

State Gas Tax¹

This IPRO report presents an overview of recent state action on gasoline rates and explores policy alternatives.

Background

Gasoline taxes have long been considered a “non-starter” issue, because consumer sensitivity over high prices bars politicians from increasing taxation levels.² For this reason, U.S. gasoline taxes are the lowest of any industrialized nation, with a national average of 47.4 cents per gallon (cpg).³ The national average consists of a federal tax of 18.4 cpg, an average state tax is 18.5 cpg, and an average 10.5 cpg consisting of local taxes and miscellaneous environmental fees.⁴ Thus, mean state gas taxes are just under twenty cents per gallon.

However, concerns about infrastructure quality have increased demand for state spending on highways and roads following the collapse of I-35W Bridge in Minneapolis in 2007. Since 2008, six state governments have increased state gasoline taxes an average of 6.25 cpg, and legislation has been introduced in another nine to raise tax levels in 2010.⁵ The generated funds are usually earmarked specifically for road and bridge construction and maintenance. Periods of historically high gas prices and increased environmental concern of gasoline combustion have also influenced the gasoline tax debate.

Costs and Benefits

Economics

Costs

A gas tax will involve transferring money from consumers to the government. This lowers consumers' ability to purchase goods and may lead to further decline in the economy.⁶ Increased costs for goods may occur on several levels including increased shipping costs for out of state goods as well as higher costs of production for the agricultural industry.

Another argument against the gas tax is its regressive nature. A gas tax would place more of a burden on the poor relative to the rich, as the rich tend to spend a lower proportion of their income on gas.⁷ As the poor would pay the same rate as the rich, a gas tax would be a burden on less wealthy individuals.

A gas tax will have a higher impact on consumer spending because demand for gasoline is inelastic in the short term, meaning that consumers will still purchase a similar amount of gasoline,

¹ Written by Veena Patel (Veena-Patel@uiowa.edu) and Michael Smith (michael-l-smith@uiowa.edu).

² Chouinarda, H. (2003). *Incidence of federal and state gasoline taxes*. Berkeley, CA: Department of Agricultural and Resource Economics.

³ Ibid.

⁴ http://www.api.org/statistics/fueltaxes/upload/January_2010_gasoline_and_diesel_summary_pages.pdf

⁵ <http://www.ncsl.org/IssuesResearch/Transportation/NCSLnetSearchResultsTransportationFundingLeg/tabid/13597/Default.aspx>

⁶ Espey, Molly. “Explaining the Variation in elasticity Estimates of Gasoline Demand in the United States: A Meta-Analysis.” *Energy Journal*, Vol. 17, No. 3, 1996 pp. 49-51. [Academic Search Elite](#).

⁷ <http://www.britannica.com/EBchecked/topic/496192/regressive-tax>

despite the higher prices.⁸ The inelasticity of demand for fuel means that an increase in price will necessarily result in a reduction of consumption elsewhere, causing economic decline overall.

Fuel demand may become more elastic in the long run as more fuel efficient alternatives are developed. As fuel efficiency for vehicles increases, the revenue from gas taxes will decrease. If the government depends upon a certain percent of revenue from gas taxes, this revenue source would be depleted over time.⁹

Benefits

The increase in individuals' fuel expenses would range from \$33-\$100 per year per individual.¹⁰ Furthermore, the tax would not need to apply to all individuals in society since it requires that individuals use fuel to be taxed. In this way, the tax may be termed a "user fee."¹¹

Should the cost nevertheless be too significant for drivers, the increased cost of driving may result in less driving, which would reduce traffic congestion and could also reduce costs associated with automobile accidents.¹²

The highway system in Iowa is in need of repairs and is estimated to require \$21 billion in the 20-year period between 1994 and 2013.¹³ The Iowa Department of Transportation has estimated a budget shortfall of \$12 billion over this period.¹⁴ Gas tax money is constitutionally required to go to road and bridge repair, and would be contribute to overcoming the budget shortfall.¹⁵ Road and bridge repairs and maintenance have farther reaching implications on the level of safety, as proper highway maintenance will help prevent automobile accidents.

Environment

Costs

While an increase in the gas tax may not necessarily harm the environment, the benefits to the environment gas tax proponents may claim are undercut by the short-term inelasticity of demand for gasoline. Since people will use the same amount of gasoline despite an increase in price, there will be no significant, positive effect on the environment in the short run.¹⁶

⁸ http://www.econ.ucdavis.edu/faculty/knittel/papers/gas_demand_083006.pdf

⁹ Hancock, Jason. "Gas Tax Showdown on the Horizon." 9 Feb 2009. <http://iowaindependent.com/11300/gas-tax-showdown-on-the-horizon>

¹⁰ Hancock, Jason. "Economists: Gas Tax Increase Best Way to Revamp Roads." 18 Feb 2009.

<http://iowaindependent.com/11687/economists-gas-tax-increase-best-way-to-revamp-roads>

¹¹ Hancock, Jason. "Branstad, Culver Trade Barbs over Gas Tax." 14 July 2010.

<http://iowaindependent.com/39041/branstad-culver-trade-barbs-over-gas-tax>

¹² Parry, Ian, and Kenneth Small. "Does Britain or the United States Have the Right Gasoline Tax?" The American Economic Review, Vol. 95, No. 4 (Sep 2005). JSTOR.

¹³ <http://www.agcia.org/everyIowanShouldKnow.asp>

¹⁴ Ibid.

¹⁵ Hancock, Jason. "Gas Tax Showdown on the Horizon."

¹⁶ http://www.econ.ucdavis.edu/faculty/knittel/papers/gas_demand_083006.pdf

Figure 2: Gasoline Taxes as of January 2010 (Includes Federal Taxes of 18.4cpg)¹⁹

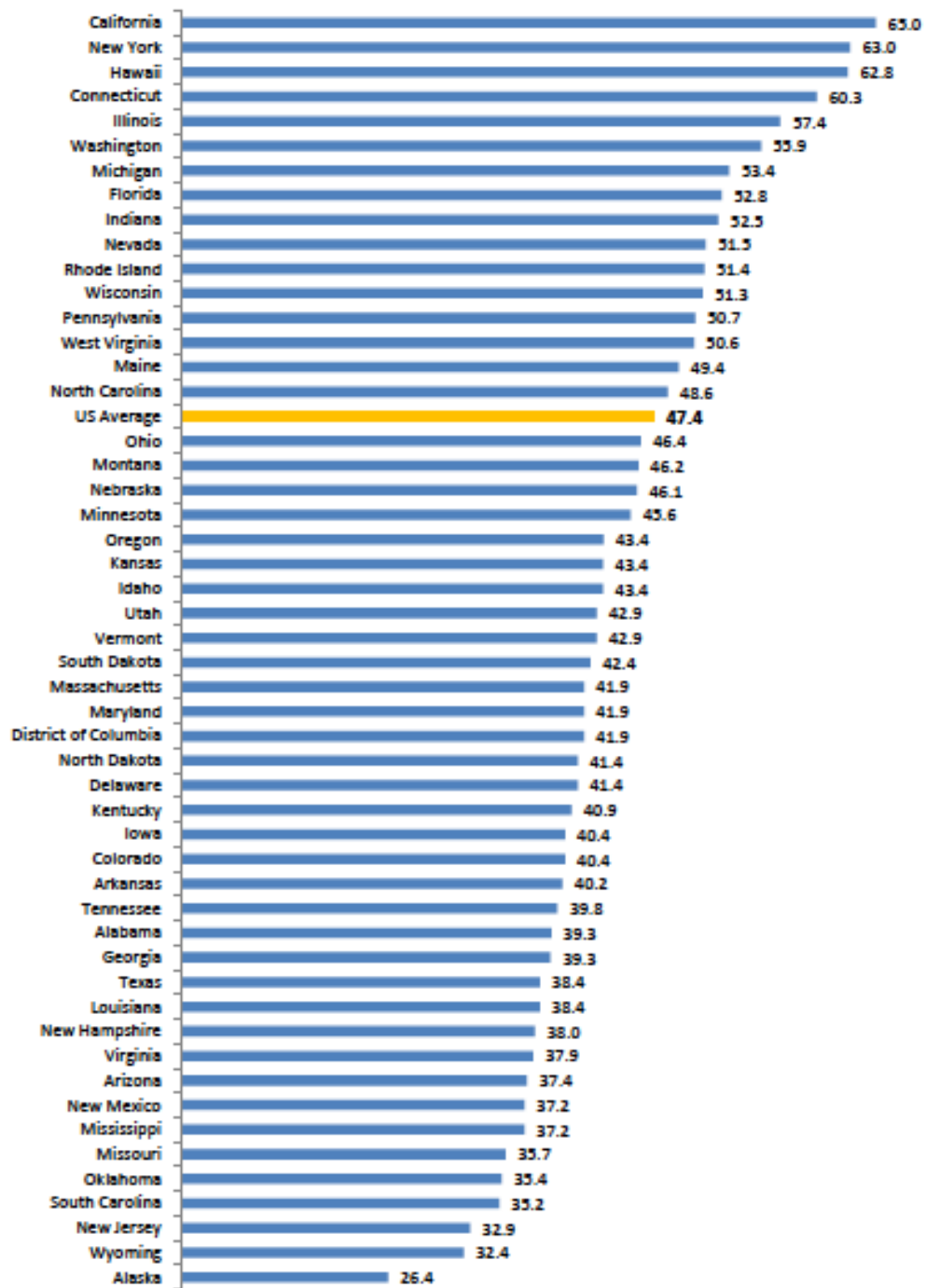


Figure 2 ranks the 50 states and the District of Columbia by state and federal taxation levels. It shows that Iowa is well below the national average; ranked 30th overall.

¹⁹ Ibid.

Figure 3: State Action on State Fuel Taxes²⁰

State Action on State Fuel Taxes					
State	Bill	Status	Change in Cent Per Gallon (CPG)	Summary	Date
Oregon	HB 2001	Enacted	6	Raises tax from 24cpg to 30 cpg	July-09
Minnesota	HF 2800	Enacted	5	Increase tax by 5 cpg. Creates a lower income motor fuel tax credit.	February-08
Vermont	HB 438	Enacted	5	Raises the gasoline tax by 5 cpg for transportation infrastructure projects	June-09
Kentucky	HB 374	Enacted	4	Holds tax at 22.5 cpg, before tax was to fall by 4 cpg	March-09
District of Columbia	DC B 443	Enacted	3.5	Increases tax from 20 cpg to 23.5 cpg	October-09
Rhode Island	HB 5983	Enacted	2	Raises tax by 2 cpg from 30 to 32 cpg	June-09
Connecticut	SB 1000	Enacted	-0.5	Holds the gross receipts at 7 cpg; stops automatic increase to 7.5 cpg	June-08
Idaho	HB 338	Enacted	-2.5	Eliminates 10 percent (2.5 cpg) tax exemption for biodiesel and gasoline	May-09
Indiana	HB 1001	Enacted	n/a	Raises sales and use tax from 6 percent to 7 percent	March-08
Nebraska	LB 846	Enacted	n/a	Imposes a 5 percent tax rate on the average price of wholesale gasoline; lowers tax for "producers, suppliers, distributors, wholesalers, or importers" from 10 cpg to 2.5 cpg	April-08
Massachusetts	HB 107	Proposed	16.5	Raises tax to 40 cpg, and after 2011 tax rate will adjust annually based on inflation	March-09
New Hampshire	HB 644	Proposed	15	Raises tax from 18 cpg to 23 cpg in 2009; from 23 cpg 28 cpg in 2010; and, to 33 cpg in 2011	April-09
Hawaii	SB 1611	Proposed	10	Raises tax 10 cents to 27 cpg	May-09
Illinois	HB 1	Proposed	8	Increases tax by 8 cpg. Funds directed for road and bridge construction.	April-09
Iowa	HSB 164/SSB 1182	Proposed	8	Would increase tax 4 cpg and another 4 cpg in 2010. Funds directed to TIME-21 for transportation infrastructure	February-09
Michigan	HB 5769	Proposed	8	Increases tax from 19 cpg 23 cpg; then increase it to 27 cpg in 2013	January-10
Kansas	SB 498	Proposed	7	Increases tax rate by 4 cpg starting in 2013 and another 3 cpg starting in 2014	February-10
Michigan	SB 863	Proposed	4	Requires 4 cpg of motor fuel tax to be appropriated for repair of state bridges	March-08
Michigan	HB 6322	Proposed	3	Allows counties to impose 3 cpg with voter approval.	March-08
West Virginia	HB 218	Proposed	0	Freezes tax increase for 2009.	June-08
New York	SB 7594	Proposed	n/a	Suspension of taxes from Memorial Day to Labor Day; would save approximately 33 cpg in state taxes	May-08
New York	AB 2800	Proposed	n/a	Creates committee to investigate "the conditions, needs, issues, and problems raising the gasoline tax"	March-10
North Carolina	SB 200	Proposed	n/a	Sets tax floor at 12.4 cpg.	June-10

<i>Summary Statistics</i>			
	Increase	Decrease	Other
Enacted	6	2	2
Proposed	9	0	4

²⁰<http://www.ncsl.org/IssuesResearch/Transportation/NCSLnetSearchResultsTransportationFundingLeg/tabid/13597/Default.aspx>

Figure 3 shows state action on gasoline taxes since 2008. Six states have increased their gasoline tax rates, denoted in green in the upper portion of the table. Connecticut and Idaho are the only states that have decreased their tax rates, shown in red. The lower portion of the table includes proposed legislation from the past two years. Every proposal on taxation rates lobbied for an increased rate, shown in green. States depicted without color do not deal directly with an increase or decrease in rate, but legislate on the topic.

Iowa

In 2009, Representative Brian J Quirk introduced HSB 164 which sought to increase the state tax on gasoline by four cents per gallon upon passage, and another four cents beginning January 1, 2010.²¹ The generated funds would be directed to TIME-21 fund for transportation infrastructure. Political insiders have cited this bill will likely be debated by the 2011 Iowa Legislature. Governor-Elect Terry Brandstad has characterized the gasoline tax increase as a “user fee” and part of a “pay as you go system,” but cites the economic recession as a barrier to current implementation.²² Furthermore, given Iowa’s lower than average tax rates, if Iowa were to raise the gas tax by 7 cents per gallon it would be commensurate with the national average.

This report was prepared in November 2010 by the Iowa Policy Research Organization (IPRO), a non-partisan public policy undergraduate research group at the University of Iowa. For additional research on this or other issues, please visit our website at <http://www.uiowa.edu/~ipro/> or contact us at caroline-tolbert@uiowa.edu.

²¹ Ibid.

²² Hancock, Jason. “Brandstad, Culver Trade Barbs over Gas Tax.”