

Testimony of Dr. David Ellis
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before the
House Select Committee on Transportation Funding, Expenditures and Finance
Texas House of Representatives
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Mr. Chairman, members of the Committee, my name is David Ellis. I am the manager of the Infrastructure Investment Analysis Program at the Texas A&M Transportation Institute. TTI was asked to address two questions for the hearing today. The first question relates to how much additional revenue would be raised if the motor fuels tax were increased by 5 cents per gallon. We have estimated those amounts on an annual, biennial and average 10-year basis. We've also provided below the distribution of the revenues based on the current 75-25 split between transportation and public education.

If the motor fuels tax was raised by 5 cents per gallon, our estimate is the tax would raise the following amounts over the time periods described:

- \$846 million in total revenue raised in FY 2015
- \$1.7 billion in total revenue raised during the FY 2015-2016 biennium
- An average of \$854 million revenue per year over the next 10 years

Assuming the 75%-25% split between transportation and public education is maintained:

- \$628 million in total new revenue to transportation in FY 2015
- \$209 million in total new revenue for public education in FY 2015
- \$1.3 billion in total new revenue for transportation during the FY 2015-2016 biennium
- \$420 million in total revenue for public education during the FY 2015-2016 biennium
- An average of \$634 million in new revenue per year over the next 10 years for transportation
- An average of \$211 million in new revenue per year over the next 10 years for public education

We were also asked to estimate how much would be raised if the consumer paid the state sales tax (6.25%) at the pump on the retail purchase of motor fuel in lieu of the current motor fuels tax. Below are two sample calculations that address the question.

Table 1 shows the current taxing system for gasoline and diesel fuel. Under that system, currently the 20 cent per gallon motor fuels tax represents 6.46% of the untaxed retail price gasoline and 5.99% of the untaxed retail price of diesel fuel.

Table 1. Sample Calculation Using Current Fuel Tax System

	Gasoline	Diesel
Average Statewide Untaxed Price (June 2014) per gallon:	\$ 3.095	\$ 3.335
Plus State Motor Fuel Tax	\$ 0.200	\$ 0.200
Plus Federal Motor Fuel Tax	\$ 0.184	\$ 0.244
Average Statewide Pump Price	\$ 3.479	\$ 3.779
Effective State Tax Rate	6.46%	5.99%

Table 2 shows the tax effect if the motor fuels tax was replaced with the state sales tax. Under this system, given the current price of fuel, the tax yield on gasoline would decrease while the tax yield on diesel fuel would increase.

Table 2. Sample Calculation Substituting the State Sales Tax for the State Motor Fuels Tax

	Gasoline	Diesel
Average Statewide Untaxed Price (June 2014) per gallon:	\$ 3.095	\$ 3.335
Plus State Sales Tax on Motor Fuels	\$ 0.193	\$ 0.209
Plus Federal Motor Fuel Tax	\$ 0.184	\$ 0.244
Average Statewide Pump Price	\$ 3.472	\$ 3.787
Effective State Tax Rate	6.25%	6.25%

Figure 1 on the following page shows the average pump price of gasoline and diesel fuel in Texas from the beginning of FY2000 through June of this year. The solid line indicates the “breakeven” line relative to whether more revenue would be raised from the current motor fuels tax gasoline versus levying the state sales tax in lieu of the motor fuels tax. In sum, if the pump price is approximately \$3.59 or higher, more money is raised by levying the state sales tax on motor fuels. If the pump price is below \$3.58 per gallon, more money is raised by the 20 cent per gallon motor fuels tax. The “breakeven” price for diesel fuel under the same scenario is \$3.65 per gallon.

As shown in Table 3 (page 4), over the last 10 years the motor fuels tax (both gasoline and diesel together) has raised an estimated \$30.6 billion. Had the state sales tax been levied on motor fuels in lieu of the motor fuels tax the total revenue yield would have been an estimated \$22.4 billion, representing a difference of \$8.2 billion.

For FY 2013, it is estimated that had a sales tax been applied to the price of motor fuel in lieu of the motor fuel tax the revenue yield would have been approximately \$3.1 billion, about \$90 million less than the current fuel tax.

The difficulty in forecasting future revenues from a sales tax on the price of motor fuels, of course, lay in the inherent difficulty in predicting the price of gasoline and diesel and, further, the impact of future price changes on travel. However, in round numbers, it can be said that for every cent above a pump price of \$3.59 for gasoline, a sales tax of 6.25% on the price of motor fuel would yield approximately \$9 to \$10 million more over the course of a year than the current 20 cent per gallon tax.

Figure 1: Average Retail Price of Motor Fuel in Texas (in billions of \$)

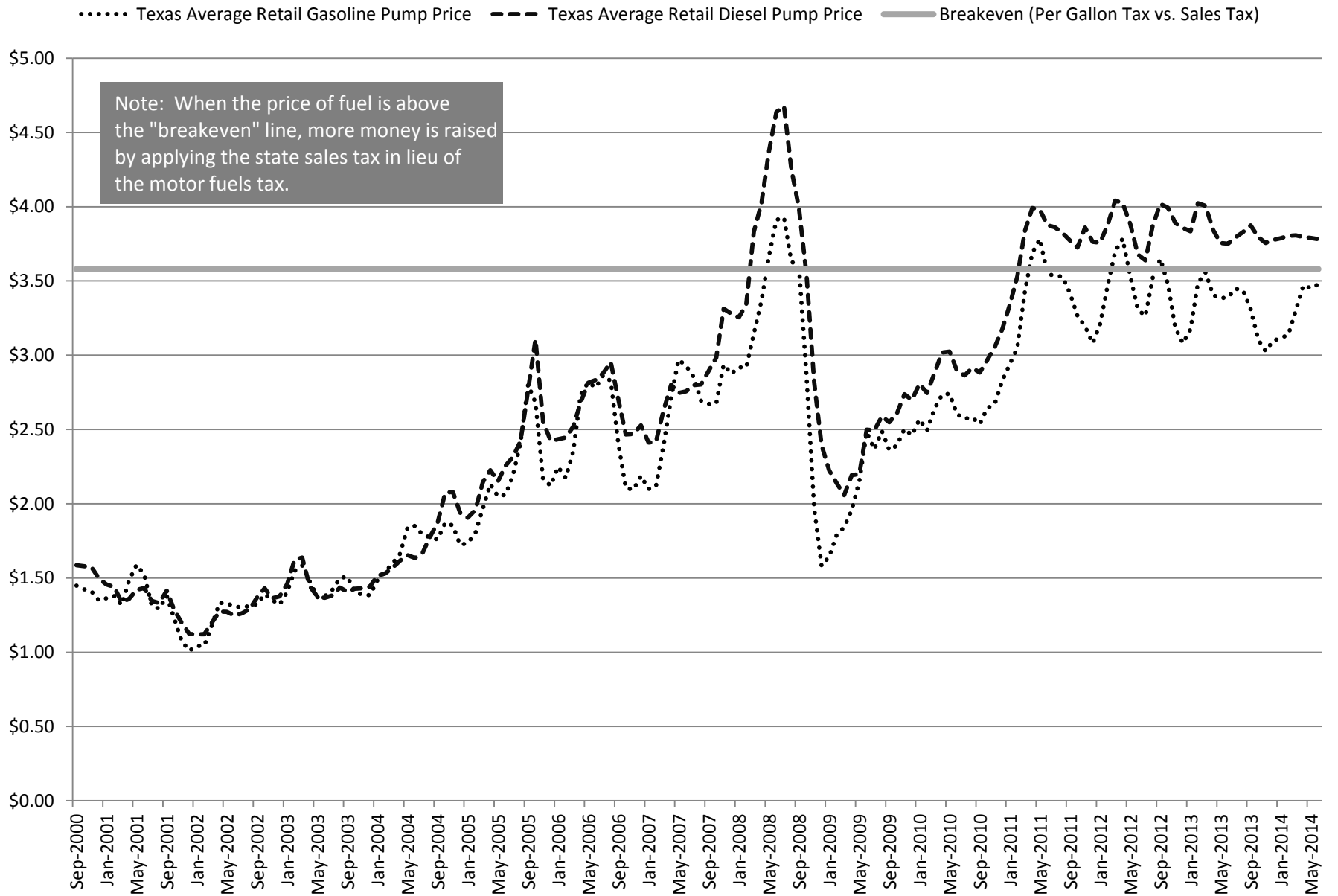


Table 3: Comparison of Current Fuel Tax Revenues vs. Sales Tax on Motor Fuels for the Previous 10 Years (in billions of \$)

Fiscal Year	Gasoline Tax Revenue from Current State Tax	Gasoline Tax Revenue - State Sales Tax Applied to Retail Price in Lieu of Motor Fuels Tax	Difference	Diesel Tax Revenue from Current State Tax	Diesel Tax Revenue - State Sales Tax Applied to Retail Price in Lieu of Motor Fuels Tax	Difference	Total Fuel Tax Revenue from Current State Tax	Revenue - State Sales Tax Applied to Retail Price in Lieu of Motor Fuels Tax	Difference
2004	\$2.272	\$0.866	-\$1.406	\$0.644	\$0.225	-\$0.419	\$2.916	\$1.091	-\$1.825
2005	\$2.260	\$1.116	-\$1.143	\$0.673	\$0.352	-\$0.322	\$2.933	\$1.468	-\$1.465
2006	\$2.257	\$1.530	-\$0.727	\$0.735	\$0.519	-\$0.216	\$2.992	\$2.048	-\$0.944
2007	\$2.301	\$1.499	-\$0.802	\$0.752	\$0.514	-\$0.238	\$3.053	\$2.012	-\$1.040
2008	\$2.315	\$2.051	-\$0.264	\$0.785	\$0.805	\$0.020	\$3.100	\$2.856	-\$0.245
2009	\$2.344	\$1.356	-\$0.988	\$0.706	\$0.478	-\$0.228	\$3.050	\$1.834	-\$1.216
2010	\$2.342	\$1.589	-\$0.753	\$0.699	\$0.519	-\$0.181	\$3.041	\$2.107	-\$0.934
2011	\$2.361	\$2.062	-\$0.299	\$0.742	\$0.715	-\$0.027	\$3.103	\$2.778	-\$0.325
2012	\$2.388	\$2.247	-\$0.141	\$0.781	\$0.824	\$0.044	\$3.168	\$3.071	-\$0.097
2013	\$2.418	\$2.271	-\$0.147	\$0.801	\$0.860	\$0.059	\$3.219	\$3.131	-\$0.088
Total	\$23.258	\$16.587	-\$6.672	\$7.317	\$5.810	-\$1.507	\$30.576	\$22.397	-\$8.179