

Executive Summary

MARCH 2011



It's About Time: Investing in Transportation to Keep Texas Economically Competitive



Introduction

In 2008, Texas Transportation Commission Chair Deirdre Delisi appointed members of the original 2030 Committee. The initial charge of this committee made up of experienced and respected business leaders was to provide an independent, authoritative assessment of the state's transportation infrastructure and mobility needs from 2009 to 2030. The report that emerged from the first 2030 Committee, entitled *2030 Committee Texas Transportation Needs Report*, was released in February 2009 and can be found, along with its executive summary, on the Committee's website: <http://texas2030committee.tamu.edu>.

In July 2010, Chair Delisi reconvened the 2030 Committee, which includes most of the original Committee members, and charged it with developing a forecast for alternative levels of service for the four elements of the Texas transportation system—pavements, bridges, urban mobility and rural connectivity—along with analyzing potential sources of transportation revenue and determining the economic effects of under-investing in the system. The Committee provided guidance and direction to a team of transportation experts at the Texas Transportation Institute (The Texas A&M University System); the Center for Transportation Research (The University of Texas at Austin); and The University of Texas at San Antonio. The current report, *It's About Time: Investing in Transportation to Keep Texas Economically Competitive*, updates the February 2009 report

by providing an enhanced analysis of the current and future state of the Texas transportation system.

The Challenge Facing Texans

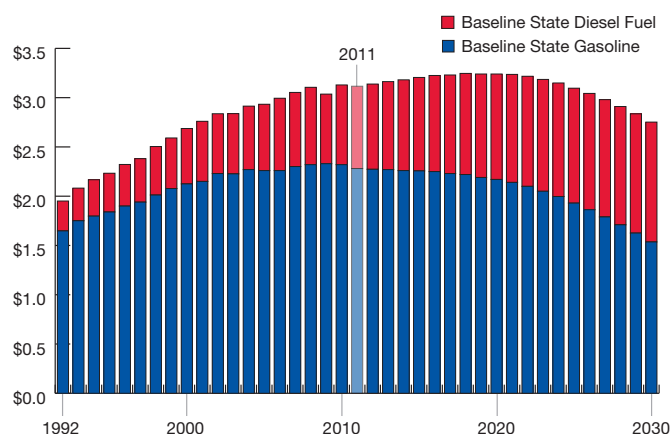
Texas has experienced more than 40 years of strong economic growth. Strategic transportation investments have played a significant role in enabling Texans to live and work where they choose and efficiently transport goods to markets and manufacturers. Unfortunately, transportation investments have not kept pace with the state's growth. Subdivisions, office buildings, schools and other travel destinations are often built without sufficient facilities to accommodate the travel created by these developments. Increasing traffic problems in rush hours—and even in the middle of the day in some cities—are only one symptom of the investment gap. Factors impacting the quality of Texas transportation include:

- **Burgeoning population and job growth**—The 15 million new Texans projected to arrive over the next 25 years means Texans will need to make more transportation investments.
- **More freight being moved**—Freight traffic is expected to grow at twice the rate of passenger vehicle traffic as the Texas economy grows over the next 25 years. Trucks and trains in rural and urban corridors are a key part of the economy and must travel on reliable timetables. If freight does not move efficiently in Texas, the state will lose jobs to areas where freight moves more easily.



The 2030 Committee believes that the responsibility of choosing individual transportation projects belongs with local and state officials who have access to the expertise and necessary information and are in touch with prevailing public opinion.

Exhibit ES-1. Motor Fuel Revenue (Billions of \$2010)



Source: Texas Comptroller of Public Accounts and the TxDOT TRENDS Model.

- **Road preservation concerns**—It is cheaper to keep roads in good condition than to fix them after they deteriorate. Maintaining transportation facilities is similar to maintaining a vehicle; it is easier and cheaper to change the oil and filter than to burn out the motor and then replace it. The projections show that many road miles will require costly rebuilding even if the best efforts are made to preserve them through the most cost-effective maintenance programs.
- **Increased time and costs for system improvement**—Waiting until transportation problems escalate will mean higher costs for transportation system improvements. Major transportation projects can take years to plan, design and build.
- **Deficient bridges**—Most Texas bridges that are deficient do not collapse completely. Instead, they have weight restrictions placed on them. Increasingly restrictive weight limits cause inconvenience to the traveling public and result in increased costs for freight and commercial vehicles.
- **Significant erosion in traditional funding**—Income from traditional transportation funding sources (taxes and fees) is no longer sufficient to keep pace with current and projected highway construction and maintenance cost increases.
- **Recent one-time funding infusions breed complacency**—Recent one-time funding infusions from a variety of sources have enabled road and bridge conditions to be maintained, even while traditional funding sources have declined. Urban traffic congestion grew during the last decade; it recently declined with the economic recession but is on the rise again. The one-time funding infusions make it easy to overlook the problems coming in the near future.

Adding to the funding and growth challenges, today's more fuel-efficient vehicles pay lower fuel taxes per mile than when the tax rates were set almost two decades ago. While they offer benefits such as leaving a smaller carbon footprint and allowing Texans to travel further per gallon, increasingly fuel-efficient cars and trucks generate less income from motor fuel taxes to fund the rising demands on Texas roadways as we move further into the 21st century. As Exhibit ES-1 shows, Texans will not be able to count on ever-increasing fuel tax revenues as they have in the past.

Texas Transportation Action Principles

The 2030 Committee believes that the responsibility of choosing individual transportation projects belongs with local and state officials who have access to the expertise and necessary information and are in touch with prevailing public opinion. However, the Committee believes that certain principles should guide investments in transportation programs. The Committee used these principles to identify methods to select transportation projects (without choosing individual projects), identify appropriate funding levels and ensure accountability with Texans.

- First and foremost, preserve Texas' substantial investment in transportation infrastructure.
- Ensure Texas is getting “bang for the buck” in using its transportation system.
- Involve transportation users and employers in transportation solutions.
- Attack problems and seize opportunities.
- Display results and support accountability.
- Require users to pay for services they “consume.”
- Make timely decisions about transportation investment levels.



The Committee studied four transportation quality scenarios for pavement and bridge conditions and urban and rural system performance to illustrate the choices that Texans face between now and 2035. A letter grade was assigned to each scenario ranging from F to B.

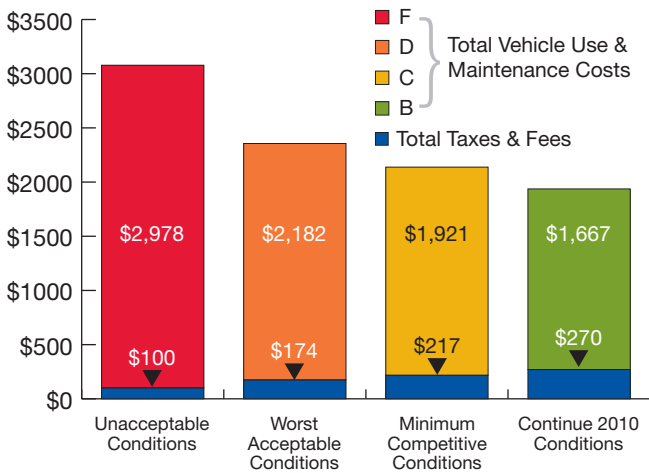
Four Transportation Scenarios—Texas' Alternative Futures

The Committee studied four transportation quality scenarios for pavement and bridge conditions and urban and rural system performance to illustrate the choices that Texans face between now and 2035. A letter grade was assigned to each scenario ranging from F to B. The strategies range from doing nothing new to implementing enough programs and projects to maintain conditions as they are now. *The Committee did not assign a letter grade of A to any scenario due to the significant funding required to achieve this level of quality for the transportation system.*

- **GRADE F: Unacceptable Conditions**—The current policies, planning processes and funding schemes would continue under this scenario.
- **GRADE D: Worst Acceptable Conditions**—Investments would be made to maintenance programs to reduce the amount of roads and bridges that will require expensive rebuilding.
- **GRADE C: Minimum Competitive Conditions**—Texas' infrastructure and congestion levels would remain in a condition equal to or better than its peer states or metropolitan regions.
- **GRADE B: Continue 2010 Conditions**—The conditions experienced in 2010 would be maintained throughout the period from 2011 to 2035.

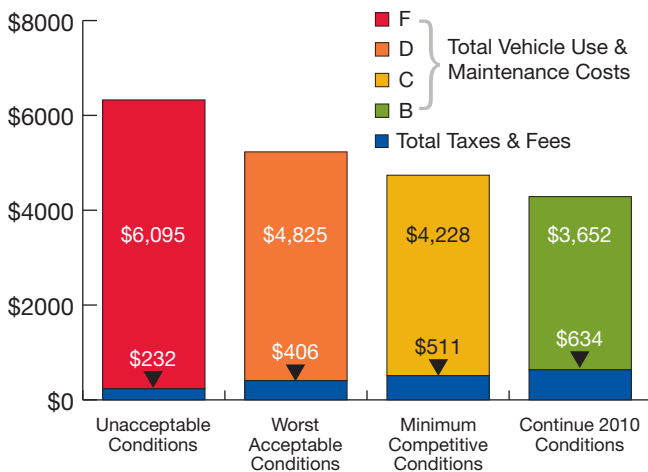


Exhibit ES-2. STATEWIDE TOTAL Transportation Costs between 2011 and 2035 (Billions of \$2010)



See appendices for more information.

Exhibit ES-3. Average Annual Household Transportation Costs, 2011 to 2035 (\$2010)



See appendices for more information.

Exhibit ES-2 summarizes the significant decreases in vehicle use and maintenance costs for relatively modest tax and fee increases. The estimates illustrate the significant value of increasing the state's investment in transportation improvements. The effects on personal travel as detailed in the scenario results are totaled. The fees and taxes paid by commercial trucks are also included, along with the increased vehicle maintenance and operating expenses, travel time, fuel and delay cost as a result of the unacceptable conditions.

How Will Texans Pay for Transportation?

Under the three improvement scenarios with passing grades, Texans realize savings in projected household costs by investing more in transportation funding. Texas' businesses also see benefits from smoother pavements, better bridges and reduced congestion. Exhibit ES-3 clearly illustrates the choices at the household level—small increases in transportation funding yield benefits much larger than the fees paid. As with Exhibit ES-2, the vehicle use and maintenance costs include items such as extra travel time and fuel due to traffic congestion, or closed bridges or increased vehicle maintenance costs due to rough roads for each of the transportation quality scenarios.

- **GRADE F: Unacceptable Conditions**—Between now and 2035, the average Texas household will pay an estimated \$232 per year in taxes and fees for transportation if there are no changes to policies or funding levels. This includes fuel taxes, vehicle registration fees, tolls and other fees for construction and maintenance of the transportation system. They will also pay almost \$6,100 per year for extra travel time associated with traffic congestion and detours around deficient bridges, increased fuel purchases due to longer trips and stop-and-go traffic, and additional vehicle maintenance expenses due to rough roads.
- **GRADE D: Worst Acceptable Conditions**—An additional \$174 per year paid in taxes and fees per household, however, returns \$1,270 per year in savings of congestion and vehicle operating and maintenance costs. Pavement conditions will be much better, and congestion will grow more slowly.
- **GRADE C: Minimum Competitive Conditions**—An additional \$279 per household each year above the unacceptable conditions trend will return more than \$1,860 per household in savings each year. Conditions will ensure Texas cities and rural areas are economically competitive with peer states.
- **GRADE B: Continue 2010 Conditions**—An additional \$402 per household each year is required to keep conditions as they were in 2010, but that investment returns \$2,440 per household in benefits each year.

Total Scenario Costs

Exhibit ES-4 illustrates the total cost of each scenario and the estimated component costs for three time periods.

Exhibit ES-4. STATEWIDE TOTAL Implementation Costs for Scenarios (Billions of \$2010)

Period	System Element	Scenarios			
		F Unacceptable Conditions	D Worst Acceptable Conditions	C Minimum Competitive Conditions	B Continue 2010 Conditions
2011 to 2015	Pavement	\$5.8	\$10.6	\$10.8	\$14.5
	Bridge	\$2.3	\$2.7	\$2.7	\$2.9
	Mobility	\$18.1	\$16.5	\$32.4	\$30.6
	Rural	\$0.0	\$0.8	\$1.5	\$1.6
	Total	\$26.2	\$30.6	\$47.4	\$49.6
2016 to 2019	Pavement	\$5.1	\$10.1	\$10.3	\$13.6
	Bridge	\$1.8	\$2.2	\$2.2	\$2.4
	Mobility	\$13.7	\$15.3	\$17.3	\$27.5
	Rural	\$0.0	\$0.7	\$1.2	\$1.3
	Total	\$20.6	\$28.3	\$31.0	\$44.8
2020 to 2035	Pavement	\$9.9	\$39.5	\$40.3	\$46.8
	Bridge	\$7.3	\$8.6	\$8.6	\$9.4
	Mobility	\$36.0	\$64.2	\$85.5	\$114.5
	Rural	\$0.0	\$2.7	\$4.7	\$5.1
	Total	\$53.2	\$115.0	\$139.1	\$175.8
2011 to 2035	Grand Total	\$100	\$174	\$217	\$270

See appendices for more information.

As shown on the bottom line of Exhibit ES-4, total revenue available for pavement and bridge maintenance plus additional capacity is expected to be \$100 billion from 2011 to 2035. The estimated funding gaps for the other three scenarios will range from \$74 billion to \$170 billion from 2011 to 2035.

Possible Revenue Sources

Texans pay less in transportation fees than residents of 43 other states, including residents in almost all states with which Texas competes economically. Based on the typical family vehicle, among the 50 states, Texas ranks:

- 18th in vehicle registration fees;
- 29th in state gasoline tax rate; and
- 44th in overall annual cost of vehicle ownership.

In addition, Texas motorists do not pay some taxes that are common in other states, including a property tax on vehicles.



There are three major sources of revenue Texas uses to fund state roadways.

- **State fuel tax**—20 cents per gallon for gasoline (last raised in 1991) and 20 cents per gallon for diesel fuel (last raised in 1991).
- **Federal fuel tax**—18.4 cents per gallon for gasoline (last raised in 1993) and 24.4 cents per gallon for diesel (last raised in 1993).
- **Vehicle registration fees**—\$50.75 for personal cars (as of September 1, 2010). For commercial vehicles, the registration fee is based on the weight of the vehicle. These fees range from \$54 to more than \$840.

The Committee characterized four categories of potential roadway revenue sources:

- **Capture of existing revenue**—Some transportation-related taxes and fees are directed to other state funds; these monies could be “captured” by directing them into the State Highway Fund from the fund(s) to which they are currently dedicated.
- **Systemwide sources**—Systemwide sources are those statewide taxes and fees paid by all Texans who use the roadways or buy motor fuel. Current systemwide sources are the vehicle registration fee and the state motor fuel tax.
- **Targeted options**—Targeted options consist of taxes and fees that are raised by defined projects (such as toll roads) or areas and used only for improvements within that project or area. The revenues generated by these options would not be deposited into the State Highway Fund. They would be instituted and collected at the local or regional level. These options include increasing tolls, charging freight container fees or charging a fee to drive in congested areas.
- **Local-level approaches**—Local-level approaches include a range of possible taxes imposed at the local level to generate revenues for transportation projects in the immediate locale.

The Remaining Questions

Texans will pay more in transportation costs over the next several years. The choice is clear: do nothing to address transportation challenges facing Texas—resulting in stop-and-go traffic, lost family and work time, and economic loss—or avoid further system degradation and substantial increases in vehicle use and maintenance costs through an increased investment in transportation funding.

The detailed analysis by the 2030 Committee clearly shows the problems of rough pavement, bridges that are closed or restricted, traffic congestion and a rural road network that does not provide the required service to personal vehicle or freight movement. The remaining questions, then, are:

- **What approach will be pursued to ensure the long-term service of the Texas transportation system?**
- **Will Texans pay more and suffer bumpy roads, poor bridges and traffic congestion—or pay less to address the problem and enjoy a better quality of life and economic benefits?**

More detailed information regarding the Committee’s study is found in the complete report and appendices on the Committee’s website: texas2030committee.tamu.edu.

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