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Roadways

THE ISSUE

For many years now, road congestion in Texas has seemed to become steadily worse. Today, Austin is considered to be the most congested city of its size in the nation and the obvious traffic headaches in Houston and Dallas/Fort Worth are actually worse than those in Austin. Roadways serving as major freight arteries between cities, like IH-35, are under increasing pressure as a result of NAFTA traffic. Contributing to the problem, Texas ports are positioned to get much busier because important shippers such as Wal-Mart and Home Depot, seeking to minimize the risk of a repeat of the strike that occurred at major California ports a few years ago, have plans to make Houston's port their primary point for receiving goods from overseas. Traffic from ports will increase truck and rail traffic as these import giants distribute goods throughout the nation using Texas roadways. Despite growing road demand in Texas, little has been added to the state's road network in recent years.

The policy of the Texas Legislature in the past has been to provide roads on a pay-as-you-go basis. In other words, as revenues from the federal government and Texas' fuel taxes have been collected, they have been spent on construction and maintenance. The state has historically not borrowed funds for road projects. However, federal funds have not always been reliable and Texas contributes more in federal transportation taxes than it receives in federal road funding. Because fuel taxes do not automatically adjust to inflation, the purchasing power of the Texas fuel tax has been falling since it was last increased in 1991. Revenues from fuel taxes have not increased as much as road travel due to improvement in automobile and truck fuel efficiency. At the same time, critical road-building resources such as steel, asphalt, and concrete have all seen price increases as a result of phenomenal economic growth and increased demand in India and China.

All of these circumstances make it necessary for state policymakers to consider new and innovative ways to fund and improve the state's road infrastructure. Roads are a valuable commodity that historically has been given away. Fuel taxes have proven a very poor substitute for directly pricing roads. Tolls, associated with delay and inconvenience in the past, now offer a viable alternative with the development of new technologies that do not require the driver to even slow down.

Having realized the need to develop more road infrastructure quickly, the Texas Legislature has been increasingly open to allowing the Texas Department of Transportation to experiment with new contracting and funding methods necessary to get road infrastructure built in a timely manner, instead of relying on relatively piecemeal strategies used in the past. With the passage of HB 3588 by the 78th Legislature, Texas is now considered a leader in innovative road financing and contracting, a description that, even four years ago, few would have thought would ever apply. Today, regional mobility authorities are being formed to aid in planning and implementing toll funding strategies. Road funds are being leveraged through the issuance of bonds with tolls to aid in paying back the bonds. Unsolicited proposals to develop what has been called the Trans-Texas Corridor are being considered by the Texas Turnpike Authority. State-level toll roads in the Austin area are being rapidly constructed, partly through a design-build contract.

Changes in state policy have not been without controversy. Texans are not used to the idea that new limited-access capacity will be at least partially financed through tolls and will probably be constructed using innovative contracting practices. Tolls are controversial among people across the political spectrum and the new contracting practices are considered suspect by some, even though taxpayers are generally exposed to less risk than they had faced under the old contracting practices. The Texas Legislature will, therefore, be subject to some pressure to retrench on new transportation policy.

THE FACTS

- ★ As of 2002, there were 301,778 miles of public roads in Texas 79,493 miles were owned by the state, 142,636 were owned by counties, and 78,653 were owned by municipal authorities
- ★ 79.4 percent of Texans commute to work alone in their personal vehicles
- ★ Only 12.5 percent of Texans carpool and fewer than 2 percent use public transportation, including taxis
- ★ The number of vehicle miles traveled per person in Texas in 2000 was 800 miles greater than the national average
- ★ 8 percent of all the vehicle miles traveled in the United States in 2000 occurred in Texas
- ★ From 1990 to 2003, the number of lane miles of public road on the Texas state system increased 4 percent while the number of total vehicle miles traveled on the state system increased 52.8 percent
- ★ In 2001, 22 percent of all Texas road bridges were functionally obsolete or structurally deficient, representing 10,555 structures, more than in any other state
- ★ Travel delay caused by congestion in Texas increased from 750 million hours in 1982 to 3.6 billion hours in 2000
- ★ Between 1990 and 2000 congestion in Texas' eight major metropolitan areas cost over \$45 billion in lost time and wasted fuel
- ★ Passenger cars and light duty trucks accounted for some 78 percent of carbon dioxide emissions in 2001
- ★ Truck imports by weight from Mexico to Texas increased 9 percent from 1997 to 2000. Truck imports by weight from Canada increased 36 percent during the same period
- ★ Of the top 50 U.S. foreign trade freight gateways (by value of shipments),
 8 are in Texas, with 4 on the Texas/Mexico border

THE FACTS (continued)

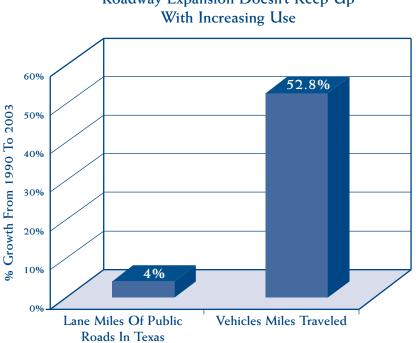
- ★ The 2000 U.S. Census shows that since 1990 carpooling declined from 13.4 percent of work trips to 11.2 percent of work trips, despite billions being spent on carpool lanes (HOV) on congested highways
- ★ A study by the Minnesota Department of Transportation indicated that opening HOV lanes to general use would reduce congestion, save fuel, and possibly reduce pollution
- ★ As of 2001, there were 8 toll roads in Texas 5 owned by the Harris County Toll Road Authority, 2 owned by the North Texas Tollway Authority, and 1 privately owned – totaling 135 miles in length

RECOMMENDATIONS

- ★ Refine reforms in HB 3588 as necessary in order to make procedures smoother and lines of authority clearer, but preserve the fundamental reforms
- ★ Enhance urban mobility through tolled "managed lanes" and convert highoccupancy vehicle (HOV) lanes, currently offered for free, to tolled lanes
- ★ On tolled intercity highways that might be developed, include concessions within the rights-of-way where possible so that they are accessible only from the toll lanes. Simultaneously eliminate or substantially reduce state fuel taxes on gasoline and diesel sold from these concessions
- ★ Adjust state policy to allow for funding projects to expedite freight rail traffic, taking pressure off the road network and improving traffic flow on roads
- * Limit incompatible land development along railroad rights-of-way
- ★ Establish procedures and metrics to make sure tax-financed road projects that expand capacity are properly prioritized to produce the greatest possible net benefits for the state
- ★ Make greater use of contracting for routine maintenance, expanding the model established with the VMS, Inc. contracts for routine maintenance on IH-35 and IH-20
- ★ Eliminate the old design-bid-build road construction strategy and make greater use of design-build strategies
- ★ Establish disincentives for the diversion of local resources to transit projects, which have shown themselves to be almost universally cost ineffective

<u>resource</u>

Texas Road Policy: Keeping Up With Demand by Byron Schlomach, Texas Public Policy Foundation
 (Forthcoming 2005)



Roadway Expansion Doesn't Keep Up

Rail Transit

THE ISSUE

Rail transit is perhaps the most contentious aspect of transportation policy, although it is the least used form of travel by Texans. Viewed by many as a local issue, rail transit is still worth being addressed as a matter of state policy for several reasons. First, the state mobility plan offers transit as an option for regional mobility plans. Second, though only federal pass-through funds are funneled through the state to help pay for transit, it does divert resources from more effective congestion-relieving strategies. Third, state resources are being used to fund other, more effective congestion-relieving strategies such as road construction, and transit diverts local resources from leveraging the state resources. Fourth, combining state and federal gas taxes and tolls, it can be argued that the state's road network is financially self-supporting whereas no such argument can be made for any transit system, especially rail transit.

Some policymakers support rail transit as a cost-effective way to transport Texans in urban areas and the way to reduce energy consumption while protecting air quality. Houston, Dallas, and Fort Worth operate rail transit. San Antonio has considered rail, and Austin voters in November 2004 accepted a commuter rail project.

Studies of rail transit in Texas and cities throughout the nation offer strong evidence that rail transit is:

- \star The most expensive form of transportation,
- ★ Unsuccessful at reducing urban congestion,
- \star Ineffective at conserving energy;
- * Dangerous for drivers and pedestrians; and
- ★ The least effective way to control air pollution.

<u>THE FACTS</u>

- ★ Of the 23 largest rail transit systems in the United States, transit lost market share of commuters in 60 percent of rail regions
- ★ Buses provide faster travel than rail moving at least 15 mph more quickly
- ★ Highways are 14 times more cost-effective than rail, and buses are 1.7 times more cost-effective than rail
- * Rail transit is generally more dangerous than alternative forms of transportation
- * Most rail systems consume more energy per passenger mile than cars
- ★ Rail pollution costs about \$1 million per ton of ozone precursors eliminated a cost considerably higher than the widely accepted efficiency standard of \$10,000 to \$20,000 cost per ton of air pollutants

★ Construction of rail transit is strongly associated with increased congestion and less affordable housing

RECOMMENDATIONS

- ★ Use transportation dollars on the most effective investment measured by the cost per hour of reduced delay
- * Construct or improve highways instead of investing in rail transit
- ★ Use traffic signal coordination, freeway ramp metering and incident management as cost-effective solutions to congestion – capacity expansions are not necessarily the best solution
- ★ Consider bus rapid transit as an alternative to transit rail, particularly in high occupancy lanes
- ★ Create incentives to encourage cities to accommodate private bus or van transit services that currently do not exist only because they are outlawed

RESOURCE

• Great Rail Disasters: Impact Of Rail Transit On Urban Livability by Randal O'Toole, Texas Public Policy Foundation, June 2004 (http://www.texaspolicy.com/pdf/2004-06-GRD.pdf)



Highways are 14 times more cost-effective and buses are 1.7 times more cost-effective than light rail