

## Key Elements of the U.S. Tax System

What are the major federal excise taxes, and how much money do they raise?

EXCISE TAXES  
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**Q. What are the major federal excise taxes, and how much money do they raise?**

**A. Federal excise tax revenues—collected mostly from sales of motor fuel, airline tickets, tobacco, alcohol, and health-related goods and services—totaled \$83.8 billion in 2017, or 2.5 percent of federal tax receipts.**

Excise taxes are narrowly based taxes on consumption, levied on specific goods, services, and activities. They can be either a per unit tax (such as the per gallon tax on gasoline) or a percentage of price (such as the airline ticket tax). Generally, excise taxes are collected from producers or wholesalers, and are embedded in the price paid by final consumers.

Federal excise tax revenue has declined over time relative to the size of the economy. As a percentage of gross domestic product (GDP), excise tax revenue fell from 2.7 percent in 1950 to 0.7 percent by 1979 (figure 1). Receipts temporarily increased because of the crude oil windfall profit tax imposed in 1980, but excluding that tax, (the dashed line in figure 1) revenue was about 0.7 percent of GDP through the 1980s and 1990s. Excise tax revenues as a percentage of GDP gradually declined again throughout the 2000s to roughly 0.5 percent in recent years.

Excise tax revenue fell from \$95 billion (5.1 percent of GDP) in 2016 to \$83.8 billion (4.4 percent of GDP) in 2017 because of a one-year suspension of the annual fee on health insurance providers.

### GENERAL FUND OR TRUST FUND REVENUES

Excise tax revenue is either transferred to the general fund or allocated to trust funds dedicated to specified purposes. General fund excise taxes account for roughly 40 percent of total excise receipts, with the remaining 60 percent going to trust funds.

General fund excise taxes are imposed on many goods and services, the most prominent of which are alcohol, tobacco, and health insurance. Other general fund excise taxes include taxes on local telephone service, vehicles with low-mileage ratings (“gas guzzlers”), ozone-depleting chemicals, indoor tanning services, and medical devices.

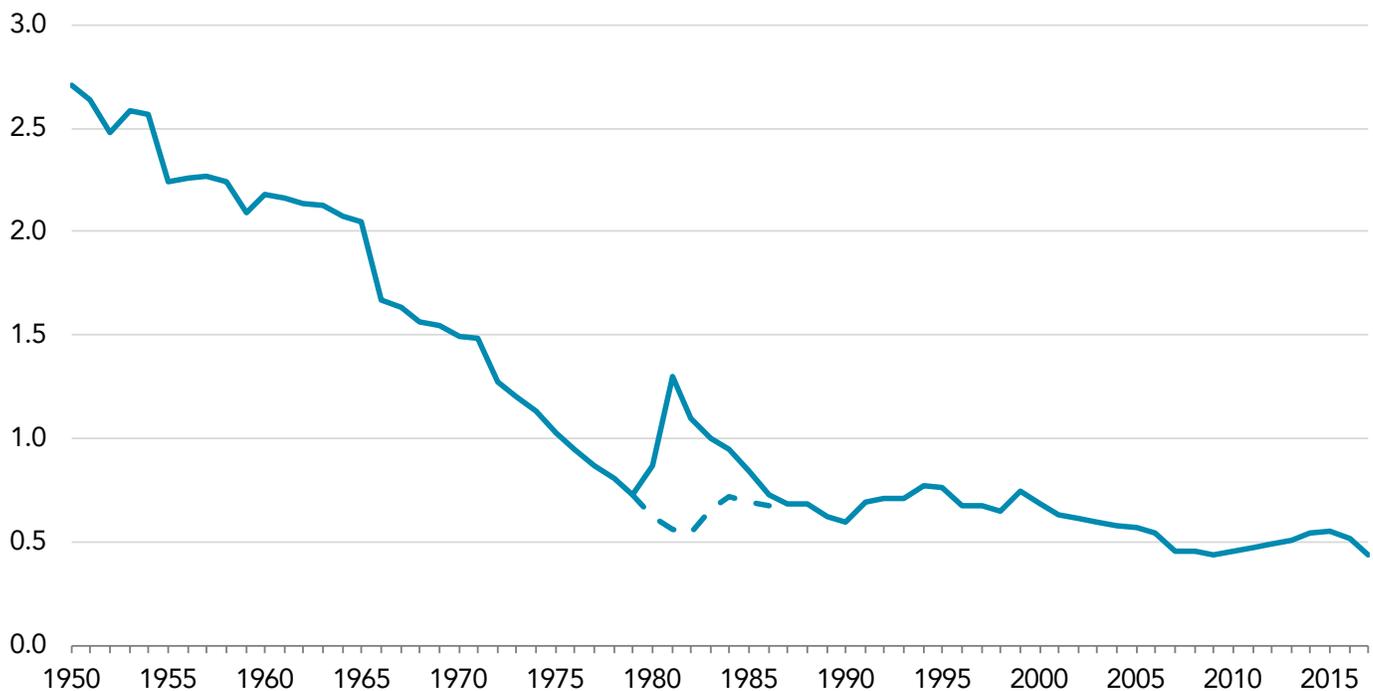
Excise taxes dedicated to trust funds finance transportation as well as environmental- and health-related spending. The Highway Trust Fund and the Airport and Airway Trust Fund account for over 90 percent of trust fund excise tax receipts, mostly from taxes on gasoline and other transportation fuels (Highway Trust Fund), and air travel (Airport and Airway Trust Fund).

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**FIGURE 1**

### Federal Excise Tax Revenue as a Share of GDP 1950–2017



**Source:** Office of Management and Budget, Historical Tables 2.3 and 2.4.

**Note:** The dashed line excludes receipts from the Crude Oil Windfall Profit Tax Act of 1980.

GDP = gross domestic product.

### MAJOR FEDERAL EXCISE TAXES

Five categories of excise taxes—highway, aviation, tobacco, alcohol, and health—accounted for 96 percent of total excise tax receipts in 2017 (figure 2).

#### Excise taxes dedicated to the Highway Trust Fund

Highway-related excise tax revenue totaled \$37.6 billion in 2017, 45 percent of all excise tax revenue. Gasoline and diesel taxes, which are 18.4 and 24.4 cents per gallon, respectively, make up over 90 percent of total highway tax revenue, with the remaining from taxes on other fuels, trucks, trailers, and tires. (The tax rates for gasoline and diesel include a 0.1 percent tax earmarked for the Leaking Underground Storage Tank Trust Fund.) Most other motor fuels are also subject to excise taxes, although “partially exempt” fuels produced from natural gas are taxed at much lower rates. Tax credits for producers of certain fuels deemed environmentally superior—including biodiesel, renewable diesel mixtures, alternative fuel, and alternative fuel mixtures—expired at the end of 2016 but were extended by the Bipartisan Budget Act of 2018 through 2017.

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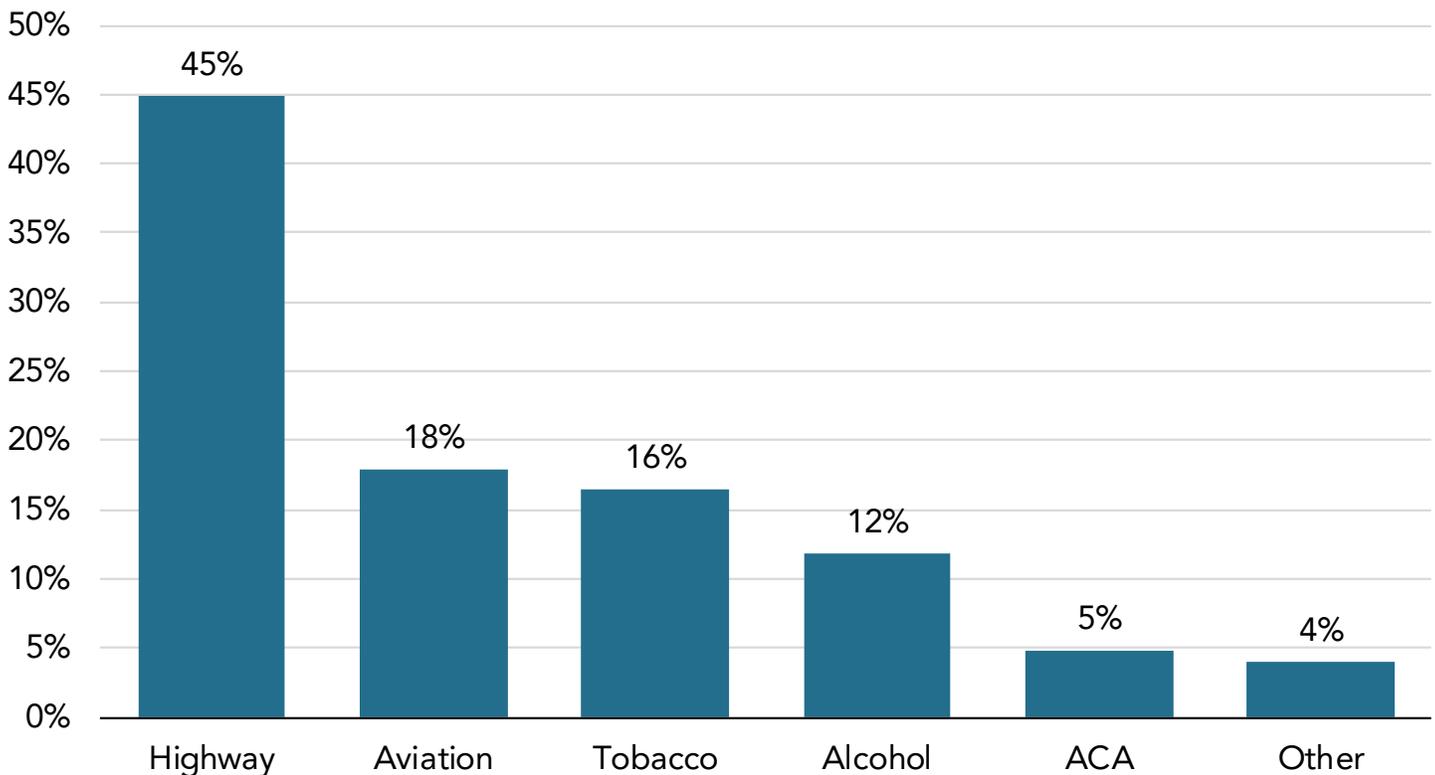
### Excise taxes dedicated to the Airport and Airway Trust Fund

Revenue from excise taxes dedicated to the Airport and Airway Trust Fund totaled \$15.1 billion in 2017, accounting for 18 percent of all excise tax receipts. According to Congressional Budget Office data, more than 90 percent of aviation excise taxes came from taxing passenger airfares, with the remaining coming from taxes on air cargo and aviation fuels.

Domestic air travel is subject to a 7.5 percent tax based on the ticket price plus \$4.10 (in 2018) for each flight segment (one takeoff and one landing). A 6.25 percent tax is charged on domestic cargo transportation. International arrivals and departures are taxed at \$18.30 per person (in 2018); there is no tax on international cargo. Both the domestic segment fee and the international arrivals and departures fee are indexed for inflation.

**FIGURE 2**

### Composition of Total Federal Excise Tax Revenue FY2017



**Source:** Office of Management and Budget, Historical Table 2.4.

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### Tobacco excise taxes

Revenue from tobacco taxes totaled \$13.8 billion in 2017, accounting for 16 percent of all excise tax revenue. Federal excise taxes are imposed on tobacco products, which include cigarettes, cigars, snuff, chewing tobacco, pipe tobacco, and roll-your-own tobacco. The tax is calculated per thousand cigars or cigarettes or per pound of tobacco, depending on the product. The tax equals about \$1.00 per pack of 20 cigarettes. Cigarette papers and tubes are also subject to tax. Tobacco taxes are collected when the products leave bonded premises for domestic distribution. Exported products are exempt. Unlike other excise taxes collected by the IRS, alcohol and tobacco taxes are collected by the Alcohol and Tobacco Tax and Trade Bureau of the US Treasury Department.

### Alcohol excise taxes

Excise tax revenue from alcoholic beverages amounted to \$9.9 billion in 2017, 12 percent of total excise receipts. There are different tax rates for distilled spirits, wine, and beer. Distilled spirits generally are taxed at \$13.50 per proof gallon (a proof gallon is one liquid gallon that is 50 percent alcohol), but a lower rate applies in 2018 and 2019 to quantities of less than 22.23 million proof gallons removed from the distillery or imported. Tax rates on wines vary based on type and alcohol content, ranging from \$1.07 per gallon for wines with 14 percent alcohol or less to \$3.40 per gallon for sparkling wines, but lower rates also apply in 2018 and 2019 to smaller quantities of wine removed or imported. Beer is typically taxed at \$18.00 per barrel (31 gallons), although a reduced rate of \$7.00 per barrel applied to the first 60,000 barrels for breweries that produce less than two million barrels. Lower rates apply in both cases in 2018 and 2019. Note that the alcohol content of beer and wine is taxed at a much lower rate than the alcohol content of distilled spirits.

### Excise taxes enacted by the Affordable Care Act

The Affordable Care Act (ACA) legislation passed in 2010 contained several health-related excise taxes.

- The largest is an annual fee on health insurance providers. This fee represents a fixed aggregate amount for each calendar year (\$14.3 billion in 2018), imposed on insurance providers according to their market share. The Consolidated Appropriations Act of 2016 suspended the fee for 2017. It is currently scheduled to return in 2018, but then was suspended again for 2019 by the Extension of Continuing Appropriations Act of 2018.
- Starting in 2014, an annual fee also applies to manufacturers and importers of branded prescription drugs, which, like the annual fee on health insurance providers, is a fixed aggregate amount for each calendar year (\$4.1 billion in 2018) allocated in proportion to sales.
- A 40 percent excise tax on certain high-cost employer-sponsored health insurance plans (the “Cadillac

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tax”) was scheduled to begin in 2018 but Congress passed a two-year postponement of the excise tax, and later extended the suspension through 2022.

- Other health care–related excise taxes include a 2.3 percent tax on medical devices and a 10 percent tax on indoor tanning services. Congress suspended the excise tax on medical devices for two years for medical device sales in 2016 and 2017, and recently extended that suspension through 2019.

Health-related excise tax revenue totaled \$4.1 billion in 2017, 5 percent of total excise receipts, down from \$14.8 billion and 16 percent of excise receipts in 2016.

The ACA also imposed two additional taxes—a penalty tax on individuals without essential health insurance coverage (the “individual mandate”) as an incentive to buy it, and a penalty tax on large employers that choose not to offer health care coverage (the “employer mandate”). The 2017 Tax Cuts and Jobs Act eliminated the individual mandate starting in 2019. This will reduce revenue but on net save money for the federal government because without the individual mandate, fewer people will enroll in government-subsidized health insurance programs and the saving from lower Medicaid costs and tax subsidies for health insurance premiums will exceed the lost revenues. Eliminating the individual mandate, however, will increase the number of people without health insurance—by an estimated 4 million in 2019 and by 12 million starting in 2021 according to the Congressional Budget Office.

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## Key Elements of the U.S. Tax System

What is the Highway Trust Fund, and how is it financed?

EXCISE TAXES  
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### Q. What is the Highway Trust Fund, and how is it financed?

**A. The Highway Trust Fund finances most federal government spending for highways and mass transit. Revenues for the trust fund come from transportation-related excise taxes, primarily federal taxes on gasoline and diesel fuel. In recent years, however, the trust fund has needed significant transfers of general revenues to remain solvent.**

The Highway Trust Fund tracks federal spending and revenue for surface transportation. The trust fund has separate accounts for highways and mass transit. Because obligations from the trust fund generally are for capital projects that take several years to complete, outlays reflect projects authorized by Congress in previous years.

Most spending from the Highway Trust Fund for highway and mass transit programs is through federal grants to state and local governments. The federal government accounts for about one-quarter of all public spending on roads and highways, with the remaining three-quarters financed by state and local governments.

### FINANCING THE TRUST FUND

The Congressional Budget Office estimates that Highway Trust Fund tax revenue will total \$41 billion in fiscal year 2018 (figure 1). Revenue from the federal excise tax on gasoline (\$25.7 billion) and diesel fuel (\$9.9 billion) accounts for 87 percent of the total. The remaining trust fund tax revenue comes from a sales tax on tractors and heavy trucks, an excise tax on tires for heavy vehicles, and an annual use tax on those vehicles. In addition to dedicated tax revenue, the trust fund receives a small amount of interest on trust fund reserves.

The current tax rates are 18.4 cents per gallon for gasoline and ethanol-blended fuels and 24.4 cents per gallon for diesel (0.1 cent of each tax is dedicated to the Leaking Underground Storage Tank Trust Fund). The tax rates on motor fuels have not changed since 1993 and thus have failed to keep pace with inflation. If tax rates had been indexed for inflation since 1993, the current tax on gasoline would be about 31 cents per gallon and the tax on diesel fuel would be about 42 cents per gallon. Although the current taxes on motor fuels (except for a residual tax of 4.3 cents per gallon) are set to expire at the end of September 2022, Congress has routinely extended the taxes in the past.

### TRUST FUND BALANCES

Before 2008, highway tax revenue dedicated to the trust fund was sufficient to pay for outlays from the fund, but that has not been true in recent years. Since 2008, Congress has sustained highway spending by transferring \$140 billion of general revenues to the fund, including \$70 billion in 2016 because of legislation enacted at the end of 2015.

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Those transfers will enable the trust fund to meet spending obligations through 2020, but projected shortfalls will appear again by the end of 2021 (figure 2). The Congressional Budget Office projects that outlays from the Highway Trust Fund will exceed trust fund reserves by a cumulative \$119 billion for the highway account and by \$42 billion for the mass transit account by 2028, even if expiring trust funds taxes are extended (Congressional Budget Office 2018).

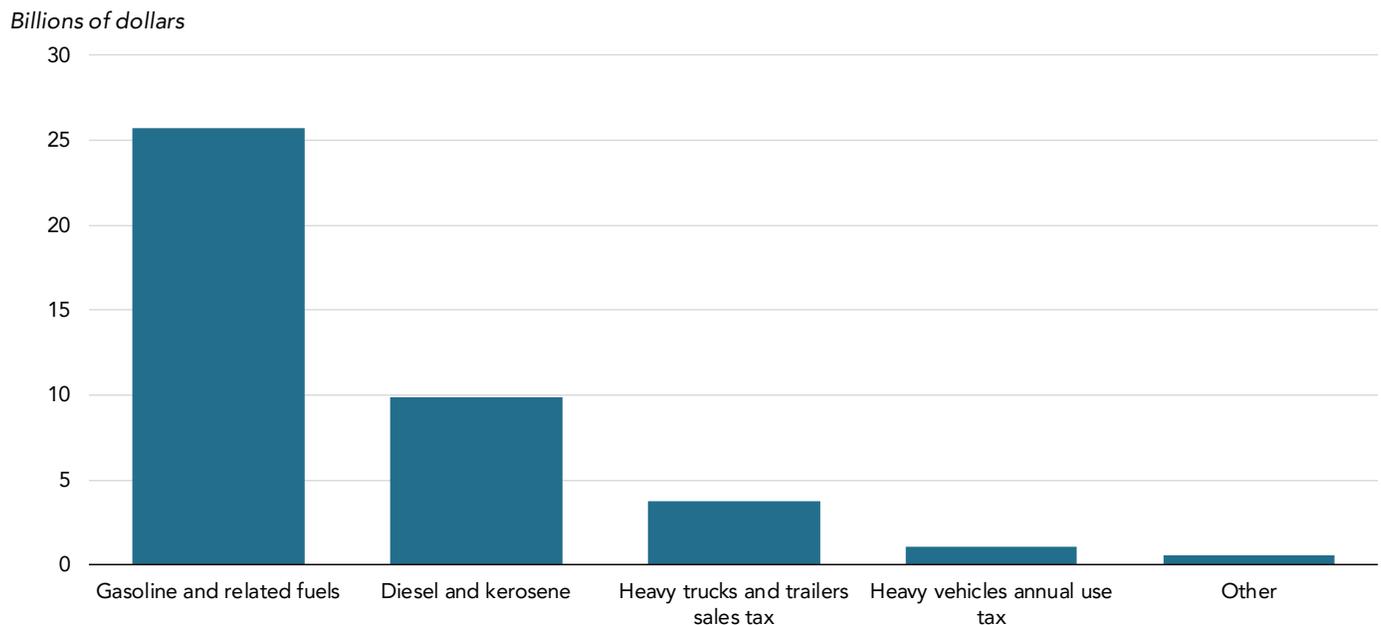
#### FINANCING FEDERAL SPENDING ON HIGHWAYS AND MASS TRANSIT

Congress could pay for projected highway and mass transit spending by simply raising the federal tax rate on gasoline and diesel fuel. A one cent increase in motor fuels taxes dedicated to the Highway Trust Fund would raise trust fund revenues by between \$1.5 billion and \$1.7 billion annually (Kile 2015). (Higher motor fuels taxes would increase costs for businesses, thus lowering business profits, employee wages, and the federal taxes collected on that income. The estimated increase in Highway Trust Fund revenues does not include the reduction in federal revenues from other sources.)

Drivers likely would respond to an increase in motor fuels taxes by driving less, which would reduce pollution and lessen the need for highway construction and maintenance. But drivers may also respond by driving more fuel-efficient vehicles, which would weaken the incentive to reduce miles driven.

Motor fuels taxes link highway use with the associated costs of building and maintaining roads as well other costs associated with fuel consumption, such as pollution and dependence on foreign oil. But motor fuels taxes are an imperfect user fee because they do not differentiate among vehicles that cause greater or lesser

**FIGURE 1**  
Highway Trust Fund Revenue by Source  
2018



Source: Congressional Budget (2018).

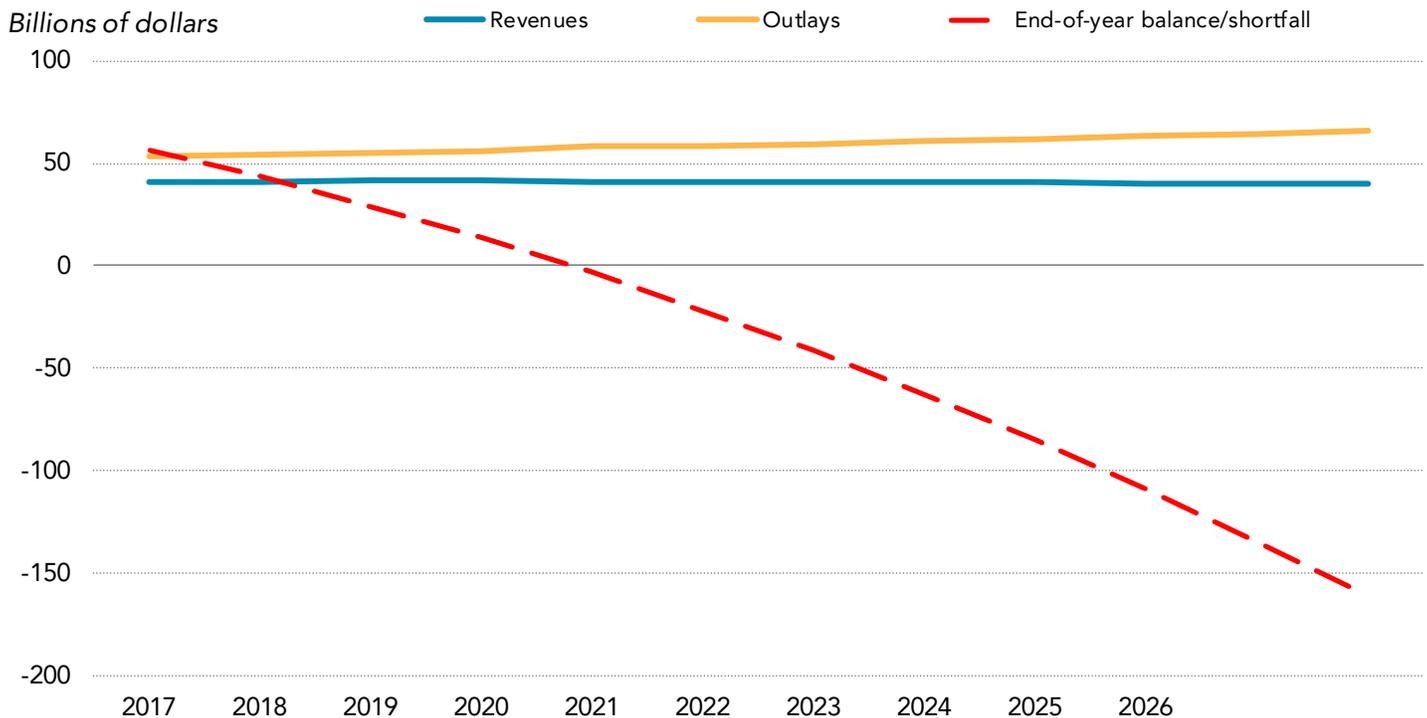
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road wear for the same amount of fuel consumed or between travel on crowded and uncrowded roads. A tax on vehicle miles driven would provide a more direct link to the cost of highway use but, unlike an increase in the tax on motor fuels, would be difficult to implement, requiring new tolls or electronic motoring of vehicles. An advantage of a vehicle mileage tax is that it could adjust to reflect the additional costs of congestion by increasing tolls or the tax rate in certain locations and at certain times of the day. A vehicle mileage tax would not, however, provide an incentive for driving more fuel-efficient vehicles.

Alternatively, Congress could abandon the user-pay principle and simply pay for highways through general revenues. Highway spending would no longer have a dedicated source of revenue and would instead compete with other spending programs for general revenue funding through the annual appropriations process. Or Congress could decide to limit federal highway spending to the amount of revenue collected from existing motor fuels taxes. This would require curtailing some existing highway projects and not starting others, at a time when the nation's infrastructure is already in need of repair.

**FIGURE 2**  
Highway Trust Fund Account Projections  
2017–28



**Source:** Congressional Budget Office (2018).

**Notes:** Revenues include a small amount of interest on trust fund reserves. Under current law, the Highway Trust Fund cannot incur negative balances.

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Congressional Budget Office. 2018. [The Budget and Economic Outlook: 2018 to 2028](#). Washington, DC: Congressional Budget Office.

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