Congressional Research Service
Informing the legislative debate since 1914

The Federal Excise Tax on Motor Fuels and the Highway Trust Fund: Current Law and Legislative History

Updated February 22, 2016

Congressional Research Service
https://crsreports.congress.gov
RL30304

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

The federal government levies an excise tax on various motor fuels. Under current law, the tax rate is 18.3 cents per gallon on gasoline and 24.3 cents per gallon on diesel fuel. A 0.1 cents per gallon tax is also levied on top of these fuel tax rates to help fund expenses associated with fuel regulation. These rates are not automatically adjusted for inflation. Specific tax rates also apply to special motor fuels. Under current law, federal motor fuels excise tax collections are credited to two federal spending accounts: the Highway Trust Fund (HTF) and the Leaking Underground Storage Tank (LUST) Trust Fund.

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act (P.L. 114-94). The FAST Act reauthorized federal highway and public transportation programs for five years (FY2016-FY2020) and reauthorized current gas tax and LUST tax levels through FY2022. Spending levels in the FAST Act are funded by HTF revenues and a $70 billion transfer from the general fund to the HTF and $300 million in scheduled transfers from the LUST Fund. The transfers from the general fund were offset by non-transportation-related provisions.

A major policy debate surrounding the motor fuels excise tax relates to the ability of the HTF to be self-sustaining. Approximately 90% of HTF receipts are composed of annual tax collections on gasoline and diesel fuels. Since 2008, HTF spending obligations have exceeded receipts and $139.9 billion (after sequestration) has been transferred from the Treasury's general fund (as well as $3.7 billion from the LUST Trust Fund) to address these projected shortfalls. Tax collections have declined over time because of inflation's effect on the value of the tax rates, among other factors. Future declines in tax collections are anticipated because of scheduled increases in corporate average fuel economy (CAFE) standards.

Although left unaddressed by the FAST Act, federal motor fuels excise tax rates could be a major subject of debate as Congress considers longer-term sources of funding for the HTF. In the 114th Congress, multiple bills (H.R. 680, H.R. 2971, S. 1994) propose an increase in the federal motor fuels excise tax. Some bills also contain provisions linking the excise tax rate to increases in inflation (H.R. 680, H.R. 2971, H.R. 1846, S. 1994). Alternatively, other proposals in the 114th Congress would link funding for the HTF with international tax policy changes, or would cut the federal motor fuels tax and devolve authority for transportation projects to the states. The President's FY2017 budget also proposes funding a "21st Century Clean Transportation System" initiative partly with revenue raised from a fee on U.S. crude oil consumption.

This report provides an overview of current law and a recent legislative history of federal motor fuels excise tax rates (with an emphasis on gasoline and diesel fuel for highway use) and the HTF. State motor fuels tax rates are mentioned in brief. The report also includes a summary of the history of the gas tax and funding for the HTF. Issues related to HTF spending programs and infrastructure financing, more broadly, are beyond the scope of this report, but are discussed in CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett.

Contents

Introduction 1
Current and Historical Motor Fuel Excise Tax Rates 3
Federal Tax Rates 3
State and Local Tax Rates 4
Recent History 5
Activity in the 113th Congress 6
Extension of Funding for the Highway Trust Fund 6
Proposals to Modify Excise Taxes on Motor Fuels 7
Excise Tax Reductions and Highway Trust Fund Reform 7
Excise Tax Increases 8
Ways and Means Chairman Camp's Tax Reform Proposal 9
Activity in the 114th Congress 10
Short-Term Extensions of HTF Spending Authority 10
DRIVE Act (Senate-Passed Bill) 10
FAST Act (Five-Year Authorization) 11
Proposals to Increase Motor Fuels Tax Rates 11
UPDATE Act of 2015 (Blumenauer et al. Proposal) 11
Bridge to Sustainable Infrastructure Act (Renacci et al. Proposal) 12
Highway Trust Fund Certainty Act (Rice Proposal) 12
TRAFFIC Relief Act (Carper Proposal) 13
Proposals to Reduce Motor Fuels Tax Rates 13
Transportation Empowerment Act (Lee and DeSantis Proposal) 13
International Tax Proposals 13
Invest in Transportation Act of 2015 (Boxer-Paul Proposal) 13
President's FY2017 Budget Proposal for Funding a "21st Century Clean Transportation System" 15
Alternative Policy Approaches 18

Tables

Table 1. Federal Motor Fuel Excise Tax Rates Under Current Law 3
Table 2. Summary of Changes in the Statutory Rate of the Federal Manufacturers' Excise Tax on Gasoline 4
Table 3. General Fund Transfers to the Highway Trust Fund 5
Table 4. HTF Funding Provisions in the FAST Act (P.L. 114-94), As Enacted on December 4, 2015 11
Table 5. Proposed Federal Motor Fuels Excise Tax Rates Under H.R. 680 12

Appendixes

Appendix. History of the Federal Motors Fuels Excise Tax and the Highway Trust Fund 19

Contacts

Author Information 28
Acknowledgments 28

Introduction

The federal government levies an excise tax on various motor fuels intended for highway use.[1] Under current law, the tax rate is 18.3 cents per gallon on gasoline and 24.3 cents per gallon on diesel fuel.[2] A 0.1 cents per gallon tax is also levied on top of these fuel tax rates to help fund expenses associated with fuel regulation. These rates do not automatically adjust for inflation. The statutory motor fuel excise tax rates were last increased in 1993. Specific tax rates also apply to special motor fuels, such as kerosene, compressed natural gas, and fuels derived from biomass. Motor fuels that are not intended for highway use are exempt from these taxes, as are specific federal government purchases of motor fuels.[3]

Under current law, federal motor fuels excise tax collections are credited to two federal spending accounts: the Highway Trust Fund (HTF) and the Leaking Underground Storage Tank (LUST) Trust Fund.

The HTF is a federal transportation fund that is divided into two accounts: (1) mass transit and (2) highways. The HTF predominantly supports highway and transit programs and projects that are carried out at the state and local level.[4] Although the HTF has other sources of revenue and is also credited with interest paid on the fund balances held by the U.S. Treasury, fuel taxes historically have provided almost 90% of the receipts to the HTF.[5] The mass transit account receives 2.86 cents per gallon of fuel taxes, with the remainder of the tax revenue flowing into the highway account.[6]

The LUST Trust Fund receives 0.1 cents per gallon from the tax.[7] Monies in the LUST Trust Fund are used to pay expenses incurred by the Environmental Protection Agency (EPA) and the states for preventing, detecting, and cleaning up leaks from petroleum underground storage tanks, as well as programs to evaluate the compatibility of fuel storage tanks with alternative fuels, methyl tertiary butyl ether (MTBE) compounds added to improve fuel combustion and air quality, and ethanol and biodiesel blends.[8]

---

[1] More specifically, the majority of federal excise taxes on motor fuels are collected "at the rack" when the fuel is removed from bulk storage terminals. A tax imposed at the production or importation level provides ease in administration and revenue collection. For more details about federal motor fuels excise tax administration, see U.S. Department of Transportation, "Motor Fuel Tax Compliance Outreach - FAQs," at http://www.fhwa.dot.gov/motorfuel/faqs.htm. For generic analysis of federal excise tax policy, see CRS Report R43189, *Federal Excise Taxes: An Introduction and General Analysis*, by Sean Lowry.

[2] See 26 U.S.C. 4081(a)(2)(A). The tax on gasoline used as aviation fuel is 19.3 cents per gallon.

[3] For exemption terms, see 26 U.S.C. 4041.

[4] For more information, see CRS Report R44332, *Federal-Aid Highway Program (FAHP): In Brief*, by Robert S. Kirk; CRS Report R41869, *The Donor-Donee State Issue in Highway Finance*, by Robert S. Kirk; and U.S. Federal Highway Administration, "Motor Fuel and Highway Trust Attribution," at http://www.fhwa.dot.gov/policyinformation/motorfuel/aboutmf.cfm.

[5] See U.S. Government Accountability Office, *Highway Trust Fund: Options for Improving Sustainability and Mechanisms to Manage Solvency*, GAO-09-845T, June 25, 2009, p. 4, at http://www.gao.gov/new.items/d09845t.pdf; and CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett.

[6] For more information, see CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett.

[7] See 26 U.S.C. 4081(a)(2)(B).

[8] For more information, see U.S. Congress, Joint Committee on Taxation, *Present Law and Background Information on Federal Excise Taxes*, committee print, 111th Cong., 2nd sess., January 2011, JCS-1-11 (Washington: GPO, 2011), pp. 18-19.

Some Members of Congress have expressed concern that the HTF is no longer self-sustaining. In recent years, tax collections have declined largely because of inflation's effect on the real value of the tax rates, improvements in vehicle fuel efficiency, and less growth in vehicle miles traveled. Future declines in tax collections are projected largely due to scheduled increases in corporate average fuel economy (CAFE) standards.[9] Since 2008, Congress has prevented projected shortfalls in the HTF by transferring money from the Treasury's general fund and the LUST Trust Fund to the HTF. While these transfers have been capable of fulfilling HTF obligations to the states temporarily, some Members of Congress have considered *increasing* excise tax rates or other revenue reforms to more closely align the growth of HTF receipts with the growth of obligations. Others, in contrast, have suggested cutting programs to reduce HTF outlays.[10]

This report provides an overview of current law and a legislative history of the federal motor fuels excise tax and financing of the HTF. Specifically, this report analyzes tax collections from gasoline and diesel motor fuels for highway use, since they have historically composed approximately 90% of the source of funding for the HTF. The report also includes a summary of the history of the gas tax and funding for the HTF in past sessions of Congress. The **Appendix** contains a legislative history of the gas tax dating back to its inception in 1932.

Issues related to Federal Highway Trust Fund spending programs and infrastructure financing more broadly are beyond the scope of this report. Other CRS reports provide additional analysis of transportation finance issues:

- For more in-depth analysis of federal highway finance options (including the HTF), see CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett; and CRS Report R41869, *The Donor-Donee State Issue in Highway Finance*, by Robert S. Kirk.
- For an analysis of the economic effects of a change in the amount of the gasoline tax, see CRS Report R40808, *The Role of Federal Gasoline Excise Taxes in Public Policy*, by Robert Pirog.
- For information on transportation spending programs and infrastructure financing, see CRS Report R43582, *Transportation, Housing and Urban Development, and Related Agencies (THUD): FY2015 Appropriations*, by Libby Perl and David Randall Peterman; CRS Report R42966, *Public Transportation Program and Funding Issues*, by William J. Mallett; and CRS Report R43308, *Infrastructure Banks and Debt Finance to Support Surface Transportation Investment*, by William J. Mallett and Steven Maguire.

[9] See testimony of Kim Cawley, Congressional Budget Office, in U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Financial Status of the Highway Trust Fund*, 113th Cong., 1st sess., July 23, 2013, p. 3, at http://www.cbo.gov/sites/default/files/cbofiles/attachments/44434-HighwayTrustFund_Testimony.pdf.

[10] For an example of these discussions, see U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Financial Status of the Highway Trust Fund*, 113th Cong., 1st sess., July 23, 2013.

Current and Historical Motor Fuel Excise Tax Rates

Federal Tax Rates

Federal tax rates on motor fuels used for transportation purposes are summarized in **Table 1**. Under current law, the federal tax on gasoline is 18.3 cents per gallon and diesel is taxed at 24.3 cents per gallon. A 0.1 cents per gallon tax is levied on top of these rates for the LUST Trust Fund. The rate of tax is 24.3 cents per gallon in the case of liquefied natural gas, any liquid fuel (other than ethanol or methanol) derived from coal, and liquid hydrocarbons derived from biomass. Other alternative motor fuels, such as compressed natural gas (CNG), are generally taxed at a rate of 18.3 cents per gallon.[11]

The current tax rates on gasoline and diesel motor fuels are scheduled to decrease to the permanent law rate of 4.3 cents per gallon (regardless of fuel type) after September 30, 2022. In addition, the 0.1 cent LUST Fund Tax is scheduled to expire on that same date.[12]

Table 1. Federal Motor Fuel Excise Tax Rates Under Current Law

Category	Current Tax Rate (Cents Per Gallon)	Expiration Date of Current Law Rate	Permanent Law Tax Rate (Cents Per Gallon)
Gasoline	18.3	September 30, 2022	4.3
Diesel	24.3	September 30, 2022	4.3
Leaking Underground Storage Tank (LUST) Trust Fund tax	0.1	September 30, 2022	Expires

Source: Internal Revenue Code Section 4081, last modified by P.L. 114-94.

The role of the motor fuels excise tax has changed since its origination in 1932. Initially, the tax was among several deficit reduction tools. Increases in the "gas tax" were used in combination with other excise tax increases to finance emergency spending during wartime over the next two decades. In 1956, federal gasoline tax receipts were transferred to the newly created Highway Trust Fund. Federal gasoline excise tax rates were raised again in the early 1990s and directed partially for HTF funding purposes but also for general deficit reduction. In 1997, the portion of gas tax revenues directed to the general fund for deficit reduction in the early 1990s was redirected back to the HTF. The **Appendix** provides a more detailed history of the motor fuels excise tax and the HTF. **Table 2** provides a complete summary of the gasoline tax rate changes since its establishment in 1932.

[11] For a complete list of motor fuels tax rates, see IRS Form 720 (Quarterly Federal Excise Tax Return), at http://www.irs.gov/pub/irs-pdf/f720.pdf.

[12] Internal Revenue Code Sections 4081(a)(2)(A)(i) and 4081(a)(2)(B).

Table 2. Summary of Changes in the Statutory Rate of the Federal Manufacturers' Excise Tax on Gasoline

Rate of Tax (Cents per Gallon)	Period to Which Applicable
1	June 21, 1932, to June 16, 1933
1.5	June 17, 1933, to December 31, 1933
1	January 1, 1934, to June 30, 1940
1.5	July 1, 1940, to October 31, 1951
2	November 1, 1951, to June 30, 1956
3	July 1, 1956, to September 30, 1959
4	October 1, 1959, to March 31, 1983
9	April 1, 1983, to December 31, 1986
9.1	January 1, 1987, to August 31, 1990[a]
9	September 1, 1990, to November 30, 1990
14.1	December 1, 1990, to September 30, 1993[a]
18.4	October 1, 1993, to December 31, 1995[a]
18.3	January 1, 1996, to September 30, 1997
18.4	October 1, 1997, to September 30, 2022[a]
4.3	October 1, 2022, and thereafter

Source: Prepared by CRS based on various legislation. See **Appendix** for more information.

a. Tax rate includes the 0.1 cent per gallon Leaking Underground Storage Tank (LUST) Trust Fund Tax.

State and Local Tax Rates

Although not a focus of the analysis in this report, many state and local governments also levy their own motor fuel excise taxes. As such, changes to federal excise taxes will have an indirect impact on state and local motor fuel excise tax revenues. According to the American Petroleum Institute (API), a national trade association that represents the U.S. oil and natural gas industry, the average state excise tax rates on gasoline and diesel were 20.9 cents and 20.2 cents per gallon, respectively, as of January 2016.[13] API also publishes variations of this analysis on a state-by-state basis.

Motor fuel excise tax administration also varies by state. Some states have different rules for the point of taxation as some tax the product "at the rack," which is upon removal from the bulk terminal. In contrast, other states impose the tax at the distributor level where distributors hold licenses and file regular (usually monthly) returns with the state and local tax authority.[14] By comparison, the majority of federal excise taxes are collected by the Internal Revenue Service (IRS) when the fuel is removed from the bulk storage terminals.

[13] American Petroleum Institute (API), *State Motor Fuel Taxes Summary*, January 14, 2016, at http://www.api.org/oil-and-natural-gas-overview/industry-economics/fuel-taxes. API also publishes a more detailed state-by-state analysis of excise taxes and other fuel inspection taxes and fees in American Petroleum Institute (API), *State Motor Fuels Taxes by State*, at http://www.api.org/oil-and-natural-gas-overview/industry-economics/fuel-taxes.

[14] See U.S. Department of Transportation, "Motor Fuel Tax Compliance Outreach - FAQs," at http://www.fhwa.dot.gov/motorfuel/faqs.htm.

The cumulative effect of federal, state, and local taxes contributes to some of the variation in fuel prices across the nation. The American Automobile Association (AAA) publishes daily average fuel prices in a particular state (and some metropolitan areas).[15]

Recent History

Before 2008, the HTF was mostly self-sustaining, primarily through receipts generated by motor fuels excise taxes. Since 2008, the HTF has faced potential shortfalls in revenue and has required transfers in funding from the Treasury's general fund to meet its obligations to the states (under current law, the HTF cannot run negative balances).[16]

Some Members of Congress have expressed concerns regarding the state of the HTF and its ability to be self-financed given current trends in obligations and receipts.[17] Several approaches to this shortfall have been discussed, both in hearings and more generally as part of the debate over funding for the HTF. For example, Congress has prevented potential shortfalls to the HTF by transferring over $139.9 billion (after sequestration) from Treasury's general fund to the HTF. As shown in **Table 3**, general fund transfers to the HTF have been scheduled eight times by seven authorizing laws since 2008. Additionally, transfers totaling $3.7 billion have been scheduled from the LUST Trust Fund to the HTF.

Table 3. General Fund Transfers to the Highway Trust Fund

Year of Transfer	Amount ($ billions)[a]	Authorizing Law	Authorizing Law Title
FY2008	$8.0	P.L. 110-318	To Amend the Internal Revenue Code of 1986 to Restore the Highway Trust Fund Balance
FY2009	$7.0	P.L. 111-46	To restore sums to the Highway Trust Fund, and for other purposes
FY2010	$19.5	P.L. 111-147	Hiring Incentives to Restore Employment Act
FY2013	$6.2	P.L. 112-141	Moving Ahead for Progress in the 21st Century Act[b]
FY2014	$12.6	P.L. 112-141	Moving Ahead for Progress in the 21st Century Act
FY2014	$9.765	P.L. 113-159	Highway and Transportation Funding Act of 2014
FY2015	$8.068	P.L. 114-41	Surface Transportation and Veterans Health Care Choice Improvement Act of 2015
FY2016	$70.0	P.L. 114-94	Fixing America's Surface Transportation (FAST) Act
Total	**$141.150**	**($139.927 billion after sequestration)**	

[15] See American Automobile Association (AAA), *Daily Fuel Gage Report*, at http://fuelgaugereport.opisnet.com/index.asp.

[16] See testimony of Kim Cawley, Congressional Budget Office, in U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Financial Status of the Highway Trust Fund*, 113th Cong., 1st sess., July 23, 2013, p. 2, at http://www.cbo.gov/sites/default/files/cbofiles/attachments/44434-HighwayTrustFund_Testimony.pdf.

[17] For example, see U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *How the Financial Status of the Highway Trust Fund Impacts Surface Transportation Programs*, 113th Cong., 1st sess., July 23, 2013.

Source: Various laws; CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett; and Eno Center for Transportation, "General Fund Transfers to the Highway Trust Fund," July 30, 2015.

a. The table does not include two transfers of the accrued balance of Leaking Underground Storage Tank (LUST) Trust Fund in FY2012 and FY2014. These transfers were $2.4 billion (authorized by P.L. 112-141) and $1.0 billion (authorized by P.L. 113-159), respectively. Additionally, P.L. 114-94 authorized $300 million in total transfers from the LUST Trust Fund to the HTF, scheduled over three payments from FY2016-FY2019.

b. After sequestration, the combined transfers authorized by MAP-21 were reduced from $18.8 billion to $17.577 billion.

While ad hoc transfers in general funding would not enable the HTF to be self-sustaining, they could ensure that HTF obligations to the states are met through FY2020. As previously mentioned, the HTF cannot incur a negative balance under current law.

Members have also discussed options to raise the federal gas tax as a means to offset the effects of inflation on the value of the tax rate and to compensate for other trends in motor transport (e.g., fewer passenger-car miles traveled and more fuel-efficient vehicles). Alternative tax regimes, or complements to the status quo motor fuel excise tax, such as a "vehicle miles traveled" (VMT) tax, have also been discussed as an option for addressing projected HTF shortfalls.

Activity in the 113th Congress

On August 8, 2014, President Obama signed the Highway and Transportation Funding Act of 2014 (P.L. 113-159). This short-term reauthorization of the HTF was funded by a $9.765 billion transfer from the general fund and a $1 billion transfer from the LUST Trust Fund. The $10.765 billion in funding was estimated to provide enough funding for surface transportation programs for approximately nine months (around the end of May 2015).

Extension of Funding for the Highway Trust Fund

The House and the Senate initially approved different bills to respond to an anticipated funding shortfall that was estimated to occur sometime around the beginning of August 2014. On July 10, 2014, the Committee on Way and Means reported the Highway and Transportation Funding Act (H.R. 5021), a $10.8 billion extension of HTF expenditure authority that is estimated by the Joint Committee on Taxation (JCT) to fund transportation programs through May 31, 2015.[18] On that same day, the Senate Committee on Finance reported the Preserving America's Transit and Highways (PATH) Act, a $10.8 billion extension of HTF authority.[19] Ultimately, the Senate adopted the legislative language in the House bill on August 31, 2014—one day before the

[18] See U.S. Congress, Joint Committee on Taxation, *Description Of The Provisions Of* H.R. 5021, *The "Highway And Transportation Funding Act of 2014" Within The Jurisdiction of The House Committee On Ways And Means*, 113th Cong., 2nd sess., July 8, 2014, JCX-79-14 (Washington: GPO, 2014), p. 3, at https://www.jct.gov/publications.html?func=startdown&id=4644.

[19] For a more detailed explanation of each funding provision, see the JCT's descriptions of both bills: U.S. Congress, Joint Committee on Taxation, *Description Of The Provisions Of* H.R. 5021, *The "Highway And Transportation Funding Act of 2014" Within The Jurisdiction of The House Committee On Ways And Means*, 113th Cong., 2nd sess., July 8, 2014, JCX-79-14 (Washington: GPO, 2014), at https://www.jct.gov/publications.html?func=startdown&id=4644; and U.S. Congress, Joint Committee on Taxation, *Description Of The Chairman's Second Modification To The "Preserving America's Transit And Highways Act Of 2014"*, 113th Cong., 2nd sess., July 10, 2014, JCX-83-14 (Washington: GPO, 2014), at https://www.jct.gov/publications.html?func=startdown&id=4648.

Department of Transportation was to begin implementing emergency cash management procedures for highway programs to the states.[20]

As previously mentioned, P.L. 113-159 was estimated to fund surface transportation programs for approximately nine months (through the end of May 2015). This short-term funding came from a $9.765 billion transfer from the general fund and a $1 billion transfer from the LUST Trust Fund. Revenue raised from a practice called "pension smoothing" and a reauthorization of certain customs user fees were used to offset most of the general fund transfer.[21]

All funding provisions enacted in P.L. 113-159 were included in both the House and Senate bills. The Senate bill contained several other funding provisions that are not included in the House bill.[22] The additional Senate provision could have been broadly categorized as tax compliance and modernization provisions, or technical changes to tax policy administration. The Senate bill would have also lowered the statutory tax rate on liquefied petroleum gas (LPG) from its permanent law rate of 18.3 cents per gallon to 13.4 cents per gallon, based on its lower energy equivalency to gasoline.

Proposals to Modify Excise Taxes on Motor Fuels

In contrast to the short-term funding bills were reported in the House and Senate, others sought longer-term changes to funding the HTF—including significant changes to motor fuels excise tax rates. Some Members called for increasing the gas tax. Others have proposed more fundamental changes in highway financing by reducing the federal government's role and transferring more responsibilities to the states.[23]

Excise Tax Reductions and Highway Trust Fund Reform

The Transportation Empowerment Act (H.R. 3486, S. 1702), sponsored by Representative Tom Graves and Senator Mike Lee, would have phased in reductions in excise tax rates on motor fuels over a three-year period beginning in 2015. Under the Transportation Empowerment Act, the federal tax rate on gasoline would have been reduced from 18.3 cents per gallon in 2014 to 9.6 cents effective October 2015, and eventually to 3.7 cents by October 2018. Tax rates on diesel and kerosene motor fuels would have been reduced from 24.3 cents per gallon in 2014 to 5.0 cents effective October 2018. Similar bills were introduced in the 112th Congress as H.R. 3264 and S. 1164. The Transportation Empowerment Act would also have transferred the

[20] See Letter from Anthony R. Foxx, Secretary of Transportation, to State Transit Agencies, July 1, 2014, at http://www.dot.gov/sites/dot.gov/files/docs/FTA_Colleague_Letter_July_1_2014.pdf.

[21] For a more detailed explanation of the pension smoothing provision included in MAP-21, see CRS Report 95-118, *Pension Benefit Guaranty Corporation (PBGC): A Primer*, by John J. Topoleski and CRS Report R43305, *Multiemployer Defined Benefit (DB) Pension Plans: A Primer and Analysis of Policy Options*, by John J. Topoleski.

[22] The initial version of the Chairman's Mark of the PATH Act (released June 24, 2014) contained several provisions that were removed or modified from the version reported by the committee on July 10, 2014. These provisions included one transportation-related revenue-raiser (an increase in the caps for the heavy vehicle use tax), several other provisions intended to increase general taxpayer compliance and enforcement, and one provision related to pension contributions.[22] The most controversial provision of the initial version of the Chairman's Mark would have doubled the cap on the heavy vehicle use tax from $550 to $1,100 per year. This provision was removed before the version of the bill that was reported by the committee on July 10, 2014. See Joint Committee on Taxation, *Description Of The Chairman's Mark Of The "Preserving America's Transit And Highways Act of 2014"*, 113th Cong., 2nd sess., June 24, 2014, JCX-75-14 (Washington: GPO, 2014), at https://www.jct.gov/publications.html?func=startdown&id=4626.

[23] For more analysis on this issue, see CRS Report R40431, *Federalism Issues in Surface Transportation Policy: A Historical Perspective*, by Robert Jay Dilger.

responsibilities over highway and transit programs to the states over five years. Over the five-year transition period, states would have been provided with funding through block grants.

Proponents of the Transportation Empowerment Act argued that (1) the states are better situated to understand their transportation priorities than the federal government, (2) efficiencies for taxpayers could result from reducing the costs of managing surface transportation programs, (3) it would reduce the need for some federal regulations to be applied to the states (e.g., National Environmental Policy Act), and (4) the bill could avoid a federal motor fuels tax increase.[24] Opponents of the bill argued that some states might not be able to provide adequate levels of funding for surface transportation, and that federal assistance could help prevent deterioration of transportation infrastructure in one state from impeding interstate commerce between other states. There is also concern that the Transportation Empowerment Act could require a one-time transfer of funds in order to reimburse the states for outstanding spending, which they agreed to under the assumption that they would be supported by federal HTF funds.[25]

The Surface Transportation and Taxation Equity Act (H.R. 3497), sponsored by Representative Scott Garrett, would have allowed states to opt out of the federal transportation program and would have reduced federal tax rates on motor fuels in proportion to any state tax rate increases (but the tax rates cannot be decreased below 2 cents per gallon). According to press releases, Representative Garrett's proposal aimed to reduce state reliance on the federal HTF for transportation funding and, like the Transportation Empowerment Act, sought to increase efficiencies for the taxpayer by reducing federal management costs and avoiding federal excise tax increases.[26] A similar bill was introduced in the 112th Congress as H.R. 1737.

Excise Tax Increases

Representative Earl Blumenauer introduced the Update, Promote, and Develop America's Transportation Essentials (UPDATE) Act of 2013 (H.R. 3636), which would have increased federal excise tax rates on gasoline, diesel, and kerosene fuels for the first time since October 1993. According to a press release from Representative Blumenauer's office, the bill would have raised around $170 billion over 10 years.[27]

Under H.R. 3636, current federal tax rates on gasoline would have increased by 15 cents (from 18.3 cents to 33.3 cents) between 2013 and 2016, and diesel and kerosene tax rates would also have increased by 15 cents (from 24.3 cents to 39.3 cents). Under current law at the time, these tax rates were scheduled to decrease to the permanent law rate of 4.3 cents per gallon and the LUST tax was set to expire after September 2016. In addition, H.R. 3636 would have indexed

[24] For example, see Emily Goff, *Empowering the States by Turning over the Federal Highway Program*, The Heritage Foundation, November 15, 2013, at http://www.heritage.org/research/reports/2013/11/impact-of-turning-over-the-federal-highway-program-to-the-states, and Heritage Action, *House Key Votes: Co-Sponsorship of the Transportation Empowerment Act*, November 14, 2013, at http://heritageaction.com/key-votes/co-sponsorship-transportation-empowerment-act/.

[25] For analysis, see *Eno Transportation Weekly*, Eno Center for Transportation, January 14, 2015.

[26] Representative Scott Garrett, "Rep. Garrett Reintroduces STATE Act: A Taxpayer-Friendly Solution for Infrastructure Funding," press release, March 12, 2013, at http://garrett.house.gov/press-release/garrett-reintroduces-state-act-taxpayer-friendly-solution-infrastructure-funding.

[27] See Representative Earl Blumenauer, "Blumenauer Joined by Leaders in Transportation, Commerce, Labor, Construction to Introduce UPDATE Act to Fund Infrastructure," press release, December 4, 2013, at http://blumenauer.house.gov/press-releases/blumenauer-joined-by-leaders-in-transportation-commerce-labor-construction-to-introduce-update-act-to-fund-infrastructure/. Official revenue estimates for legislation are conducted by the Joint Committee on Taxation (JCT).

further tax rate increases to changes in inflation in years 2016 to 2024. According to the bill's text, the general theme of these justifications was that an increase in the gas tax was needed to not only maintain HTF solvency at current spending levels, but to also fund higher levels of spending.[28] The bill cited the American Society for Civil Engineers (ASCE), a trade association, which estimated that the United States should "invest at least an additional $500 billion in our surface transportation system by 2020 in order to meet U.S. economic and transportation needs."[29] Critics of ASCE's estimates argued that America's transportation infrastructure was in a better state than the trade association's figures suggest, and that taxpayer money could be better allocated or reprioritized between projects rather than increased across most or all transportation projects.[30]

In June 2014, Senators Bob Corker and Chris Murphy called for a 12 cent increase in gasoline and diesel tax rates, coupled with a permanent extension of some personal and business temporary tax provisions known as "tax extenders."[31] Under the proposal, the tax increases would be phased in over two years at a rate of 6 cents per gallon annually. After the tax increases have been phased in, the tax rates on gasoline and diesel would be 33.3 and 39.3 cents per gallon, respectively (not including the 0.1 cent per gallon LUST tax). The proposal was not introduced as legislation.

Ways and Means Chairman Camp's Tax Reform Proposal

On February 26, 2014, House Ways and Means Chairman Camp released draft discussion legislation for comprehensive tax reform that contained a revenue-raising provision for the HTF. This discussion draft was introduced as the Tax Reform Act of 2014 (H.R. 1) on December 10, 2014. In short, Section 4003 of the bill would have provided foreign subsidiaries of U.S. corporations with a special tax rate on previously untaxed earnings and profits (E&P) accumulated overseas to the United States as part of the transition rules toward a more "territorial" form of corporate taxation.[32]

The revenue raised from this one-time provision would have been deposited into the HTF. Consistent with the current allocation of the motor fuel excise tax revenues, 80% of the revenue raised from the provision would have been allocated to the highway account and 20% would have been allocated to the mass transit account. The Joint Committee on Taxation (JCT) estimates that this provision would have provided $126.5 billion in revenue for the Highway Trust Fund over 10

[28] See Section 2 of H.R. 3636.

[29] See ibid. and American Society of Civil Engineers, *Failure to Act*, at http://www.asce.org/failuretoact/. Previous reports by ASCE reached similar conclusions that higher levels of spending were necessary to meet America's economic and transportation needs.

[30] For example, see Evan Soltas, "The Myth of the Falling Bridge," *Bloomberg Online*, April 8, 2013, at http://www.bloomberg.com/news/2013-04-08/the-myth-of-the-falling-bridge.html; and Charles Marohn, *ASCE and the Infrastructure Cult*, Strong Towns, December 12, 2011, http://www.strongtowns.org/journal/2011/12/12/best-of-blog-asce-and-the-infrastructure-cult.html#.UuaFJbQo5zk.

[31] Senator Chris Murphy, "Murphy, Corker Unveil Bipartisan Plan to Shore Up Highway Trust Fund, Boost Economic Growth," press release, June 18, 2014, at http://www.murphy.senate.gov/newsroom/press-releases/murphy-corker-unveil-bipartisan-plan-to-shore-up-highway-trust-fund-boost-economic-growth.

[32] For more information, see Joint Committee on Taxation, Technical Explanation of the Tax Reform Act of 2014, A Discussion Draft of the Chairman of the House Committee on Ways and Means to Reform the Internal Revenue Code: Title IV Participation Exemption System, JCX-15-14, February 26, 2014, pp. 29-33, at https://www.jct.gov/publications.html?func=startdown&id=4557. For more information on issues related to transitioning toward a more territorial form of corporate taxation, see CRS Report R42624, Moving to a Territorial Income Tax: Options and Challenges, by Jane G. Gravelle.

years.[33] Funds designated by Section 4003 would have reduced, but not eliminated, projected HTF shortfalls on an annual basis in the short term.[34]

Activity in the 114th Congress

Short-Term Extensions of HTF Spending Authority

On May 29, 2015, President Obama signed the Highway and Transportation Funding Act (P.L. 114-21), which extended both the authority to expend from the trust fund and authority to spend on surface transportation programs for two months (through July 31, 2015). Spending from the HTF was supported by existing balances in the HTF.

On July 31, 2015, President Obama signed the Surface Transportation and Veterans Health Care Choice Improvement Act of 2015 (P.L. 114-41), which extended both the authority to expend from the trust fund and authority to spend on surface transportation programs, for three months (through October 29, 2015). P.L. 114-41 also transferred $8.068 billion from the general fund to the HTF.[35]

DRIVE Act (Senate-Passed Bill)

On the same day that it passed P.L. 114-41, the Senate also passed H.R. 22, the legislative vehicle for the Developing a Reliable and Innovative Vision for the Economy (DRIVE) Act. The DRIVE Act outlined a six-year spending plan for transportation programs, and was meant to be a competing policy option to the shorter-term HTF extension proposals originating in the House. Given the sense of urgency to pass a HTF reauthorization before spending authority expired at the end of July 31, 2015, the Senate passed the short-term extension of the HTF in order to provide Congress with more time to negotiate the terms of longer-term transportation bill during the latter half of 2015.

Before passage of P.L. 114-41, the sponsors of the DRIVE Act intended for the bill to contain enough offsets to provide for roughly the first three years of the six-year spending bill.[36] The DRIVE Act and P.L. 114-41 contained some overlapping offsets.[37]

---

[33] U.S. Congress, House Committee on Ways and Means, *Tax Reform Act of 2014*, Discussion Draft, Section-by-Section Summary, 113th Cong., 2nd sess., February 26, 2014, pp. 143-144, at http://waysandmeans.house.gov/uploadedfiles/ways_and_means_section_by_section_summary_final_022614.pdf.

[34] See "cumulative shortfall" in Congressional Budget Office, *Projections of Highway Trust Fund Accounts Under CBO's February 2014 Baseline*, February 2014, at http://www.cbo.gov/sites/default/files/cbofiles/attachments/43884-2014-02-Highway_Trust_Fund.pdf; and footnote 24 in U.S. Congress, Joint Committee on Taxation, *Estimated Revenue Effects of the "Tax Reform Act of 2014*," 113th Cong., 2nd sess., February 26, 2014, JCX-20-14 (Washington: GPO, 2014), p. 18, at https://www.jct.gov/publications.html?func=startdown&id=4562.

[35] For a summary of the effects on HTF and general fund balances, see U.S. Congress, Joint Committee on Taxation, *Estimated Revenue Effects Of The Revenue Provisions Contained In Titles II And IV Of* H.R. 3236, *The "Surface Transportation And Veterans Health Care Choice Improvement Act Of 2015," Scheduled For Consideration By The Senate On July 30, 2015*, 114th Cong., 1st sess., July 30, 2015, JCX-105-15, at https://www.jct.gov/publications.html?func=startdown&id=4804.

[36] See U.S. Senate Committee on Environmental and Public Works, "DRIVE Act Modernizes America's Infrastructure, Transportation System," press release, July 21, 2015, at http://www.epw.senate.gov/public/index.cfm/press-releases-republican?ID=DFAF66C0-D453-42C3-AB84-A90BBD326E44.

[37] For a summary of these estimates, see P.L. 114-41; Joint Committee on Taxation, *Estimated Revenue Effects of the Revenue Provisions Contained in Division E and Division F of* H.R. 22, *As Amended, And Scheduled for*

FAST Act (Five-Year Authorization)

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act (P.L. 114-94). The FAST Act authorizes federal highway and public transportation programs for five years (FY2016-FY2020).[38]

Table 4. HTF Funding Provisions in the FAST Act (P.L. 114-94), As Enacted on December 4, 2015

Provision	10-Year Revenue Or Spending Offset Estimates (millions of dollars)
Transfer and Limit of Federal Reserve Surplus Fund	$53,334
Reduce Dividend Rate Paid by Federal Reserve to Member Banks	$6,904
Sell Oil from the Strategic Petroleum Reserve	$6,200
Increase Customs User Fees for Inflation	$5,188
Require IRS to Use Private Contractors to Collect Certain Unpaid Tax Liabilities	$2,408
Increase Motor Vehicle Safety Civil Penalties	$423
Revocation or Denial of Passports in Cases of Certain Unpaid Taxes	$395
Repeal Interest on Overpayments of Royalties on Federal Oil and Gas Leases	$320

Source: Letter from Keith Hall, Director of the Congressional Budget Office (CBO), to Honorable Bill Shuster, Chairman of the House Committee on Transportation and Infrastructure, December 2, 2015, at https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/costestimate/hr22_1.pdf.

In order to fund the spending levels in the FAST Act, the law authorizes a $70 billion transfer from the general fund to the HTF (offset by the provisions in **Table 4**) and $300 million in scheduled transfers from the LUST Fund (spread out over three, subsequent annual payments of $100 million beginning immediately in FY2016) to supplement projected HTF revenues. Most of these offsets were part of the Senate-passed DRIVE Act. The FAST Act also reauthorized current law tax rates for motor fuels and the LUST Fund tax through FY2022.

Proposals to Increase Motor Fuels Tax Rates

Before enactment of the FAST Act, several bills were introduced to increase gas tax rates as a means to fund transportation spending through the HTF.

UPDATE Act of 2015 (Blumenauer et al. Proposal)

Representative Earl Blumenauer and a group of cosponsors reintroduced a version of the Update, Promote, and Develop America's Transportation Essentials (UPDATE) Act from the 113th Congress. Similar to the UPDATE Act of 2013, The UPDATE Act of 2015 (H.R. 680) would

Consideration by the Senate on July 30, 2015, JCX-106-15, July 30, 2015, https://www.jct.gov/publications.html?func=startdown&id=4805; and Letter from Keith Hall, Director of the Congressional Budget Office (CBO), to Honorable Mitch McConnell, Senate Majority Leader, July 24, 2015, at https://www.cbo.gov/publication/50428.

[38] For more information about the outlays authorized by P.L. 114-94, see CRS Insight IN10406, *FAST Act (H.R. 22): Highlights of the Surface Transportation Bill Signed by the President*, by Robert S. Kirk.

phase in an increase in the motor fuels excise tax over three years and index the tax rate for inflation over a 10-year period. H.R. 680's tax rate changes are summarized in **Table 5**.

Table 5. Proposed Federal Motor Fuels Excise Tax Rates Under H.R. 680

(tax rates are in cents per gallon)

	Current Law		Proposed Rates Under H.R. 680			
Category	**Through 9/30/22[a]**	**After 9/30/2022[b]**	**2015**	**2016**	**2017**	**2017 to 2028[c]**
Gasoline	18.3	4.3	18.3	26.3	30.3	33.3
Diesel	24.3	4.3	24.3	32.3	36.3	39.3

Source: Update, Promote, and Develop America's Transportation Essentials Act of 2015 (H.R. 680).

a. Current law tax rate does not include the 0.1 cent per gallon LUST Trust Fund Tax.

b. The 4.3 cents per gallon tax rate is set in permanent law.

c. Proposed tax rates under H.R. 680, as listed above, do not include the bill's proposed automatic adjustment for inflation for 2017 to 2028 on top of the base rate of 33.3 or 39.3 cents per gallon.

Bridge to Sustainable Infrastructure Act (Renacci et al. Proposal)

The Bridge to Sustainable Infrastructure Act (H.R. 1846) would require an inflation adjustment in calendar years after 2015 to the rates of the excise taxes on motor fuels. In years 2016 and beyond, the federal excise tax on motor fuels would be tied to changes in the Consumer Price Index for All Urban Consumers (CPI-U). According to a press release, Representative Jim Renacci claims that the tax rate on gasoline and diesel fuel would increase to 18.8 cents per gallon and 24.9 cents per gallon, respectively, in 2016.[39] The bill would also establish a Bipartisan Task Force for Sustainable Highway Funding, which would identify and make recommendations addressing factors that affect the long-term fiscal imbalance of the HTF.

Highway Trust Fund Certainty Act (Rice Proposal)

The Highway Trust Fund Certainty Act (H.R. 2971) would immediately increase the tax rates on gasoline and diesel fuel each by 10.1 cents per gallon and adjust the tax rates for inflation (as measured by the CPI-U) beginning in 2016.[40] Before adjusting for inflation, the federal motor fuels tax rates on gasoline and diesel fuel would be 28.4 and 34.4 cents per gallon, respectively, after enactment of H.R. 2971.[41]

According to media reports, preliminary JCT estimates indicate that H.R. 2971 would raise would raise $12.6 billion in FY2016 and $214.5 billion over 10 years for the HTF.[42] Other revenue raised by the bill would be allocated to the Sport Fish Restoration and Boating Trust Fund. Income and payroll offsets due to the excise tax increase would result in revenue losses to the

[39] See Representative Jim Renacci, "E&E: House Republican proposes gas tax increase tied to inflation," press release, April 17, 2015, at http://renacci.house.gov/index.cfm/in-the-news?ID=BD0A45E3-707A-421A-B7A0-C72C9E8D0480.

[40] H.R. 2971 specifies that the base year for measuring inflation would be CY2014.

[41] H.R. 2971 specifies specific rate changes for special motor fuels and other fuels. See bill text for more details.

[42] Joint Committee on Taxation, *(Preliminary) Estimated Revenue Effects of Possible Highway Trust Fund Proposals*, June 25, 2015, at https://www.enotrans.org/wp-content/uploads/2015/07/Rice-bill-JCT-score.pdf.

LUST Trust Fund ($11 billion over 10 years) and the general fund ($56.4 billion). Overall, the fuel tax increase would raise net $161.1 billion in new revenue.

TRAFFIC Relief Act (Carper Proposal)

The Tax Relief And #FixTheTrustFund For Infrastructure Certainty Act ("TRAFFIC Relief") Act (S. 1994) would increase the motor fuels tax on gasoline and diesel by four cents annually for four years (through 2019), and index the tax rate to inflation in subsequent years.

In addition to the provisions related to the motor fuels excise tax increases, the bill would also restore the higher levels for the child tax credit and the Earned Income Tax Credit (EITC) that were temporarily enacted under the American Recovery and Reinvestment Act of 2009 (P.L. 111-5), and expand EITC access for childless workers, among other provisions.[43]

Proposals to Reduce Motor Fuels Tax Rates

Before enactment of P.L. 114-94, at least one legislative proposal had been introduced in the 114th Congress to reduce federal gas tax rates and reduce the role of the federal government in transportation policy. This proposal might still be debated, even after enactment of the FAST Act, as a means to reassign more responsibility on transportation policy to the states.

Transportation Empowerment Act (Lee and DeSantis Proposal)

The motor fuel excise tax provisions of the Transportation Empowerment Act (H.R. 2716; S. 1541) introduced in the 114th Congress are similar to the bills described in the section of this report outlining "Excise Tax Reductions and Highway Trust Fund Reform" proposals in the 113th Congress.

Under the bill introduced in the 114th Congress, federal motor fuel taxes would be phased down from the current rates of 18.3 cents per gallon of gasoline and 24.3 per gallon of diesel fuel to 3.7 cents per gallon and 5.0 cents gallon, respectively, over the 2018-2021 period.

International Tax Proposals

Before enactment of P.L. 114-94, some proposals linked international or business tax reform changes to transportation funding.

Invest in Transportation Act of 2015 (Boxer-Paul Proposal)

On May 16, 2015, Senators Barbara Boxer and Rand Paul introduced the Invest in Transportation Act (S. 981) to fund the HTF using a voluntary repatriation tax holiday for U.S. multinational corporations (MNCs) as the primary "offset" to fund new transportation spending. Some of the primary provisions of the bill include the following:

- A voluntary repatriation holiday for foreign-source earnings would be taxed at a rate of 6.5%. The rate is only for repatriations that exceed each company's average repatriations in recent years, and funds must have been earned in 2015 or earlier. Companies have up to five years to complete the transfer.

[43] For more information, see CRS Report R43805, *The Earned Income Tax Credit (EITC): An Overview*, by Gene Falk and Margot L. Crandall-Hollick; and CRS Report R41873, *The Child Tax Credit: Current Law and Legislative History*, by Margot L. Crandall-Hollick.

- All tax revenues from the repatriation program will be transferred into the Highway Trust Fund;
- Companies must use no less than 25% of the repatriated funds for increased hiring, wages, and pensions; research and development; environmental improvements; public-private partnerships; capital improvements; and acquisitions. The proposal indicates that funds may not be spent on increases in executive compensation or on increases in shareholder dividends or stock buybacks for three years after the program ends.
- Companies that invert within 10 years of participating in this program must "repay the tax incentive with interest."[44]

Voluntary repatriation holidays have been discussed as potential offsets for a variety of infrastructure spending programs, such as the HTF. The last voluntary repatriation holiday was enacted by Congress in the American Jobs Creation Act of 2004 (AJCA; P.L. 108-357). Although voluntary repatriation holidays may increase revenue in the first year or two after implementation, the Joint Committee on Taxation (JCT) has scored these types of policies as leading to a net revenue loss over the 10-year budget window.[45] Media reports indicate that the JCT has estimated the Boxer-Paul bill would cost $117.9 billion over 10 years.[46] Repatriated dividends under the voluntary holiday would be taxed at a lower rate than they would otherwise be later in the budget window.

A significant difference between the Boxer-Paul proposal and the last voluntary repatriation holiday in the AJCA is that the Boxer-Paul proposal makes the option available for firms to repatriate over five years instead of one. It is uncertain how the five-year repatriation window could change any revenue score associated with the proposal. The proposal could encourage some firms to repatriate earnings earlier than they would have, and revenue from repatriated earnings could be at a level high enough to address potential shortfalls in the HTF. On the other hand, some firms could choose to repatriate at the end of the five-year window (e.g., simply to delay paying the 6.5% repatriation tax) and the proposal might result in little short-term increase in revenue. In the latter case, revenue raised by the proposal might not be sufficient to address potential shortfalls in the HTF. In either case, it is likely that any revenue estimate will begin to show revenue losses closer to the end of the 10-year budget window. Even if the provision is scored as raising revenue within the 10-year budget window, it is presumed that this repatriation holiday would result in net-revenue losses outside of the budget window.

The provision in the Boxer-Paul proposal to require portions of the repatriations to be spent or invested is intended to address a critique of the 2004 repatriation holiday.[47] Several empirical

---

[44] Office of Senator Barbara Boxer (CA), *Boxer-Paul "Invest in Transportation Act,"* January 29, 2015, at http://www.boxer.senate.gov/press/related/BoxerPaulWhitePaper012915.pdf.

[45] Revenue is gained the first two years because companies have different dates for the start of their fiscal years, and would elect to take advantage of the proposal in accordance with their financial calendars. In subsequent years, though, the proposal loses money within the budget window. For example, see Letter from Thomas Barthold, Chief of Staff of the Joint Committee on Taxation, to the Honorable Orrin Hatch, United States Senate, June 6, 2014, at http://www.hatch.senate.gov/public/_cache/files/1b24c4cf-6005-4a4e-bab7-3d9e3820c509/JCT%206-6-14.pdf

[46] See Deloitte, *Tax News & Views*, May 1, 2015, at https://www2.deloitte.com/content/dam/Deloitte/us/Documents/Tax/us-tax-taxnewsandviews-150501.pdf. For the article's scanned attachment of the Joint Committee on Taxation (JCT) revenue estimate (dated April 30, 2015), see http://newsletters.usdbriefs.com/2015/Tax/TNV/150501_2suppA.pdf.

[47] See CRS Report R40178, *Tax Cuts on Repatriation Earnings as Economic Stimulus: An Economic Analysis*, by Donald J. Marples and Jane G. Gravelle.

studies indicate that the purported stimulus benefits of the 2004 repatriation holiday were not evident. A Senate report found that several major beneficiaries of the 2004 holiday actually reduced their U.S. employment in the years after the holiday.[48] Economic studies found that much of the money repatriated was distributed to shareholders (in the form of dividends) or was used to repurchase shares. In 2004, firms that elected to repatriate under the AJCA were still able to bypass the statutory provisions intended to prohibit the use of repatriated funds for executive compensation, stock repurchases, and shareholder dividends.[49] The strength of any revised prohibitions would depend on the text of the legislation. Since money is fungible, however, it is difficult to devise an effective rule.

The repayment provision of the Boxer-Paul proposal could reduce the tax-related benefits for some companies considering an inversion. It is uncertain how much of an additional deterrent this provision would provide, since many of the tax-related benefits for inversions have been eliminated by the Department of the Treasury's actions to reduce such actions beginning in September 2014.[50] On the other hand, this provision could unintentionally affect inversion deals that are motivated primarily for non-tax reasons.

The voluntary repatriation holiday in the Boxer-Paul proposal differs substantially from the Camp tax reform proposal, in that the latter was a mandatory transition tax as part of larger reform to a territorial corporate tax system. The Boxer-Paul proposed repatriation holiday also differs from the President's FY2016 proposal to impose a 14%, one-time tax on previously untaxed foreign income, in that the latter is a mandatory transition tax as part of a larger reform to an international tax system without deferral of taxes on foreign earnings.

President's FY2017 Budget Proposal for Funding a "21st Century Clean Transportation System"

The President's FY2017 budget proposes $495 billion in budgetary authority in excess of FAST Act levels to fund programs and projects for a new "21st Century Clean Transportation System" initiative.[51] Under the initiative, the Department of Transportation would administer programs and projects that mostly involve multimodal transportation development and transit, among other programs intended to "invest in a new, sustainable transportation system that ... builds resilient and connected communities" and "reduces reliance on oil, cuts carbon pollution, and strengthens our resilience to the impacts of climate change."[52]

---

[48] U.S. Senate, Permanent Subcommittee on Investigations, Committee on Homeland Security and Governmental Affairs, Repatriating Offshore funds: 2004 Tax Windfall for Select Multinationals, Majority Staff Report, October 11, 2011, at http://hsgac.senate.gov/public/index.cfm?FuseAction=Press.MajorityNews&ContentRecord_id=f3063308-5056-8059-76ad-ff573eb2df8c.

[49] See ibid., p. 7; and 26 U.S.C. §965(b)(4)(B).

[50] For more information, see CRS Report WSLG1067, *Treasury's Actions on Corporate Inversions*, by Erika K. Lunder and Carol A. Pettit; and CRS Report R43568, *Corporate Expatriation, Inversions, and Mergers: Tax Issues*, by Donald J. Marples and Jane G. Gravelle.

[51] See Office of Management and Budget (OMB), Analytical Perspectives: Budget of the U.S. Government, Fiscal Year 2017, February 2016, pp. 141-143, at https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/spec.pdf.

[52] See OMB, "Meeting Our Greatest Challenges: Innovation to Forge a Better Future," in Budget of the United States Government, Fiscal Year 2017, February 2016, p. 19, at https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/innovation.pdf; The White House, "FACT SHEET: President Obama's 21st Century Clean Transportation System," press release, February 4, 2016, https://www.whitehouse.gov/the-press-office/2016/02/04/fact-sheet-president-obamas-21st-century-clean-

The President proposes that $176 billion of the funding would come from transition revenue raised from the President's proposal for "business tax reform" (which is similar to the version introduced in his FY2016 budget). Some of the revenue raisers in the President's proposal for business tax reform include (1) a 14% one-time tax on previously untaxed foreign income (estimated by Treasury to raise $299.4 billion over 10 years), and (2) an ongoing, 19% minimum tax on foreign income earned in the future (estimated by Treasury to raise $350.4 billion over 10 years).[53] These international tax reform provisions would effectively end deferral of tax on foreign-earned income. Additional revenue would be raised from reducing the ability for U.S. corporates to expatriate, or "invert" (estimated by Treasury to raise $13.4 billion over 10 years). The President's business tax reform proposal would also lower the top corporate income tax rate from 35% to 28%, among other provisions.[54]

Additionally, the President would fund $319 billion of the proposed initiative using revenue from a new fee on crude oil and finished oil products consumed in the United States. The fee would be set at $10.25 per barrel of crude oil and finished petroleum products (adjusted for inflation from 2016), and would be phased in evenly over five years.[55] Oil producers and importers would be responsible for the statutory burden of the tax, and exports would be exempt. The Department of the Treasury estimates that the President's proposal for an oil fee would raise $35.1 billion in the first year after being fully phased in, and $319.1 billion over 10 years.[56] According to the President's budget, home heating oil would be temporarily exempted from the fee (for an unspecified amount of time) and 15% of the gross revenue raised from the fee would be used to fund assistance for households with "particularly burdensome" energy costs, such as those in the Northeast, who might be disproportionately affected by an increase in heating oil costs in the short run. The exact form of this assistance is not specified in the budget, though.[57]

Taxing oil could help improve market efficiency, improving the allocation of goods and services in the economy, assuming the current price does not reflect the full societal cost of consumption, such as higher carbon emissions.[58] Economic theory indicates that higher prices on oil would be

---

transportation-system.

[53] For more information, see U.S. Department of the Treasury, *General Explanations of the Administration's Fiscal Year 2017 Revenue Proposals*, February 2016, at https://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2017.pdf.

[54] For past details on the President' framework for business tax reform, see White House Council of Economic Advisers, "Chapter 5: Business Tax Reform and Economic Growth," in 2015 Economic Report of the President, at https://www.whitehouse.gov/sites/default/files/docs/2015_erp_chapter_5.pdf.

[55] U.S. Department of the Treasury, *General Explanations of the Administration's Fiscal Year 2017 Revenue Proposals*, February 2016, pp. 190-191, at https://www.treasury.gov/resource-center/tax-policy/Documents/General-Explanations-FY2017.pdf. The method for adjusting for inflation (e.g., adjusted for changes in the broader Consumer Price Index or changes in the price of crude oil) is not specified in the budget proposal.

[56] Ibid., p. 269.

[57] See OMB, "Meeting Our Greatest Challenges: Innovation to Forge a Better Future," in Budget of the United States Government, Fiscal Year 2017, p. 19, February 2016, at https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/innovation.pdf.

[58] The net effect of an oil tax on carbon emissions depends, in part, on how the revenue is used. For more economic analysis, see Congressional Budget Office, *Effects of a Carbon Tax on the Economy and Environment*, May 2013, at https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/44223_Carbon_0.pdf. A broad-base carbon tax as a means to reduce the social costs of greenhouse gas emissions is supported by a bipartisan group of economists, former elected officials, and policy commentators. See N. Gregory Mankiw, "An Open Invitation to Join the Pigou Club," *Eastern Economic Journal*, vol. 35 (2009), pp. 14-23, and a sample list of supporters at Greg Mankiw's Blog, "Rogoff Joins the Pigou Club," September 16, 2006, at http://gregmankiw.blogspot.com/2006/09/rogoff-joins-pigou-club.html; and survey responses from 40 prominent economists, see University of Chicago Booth School of Business, *IGM Forum: Carbon Taxes II*, December 4, 2012, http://www.igmchicago.org/igm-economic-experts-panel/poll-

passed on to consumers in the short run, in the form of higher prices, because consumer demand is relatively unresponsive to short-term changes in the price of oil.[59] Estimates suggest that the fee could increase the price of a gallon of gasoline by at least 25 cents per gallon, depending on the rate of inflation, by the time the fee is fully phased in.[60] Given that the fee would largely be passed along to consumers in the short run, the effects on output and employment in the oil industry due to the fee are predicted to be small.

In the long run, though, the higher price of oil could lead consumers to internalize the external costs commonly associated with the production and consumption of oil. These external costs include environmental costs, as well as national security risks stemming from the reliance on oil imported from unstable regions.[61] Over time, consumers are better able to adapt to persistent higher oil prices as they are able to switch to more fuel-efficient vehicles, manufacturers develop methods of production that substitute non-oil inputs, and workers relocate to reduce their commuting costs.[62] While this could reduce U.S. consumer demand for oil, it is unclear what the effect would be on future U.S. oil industry output, which would be driven largely by future global supply and demand forecasts (which are highly uncertain).

Taxing oil, as opposed to transportation fuels, moves away from the user-fee approach for financing the HTF. Not all oil is ultimately used as a transportation fuel, with some oil being used in home heating or the manufacture of industrial products.[63] A tax on oil could weaken the linkage between the beneficiaries, or users, of the public goods provided by transportation programs.[64] With this said, however, some could argue that this linkage has already been weakened, as extensions of the HTF have been funded in recent years by general fund offsets funded by provisions that are not considered to be transportation user fees.

Lower-income households would likely pay a higher share of their income in tax than higher-income households. For this reason, a standalone fee on oil is likely to be regressive. Further, the burden of the tax may be unevenly distributed geographically. For example, households in the Northeast may see their energy costs increase by more than other regions since there is a greater

---

results?SurveyID=SV_8oABK2TolkGluV7. For potential economic arguments against a carbon tax, see Tyler Cowan, "Do all serious economists favor a carbon tax?," Marginal Revolution Blog, September 18, 2011, at http://marginalrevolution.com/marginalrevolution/2011/09/do-all-serious-economists-favor-a-carbon-tax.html. Note that Dr. Cowan, though, is still is in favor of a carbon tax.

[59] Empirical estimates of the short-run responsiveness (or "elasticity") of consumer demand with respect to price vary widely, but are widely cited as being inelastic (less than 1 in absolute value). See James Hamilton, "Understanding Crude Oil Prices," *Energy Journal*, vol. 30, no. 2 (2009), pp. 179-206. Short-run supply is assumed to be completely responsive, or infinitely elastic, given the global market for crude oil.

[60] A rule of thumb used by some energy analysts is for every $1 increase in the price of a barrel of crude oil, U.S. consumers pay 2.5 more cents for a gallon of gasoline. See James Hamilton, "Crude oil and gasoline prices," Econbrowser Blog, February 22, 2012.

[61] Keith Crane, Nicholas Burger, and Martin Wachs, *The Option of an Oil Tax to Fund Transportation and Infrastructure*, RAND Corporation, Occasional Paper, 2011, at http://www.rand.org/pubs/occasional_papers/OP320.html.

[62] See James Hamilton, "Understanding Crude Oil Prices," *Energy Journal*, vol. 30, no. 2 (2009), pp. 179-206.

[63] In 2014, U.S. crude oil consumption was allocated primarily to motor gasoline (46.7%), diesel fuel and fuel oil (22.5%), natural gas liquids (12.8%), kerosene and kerosene jet fuel (7.7%), still gas composed mostly of methane and ethane (3.6%), petrochemical feedstocks (1.8%), petroleum coke (1.8%), and asphalt and road oil (1.7%). Other finished petroleum products composed the remaining 1.5% of U.S. crude consumption. CRS analysis of U.S. Energy Information Administration (EIA) data, "Table – U.S. Product Supplied for Crude Oil and Petroleum Products," accessed February 11, 2016, at http://www.eia.gov/dnav/pet/pet_cons_psup_dc_nus_mbbl_m.htm.

[64] For more analysis of user fees and benefit-based excise taxes, see CRS Report R43189, *Federal Excise Taxes: An Introduction and General Analysis*, by Sean Lowry.

tendency to use oil in home heating. In other words, these Northeast households might bear a greater share of the tax, even if they have similar income to households in different parts of the country. In an attempt to address this issue, the President calls for assistance programs to households with burdensome energy costs. The specific details of such a proposal would determine the extent to which the assistance program would offset the regressive nature of the oil tax, and the disproportionate effect it would have in regions whose energy utilities have not transitioned away from a reliance on oil.

Alternative Policy Approaches

As indicated by hearings on highway financing, some Members of Congress have indicated that they think that the federal motor fuels excise tax base might need to be broadened to meet the evolution of transportation in the 21st century.[65] CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett, discusses several of these options and other approaches that could be used in various combinations to reform HTF funding, such as the following:

- Indexing existing fuel taxes to some measure of inflation. For example, the tax could be adjusted to return it to the level of purchasing power it had in 1993 and indexed for inflation in the following years.[66] To return the tax rates back to the purchasing power when they were last increased in 1993, the tax rates on gasoline and diesel would be about 30 cents per gallon and 40 cents per gallon, respectively.[67]
- A tax based on the percentage of the sales price (i.e., an ad valorem tax rate) instead of the current regime that levies a tax rate per gallon. An ad valorem tax rate could adjust for inflation in fuel costs over time, but it could also lead to increased tax collection volatility or decreases during times of lower prices.
- A distance-based user charge based on vehicle miles traveled (VMT) on highways could better reflect actual use of highways, but there are also privacy, cost, and administrative hurdles that would need to be addressed to implement such a system.
- Freight-related transportation taxes and fees could be used to increase HTF collections from narrower tax bases than the motor fuels tax or a VMT charge.

[65] See U.S. Congress, House Committee on Transportation and Infrastructure, Subcommittee on Highways and Transit, *Financial Status of the Highway Trust Fund*, 113th Cong., 1st sess., July 23, 2013.

[66] Various indexes could be used to adjust for inflation. The most commonly used index is the U.S. Bureau of Labor Statistics' consumer price index (CPI), which, for example, is used to adjust certain aviation user fees. Using the CPI, the inflation-adjusted tax rate on gasoline would increase from 18.3 cents per gallon to approximately 29-30 cents per gallon, and the tax rate on diesel would increase from 24.4 cents per gallon to 39 cents per gallon. CRS analysis of tax rates in the Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, adjusted for inflation using Consumer Price Index for All Urban Consumers (CPI-U) for all items at http://www.bls.gov/cpi/data.htm.

[67] See Joseph Kile, Assistant Director for Microeconomic Studies, *The Status of the Highway Trust Fund and Options for Financing Highway Spending*, Congressional Budget Office, Testimony before the Senate Committee on Finance, May 6, 2014, p. 9, at http://www.cbo.gov/sites/default/files/cbofiles/attachments/45315-TransportationTestimony.pdf.

Appendix. History of the Federal Motors Fuels Excise Tax and the Highway Trust Fund

Gasoline Excise Tax for Deficit Reduction—1932

Although excise taxes have long been a source of federal tax revenue, the federal manufacturers excise tax on gasoline was first incorporated into the federal tax structure by the Revenue Act of 1932, which became law on June 6, 1932.

Prior to the 1932 act, there had been reluctance on the part of federal officials and Congress to impose this tax at the federal level. Instead, they preferred to relinquish this revenue source to the states to help them finance their revenue needs. Oregon was the first state to levy a gasoline tax in 1919. As of January 1932, all of the states and the District of Columbia had enacted legislation imposing a tax on gasoline with rates that ranged from two to seven cents per gallon.

However, during the severe depression of the 1930s, federal revenues were sharply reduced and higher expenditures were made for relief and public works programs. As a result, the Secretary of the Treasury, in his annual report for FY1931, reported that the federal government had incurred a budgetary deficit of some $903 million that year. This marked the first year in more than a decade when federal receipts failed to exceed federal expenditures and produce a budgetary surplus. Moreover, the Secretary of the Treasury estimated then that even higher deficits were anticipated in the years immediately following: $2.1 billion in FY1932, and $1.4 billion in FY1933.

To correct this budgetary imbalance, the Secretary of the Treasury submitted comprehensive tax-raising and expenditure-reduction proposals for congressional action. Among the tax recommendations were those for legislation increasing individual and corporation income, estate and gift, excise, and other taxes. Included in the excise tax proposals was the request for a new federal manufacturer's excise tax on gasoline, to be levied at the rate of one cent per gallon and scheduled to end in 1934. It was estimated that adoption of such a tax would yield the U.S. Treasury approximately $165 million in revenues during FY1933.

The House of Representatives, in its consideration of and action on these revenue-raising proposals, initially refused to impose a new federal tax on gasoline. The Senate amended the House-passed bill, however, authorizing a gasoline tax at the rate of one cent per gallon. Congress retained the tax in the final version of the bill approved by the House and Senate conference committee and signed into law.

As approved, Section 617(a) of the Revenue Act of 1932[68] imposed a federal tax on gasoline sold by a producer or importer at the rate of one cent per gallon. Under Section 617(c) of this legislation, the term "producer" included a "refiner, compounder, or blender, and a dealer selling gasoline exclusively to producers of gasoline, as well as a producer." Gasoline was defined to include gasoline, benzyl, and any other liquids used primarily as a fuel to propel motor vehicles, motor boats, or airplanes. Section 629 of this act made this tax effective on June 21, 1932, for a temporary period, with provision for its end just over a year later on June 30, 1933. The *Annual Report of the Commissioner of Internal Revenue* for FY1933 reported that the federal government derived $124.9 million from the excise tax on gasoline. Thus, the gasoline tax represented 7.7% of the total Internal Revenue collection of $1.62 billion derived from all sources during FY1933.

[68] Revenue Act of 1932, P.L. 154, 72nd Congress, approved June 6, 1932.

Shortly before the tax was scheduled to expire, Congress approved two bills that extended this tax for an additional year and increased its rate. Under P.L. 73, approved by the 73rd Congress,[69] Congress extended this tax until June 30, 1934. The National Industrial Recovery Act,[70] signed into law on the same day, included provisions governing the rate of this tax. Section 211(a) of this act authorized the increase in federal gasoline tax from one cent to 1.5 cents per gallon, effective June 17, 1933. Section 217(b) provided for this tax to be reduced to one cent per gallon on the first day of the calendar year following the date proclaimed by the President when either of the following occurred: (1) the close of the first fiscal year ending after 1933 when total federal receipts exceeded total federal expenditures, or (2) the repeal of the 18th amendment to the Constitution, establishing national prohibition (repeal would bring in additional revenues to the U.S. Treasury from alcohol taxes).

Subsequently, President Franklin D. Roosevelt proclaimed repeal of the 18th amendment to the Constitution on December 5, 1933. Therefore, under authority of Section 217(b) of the National Industrial Recovery Act, the federal gasoline tax reverted to its former rate of one cent per gallon on January 1, 1934.

Section 603 of the Revenue Act of 1934,[71] approved in the spring of 1934, continued this tax at the rate of one cent per gallon beyond its scheduled expiration date of June 30, 1934.

National Defense Requirements—1940s and 1950s

The one-cent rate was maintained until just before the United States entered World War II, when, as a result of increased national defense requirements, Congress again took action increasing this tax. Section 210 of the Revenue Act of 1940[72] authorized an increase to 1.5 cents per gallon for the five-year period beginning on July 1, 1940, and continuing through June 30, 1945, as part of a defense tax.

The following year, under Section 521(a)(20) of the Revenue Act of 1941,[73] this rate was made permanent by elimination of the June 30, 1945, expiration date that had been specified in the Revenue Act of 1940.

The 1.5-cent per gallon rate continued for more than a decade until the outbreak of the Korean War, when Congress increased the rate to two cents per gallon under authority of Section 489 of the Revenue Act of 1951.[74] This rate became effective on November 1, 1951, and Congress authorized it to continue until March 31, 1954. After this date, Congress scheduled the rate to be reduced to its former rate of 1.5 cents per gallon.

Before this reduction took place, Congress passed the Excise Tax Reduction Act of 1954,[75] and under Section 601(a)(6) of this legislation, the two-cent per gallon rate was extended for an additional year—until March 31, 1955.

---

[69] Act to Extend the Gasoline Tax for One Year, to Modify Postage Rates on Mail Matter and for other Purposes, P.L. 73, 73rd Congress, approved June 16, 1933.

[70] National Industrial Recovery Act, P.L. 67, 73rd Congress, approved June 16, 1933.

[71] Revenue Act of 1934, P.L. 216, 73rd Congress, approved May 10, 1934.

[72] Revenue Act of 1940, P.L. 656, 76th Congress, approved June 25, 1940.

[73] Revenue Act of 1941, P.L. 250, 77th Congress, approved September 20, 1941.

[74] Revenue Act of 1951, P.L. 183, 82nd Congress, approved October 20, 1951.

[75] Excise Tax Reduction Act of 1954, P.L. 324, 83rd Congress, approved March 31, 1954.

During the next two years Congress passed legislation granting one-year extensions of the two-cent per gallon tax on gasoline by approval of the Tax Rate Extension Act of 1955[76] (Section 3(a)(3)) and the Tax Rate Extension Act of 1956[77] (Section 3(a)(3)), which continued the rate first to March 31, 1956, and then to March 31, 1957.

P.L. 466, approved by the 84th Congress,[78] provided that the Treasury Department refund those taxes paid on gasoline used on farms for farming purposes purchased after December 31, 1955.

Creation of the Highway Trust Fund—1956

The Federal Aid Highway Act of 1956[79] provided for a significant expansion in the federal-aid highway program and authorized federal funding over a longer period to permit long-range planning. It was considered necessary to authorize the entire interstate highway program to assure orderly planning and completion of this network of highways throughout the United States as efficiently and as economically as possible. Consequently, this act authorized appropriations for the 13-year period from FY1957 through FY1969 for this highway system. To make the federal aid highway program self-sustaining, the Highway Revenue Act of 1956[80] was incorporated as Title II of this legislation and imposed new taxes and increased others levied on highway users who directly benefitted from this program.

Section 205 of this Highway Revenue Act authorized an increase in the federal gasoline tax from two to three cents per gallon for the 16-year period from July 1, 1956, through June 30, 1972. After that, the Congress scheduled the tax to be reduced to 1.5 cents per gallon.

Section 209 of this act authorized the creation of the Highway Trust Fund (HTF), to which there was to be appropriated from Treasury's general fund certain percentages of receipts derived from highway-user taxes: gasoline, diesel and special motor fuel, tread rubber, tires and inner tubes, trucks, buses, etc. One hundred percent of the federal gasoline tax receipts were transferred to the Highway Trust Fund.

It was argued that transferring such taxes to the HTF was necessary to cover anticipated expenditures to be made under the federal aid highway program for the 16-year period from FY1957 through FY1972. H.Rept. 2022 (84th Congress), issued on this legislation, estimated that highway-user taxes would yield some $38.5 billion in revenues for this trust fund during this 16-year period—enough to cover anticipated expenditures of approximately $37.3 billion (during this same period) for the federal aid highway program.

This legislation also arranged for refunding a certain portion of federal gasoline taxes paid that were used for non-highway purposes or by local transit systems.

Since enactment of this legislation, Congress has continued to pass laws extending the life of the Highway Trust Fund and extending and increasing the rates imposed on gasoline.

[76] Tax Rate Extension Act of 1955, P.L. 18, 84th Congress, approved March 30, 1955.

[77] Tax Rate Extension Act of 1956, P.L. 458, 84th Congress, approved March 29, 1956.

[78] Act to Amend the Internal Revenue Code of 1954 to Relieve Farmers from Excise Taxes in the Case of Gasoline and Special Fuels Used on Farms for Farming Purposes, P.L. 266, 84th Congress, approved April l 2, 1956.

[79] Federal-Aid Highway and Highway Revenue Act of 1956, P.L. 627, 84th Congress, approved June 29, 1956.

[80] Ibid.

Under Section 201(a) of the Federal Aid Highway Act of 1959,[81] the federal gasoline tax was increased from three to four cents per gallon, a change that was to be in effect from October 1, 1959, through June 30, 1961.

Under Section 201(b) of the Federal Aid Highway Act of 1961,[82] this four-cent rate was extended beyond June 30, 1961. The scheduled reduction to 1.5 cents per gallon, which the Highway Revenue Act of 1956 had authorized to take place on July 1, 1972, was deferred until October 1, 1972.

Following the 1961 act, the next law affecting the federal gasoline tax was the Federal-Aid Highway Act of 1970.[83] Under Section 303(a)(6) of this act, the scheduled reduction in the rate of this tax to 1.5 cents per gallon was deferred from September 30, 1972, to September 30, 1977.

Again in 1976, extension of excise tax rates without the scheduled rate reductions allocated to the HTF was provided in Title III of the Federal Aid Highway Act of 1976.[84] The rate reductions were not implemented because the Interstate Highway System was obviously not going to meet the projected completion date by 1977 (it was estimated in 1976 that it might be completed in 1988). Lack of time to study and report to Congress on modifications to the HTF led to the two-year extension. Congress was concerned that without this legislation funding would be interrupted. Thus, Congress delayed decisionmaking until it could gather additional information.

Two years later, Congress had not yet decided on modifications to the HTF and its related taxes. The Ways and Means Committee accepted the recommendation of the Public Works Committee and approved an extension of the trust fund and the taxes payable to the fund. This five-year extension through September 30, 1984, became part of the Surface Transportation Assistance Act of 1978.[85]

Congress gathered extensive information on highway finance and related taxes in 1982. Two major studies were submitted to Congress. The first was a cost allocation study done by the Department of Transportation in May 1982. The second was a study of the excise tax structure that the Department of the Treasury provided to Congress in December 1982. Further, Congress held more than a dozen hearings before the passage of the Surface Transportation Assistance Act of 1982.[86]

The act contains what was commonly called the 4R Program: interstate reconstruction, resurfacing, restoration, and rehabilitation. The completion and selective expansion of the Interstate Highway System remained the primary goals under the bill. Congress raised the gasoline excise tax from its previous level of four cents per gallon to nine cents per gallon. With this increase, Congress eliminated some highway user charges while increasing others. The act also provided that one cent of the five-cent increase in the motor fuel taxes was to be allocated for mass transit purposes. The bill set up a special mass transit account for expenditures made under the Urban Mass Transportation Act of 1964.

In 1986, in response to concerns about the cost for cleanup of leaking underground storage tanks containing petroleum products, Congress established the Leaking Underground Storage Tank

[81] Federal-Aid Highway Act of 1959, P.L. 86-342, approved September 21, 1959.

[82] Federal-Aid Highway Act of 1961, P.L. 87-61, approved June 29, 1961.

[83] Federal-Aid Highway Act of 1970, P.L. 91-605, approved December 31, 1970.

[84] Federal-Aid Highway Act of 1976, P.L. 94-280, approved May 5, 1976.

[85] Surface Transportation Assistance Act of 1978, P.L. 95-599, approved November 6, 1978.

[86] Surface Transportation Assistance Act of 1982, P.L. 97-424, approved January 6, 1983.

(LUST) Trust Fund.[87] This fund received revenues of 0.1 cent per gallon on the sale or use of gasoline (first effective January 1, 1987). Congress scheduled the tax to expire on the earlier of December 31, 1991, or the last day of the month in which the Secretary of the Treasury estimated that net revenues in the fund were at least $500 million. This additional tax ended after August 31, 1990, because the LUST Trust Fund had reached its net revenue target for cancellation.[88]

The Surface Transportation and Uniform Relocation Assistance Act of 1987[89] extended the highway-related excise taxes (including the tax on gasoline) through September 30, 1993.

Gasoline Excise Tax for Deficit Reduction—1990s

Under provisions of the Omnibus Budget Reconciliation Act of 1990 (OBRA90),[90] the tax rate on highway and motorboat fuels was increased by five cents per gallon. Thus, the tax increased from 9 to 14 cents per gallon of gasoline. Half of the increase in revenues from the gasoline tax imposed on highway use vehicles was dedicated as additional funding for the HTF. The remaining half of revenues was deposited in Treasury's general fund and dedicated for federal deficit reduction. Of the 2.5-cent increase dedicated to the HTF, 0.5 cents were dedicated to the Mass Transit Account in that trust fund. Thus, Congress increased mass transit account funding from one cent to 1.5 cents. OBRA90 also reinstated the LUST Trust Fund. The LUST tax recommenced at the same 0.1-cent-per-gallon tax rate.[91] The 14-cent tax rate was scheduled to expire on September 30, 1995, while the LUST tax was scheduled to terminate three months later on December 31, 1995.

The conventional view that had held since the establishment of the HTF, which was that the gasoline tax was a user tax, was challenged. With the passage of OBRA90, the gasoline tax returned to the role it served prior to 1957: a general fund revenue source, at least in part.

The following year Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.[92] The revenue title is the Surface Transportation Revenue Act of 1991. This act extended the highway-related excise taxes (including the tax on gasoline in Section 8002(a)(3)) for four years. Hence, this law extended the tax on gasoline (without an increase in tax rate) through September 30, 1999. In addition, under provisions of the act, states were permitted to spend their HTF grants on a broader range of alternative transportation modes and related infrastructure needs. This was done in response to the argument that highway users benefit from expenditures on mass transit and other transportation modes because the availability of these travel alternatives alleviates congestion on existing highways, which in turn reduces the need to build additional roadways.

Also included in provisions of ISTEA was the establishment of a new trust fund known as the National Recreational Trails Trust Fund. This fund receives tax transfers from the HTF that represent tax receipts (imposed on gasoline, diesel, and special motor fuels) collected from *non-highway* recreational fuel use. Examples of recreational fuels are those used in vehicles on

[87] Superfund Revenue Act of 1986, P.L. 99-499, approved October 17, 1986.

[88] Internal Revenue Service Announcement 90-82, released June 27, 1990.

[89] Surface Transportation and Uniform Relocation Assistance Act of 1987, P.L. 100-17, approved April 2, 1987.

[90] Omnibus Budget Reconciliation Act of 1990, P.L. 101-508, approved November 5, 1990.

[91] This act also instituted a new 2.5-cent per gallon tax on fuels used in rail transportation effective on December 1, 1990. Rail transportation generally uses diesel fuel. All revenues from this new tax go to general fund revenues with the tax scheduled to expire on October 1, 1995.

[92] Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, P.L. 102-240, approved December 18, 1991.

recreational trails or back-country terrain, and non-business fuel used in outdoor recreational equipment, such as camp stoves.

Once again, the gasoline excise tax was changed under provisions of the Omnibus Budget Reconciliation Act of 1993 (OBRA93, Section 13241(a)).[93] Under provisions of OBRA93, the additional 2.5-cent gasoline tax dedicated for deficit reduction was transferred to the Highway Trust Fund beginning October 1, 1995. This additional 2.5-cent tax rate was extended from October 1, 1995, to September 30, 1999. The highway portion of the fund received two cents, while the mass transit account was credited with 0.5 cent of the increased funding. In addition, OBRA93 provided for a permanent, additional 4.3 cents per gallon tax on gasoline starting on October 1, 1993. Thus, the combination of the 2.5-cents OBRA90 gasoline tax rate and the permanent 4.3-cent OBRA93 gasoline tax rate resulted in a total of 6.8 cents per gallon dedicated to deficit reduction purposes between October 1, 1993, and October 1, 1995. Revenues collected from this 6.8-cent portion of the tax were placed in Treasury's general fund.

As previously mentioned, provisions of OBRA90 terminated the LUST tax rate of 0.1 cent on December 31, 1995. Thus, the 18.3-cent federal gasoline excise tax rate was in effect from January 1, 1996, to October 1, 1997, before increasing to 18.4 cents with the reintroduction of the LUST tax. This 18.3-cent rate includes the permanent 4.3 cents initially dedicated to federal deficit reduction but which now goes to the HTF.

Reversion from Deficit Reduction to User Tax Status

During the early months of 1996, the price of gasoline at the pump was rising and a renewed interest developed in federal gasoline excise taxes. Three principal views developed. The first view was that the 4.3 cents increase in federal excise taxes imposed under OBRA93 should be repealed. Proponents of repeal argued that the 4.3 cents repeal could lead to a similar reduction in gasoline pump prices. Two camps developed which supported retaining the tax. Some supporters of the tax expressed the view that while the 4.3-cent tax should be retained, the tax revenues should be returned to the HTF for long-term capital improvements. They argued for increased funding of the nation's highway infrastructure. Others expressed the view that the monies should continue to be collected and used for deficit reduction. This camp of supporters argued that the gasoline price increase was temporary and that over the long term prices would trend lower. Partially in response to this debate, the chairman of the House Ways and Means Committee, Representative Bill Archer, appointed a bi-partisan group to examine the tax treatment of each of the transportation modes with a goal of rationalizing the current myriad tax rules applying to the transportation sector.

Included in the Taxpayer Relief Act of 1997[94] was a provision that returned the general fund portion of the tax back to the HTF. This provision, first added by a Senate amendment (and modified in conference), provides that the 4.3-cent tax is divided between the highway account (3.45 cents) and the mass transit account (0.85 cent). The provision was effective on October 1, 1997. Thus, of the total 18.3 cents dedicated to the HTF, 15.44 cents goes to the highway account and 2.86 cents to the mass transit account.[95] As a consequence, the disposition of revenues was altered by the act so that all revenues now accrue to the HTF and none are applied to deficit

[93] Omnibus Budget Reconciliation Act of 1993, P.L. 103-66, approved August 10, 1993.

[94] Taxpayer Relief Act of 1997, P.L. 105-34, approved August 5, 1997.

[95] A technical correction contained in the Transportation Equity Act for the 21st Century (discussed later in this report) provides that deposits are to be equal to 2.86 cents per gallon rather than the 2.85 cents provided in the 1997 Act.

reduction. Consumers experienced no price change due to enactment of this provision since the federal tax rate on gasoline remained the same.

In addition, the Taxpayer Relief Act of 1997 reinstated the LUST Trust Fund excise tax, which had expired January 1, 1996.[96] The tax was reinstated at its prior tax rate of 0.1 cent per gallon on all types of motor fuels. The tax rate change was effective from October 1, 1997, through March 31, 2005.[97] The LUST excise tax was then extended for an additional seven months (through September 30, 2005).[98] Under a provision contained in the Energy Policy Act of 2005 the LUST tax was extended through September 30, 2011. The imposition of the gasoline tax is codified under IRC Section 4081.

Although the component of the federal gasoline tax formerly (but no longer) applied to deficit reduction continues without an expiration date, the 14 cents that was scheduled to expire on September 30, 1999, was extended. Congress not only extended the gasoline excise tax but also the other highway-related excise taxes. The House had proposed to extend the heavy truck tire tax until October 1, 2000, whereupon it would expire. However, in conference with the Senate, all the highway-related excise taxes were extended through September 30, 2005. The legislative vehicle for this extension was the Transportation Equity Act for the 21st Century[99] generally known as TEA-21. The revenue portion of this act (Title IX) was titled the Surface Transportation Revenue Act of 1998.

This act also provided that the HTF no longer earns interest on unspent balances (effective September 30, 1998). The balance of funds that exceed $8 billion in the Highway Account was canceled on October 1, 1998. In addition, TEA-21 provided that the National Recreational Trails Trust Fund established under ISTEA be repealed. In the absence of an appropriation of funds, no revenues had been available for expenditure. The conference agreement noted that similar expenditure purposes were provided by authorized amounts from the HTF.

Beginning in the 108th Congress, a series of laws were passed extending the funding for the HTF.

Extensions in the 108th Congress

Six short-term extensions of TEA-21 were enacted in the 108th Congress.[100]

The Surface Transportation Extension Act of 2004, Part V became P.L. 108-310 and provided extensions through May 31, 2005, for those programs authorized by the Transportation Equity Act for the 21st Century (TEA-21). This last extension provided $31.8 billion in contract authority, of which $2.7 billion was for FY2004 and $29.1 billion was available for the eight-month period from October 1, 2004, through May 31, 2005. Under provisions of TEA-21, expenditures from the trust fund would have ceased if Congress had failed to approve these short-term extensions.[101]

---

[96] Ibid.

[97] For additional information and a discussion of the LUST Trust Fund, see CRS Report RS21201, *Leaking Underground Storage Tanks (USTs): Prevention and Cleanup*, by Mary Tiemann.

[98] Extension of the Leaking Underground Storage Tank Trust Fund Financing Rate, P.L. 109-6, approved March 31, 2005.

[99] Transportation Equity Act for the 21st Century, P.L. 105-178, approved June 9, 1998.

[100] In summary, these laws passed in the 108th Congress (and the length of their extension of funding) were: P.L. 108-263 (five months), P.L. 108-202 (two months), P.L. 108-224 (two months), P.L. 108-263 (1 month), P.L. 108-280 (two months), and P.L. 108-310 (eight months).

[101] For an additional historical perspective on extension legislation, see CRS Report RS21621, *Surface Transportation*

At the time, the revenue sources for the HTF included six different excise taxes, which are taxes on the highway motor fuels, gasoline, diesel fuel, and kerosene; a retail sales tax on heavy highway vehicles; a manufacturers' excise tax on heavy vehicle tires;[102] and an annual use tax on heavy vehicles. These excises were not affected by the temporary extensions, since under the law at that time the excise taxes were not scheduled for expiration until September 30, 2005.

Extensions in the 109th Congress

Again in the 109th Congress, six short-term extensions of TEA-21 were enacted so that the HTF could continue operations until enactment of a longer-term reauthorizing measure.[103] Accordingly, these extensions were known as the Surface Transportation Extension Acts of 2005.

The 109th Congress initially had until Memorial Day to complete work on the new highway bill. That extension included language that provided for the 2.5 cents per gallon tax on ethanol to be deposited into the HTF for one year. Those monies had previously been deposited into the general fund. That change was estimated to generate $940 million in new revenue for the HTF. Also included was a one-year extension of the budgetary firewalls that tie gas tax revenue to highway and transit programs, while at the same time waiving for one year the Byrd self-solvency test for the trust fund and releasing the $716 million the Federal Highway Administration was holding onto as a result of the trust funds failure of that test.[104] Further, the extension "also included a new 'supplemental minimum guarantee' program that was designed to ensure that all states continue to receive their 90.5% minimum guaranteed rate of return on fuel taxes sent to the HTF."[105]

Just prior to the summer recess in August 2005, Congress sent legislation (H.R. 3) to the President which extended trust fund expenditures through FY2009 and continued the highway related taxes through FY2011. The legislation also included provisions aimed at stopping fuel fraud, provided tax-exempt financing authority to finance highway projects and rail-truck transfer facilities, and modified a number of excise taxes (both highway and non-highway related). President Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (the "Highway Act") into law on August 10, 2005. The act extended for six years the HTF excise taxes due to expire in 2005 until 2011. All of the excise taxes, including the federal excise tax on gasoline, were continued at the prior tax rates. The act established the Motor Fuel Tax Enforcement Advisory Commission, which was scheduled to

---

and Aviation Extension Legislation: A Historical Perspective, by John W. Fischer and Robert S. Kirk.

[102] The American Jobs Creation Act of 2004 (P.L. 108-357) replaced the tax on tires from one based on tire weight to a tax based on tire load capacity. This legislation also added definitions of "taxable tires," "bias ply tires," and "super single tires." Additional clarification of the definition for "super single tires" was provided with passage of the Energy Policy Act of 2005.

[103] In summary, these laws passed in the 109th Congress (and the length of their extension of funding) were: P.L. 109-14 (one month), P.L. 109-20 (three weeks), P.L. 109-35 (2 days), P.L. 109-37 (six days), P.L. 109-40 (three days), and P.L. 109-42 (two weeks).

[104] A characteristic of the HTF is that it was set up as a pay-as-you-go fund. When the creation of the HTF was under consideration, there were concerns that the proceeds of the taxes dedicated to the HTF might prove insufficient to make reimbursements when claims were made. The bill under consideration was amended to require a comparison of current and future resources with existing and projected unpaid authorizations and to adjust the amounts apportioned for highways if the two are out of balance. This comparison is referred to as the Byrd Amendment or the Byrd Test. The exact requirements of the Byrd Test have changed several times since it was established in 1956. See Federal Highway Administration, "Legislative Affairs and Policy Communications," at http://www.fhwa.dot.gov/policy/olsp/financingfederalaid/fund.cfm#d.

[105] Heather M. Rothman, "Highway Funding Extension Bill Cleared, With Provisions for AMT Relief, Expensing," *Daily Tax Report*, October 1, 2004, No. 190, p. G-11.

terminate on September 30, 2009. In other legislation, the Energy Policy Act of 2005 extended the Leaking Underground Storage Tank (LUST) Trust Fund financing rate for the same six-year period that the highway excise taxes were extended.

Extensions in the 110th Congress

At the time of passage of SAFETEA-LU, tax changes, the unexpended balance in the trust fund, and economic growth were expected to provide sufficient financing for the Highway Trust Fund. But projected shortfalls developed which required general fund contributions.[106] On September 15, 2008, P.L. 110-318, *To Amend the Internal Revenue Code of 1986 to Restore the Highway Trust Fund Balance*, was passed. This law transferred $8.017 billion from Treasury's general fund to the HTF, which provided financing through the end of FY2008.

Extensions in the 111th Congress

Six short-term extensions of SAFETEA-LU were passed in the 111th Congress.[107] As shown in **Table 3**, general fund transfers were twice in the 111th Congress to keep the HTF's balance positive under short-term funding measures.

On December 22, 2010, the Continuing Appropriations and Surface Transportation Extension Act, 2011 (H.R. 3082) became P.L. 111-322. This law extended SAFETEA-LU authorization of appropriations out of the HTF through March 4, 2011.

Extensions in the 112th Congress

In the 112th Congress, a series of four short-term extensions of the surface transportation legislation were enacted.[108] These extensions reauthorized the federal government's highway, mass transit, and surface transportation safety programs and levied user taxes. Extended taxes on gasoline and diesel fuels provided approximately 90% of the funding for the HTF and 80% of the funding for mass transit programs.[109] Other extended taxes were levied on heavy trucks, truck tires, gasohol, and fuel from natural or petroleum gas.

On July 6, 2012, President Obama signed H.R. 4348, the Moving Ahead for Progress in the 21st Century Act or MAP-21 (P.L. 112-141). This law authorized appropriations for the federal surface transportation programs through October 1, 2014, expenditure authority for the HTF, and the authorization of existing highway taxes, including gasoline and diesel taxes, through September 30, 2016. The extended gasoline tax rate was 18.4 cents per gallon and the extended diesel tax rate was 24.4 cents per gallon. These rates include a 0.1 cent per gallon tax levied and deposited in the LUST Trust Fund.

---

[106] CRS Report R42877, *Funding and Financing Highways and Public Transportation*, by Robert S. Kirk and William J. Mallett.

[107] In summary, these laws passed in the 111th Congress (and the length of their extension of funding) were: P.L. 111-68 (one month), P.L. 111-88 (one and a half months), P.L. 111-118 (two and a half months), P.L. 111-144 (two weeks), P.L. 111-147 (nine and a half months), and P.L. 111-322 (three months).

[108] In summary, these laws passed in the 112th Congress (and the length of their extension of funding) were: P.L. 112-5 (seven months), P.L. 112-30 (six months), P.L. 112-102 (three months), and P.L. 112-140 (one week).

[109] Detailed information about some of this legislation is available in CRS Report R42445, *Surface Transportation Reauthorization Legislation in the 112th Congress: MAP-21, H.R. 7, and H.R. 4348—Major Provisions*, coordinated by Robert S. Kirk.

Author Information

Sean Lowry
Analyst in Public Finance

Acknowledgments

Previous versions of this report were authored by James M. Bickley, now retired, and Pamela J. Jackson, specialists in Public Finance.

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.