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Renewing Texas Infrastructure

2008 Texas Infrastructure Report Card

Texas Section – American Society of Civil Engineers

Highways and Roads Fact Sheet

Key Infrastructure Facts: Existing Condition and Performance

- Of the 305,000 centerline miles of roadway in Texas, 225,000 miles (nearly three-quarters) are managed by county or municipal governments. The remaining 80,000 miles (interstates, US and state roadways) are managed by the Texas Department of Transportation (TxDOT). However, the vast majority of the 238 billion vehicle-miles travelled annually on Texas roads – 74% – are logged on TxDOT-managed facilities.¹
- Over the past 25 years, vehicle travel on Texas' roads increased by 95% and the overall population increased 57%. However, the capacity of TxDOT-managed roads has only expanded about 8%. During the next 25 years, vehicle travel on Texas roads is projected to increase by 214%, and the population will increase by 64%.^{2,3}
- Driving on roads in need of repair costs Texas motorists \$4.8 billion a year in extra vehicle repairs and operating costs - \$326 per motorist.⁴
- The 2007 Urban Mobility Report published annually by the Texas Transportation Institute (TTI), reports traffic congestion data and key mobility measures for US cities. Congestion is becoming increasingly worse in urban areas of all sizes, and Texas cities reflect this national trend. As shown below, nine Texas urban areas are currently experiencing congestion growth significantly above the national average.⁵

CITY	OVER 45% FASTER THAN AVERAGE* CONGESTION GROWTH	30-45% FASTER THAN AVERAGE* CONGESTION GROWTH	15-30% FASTER THAN AVERAGE* CONGESTION GROWTH	ANNUAL DELAY PER TRAVELER (HOURS)	ANNUAL COSTS OF CONGESTION (\$ MILLIONS)
Dallas-Fort Worth-Arlington	X			58	2,747
Houston			X	56	2,225
San Antonio		X		39	530
Austin		X		49	422
El Paso	X			24	159
Corpus Christi			X	10	32
Beaumont			X	11	25
Laredo		X		12	23
Brownsville			X	8	12

*Congestion growth rate exceeds the average rate for all US cities.

The Challenge: Funding

- When compared to other states, expenditures for highways in Texas ranks 17th on a per capita basis and 30th on a per-vehicle-mile-travelled basis. However, Texas ranks 2nd in the nation in both population and vehicle miles travelled.¹

- The Texas Transportation Commission estimates that \$188 billion will be required over the next 25 years to construct needed improvements to the TxDOT system, but current revenue sources will only generate just over half of that amount.²
- Under the current Federal legislation (SAFETEA-LU), Texas is theoretically supposed to receive at least 83% of federal fuel tax sent to Washington over the life of the bill; in reality, across-the-board rescissions and other manipulations of the Highway Trust Fund have reduced that return rate even further. SAFETEA-LU will be up for reauthorization in Congress in 2009, and Texas leaders are continuing to work towards a more equitable distribution of Federal funds.⁶
- Since the last Texas Section-ASCE Report Card in 2004, government agencies charged with maintaining roads and highways have been facing a serious challenge – inflation in construction material costs. Between December 2003 and December 2007, producer prices for roadway construction products increased a staggering 47%.⁷ This rate of increase means that in just four years, typical “no growth” roadway maintenance or construction budget has been reduced to 68% of its original effective value. Prices continue to rise at an accelerated rate; by May 2008, producer prices were 66% higher than in December 2003.⁸
- In 2007, TxDOT spent \$2.63 billion – 36% of their \$7.37 billion budget on maintenance operations for facilities it manages.³ Despite an increase of more than \$430 million dollars from the \$2.2 billion spent on maintenance in 2004, the *percentage* of the budget actually *dropped* from 41% of the 2004 overall budget of \$5.35 billion and inflation further reduced the buying power of the 2007 budget to only about \$1.9 billion in 2004 dollars.⁸
- Despite the dramatic reduction in buying power, TxDOT has still been able to maintain a consistently high percentage of its pavements in “good” or better condition since 2004 – around 86%.⁹ These outstanding results can be attributed to accelerated pavement maintenance expenditures through 2006 and to TxDOT’s consistent use of objective engineering criteria when prioritizing maintenance efforts. TxDOT engineers are understandably concerned that such results will no longer be achievable unless funding for pavement maintenance is increased to offset escalating construction costs and increasing numbers of heavy traffic loads.⁹

Sources

- [1] Federal Highway Administration, Highway Statistics 2006, (supplemented by calculated values).
- [2] Texas Department of Transportation. “TxDOT has a Plan – Strategic Plan for 2007-2011.” TxDOT Government & Business Enterprises Division, Austin Texas, July 2006.
- [3] Texas Department of Transportation. “Texas Department of Transportation Pocket Facts 2007.” TxDOT Public Information Office, Austin, Texas, 2007.
- [4] TRIP – A National Transportation Research Group, “Key Facts about Texas and Bridge Conditions and Federal Funding”. TRIP, Washington, D.C. February 2007.
- [5] Schrank, David and Tim Lomax. Texas Transportation Institute, “The 2007 Annual Urban Mobility Report.” September 2007.
- [6] Ramirez, Tonia N. Texas Department of Transportation, “The Unreliability of Federal Financing”. TxDOT Government & Business Enterprises Division, Austin Texas, May 2006.
- [7] Simonson, Ken. The Associated General Contractors of America, “AGC Construction Inflation Alert”. AGC, March, 2008.
- [8] Simonson, Ken. The Associated General Contractors of America, “The Data DIGest”. AGC, June 13-19, 2008 (with supplementary charts).
- [9] Texas Department of Transportation. “Maintaining the Texas Highway System – Pavement Conditions”, TxDOT Commission Meeting, May 2007.