

# Are we being asked to pay enough to support our national highway and transit network?

## Highlights:

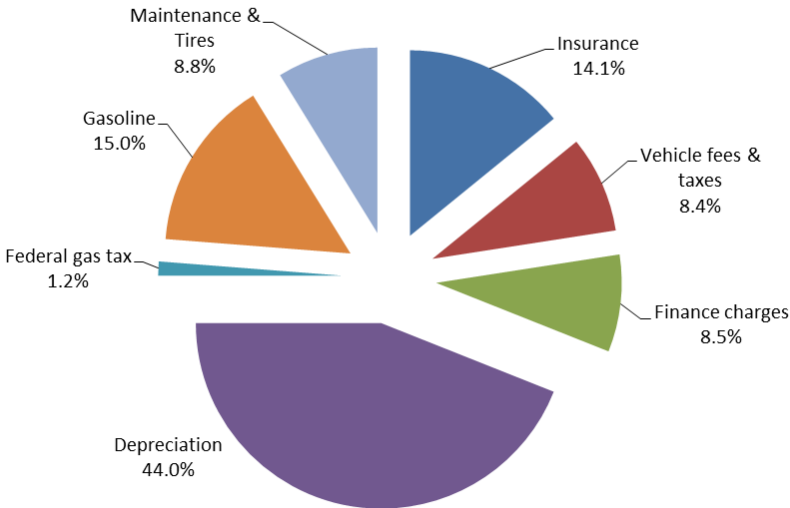
- Last year, the average American driver traveled 11,400 miles in their car or light truck, bought 529 gallons of gasoline to do it, and paid a total **\$97 in federal gas tax on the purchases.**
- The **federal gas tax represents 1.2 percent of the money the average driver spent last year to own and operate their vehicle.**
- On average, the same motorist paid **nearly seven times more in vehicle loan finance charges, and over 11 times more in auto insurance charges, than in federal gas tax.**

## A new analysis from the American Road & Transportation Builders Association (ARTBA) of what we pay for mobility.

We all want safe, well maintained and uncongested roads, but a new analysis shows the average American driver is only being asked to contribute 1.2 percent of their annual cost to own and operate a motor vehicle towards funding federal investments in highway and transit capital improvements. Drivers spend over 11 times more each year for auto insurance.

The analysis looked at the AAA's 2015 breakdown of motor vehicle ownership and operating costs and matched it with a calculation of how much the average motorist pays each year through the 18.4 cents-per-gallon federal gas tax, based on data from the U.S. Department of Transportation. The gas tax collection is dedicated to Highway Trust Fund-supported programs.

### Americans pay an average \$7,894 each year to own and operate a vehicle



Source: Based on AAA "Your Driving Costs" for 2015 adjusted to average annual vehicle miles traveled for passenger cars & trucks at 11,400 miles.

The research found that last year the average 11,400-miles-per-year driver **paid just under \$100 dollars in federal gas tax. That compared to annual fixed costs like \$1,115 for car insurance, \$3,473 in auto depreciation and \$669 in auto loan finance charges.**

This is the first research to look at how much each of us is personally investing each year to build and maintain the important highway and transit infrastructure that is so critical to us as individuals and the nation as a whole. The **Highway Trust Fund** is important because it focuses its resources primarily on supporting state capital investments in the nation's most heavily traveled roadways and transit systems. It **provides, on average 52 percent of the annual capital investment in highways and bridges.**

The amount we, as individual road users, contribute to the federal investment in surface transportation infrastructure is established by the federal gas tax rate. Since 1993, the rate has been fixed at 18.4 cents-per-gallon. This excise is not a percentage sales tax applied to the total price of our gas purchases, nor is it assessed at the pump. It is collected when gasoline is removed from bulk storage terminals. And it is but one—relatively small—input among several factors used to determine the retail price we are charged for gas at the pump at any given time.

These facts are relevant to the current congressional debate on how to **fund the federal highway and transit investment program beyond May 31, when the current authorization ends. The program faces a \$15 billion per year deficit just to maintain current funding.**

The answers we found should cause President Obama and our representatives in Congress to reassess why they have so much trouble asking Americans who use our roads and transit systems every day to contribute a few dollars more each month in user fees like the federal gas tax to renew and upgrade our national network.

### **Policy Solution: “Getting Beyond Gridlock”**

In March, ARTBA announced a detailed policy proposal to help end the political impasse over how to fund future federal investments in state highway, bridge and transit capital projects.

“Getting Beyond Gridlock” (GBG) would marry a 15 cents-per-gallon increase in the federal gas and diesel motor fuels tax with a 100 percent offsetting federal tax rebate for middle and lower income Americans for six years.

The plan would help fund a six-year, \$401 billion highway and public transit capital investment program and provide sustainable, user-based funds to support it for at least the next 10 years. **Even at this higher rate, the federal gas tax would still represent only 2.2 percent of the annual cost of owning and operating a vehicle.**

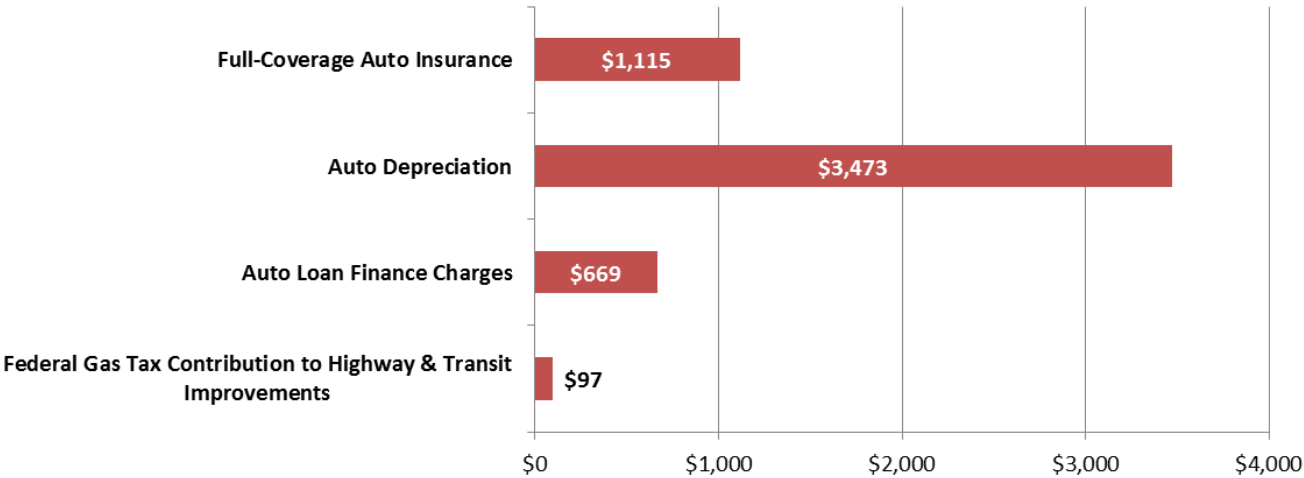
And by fixing roads, bridges and transit systems and funding new capital investments aimed at improving the movement of freight, the American public and business community would save time and money on annual transportation costs.

Learn more about GBG at [www.artba.org](http://www.artba.org).

**Summary**

- The current federal gas tax represents 1.2 percent of what the average American motorist pays each year to own and operate their personal vehicle.
- The same motorist pays 8.5 percent in annual finance charges; and 14 percent in insurance costs.
- ARTBA’s proposed federal gas tax increase, plus state gas taxes, would still represent just 4 percent of the annual cost of owning and operating a vehicle.
- Better roads and bridges would reduce costly time delays, and save on vehicle maintenance costs by reducing wear and tear.
- Infrastructure repair would create short-term construction jobs and allow the American economy to expand and stay competitive, creating even more long-term jobs and broad financial benefits.

**What the Average U.S. Driver\* Contributes Annually to Federal Investments in Highway & Transit Improvements Relative to Some Other Costs of Owning & Operating a Car**



\*11,400 miles driven per year  
Source: American Road & Transportation Builders Association analysis of AAA's 2015 "Your Driving Costs" study and U.S. DOT auto usage data

**Methodology**

For this analysis, we first determined the average miles driven by Americans in passenger vehicles and light trucks, using data from *National Transportation Statistics*, published by the U.S. Bureau of Transportation Statistics (BTS) at the U.S. Department of Transportation. The most recent data are for calendar year 2012. We divided the total vehicle miles traveled by cars and light trucks (2.66 trillion) by the total registered U.S. cars and light trucks (233.8 million). Thus, the average miles driven per vehicle are estimated to be 11,400 miles per year.

To determine the average annual cost of owning and operating a vehicle traveling 11,400 miles per year, we used additional data from the American Automobile Association’s (AAA) annually published “Your Driving Costs” analysis. For the year 2015, the AAA analysis reports the average driver pays 17.3 cents-per-mile in vehicle operating costs. This includes expenditures for gasoline, maintenance (“retail parts and labor for normal, routine maintenance as specified by the vehicle manufacturer) and tires.

We took AAA’s 17.3 cents-per-mile operating cost and multiplied it by the average 11,400 miles driven by Americans. This results in an average vehicle operating cost in 2015 of \$1,972.

We then looked at the average annual fixed vehicle ownership costs as determined by AAA. AAA includes in is

<b>Average Annual Cost of Owning and Operating a Vehicle in the U.S.</b>	
<b>From 2015 AAA "Your Driving Costs"</b>	
<b>Variable Per Mile Vehicle Operating Costs (cents per mile)</b>	
Gasoline .....	\$0.11
Maintenance .....	\$0.05
Tires .....	\$0.01
Total cost per mile .....	\$0.17
Total estimated operating costs for 11,400 miles driven .....	\$1,972.20
<b>Fixed Vehicle Ownership Costs (per year)</b>	
Full-coverage insurance .....	\$1,115.00
Vehicle License, registration & taxes .....	\$665.00
Finance charges .....	\$669.00
Depreciation (15,000 miles driven annually) .....	\$3,654.00
Adjusted depreciation (11,400 miles driven annually) .....	\$3,472.56
Total estimated ownership costs (11,400 miles driven annually) .....	\$5,921.56
<b>Total Vehicle Operating &amp; Ownership Costs for 11,400 miles driven annually .....</b>	<b>\$7,893.76</b>
Average driver contribution to federal-aid highway and transit program (18.3 cpg x 529 gallons) .....	\$96.79
Average driver contribution to federal-aid highway and transit program as % of total vehicle ownership and operating costs .....	1.2%

<b>U.S. Fleet of Cars and Light Trucks</b>	
Vehicle miles traveled (millions) .....	2,664,445
Gasoline motor fuel consumption (million gallons) .....	123,635
Registered vehicles (thousands) .....	233,761
Average fuel consumed per vehicle .....	529 gallons
Average miles traveled per vehicle .....	11,400

Sources: AAA "Your Driving Costs" 2015 edition  
 U.S. Bureau of Transportation Statistics, *National Transportation Statistics*, Tables 4-11 and 4-12  
 Data includes totals for light duty vehicles with short and long wheel base



calculation the average annual cost of full coverage auto insurance, “all government taxes and fees payable at time of purchase, as well as fees due each year to keep the vehicle licensed and registered,” finance costs (“based on a five-year loan, with 10 percent down, at the national average interest rate for the middle three of five credit rating categories”) and annual vehicle depreciation.

AAA reports estimates of annual vehicle depreciation (“the difference between the new vehicle purchase price and estimated trade-in value at the end of five years”) based on 15,000 and 10,000 miles annual usage. We calculated a depreciation total for 11,400 miles annual usage based on the per mile difference between those estimates, annually averaging the difference over 5 years, as AAA does. Our estimate of depreciation for 11,400 annual miles traveled is \$3,473.

Using our adjustment for depreciation and the other fixed ownership costs determined by AAA, we get a total cost of driving in 2015 of \$7,894.

To determine the average driver’s annual contribution to federal investments in highway, bridge and transit improvements, we calculated the average amount a driver pays into the Highway Trust Fund (HTF) through the 18.4 cents-per-gallon federal gas tax that is collected at the refinery level. (Only 18.3 cents of the excise is dedicated to the HTF.)

We used BTS data on the total gallons of gasoline consumed annually by cars and light trucks in the U.S. (123.6 billion in 2012) and the total number of registered cars and light trucks reported for that year (233.8 million). This yields an average annual per vehicle motor fuel consumption of 528.9 gallons of gasoline.

To calculate the federal gas tax collected per vehicle for HTF-supported programs, we multiplied 18.3 cents time 528.9. Thus, the average driver is contributing \$96.79 annually to support federal highway, bridge and transit improvements.

If the average American driver paid \$7,894 in 2015 to own and operate their vehicle that means their contribution to federal investment in our highway and transit network represented only 1.2 percent of their total cost.

The ARTBA analysis was conducted by the association’s chief economist, Dr. Alison Premo Black. She can be reached at (202) 289-4434, or [ablack@artba.org](mailto:ablack@artba.org).

*Established in 1902, Washington, D.C.-based ARTBA is the “consensus voice” of the U.S. transportation design and construction industry before Congress, the White House, federal agencies, news media and the general public.*