs of the 183A project

were financed with proceeds of the Senior Lien Revenue Bonds; Subordinate Lien Revenue Bond Anticipation Notes backed by a USDOT TIFIA Bond, and investment earnings on amounts in the Construction Fund. TxDOT committed a grant of up to \$65 million to CTRMA for certain costs associated with the 183A. CTRMA also received a previous grant of \$12.7 million from TxDOT in 2003 for development and pre-construction costs associated with 183A. Williamson County and the local municipalities agreed to obtain all right-of-way for the 2005 Project. With this package, CTRMA was able to leverage breadth of inter-governmental cooperation in support of this project when approaching the bond market. When one compares the building of 183A, which is 11.6 miles long and will take 3 years to complete, with the original construction of 183N, which is 10 miles long and took 14 years to complete, one can see the benefits this type of financing can provide. In fact the financing approach of the CTRMA was so well received by the bond investor community that the package won an award as the “Southwest United States Bond Deal of 2005” by the noted publication – *Bondbuyer*.

The amount of public versus private involvement in a CDA can range from a completely public project financed by traditional state gas tax revenues and monies allocated by the federal government, to a complete concession where a private entity finances the entire project for a set number of years until releasing the project back to the state. Hybrid projects, those that lie somewhere in the middle, and are best represented by the recently released agreement between TxDOT and a private joint venture on future segments of the mammoth SH130 project in Central Texas. Table 4 presents a scale that highlights these multiple hybrid options ranging from a fully public to fully private method of finance. The Alamo RMA in San Antonio, Texas is attempting a hybrid CDA by entering in to an almost fully private concession, carving out operations to be run by the RMA. The CTRMA is considering utilizing a hybrid concession on its next project, the \$600 million dollar 290E. The first segment would replicate the CDA arrangement employed on 183A, while the second segment would utilize a more involved

private sector approach designed to bring needed private financing to the table. There certainly remains considerable public debate of just what course the private concessionaire type arrangement could or even should take. There's already talk in the capital building in Austin, as well as Washington D.C., of limiting the scope of private sector investment.

Table 4: Scale of Financing Involvement



While tolling is initially designed to cover bond payments, toll operations, and facilities maintenance, most toll roads eventually generate surplus revenue. A key reason for passage of the RMA legislation in Texas was to allow local communities to generate locally, dedicated revenue to fund projects that the federal and state governments no longer can in a timely manner. This approach has proven highly successful in a number of places both in and out of Texas. However, there are challenges and risks. These surplus funds can be used for any mobility project – from bike trails to airports and non-tolled facilities. The Central Texas Metropolitan Planning Organization has developed a Texas Metropolitan Mobility Plan whose arterial projects total over \$1.9 billion dollars. Surplus toll revenues could be used to finance these improvements that would otherwise have no other funding source, particularly when they are beneficial to that particular toll road program.

These surplus funds are also what attract concessionaires. After witnessing several successful long-term, equity investments in Europe and Australia, states like Illinois, Virginia, Indiana, Oregon, and Texas are taking steps toward concessionaire financing. By entering in to a stipulated lease, these private

agencies are able to build, maintain, operate, and profit while at the same time states gain needed mobility improvements and large, up-front cash sums to build additional improvements. As referenced above, Texas signed its first hybrid toll concession agreement with Cintra-Zachry, a joint venture, to build an additional 40 miles of TX SH130 between southeast Austin and I-10 at Seguin at a cost of \$1.3 billion. The agreement gives Cintra-Zachry the right to toll for 50 years in return for fully funding \$1.3 billion of project costs and provides for an upfront concession fee of \$25 million payable by Cintra-Zachry to TxDOT plus a share of the profits. TxDOT is in the position to receive \$1.6 billion in profit share over the 50 years of the contract.

The devolution of transportation funding and the paradigm shift that has put local leaders in the drivers' seat is poorly and not readily understood by the public. As a result, implementation has been difficult. Despite a looming transportation funding crisis and a wide range of new funding tools at the disposal of public officials, the development of new facilities has been painfully slow and plagued by setbacks. Still the process moves forward, driven by the reality that there are few other realistic options and that local government and regions must bring new dollars to the table to leverage the already scarce gas tax dollars. The most important thing to focus on as this new course is charted is what brought us to this point: the inadequacy of the gas tax, as currently structured, to provide sufficient funding for future completed needs. The promise of surplus revenue from tolling brings with it the same risks born out in the history of the gas tax.

It will be critical that local leaders consider closely the consequences of all decisions made relative to the future allocation of surplus revenues that are generated. Toll roads are an enterprise and they only remain successful if they are approached from that perspective. Diverting surplus revenue to projects that don't generate new revenue or investing heavily in projects that are politically popular, but not financially wise can kill the goose that may lay a golden egg. It is the story of the gas tax, and a story, that if repeated, could make public/private partnerships, tolling, and local control yet another failed policy approach. For

communities wishing to compete effectively in the global economy, it's a policy mistake they can't afford to make.