# Reforming State Gas Taxes 

## How States Are (and Are Not) Addressing an Eroding Tax Base

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The federal government and all states tax gasoline purchases. At the federal level and in all but a few states the gas tax is a per-unit tax, based on the number of gallons purchased and not a percentage of purchase price. Thus, the total tax paid at the pump does not change as gasoline prices rise, increasing only if drivers buy more gas or lawmakers raise the tax rate.

Congress last increased the federal rate in 1993 and is unlikely to do so again any time soon. Members rejected the idea of hiking the gas tax rate during the summer of 2014, when the highway trust fund faced insolvency, opting instead for short-term fixes that finance the fund with revenue from other sources. In contrast, 42 states and the District of Columbia (D.C.) have increased their per gallon tax rate since 1993, although only 21 states have raised rates by more than 5 cents per gallon.

For a long time, gas tax revenue increased despite unchanged rates because Americans' gas consumption (the tax base) consistently grew. However, total gas consumption started decreasing about 10 years ago as per capita miles driven declined and automobile fuel economy increased. Thus, tax rates must now increase to simply maintain revenue levels. And gas tax revenues have become especially important for states as federal support for transportation projects has declined and infrastructure costs have escalated.

One way to ensure tax rate increases, at both the federal and state level, is indexing the rate to inflation. Massachusetts policymakers did this in 2013, at the same time they increased the tax rate by 3 cents to 24 cents per gallon. The rate increase was the state's first since 1991 and it would have allowed the rate to change annually. But Massachusetts voters repealed indexing with a ballot measure in November 2014. The state's gas tax rate will now remain at 24 cents until the legislature changes it.

Critics of indexing argue that automatic increases are unjust, and that legislators should have to vote on each increase. However, as demonstrated over the past 20 years, legislators are not inclined to raise rates very often or by very much. And the structure of the tax means it cannot keep pace with a growing economy if the rate is unchanged and tax base shrinks.

Other states have tackled the problem of a declining tax base by changing to an ad valorem tax-a percentage of the price of gas. That type of tax in essence allows for another type of "automatic" increase (when the price of gas goes up). Of course, if the price of gas declines, then so would revenue if the amount of gas sold does not rise enough to compensate.

To meet the increasing costs of maintaining and expanding highway and transit infrastructure states must ultimately choose among difficult alternatives: raise more revenue through taxes dedicated to transportation, allocate general funds to transportation, or scale back transportation projects.

## Gas Tax Revenues Are Declining

On a real per capita basis-a measure of the pressures a growing population can put on roads, highways, and bridges-state and local motor fuel tax revenue declined 10 percent from $\$ 145$ in 1993 to $\$ 132$ in 2011 (in 2011 dollars) (figure 1). ${ }^{1}$ In contrast, real per capita state and local total tax revenue increased 21 percent from $\$ 3,559$ to $\$ 4,295$. As a percentage of total state and local general revenues, motor fuel taxes have fallen nearly a third from 2.3 percent in 1993 to 1.6 percent in 2011.

FIGURE 1
Real Per Capita State and Local Motor Fuel Revenue, 1993-2011


Source: U.S. Census Bureau.

[^0]One reason for the decline in per capita gas tax revenue is the structure of the tax. The federal gas tax and most state gas taxes are levied on a per gallon basis, not as a percentage of gas price.

According to the U.S. Energy Information Administration, combined federal and state taxes dropped from 28 percent of the total cost of gas in 2000 to just 12 percent in 2013 (figure 2). State gas taxes as a percentage of total cost fell from 16 percent in 2000 to 7 percent in 2013.

Why did the percentage decline? Because the price of gas increased 136 percent over that period (from $\$ 1.49$ per gallon in 2000 to $\$ 3.51$ per gallon in 2013) but the federal rate was unchanged and state taxes were only modestly changed.

FIGURE 2
Price Components of Regular Grade Gasoline


[^1]Combined federal and state taxes peaked at 39 percent of the cost of gas in December 2001, but then declined throughout much of the subsequent decade (figure 3). Taxes as a percentage of price briefly rose above 20 percent during the Great Recession-when gas prices dropped precipitously-but have stayed at roughly the same percentage (in the low teens) since 2011.

FIGURE 3
Federal and State Taxes as a Percentage of Gas Price, 2000-2014


Source: U.S. Energy Information Administration.

Meanwhile, higher gas prices (and environmental concerns) have encouraged two related trends that exacerbate the revenue problems caused by a per-gallon gas tax: less driving and more fuelefficient cars.

First, vehicle miles driven per capita have declined every year since 2004. In 2008, total vehicle miles traveled fell for the first time since the 1970s oil crisis, and the total remains well below its 2007 peak. Second, newer cars and trucks sold in the United States get more miles per gallon. Both trends mean Americans are purchasing less gas, which results in lower gas tax revenue at constant per-gallon tax rates (figure 4).

FIGURE 4
Total U.S. Vehicle Miles Traveled and Gasoline Purchased, 1970-2012


Sources:
Federal Highway Administration; U.S. Energy Information Administration.

## State Gas Tax Rates

All states and D.C. impose gas taxes on top of the federal tax of 18.4 cents per gallon. ${ }^{2}$ State gas tax rates exceed the federal rate in 40 states and D.C.

The highest state gas tax rates per gallon are in California ( 46.5 cents), Pennsylvania ( 40.7 cents), North Carolina ( 37.75 cents), Washington ( 37.5 cents), and West Virginia ( 37.5 cents) (figure 5). The lowest rates per gallon are in Alaska (8 cents), Virginia ( 11.1 cents), New Jersey ( 14.5 cents), South Carolina (16.75), and Hawaii and Oklahoma (both 17 cents).

[^2]FIGURE 5
State Gas Tax Rates, 2014


Source: Federation of Tax Administrators.

These rates include each state's excise gas tax and other relevant taxes and fees (e.g., environmental fees) but do not include any local taxes. ${ }^{3}$ At the end of this paper, table 1 provides a historical comparison of state gas tax rates, and table 2 breaks down total state gas tax rates (excise taxes plus fees and other related taxes) for 2014.

Unlike the federal government, 42 states and D.C. have increased their gas tax rates or related fees since 1993. However, most increases were modest.

Of the states that increased gas taxes, only 21 raised them more than 5 cents per gallon and just 11 states raised gas taxes by more than 10 cents per gallon. Five states (Alabama, Alaska, Colorado, Oklahoma, and Texas) have not changed their gas tax rates since 1993, and three states (Nevada, Connecticut, and Virginia) decreased theirs over the period. Overall, the average gas tax rate for all 50 states and D.C. rose by less than 6 cents ( 18.6 cents to 24.2 cents) between 1993 and 2014.

[^3]
## Indexing the Gas Tax Rate to Inflation

Before the repeal vote, Massachusetts was one of only three states that index their per-gallon tax rate to inflation. Maryland also approved inflation-adjusted rates in 2013 and Florida has tied a small part of its tax to inflation since 1990. How would indexing change rates and revenue over time? If the Massachusetts gas tax rate had been indexed to inflation from 1993 to 2013, and gas consumption did not change, the state's gas tax revenue in 2013 could have been more than 60 percent higher (figure 6).

FIGURE 6
Indexing Massachusetts Gas Tax in 1993 Could Have Added \$360 Million in Revenue in 2013


Source: Gallons taxed from the Federal Highway Administration.
Notes: Tax rate is indexed to inflation beginning in 1993. Estimate assumes no change in quantity of gas sold.

Inflation was relatively low during this period so the rate would have climbed slowly. The tax rate would have increased from 21 cents per gallon in 1993 to 34 cents in 2013. Using gallons taxed as the base, the indexed tax rate could have brought in an additional $\$ 363$ million in tax revenue in 2013. This estimate assumes no change in gasoline sales. ${ }^{4}$ While there would be some decline in gasoline consumption with a higher tax rate and the consequent higher gas price, research suggests the price

[^4]effects for a 13-cent increase would be small-the 2013 estimate would decrease by less than $\$ 3$ million when accounting for lower consumption.

As noted earlier, the tax base is a big part of the problem. Gallons of gas taxed in Massachusetts increased every year between 1993 and 2004. But gallons taxed stagnated after 2004 and peaked in 2007. The indexed rate alleviates this problem. If the rate had been indexed starting in 1993, 2013 tax revenue would have been more than $\$ 50$ million higher than in 2007 . With the fixed 21 cent per-gallon rate, 2013 revenue was $\$ 40$ million below its 2007 peak.

Most other states would also have higher gas tax rates and more revenue today if they had indexed their rates to inflation in 1993, again assuming that consumption levels remained unchanged (figure 7).

FIGURE 7
Additional Gas Tax Revenue With Tax Rates Indexed

| Percent Change | $1 \%$ | $10 \%$ | $25 \%$ | $50 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| US: $61.2 \%$ |  |  |  |  |



Source: Gallons taxed from the Federal Highway Administration.
Notes: Tax rates are indexed to inflation beginning in 1993. Estimates assume no change in quantity of gas sold.

If each state's 1993 gas tax rate had increased with inflation, the hypothetical rate (including fees) would exceed the current rate in 41 states and D.C. The indexed rate would be 10 cents or more above the current rate in 16 states. If they had indexed their gas taxes to inflation starting in 1993, 16 states could have collected at least 50 percent more gas tax revenue in 2013 . In dollar terms, 24 states could have at least $\$ 100$ million more in revenue in 2013 with the indexed gas tax rates.

Nine states currently have tax rates above the hypothetical indexed rates. Four (Georgia, Kentucky, North Carolina, and West Virginia) mostly had rate increases because at least a part of their tax is a percentage of gas prices. Three states (Vermont, Washington, and Wyoming) passed rate increases with legislation (Vermont also tied part of its tax to prices in 2013). California and Pennsylvania both increased their tax rate with legislation and tie a part of the tax to gas prices. All nine of these states have per-gallon rates above 30 cents except for Georgia ( 19.3 cents per gallon).

## States that Moved Beyond the Per-Gallon Gas Tax

Although a majority of states still use the traditional per-gallon tax, 15 states and D.C. have tied at least a portion of their tax to the cost of gas, either wholesale or at the pump. As a result, gas taxes in these jurisdictions automatically increase when the price of gas rises. Here are a few notable examples:

- Kentucky ties its gas tax rate to the average wholesale price of gasoline. The state surveys wholesale prices every three months and adjusts the tax rate (up or down) accordingly. As a result of linking its tax to the cost of gas, the Kentucky gas tax rate rose from 12 cents per gallon in 1993 to 30.8 cents in 2014.
- North Carolina splits its tax rate: one part is fixed (17.5 cents per gallon) and another adjusts with the wholesale price of gas. North Carolina's total gas tax rate rose from 22 cents per gallon in 1993 to 37 cents in 2014.
- Pennsylvania, as a part of a transportation spending increase, recently transitioned from a twopart system similar to North Carolina's to a single tax based on the average wholesale price of gas. Its rate increased from 22.35 cents in 1993 to 40.7 cents in 2014.
- Before 2010, California imposed its sales tax in addition to its excise tax for gas purchases. However, that year it implemented a "fuel tax swap," which increased the per-gallon excise tax from 18 cents to 35.3 cents but also lowered the sales tax rate on gas purchases. The state's general sales tax rate is 7.5 percent, but the rate on gas is now 2.25 percent. Thus, although the state's excise gas tax rate increased by 17 cents per gallon that year, the combined excise and sales tax paid by consumers increased by only 4 cents per gallon. California also now ties a portion of its tax to gas prices.
- Nebraska's gas tax is the sum of a three-part calculation: (1) a 10.3 cent per-gallon tax, (2) a tax based on the wholesale price of gas, and (3) a tax based on the state's transportation spending. The third component is small (currently 1.9 cents per gallon), and the legislature is careful not to approve transportation spending that could trigger a large rate increase. As a result, Nebraska's 27.3 cents per-gallon tax rate is only 2.7 cents higher than it was in 1993.
- Hawaii, Illinois, and Michigan impose their full general sales taxes on the purchase of gas in addition to their excise taxes. Thus, a part of the tax on gas in these states is tied to the
changing price of gas. The sales tax is often as much as the excise tax. However, sales taxes on motor fuels are general revenues and not dedicated to transportation funding in these states.

Oregon and Virginia recently made dramatic changes to the ways they fund transportation projects. Oregon added a vehicle miles traveled (VMT) tax to its current 30-cents-per-gallon gas tax. Starting in July 2015, 5,000 volunteer drivers of fuel-efficient vehicles will pay a tax based on the number of miles they drive (tracked by the driver via GPS or odometer) rather than the amount of gas they purchase. Drivers of high-fuel vehicles are not eligible for the VMT tax. Oregon will maintain its gas tax (for all drivers) and the volunteers will receive refunds for the gas taxes they pay at the pump. The VMT rate ( 1.5 cents per mile) was set to mirror the cost of the per gallon tax, so the volunteers are paying taxes they would have otherwise avoided by purchasing less gas. In fact, a 2013 study found that 88 volunteer drivers of fuel-efficient vehicles would have paid 28 percent more in taxes with the VMT tax than with the current fuel tax. ${ }^{5}$ Proponents of the VMT tax argue the real savings from fuel-efficient vehicles are from gas purchases, not taxes, and that these drivers should contribute to infrastructure revenues.

California also created a VMT tax pilot program with legislation in October 2014. The details of the pilot were not specified, but the legislation requires the program to begin before January 2017.

Meanwhile, Virginia significantly reduced the link between transportation taxes and transportation funding in 2013. The state replaced its 17.5 cents per-gallon gas tax with two separate taxes: (1) an excise tax equal to 3.5 percent of the statewide average wholesale price of gas, the dollar value of which will change as gas prices change; and (2) a general sales tax increase from 5 percent to 5.3 percent (on all taxed goods), with new revenues dedicated to transportation funding. Local option taxes were also added in the Northern Virginia and Hampton Roads regions. The new combination is expected to increase funds available for Virginia transportation projects (including local revenues) by $\$ 5.6$ billion over the FY 2014-FY 2018 period. ${ }^{6}$

Missouri recently considered a similar fiscal trade: An August 2014 ballot measure would have increased the state's sales tax rate and directed the new funds to transportation while barring the state from increasing the gas tax rate for the next 10 years. However, voters rejected the initiative. Missouri has not increased its gas tax since 1996.

Some states have increased their gas taxes by simply bumping up the per-gallon rate. Wyoming raised its per-gallon tax from 14 cents to 24 cents last year and New Hampshire raised its per-gallon tax by 4 cents in July 2014 (the most recent FTA data do not include the New Hampshire rate increase). However, Washington and Wyoming are the only states that have increased their gas tax rates by more than inflation since 1993 without tying a portion of the tax to gas prices

[^5]
## Conclusion: States Need to Reform Gas Taxes or Find Other Revenue to Maintain Transportation Funding

The gas tax was a reliable revenue source when Americans' driving and gas consumption continuously increased. Even if policymakers left rates unchanged, the tax base grew fast enough to bring in the revenue necessary to sustain transportation spending.

However, since Americans started driving less and purchasing more fuel-efficient cars, demand for gas has declined, and states with unchanged gas tax rates have seen revenues plummet. If states want gas taxes to remain a steady source of revenue, they have to change tax rates.

For example, compare the per capita motor fuel tax revenue between 1993 and 2011 in Massachusetts, where the per-gallon rate did not change, and Kentucky, where the tax is mostly a percentage of the price of gas (figure 8). ${ }^{7}$ From 1993 until 2004, Kentucky's per capita motor fuel revenue roughly mirrored Massachusetts' and the national average. However, when gas prices began to increase and gas consumption started its decline, the trends diverged sharply. Kentucky's per capita revenue increased from $\$ 137$ in 2004 to $\$ 168$ in 2011, while Massachusetts's per capita revenue fell from $\$ 127$ to $\$ 100$. The national average also decreased from $\$ 142$ to $\$ 132$ during the period.

FIGURE 8
Comparison of Real Per Capita Motor Fuel Tax Revenue, 1993-2011


Source: U.S. Census Bureau.

[^6]Because Massachusetts voters repealed indexing the state's gas tax to inflation, the state's recent per capita revenue trends will continue. The 3 -cent rate increase should temporarily increase revenues, but over the next few years, as driving and gas consumption continue to decline, gas tax revenue will continue to fall.

In 2011, state governments provided 38 percent of highway and transit infrastructure funding and most of that came from gas taxes. Stagnant motor fuel tax revenue cannot keep pace with the increasing costs of infrastructure. Whether the path is an indexed tax rate, a percentage of price tax, a VMT, or alternative funding, inaction on revenue is no longer an option for states that don't want to cut funding for transportation projects.

## References

Burman, Len, "'Pension Smoothing' is a Sham," Tax Policy Center (July 9, 2014).
http://taxvox.taxpolicycenter.org/2014/07/09/pension-smoothing-sham/
"Funding Challenges in Transportation Infrastructure," The Pew Charitable Trusts (May 5, 2014). http://www.pewtrusts.org/en/research-and-analysis/analysis/2014/05/05/funding-challenges-in-transportation-infrastructure
"Gasoline Explained: Factors Affecting Gasoline Prices," U.S. Energy Information Administration (July 18, 2014). http://www.eia.gov/energyexplained/index.cfm?page=gasoline_factors_affecting_prices
"Highway Statistics Series," Federal Highway Association. http://www.fhwa.dot.gov/policyinformation/statistics.cfm
"Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 - 2014," U.S. Environmental Protection Agency. http://www.epa.gov/otaq/fetrends-complete.htm
"Per capita VMT ticks down for ninth straight year," State Smart Transportation Initiative (Feb. 24, 2014). http://www.ssti.us/2014/02/vmt-drops-ninth-year-dots-taking-notice/
"State Motor Fuel Tax Rates: 2000-2011, 2013-2014," Tax Policy Center (June 10, 2014). http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=606
Snyder, Tanya, "Ten Questions (and Answers) About Oregon's New VMT Charge," Streets Blog USA (Sept. 24, 2013). http://usa.streetsblog.org/2013/09/24/ten-questions-and-answers-about-oregons-new-vmt-charge/

Vock, Daniel C., "Massachusetts Rolls Back Automatic Gas Tax Hike," Governing (Nov. 5, 2014). http://www.governing.com/topics/elections/gov-massachusetts-rolls-back-inflation-measure-for-gastax.html

Weisman, Jonathan, "House and Senate Committees Offer Competing Rescue Plans for Highway Fund," New York Times(July 10, 2014). http://www.nytimes.com/2014/07/11/us/highway-trust-fund.html?_r=1

| Table 1. Historical Comparison of State Gas Tax Rates, 1993-2014 (cents per gallon) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993 | 2000 | 2007 | 2014 | Change: 1993-2014 |
| Federal | 18.4 | 18.4 | 18.4 | 18.4 | 0 |
| Alabama | 18 | 18 | 18 | 18 | 0 |
| Alaska | 8 | 8 | 8 | 8 | 0 |
| Arizona | 18 | 18 | 18 | 19 | 1 |
| Arkansas | 18.7 | 19.5 | 21.5 | 21.8 | 3.1 |
| California | 16 | 18 | 18 | 46.5 | 30.5 |
| Colorado | 22 | 22 | 22 | 22 | 0 |
| Connecticut | 26 | 32 | 25 | 25 | -1 |
| Delaware | 19 | 23 | 23 | 23 | 4 |
| District of Columbia | 20 | 20 | 20 | 23.5 | 3.5 |
| Florida | 11.6 | 13.3 | 15.3 | 17.1 | 5.5 |
| Georgia | 7.5 | 7.5 | 7.5 | 19.3 | 11.8 |
| Hawaii | 16 | 16 | 17 | 17 | 1 |
| Idaho | 21 | 25 | 25 | 26 | 5 |
| Illinois | 19 | 19 | 19 | 20.1 | 1.1 |
| Indiana | 15 | 15 | 18 | 18 | 3 |
| Iowa | 20 | 20 | 21.0 | 22 | 2 |
| Kansas | 18 | 20 | 24 | 25.03 | 7 |
| Kentucky | 15.4 | 16.4 | 21 | 30.8 | 15.4 |
| Louisiana | 20 | 20 | 20 | 20.125 | 0.1 |
| Maine | 19 | 19 | 27.6 | 30 | 11 |
| Maryland | 23.5 | 23.5 | 23.5 | 27 | 3.5 |
| Massachusetts | 21 | 21 | 21 | 24 | 3 |
| Michigan | 15 | 19 | 19 | 19 | 4 |
| Minnesota | 20 | 20 | 20 | 28.6 | 8.6 |
| Mississippi | 18.2 | 18.4 | 18.4 | 18.4 | 0.2 |
| Missouri | 13.03 | 17 | 17 | 17.3 | 4.3 |
| Montana | 21.4 | 27.75 | 27.75 | 27 | 5.6 |
| Nebraska | 24.6 | 23.9 | 27.0 | 27.3 | 2.7 |
| Nevada | 24 | 24 | 24 | 23.805 | -0.2 |
| New Hampshire | 18.6 | 19.5 | 19.6 | 19.625 | 1 |
| New Jersey | 10.5 | 10.5 | 10.5 | 14.5 | 4 |
| New Mexico | 17 | 18.5 | 18.875 | 18.875 | 1.9 |
| New York | 22.89 | 21.45 | 24.65 | 26.4 | 3.5 |
| North Carolina | 21.9 | 22 | 29.95 | 37.75 | 15.9 |
| North Dakota | 17 | 21 | 23 | 23 | 6 |
| Ohio | 21 | 22 | 28 | 28 | 7 |
| Oklahoma | 17 | 17 | 17 | 17 | 0 |
| Oregon | 22 | 24 | 24 | 30 | 8 |
| Pennsylvania | 22.35 | 25.9 | 31.2 | 40.7 | 18.4 |
| Rhode Island | 26 | 29 | 30 | 33 | 7.0 |
| South Carolina | 16 | 16 | 16 | 16.75 | 0.8 |
| South Dakota | 18 | 22 | 22 | 24 | 6 |
| Tennessee | 20 | 20 | 20 | 21.4 | 1.4 |
| Texas | 20 | 20 | 20 | 20 | 0 |
| Utah | 19 | 24.5 | 24.5 | 24.5 | 5.5 |
| Vermont | 16 | 19 | 20 | 31.97 | 16 |
| Virginia | 17.5 | 17.5 | 17.5 | 11.1 | -6.4 |
| Washington | 23 | 23 | 36 | 37.5 | 14.5 |
| West Virginia | 20.35 | 25.35 | 32 | 35.7 | 15.4 |
| Wisconsin | 22.2 | 25.8 | 30.9 | 32.9 | 10.7 |
| Wyoming | 9 | 14 | 14 | 24 | 15 |


| Table 2. Total State Gas Tax Rates, 2014 <br> (Excise taxes plus fees and other related taxes; cents per gallon) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Excise | Fees/Additional Taxes | Total | Additional Taxes/Fees Notes |
| Federal | 18.3 | 0.1 | 18.4 | LUST tax (6) |
| Alabama (1) | 16 | 2 | 18 | Inspection fee |
| Alaska | 8 | 0 | 8 |  |
| Arizona | 18 | 1 | 19 | LUST tax |
| Arkansas | 21.5 | 0.3 | 21.8 | Environmental fee |
| California | 39.5 | 7 | 46.5 | Includes prepaid sales tax |
| Colorado | 22 | 0 | 22 |  |
| Connecticut | 25 | 0 | 25 | Plus 8.1\% petroleum tax |
| Delaware | 23 | 0 | 23 | Plus 0.9\% gross receipts tax |
| District of Columbia | 23.5 | 0 | 23.5 |  |
| Florida (2) | 4 | 13.1 | 17.1 | Sales tax added to excise |
| Georgia | 7.5 | 11.8 | 19.3 | Sales tax added to excise |
| Hawaii (1) | 17 | 0 | 17 | Sales tax additional |
| Idaho | 25 | 1 | 26 | Clean water tax |
| Illinois (1,3) | 19 | 1.1 | 20.1 | Sales tax, environmental fee, LUST tax |
| Indiana (3) | 18 | 0 | 18 | Sales tax additional |
| Iowa | 21 | 1 | 22 | Environmental fee |
| Kansas | 24 | 1.03 | 25.03 | Environmental \& inspection fees |
| Kentucky (3,4) | 29.4 | 1.4 | 30.8 | Environmental fee |
| Louisiana | 20 | 0.125 | 20.125 | Inspection fee |
| Maine (5) | 30 | 0 | 30 |  |
| Maryland | 27 | 0 | 27 |  |
| Massachusetts | 24 | 0 | 24 |  |
| Michigan | 19 | 0 | 19 | Sales tax additional |
| Minnesota (5) | 28.5 | 0.1 | 28.6 | Inspection fee |
| Mississippi | 18 | 0.4 | 18.4 | Environmental fee |
| Missouri | 17 | 0.3 | 17.3 | Inspection fee |
| Montana | 27 | 0 | 27 |  |
| Nebraska (5) | 26.4 | 0.9 | 27.3 | Petroleum fee |
| Nevada (1) | 23 | 0.805 | 23.805 | Inspection \& clean-up fees |
| New Hampshire | 18 | 1.625 | 19.625 | Oil discharge cleanup fee |
| New Jersey | 10.5 | 4 | 14.5 | Petroleum fee |
| New Mexico | 17 | 1.875 | 18.875 | Petroleum loading fee |
| New York | 8 | 18.4 | 26.4 | Petroleum tax, sales tax additional |
| North Carolina (4) | 37.5 | 0.25 | 37.75 | Inspection tax |
| North Dakota | 23 | 0 | 23 |  |
| Ohio | 28 | 0 | 28 |  |
| Oklahoma | 16 | 1 | 17 | Environmental fee |
| Oregon | 30 | 0 | 30 |  |
| Pennsylvania | 40.7 | 0 | 40.7 | Oil franchise tax |
| Rhode Island | 32 | 1 | 33 | LUST tax |
| South Carolina | 16 | 0.75 | 16.75 | Inspection fee \& LUST tax |
| South Dakota (1) | 22 | 2 | 24 | Inspection fee |
| Tennessee (1) | 20 | 1.4 | 21.4 | Petroleum tax \& environmental fee |
| Texas | 20 | 0 | 20 |  |
| Utah | 24.5 | 0 | 24.5 |  |
| Vermont | 18.2 | 13.77 | 31.97 | Cleanup \& transportation fees |
| Virginia (1) | 11.1 | 0 | 11.1 | \$64 annual tax on electric cars |
| Washington | 37.5 | 0 | 37.5 | $0.5 \%$ privilege tax |
| West Virginia | 20.5 | 15.2 | 35.7 | Sales tax additional |
| Wisconsin | 30.9 | 2 | 32.9 | Petroleum inspection fee |
| Wyoming | 23 | 1 | 24 | License tax |
| Source: Compiled by Federation of Tax Administrators from various sources. <br> (1) Tax rates do not include local option taxes. In AL, 1 to 3 cents; HI, 8.8 to 18 cents; IL, 5 cents in Chicago and 6 cents in Cook County; NV, 4 to 9 cents; OR, 1 to 3 cents; SD and TN, 1 cent; VA, 2 percent. (2) Local taxes for gasoline vary from 10.8 cents to 19.1 cents. There also is 2.071 cents per gallon pollution tax. (3) Carriers pay an additional per gallon surcharge equal to 21 cents in IL, 11 cents in IN, and 2 percent in KY.(4). Tax rate is based on the average wholesale price. Actual tax rates are 9 percent in KY and 7 percent in NC. (5) Portion of the rate is adjustable based on maintenance costs, sales volume, cost of fuel to government, or inflation. 6. Leaking Underground Storage Tank (LUST) Trust Fund. |  |  |  |  |

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#### Abstract

ABOUT THE STATE AND LOCAL FINANCE INITIATIVE State and local governments provide important services, but finding information about them-and the way they are paid for-is often difficult. The State and Local Finance Initiative provides state and local officials, journalists, and citizens with reliable, unbiased data and analysis about the challenges state and local governments face, potential solutions, and the consequences of competing options. We gather and analyze relevant data and research, making it easier for others to find the data they need to think about state and local finances. A core aim is to integrate knowledge and action across different levels of government and across policy domains that too often operate in isolation from one another.


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[^0]:    ${ }^{1}$ The state and local revenue total is nearly all state tax revenue. Local-option gas taxes are rare.

[^1]:    Source: U.S. Energy Information Administration.

[^2]:    ${ }^{2}$ Of the 18.4 cents per-gallon federal excise tax, 18.3 cents goes to the Highway Trust Fund and 0.1 cents goes to the Leaking Underground Storage Tank (LUST) Trust Fund.

[^3]:    ${ }^{3}$ Data on tax rates come from the Federation of Tax Administrators and reflect rates on January 1, 2014. See the tables at the end of this paper for more detail. Alabama, Florida, Hawaii, Illinois, Nevada, Oregon, South Dakota, Tennessee, and Virginia have local-option taxes.

[^4]:    ${ }^{4}$ Increasing the gas tax would likely raise the price of gas and thus lead to lower consumption of gas. But a recent study suggested the effect is small. A 2006 National Bureau of Economic Research (NBER) report estimated a short-run price elasticity of gasoline demand between -0.034 and -0.077 . If the 13-cent difference between the current rate ( 21 cents) and indexed rate ( 34 cents) was added to the 2013 average price of U.S. gas (\$3.51), the NBER estimate suggests gas purchases could decline by between 0.13 percent and 0.29 percent. Such a reduction lowers the estimated revenue gain by between $\$ 1.2$ million and $\$ 2.6$ million.

[^5]:    ${ }^{5}$ Oregon Department of Transportation, "Road Usage Charge Pilot Program 2013 \& Per-Mile Charge Policy in Oregon," February 2014.
    ${ }^{6}$ Estimate from HB2313 Fiscal Impact Statement. The estimate does not include possible revenue resulting from Congress passing remote sales tax collection legislation, which Virginia has pledged to transportation projects.

[^6]:    ${ }^{7}$ Kentucky's gas tax has three components: 1) the percentage of price excise tax; 2) a supplemental user fee of 5 cents per gallon; and 3 ) an underground storage tank cleanup fee of 1.4 cents per gallon.

