

Perryman Report: Roadway congestion can lead to significant problems in Texas

By Dr. M. Ray Perryman | Posted: Wednesday, September 12, 2012 9:21 am

It is a widely recognized fact that Texas' highway infrastructure is failing to keep pace with population and economic growth. Congestion is a growing problem, and many highways are in need of substantial maintenance, expansion, or other improvements.

Preventive maintenance is far more cost effective than allowing excessive deterioration, and insufficient funding will lead to even larger problems in the future.

The quality of roadways affects productivity and quality of life through time lost sitting in traffic. As traffic congestion worsens, it can have a negative effect on future development across a spectrum of industries. Manufacturing firms which need to be able to accurately plan shipment times, for example, may be reluctant to locate in high-traffic areas.

Companies employing knowledge workers may also take into consideration likely commuting times. Past studies have shown that such infrastructure investments yield about a 30 percent annual return in terms of productivity and economic activity.

Looking forward, the numbers of vehicles on Texas roadways will increase as will the volume of freight. Texas adds well over 1,000 people to its population every day, and several hundred vehicles to transport them. At the same time, the funds provided by fuel taxes are projected to remain flat or decline. Various groups have outlined scenarios describing the condition of Texas roadways given particular levels of investment in improvements. One of these is the 2030 Committee, which was originally formed in 2008 and reconvened by Texas Transportation Commission Chair Deirdre Delisi in July 2010.

The 2030 Committee worked with researchers at top universities and the Texas Department of Transportation to develop a forecast for alternative levels of service for pavement, bridges, urban mobility, and rural connectivity as well as various potential sources of revenue. In addition, the Committee assessed the economic effects of underinvesting in transportation infrastructure.

The bottom line of the Committee's findings is that investing in transportation infrastructure pays off in a big way. Without changes to policies or funding mechanisms, inadequate resources for highway projects would be available, leading to worsening roadway conditions and rapidly increasing congestion over time. The group analyzed likely outcomes during the 2011-2035 timeframe and found that Texas households would pay an average of almost \$6,100 more per year for extra travel time due to traffic congestion and detours around deficient bridges, increased fuel purchases due to longer trips and slow-moving traffic, and additional vehicle maintenance expenses due to rough roads. However, even relatively small investments on a per-household basis can pay off many times over by

reducing wasted time and fuel.

Taxes on gasoline and diesel fuels have provided billions for the State Highway Fund each year. Though, with increasingly fuel-efficient vehicles, these taxes are set to level off and even decline. Raising the amount of tax collected per gallon of fuel is one way to offset this reduction and provide more funds. Other sources of revenues under consideration include increased vehicle registration fees, various special permit fees, and higher vehicle sales tax.

The potential costs of deteriorating roadways (in terms of vehicle maintenance, extra travel time, and extra fuel) are substantial, and even relatively small investments can pay off many times over. However, the likely effects on economic development could be even more extreme, with Texas losing ground to other states which have more acceptable roadway conditions.

Identifying a mechanism for funding highway projects which will provide the funds needed to maintain the state's investment in this essential infrastructure is crucial. Like the problem of adequate water supplies, any solution will certainly be expensive. However, further delays will only compound the problem and raise the cost of a solution.

Dr. M. Ray Perryman is President and Chief Executive Officer of The Perryman Group (www.perrymangroup.com). He also serves as Institute Distinguished Professor of Economic Theory and Method at the International Institute for Advanced Studies.