THE WALL STREET JOURNAL.
WSJ.com

September 17, 2012

The Gas Tax Is Running Low. But What Should Replace It?

Almost everyone agrees that there has to be a better way. The question is how to get there.

By MICHAEL TOTTY

The gasoline tax is running on fumes.

For decades, the excise tax on gasoline and diesel fuel has been the main source of funds for building and maintaining the nation's roadways. It has paid for most of the four million road miles currently in service.

More in Investing in Energy
- The Meaning of the U.S. Oil Comeback
- Why OPEC Is Learning to Love Solar Power
- How to Prepare for Blackouts
- The Economics of Home Solar Power
- Read the complete report .

What should be done with the gas tax?

- Increase it
- Tax instead by miles driven
- Index it to inflation
- Levy more tolls
- Add federal registration fee on vehicles
- Leave as is

SUBMIT VOTE View Results »

Your Vote Total Votes: 1,29?

But now there is agreement across the political spectrum that the gas tax is broken and needs to be replaced, or at least overhauled. The problem is twofold: First, the tax has failed to keep up with the rising cost of highway construction and repair. And second, improved fuel economy and the rise of hybrid and electric vehicles means that more driving won't be matched by higher gasoline sales, and that how much people pay for the roads won't necessarily reflect how much they use them.

"The gas tax served our country extremely well as long as the amount that people drive continued to go up and people continued to get lousy gas mileage," says Pete K. Rahn, leader of the national transportation practice at HNTB Corp., a Kansas City, Mo., architectural, engineering and construction firm. Now, he says, "we do not have a sustainable way of paying for our transportation system."

Transportation experts have been warning for at least a decade about the looming crisis in the motor-fuels tax. The federal tax, at 18.4 cents for gasoline and 24.4 cents for diesel, hasn't changed since 1993. As a result, the tax buys about half the concrete, steel and other materials it did 20 years ago.

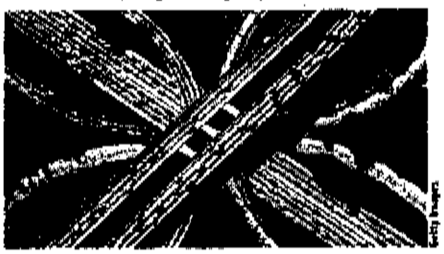
Some states have managed to increase the tax, but many have had to increase their reliance on other sources—registration fees, sales taxes and general-revenue funds—to meet their transportation needs.

Looking ahead, the Congressional Budget Office predicts new federal fuel-economy standards will reduce revenue by 21% in 2040 when they are fully phased in. To illustrate the effect of a 21% drop, the CBO estimates that if all cars on the road now met the stricter efficiency standards, it would mean a $57 billion cumulative reduction in revenue between now and 2022.

It's true that Congress could just raise the gas tax. But the tax is already unpopular, and lawmakers have resisted repeated efforts to increase it. In fact, amid high gasoline prices, many politicians have called for cutting the tax to give drivers some relief at the pump.

Road to Crisis

The gas tax built much of America's modern transportation infrastructure but has left Washington and the states strapped to maintain roads, bridges and highways and to build new ones.



1919 Oregon becomes the first state to adopt an excise tax on motor fuels. By 1932 all states and the District of Columbia have gasoline taxes.

1932 The federal government imposes a tax on gasoline to help prevent a budget shortfall.

1956 Washington establishes the Highway Trust Fund, financed by a three-cent-a-gallon motor-fuels tax, to construct the interstate highway system.

1982 The Surface Transportation Act increases the gas tax to nine cents from five cents a gallon and dedicates one cent of the increase to public-transit projects.

Source: Congressional Research Service

1990-93 In 1990 Congress increases the gas tax to 14.1 cents and dedicates 2.5 cents of the increase to deficit reduction. In 1993, a further 4.3-cent increase goes to reduce the deficit.

1997 With the federal budget heading into surplus, the share of the gas tax previously set aside for deficit reduction is redirected to the Highway Trust Fund for transportation projects.

2011 Lawmakers transfer $14.7 billion from general revenue to make up for a shortfall in the Highway Trust Fund. The fund has run a deficit for much of the previous decade because inflation has pushed up spending while increased fuel economy has held down revenue.

Getty Images

So a more comprehensive fix is needed. And this is where it gets more complicated.

Though almost all the politicians and transportation experts who have looked at it agree that the tax needs to be fixed, they don't agree on what that fix should be. They've floated all sorts of possible alternatives, including raising vehicle registration fees, using technology to track drivers' actual mileage and taxing oil rather than gasoline.

Here is a closer look at some of the options.

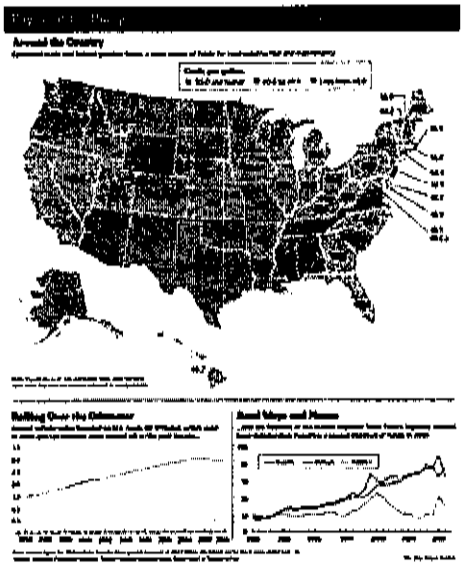
Tax the Miles

The idea that gets the broadest support is to take the user -fee piece of the gas tax to its logical conclusion: tax motorists on the miles they drive. Many economists argue that such a tax—known as a vehicle-miles-traveled tax or mileage-based user fee—is the fairest, most sustainable replacement for the gasoline tax. The problem is how to track the miles.

States could simply check a vehicle's odometer when drivers come in for annual registration renewals or pollution tests and give the driver a tax bill based on miles driven in the past year. But some skeptics say this is an invitation to odometer tampering. Drivers also would be hit with a large tax bill once a year instead of paying out the tax every time they fill their tanks. And for state taxes, there is no way to tell where the miles were driven: a daily commute or a cross-country road trip.

So some states are looking to technology. With in-car Global Positioning Systems or GPS-enabled smartphones, the government could keep track of how many miles people travel in their cars, the roads they drive on and the time of day they make the trips.

Mileage-based fees can also be adjusted to discourage motorists from driving on the most congested roads or at the busiest times of day. Mileage-based fees "let us kill two birds with one stone," says Randal O'Toole, a senior fellow at the Cato Institute, a libertarian think tank. "Short of privatization, it really is the free-market solution."



Minnesota is wrapping up a test of a mileage-based tax-collection plan that uses a custom-built smartphone app to keep track of participants' driving miles. At the end of each day, the app automatically reports how many miles were driven in-state, how many were in the U.S. and how many were in the Twin Cities. The approximately 500 people who participated in the test receive a monthly assessment of the tax they owe, like a utility bill.

Using technology to track mileage has one big drawback: privacy. Though states say they can set up the system so that personal travel information isn't collected or stored, most people don't like the idea of the government tracking where and when they drive.

Another problem is the cost of collection. The gas tax, whatever its drawbacks, is cheap to administer—taxes are collected at the refinery and passed on to consumers at the pump. Tracking miles and assessing taxes on individual drivers is more expensive. One solution would be to have third parties collect the tax. A wireless provider could add the tax as part of a data plan, for instance.

Tax the Roads

Many support a more limited form of mileage-based user fees: toll roads. Relying more on tolls is already helping states make up for lost gas tax revenues; over the past decade, about a third of all new limited-access road miles have been paid for with tolls.

John Kuczala

Toll roads have one big advantage: They tend to be more popular than the alternatives. According to an HNTB poll, 61% of Americans would prefer tolls to an increased federal gas tax or a mileage-based user fee as a way to pay for new transportation projects.

Still, without a full-scale shift to a broad mileage-based user fee, tolls will have a hard time replacing the gasoline tax. States can't convert existing interstate highway lanes to toll roads—unless they qualify for the small number of slots for a special federal pilot program. Virginia, one of the qualified states, has applied for federal approval to use tolls on a section of I-95 to pay for improvements on the busy highway.

Index the Tax to Inflation

Even supporters of mileage-based user fees concede they are a long-term fix. In the near term, some favor changing the gas tax so that it at least keeps up with the rising cost of construction without requiring lawmakers to cast a series of politically unpopular votes to raise the tax rate.

A simple approach would be to replace the per-gallon tax with a percentage-based sales tax. Several states, including Indiana and Georgia, already supplement their motor-fuels tax with a sales tax. A 2009 study of transportation-funding alternatives estimated that a federal sales tax of 1% on gasoline could raise about $7.2 billion of revenue a year, based on gas prices of $4 a gallon.

Even so, a sales tax would be a volatile source of transportation funds given the wide swings in the price of gasoline. And it doesn't address the long-term threat to revenue posed by increasing fuel efficiency.

Another solution is to index the tax rate to some measure of inflation, such as the Consumer Price Index or an index of highway construction costs. The rate could be automatically adjusted quarterly or annually as prices rose.

"If the goal is to make sure that this funding source is growing at roughly the same pace as our funding needs, tying the gas tax to some measure of inflation would be the way to do it," says Matthew Gardner, executive director of the Institute on Taxation and Economic Policy, a liberal think tank.

Florida currently indexes a portion of its gasoline tax to the Consumer Price Index; in 2011 the indexed portion accounted for 19.5 cents of the state fuel tax of 23.5 cents a gallon. While the CPI is more familiar to voters, tying the rate to construction costs would better keep up with inflation in building materials, which in the past decade or so has increased faster than general inflation.

Tax Oil, Not Gasoline

Another way to fill the gap in transportation revenue and needs is to broaden the tax base, replacing the current federal tax on gasoline and diesel fuel with a levy on every barrel of oil consumed in the U.S.

The proposal, studied by the RAND Corp. in 2011, estimated that at mid-2010 oil prices of $72 a barrel, a 17% oil tax would generate about $83 billion a year, the projected appropriation for highways and transit over the next six years. To raise the same amount, the federal gasoline tax would have to increase to 46 cents a gallon and the tax on diesel fuel would have to rise to 52 cents a gallon.

The RAND study also proposed making the rate flexible so that it produces a steady revenue stream amid volatile oil prices. The rate would increase if oil prices decline because of, say, a soft economy and reduced driving, and it would fall as oil prices increase so that consumers aren't hit with high prices and high oil taxes.

Tax Cars

Washington could also fill part of the gap in gas-tax revenue by taking a page from the states and assessing a charge on vehicle registrations. The 2009 transportation-finance study estimated a federal fee of $2.75 for cars and light trucks and $5.50 a year for heavy trucks could raise $1 billion a year.

Some states already rely heavily on these assessments. In Oklahoma, for instance, registration fees for new, noncommercial vehicles are $91 a year; in 2011, the state raised $629.7 million from registration fees, topping its $447.5 million in motor-fuel taxes.

While such a tax could raise significant sums at a fairly low additional rate, it's sure to be unpopular and wouldn't give drivers any incentive to reduce driving or avoid congestion. Nor would transportation officials have a reason to invest funds to meet the most pressing needs. And a federal registration fee would limit states' ability to tap this source of funds.

Mr. Totty is a news editor for The Journal Report in San Francisco. He can be reached at michael.totty@wsj.com.