



## **Soy Transportation Coalition Study “Alternative, Sustainable Approach to Fuel Tax” Iowa Impact**

**Contact:** Mike Steenhoek, Executive Director  
[msteenhoek@soytransportation.org](mailto:msteenhoek@soytransportation.org)  
515-727-0665 (office)

### **Project Description:**

Many interest groups, including soybean farmer organizations, have proposed raising the tax on gasoline and diesel fuel in order to pay for needed repairs to our surface transportation system. Despite the aversion of many to higher taxes, many believe doing so would be reasonable and would provide sizable enhancement to the economies of individual states and the nation. However, most would agree that increasing the federal or state gasoline and diesel tax remains a challenging prospect.

The research project examines the impact of legislation introduced on a federal and individual state level that would primarily make the following adjustments: 1.) Immediately reduce the gasoline and diesel tax by one cent and 2.) Immediately index the gasoline and diesel tax to inflation.

The Soy Transportation Coalition has contracted with the School of Public and Environmental Affairs – a joint initiative of Indiana University and Purdue University – to conduct the research.

It is no accident that the nation and individual states have increasing funding gaps between the needs of our surface transportation system and the amount of money generated by the gasoline and diesel tax. Even the most fiscally conservative will concede that the costs of steel, concrete, labor, machinery, etc. escalate, and that there should be some relationship between those costs and the revenue stream to address them.

Upon initial examination, the prospect of reducing our gasoline and diesel tax by any amount appears misguided given the dilapidated condition of our surface transportation system. We need more funding, not less. However, this project approaches this issue from a perspective of what is possible, not what is ideal. The ideal has proven to be elusive up to this point. This will likely continue.

One of the major concerns with our tax on gasoline and diesel fuel is that it is not sustainable due to not being indexed to inflation. While many policymakers acknowledge the need to remedy this problem, many also desire to provide some sort of concession, albeit modest, to the taxpayer when addressing the fiscal challenges confronting the surface transportation system. The one cent reduction in the fuel tax is an example of such a concession to the taxpayer. This proposal should not be viewed as a solution to all our transportation challenges. Rather, it should be viewed as a proposal that has a more realistic chance to introduce some sustainability to our transportation financing. If achieved, it would be a significant step forward.

## Key Questions:

In performing the analysis, the researchers examined three key questions:

- 1.) What would be the effect in Iowa of a one cent reduction in gasoline and diesel taxes?
- 2.) What would be the effect in Iowa of linking the gasoline and diesel tax to inflation in 2014 in terms of annual state fuel tax revenue through 2025?
- 3.) How much additional revenue could have been generated in Iowa from linking the gasoline and diesel tax to inflation in 2008 – the last time the state adjusted fuel taxes?

## Analysis Methodology and Assumptions:

In evaluating the above questions, the researchers at Indiana University-Purdue University developed a baseline that projects state revenue assuming the status quo (no increase in fuel taxes and no link to inflation) through 2025, using fuel prices as forecasted by the U.S. Energy Information Administration (EIA). The model projects gasoline and diesel consumption as a trend based on historic information and assumes that 10 percent of the diesel consumption is not taxed (based on historic averages). Inflation is based on the U.S. Bureau of Labor Statistics' Consumer Price Index (CPI) and projected into the future based on data from the U.S. Department of Agriculture.

## Key Findings:

- 1.) A reduction in gasoline and diesel taxes by one cent per gallon without indexing to inflation would reduce revenue to the state of Iowa by a total of \$23.35 million in 2014.**

Projections indicate that the 2014 consumption of gasoline and diesel in Iowa will be 1.65 and 0.76 billion gallons, respectively. Given a one cent reduction in the gasoline and diesel tax, the immediate reduction of state revenue would amount to a total of \$23.35 million.

- 2.) Indexing the fuel tax rate to inflation in 2014 would result in an average additional revenue per year of \$32.12 million between 2015 and 2025. If fuel taxes are indexed to inflation in 2014, additional real state revenue of \$82.75 million per year would be generated by 2025.**

- 3.) Indexing the fuel tax rate to inflation in 2008 would have generated an additional \$121 million over the past five years.**

If the gasoline and diesel tax rates had been indexed to inflation in 2008, \$157 million in additional nominal state revenue per year would have been generated by 2025. The average annual revenue over the period between 2009 and 2025 would have been \$79 million. If Iowa had indexed the gasoline and diesel taxes to inflation in 2008, \$121 million in additional revenue would have been generated in the five years since 2008.

- 4.) After the one cent reduction and indexing the fuel tax to inflation, the annual fuel tax revenue would match the status quo (no decrease, no indexing to inflation) in 2016. Cumulative losses to the fuel tax (due to the one cent reduction) would be recovered by 2018. In 2018 and in subsequent years, the one cent reduction and indexing approach would result in net positive revenue vs. the status quo approach.**

The below table summarizes the differences in fuel tax revenue (in million 2013 dollars) between the baseline (no adjustments/status quo) and the proposed scenario (indexed to inflation & one cent reduction) along with the cumulative changes:

<u>Year</u>	<u>Tax Revenue (No Adjustments)</u>	<u>Tax Revenue (2014 CPI Indexed &amp; 1 Cent Reduction)</u>	<u>Additional Revenue (2014 CPI Indexed &amp; 1 Cent Reduction)</u>	<u>Cumulative Change</u>
2013	483.44	483.44	0.00	0.00
2014	489.44	467.34	-22.10	-22.10
2015	479.90	473.25	-6.64	-28.74
2016	476.72	478.74	2.03	-26.72
2017	474.08	484.25	10.18	-16.54
2018	471.21	489.76	18.55	2.01
2019	468.14	495.27	27.14	29.15
2020	464.51	500.78	36.27	65.41
2021	460.78	506.29	45.51	110.92
2022	457.17	511.81	54.64	165.57
2023	453.43	517.32	63.89	229.46
2024	449.55	522.83	73.29	302.75
2025	445.60	528.34	82.75	385.49