OVERVIEW OF SELECTED INTERNAL REVENUE CODE PROVISIONS RELATING TO THE FINANCING OF PUBLIC INFRASTRUCTURE

Scheduled for a Public Hearing
Before the
HOUSE COMMITTEE ON WAYS AND MEANS
on March 6, 2019

Prepared by the Staff
of the
JOINT COMMITTEE ON TAXATION

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JCX-7-19

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INTRODUCTION

The House Committee on Ways and Means has scheduled a hearing for March 6, 2019, entitled "Our Nation's Crumbling Infrastructure and the Need for Immediate Action." This document[1] prepared by the Joint Committee on Taxation, provides a description of selected present-law provisions relating to the financing of public infrastructure.

[1] This document may be cited as follows: Joint Committee on Taxation, *Overview of Selected Internal Revenue Code Provisions Relating to the Financing of Public Infrastructure* (JCX-7-19), March 4, 2019. This document can also be found on our website at www.jct.gov.

A. Highway Trust Fund

The Highway Trust Fund was established in 1956 for the Federal role in highway construction and maintenance activities, including the Interstate Highway System. The Highway Trust Fund is divided into two accounts, a Highway Account and a Mass Transit Account, each of which is the funding source for specific programs.[2] Periodic multiyear surface transportation acts authorize the taxes that support the Highway Trust Fund, the Fund's expenditures, and the programs and activities these expenditures support. Expenditures from the Highway Trust Fund are authorized through September 30, 2020. Since 2001, expenditures from the fund have exceeded the revenues and interest flowing into the Highway Trust Fund. Beginning in FY2008, over $140 billion in Treasury General Fund and other transfers to the Highway Trust Fund have been made to address the shortfall.[3]

Most Federal surface transportation programs funded by the Highway Trust Fund span four major areas of investment: highway infrastructure, transit infrastructure and operations, highway safety, and motor carrier safety. The funds are distributed either by formula or on a discretionary basis through individual grant programs.

Revenue sources for the Highway Trust Fund

Six separate excise taxes are imposed to finance the Federal Highway Trust Fund program.[4] Three of these taxes are imposed on highway motor fuels and generate a substantial majority of the revenues dedicated to the Highway Trust Fund. The remaining three are a retail sales tax on heavy highway vehicles (trucks, trailers and certain highway tractors), a manufacturers' excise tax on heavy vehicle tires, and an annual use tax on heavy vehicles. With two exceptions, these taxes do not apply after September 30, 2022. The 4.3-cents-per-gallon portion of the fuels tax rates is permanent.[5] The annual use tax expires on September 30, 2023.

For fiscal year 2017, gasoline produced $26.5 billion in taxes; diesel produced $9.6 billion; tires and tread rubber produced $0.5 billion in taxes; the heavy vehicle use tax produced $1.2 billion in taxes; the retail sales tax on trucks and trailers produced $3.5 billion in taxes; and other fuels (including kerosene, liquefied natural gas and other alternative fuels) produced $1.1

[2] Sec. 9503. All section references are to the Internal Revenue Code of 1986 ("the Code") unless otherwise indicated.

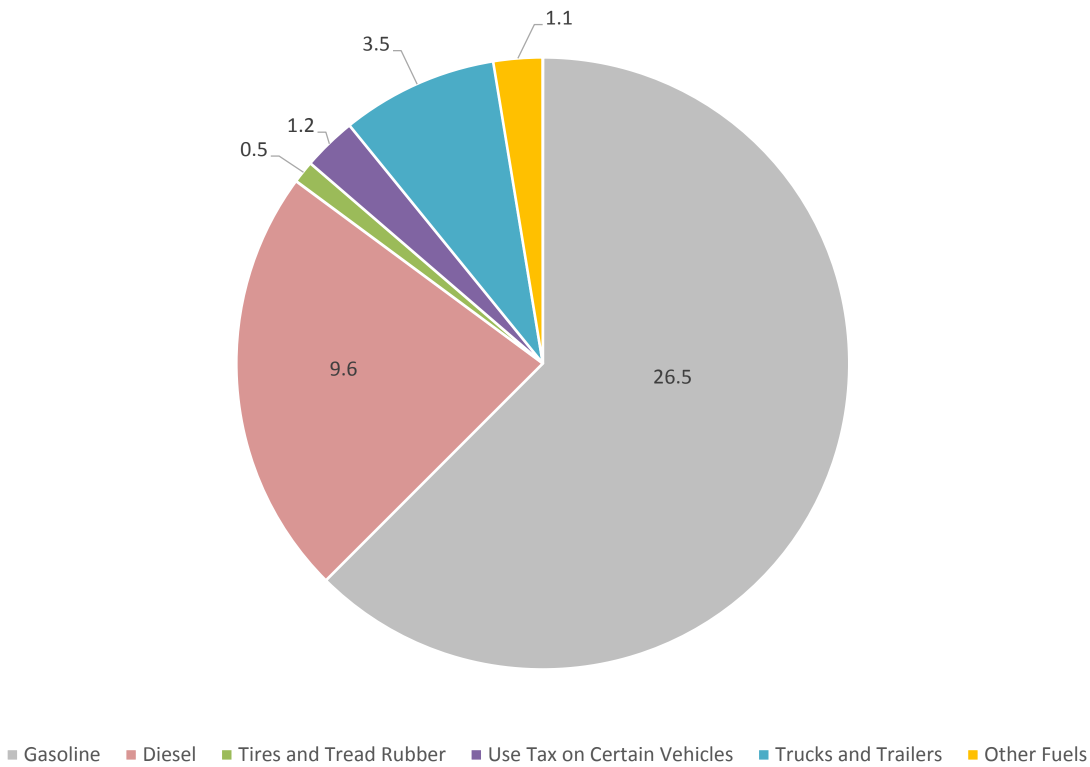
[3] Secs. 9503(f) and 9508(c)(2), (3) and (4).

[4] Sec. 9503(b)(1).

[5] This portion of the tax rates was enacted as a deficit reduction measure in 1993. Receipts from it were retained in the General Fund until 1997 legislation provided for their transfer to the Highway Trust Fund.

billion in taxes.[6] For fiscal year 2017, the total tax revenue for the Highway Trust Fund was $42.4 billion.[7]

Figure 1.–HIGHWAY TRUST FUND TAX RECEIPTS, Fiscal Year 2017 By Source ($ Billions)



[6] Internal Revenue Service, Statistics of Income Bulletin, Historical Table 20, "Federal Excise Taxes Reported to or Collected by the Internal Revenue Service, Alcohol and Tobacco Tax and Trade Bureau, and Customs Service, by Type of Excise Tax, Fiscal Years 1999-2017," 2018, available at http://www.irs.gov/pub/irs-soi/histab20.xls.

[7] Motorboat fuel taxes and small engine fuel taxes, to the extent deposited in the Highway Trust Fund, are transferred to the Sport Fish Restoration and Boating Trust fund. Taxes attributable to kerosene used in aviation and aviation gasoline are dedicated to the Airport and Airway Trust Fund.

The taxes dedicated to the Highway Trust Fund are summarized below.

Highway motor fuels taxes

The Highway Trust Fund motor fuels tax rates are as follows:[8]

Fuel	Tax Rate
Gasoline	18.3 cents per gallon
Diesel fuel and kerosene	24.3 cents per gallon[9]
Alternative fuels	24.3 and 18.3 cents per gallon generally[10]

Non-fuels excise taxes

Tax on heavy vehicle tires

The Code imposes a tax on taxable tires sold by the manufacturer, producer or importer of the tire. The rate is 9.45 cents for each 10 pounds of maximum rated load capacity over 3,500 pounds.[11] A "taxable tire" is any tire of the type used on highway vehicles if made of rubber (in whole or in part) and if marked according to Federal regulations for highway use.[12] "Rubber" includes synthetic and substitute rubber. For biasply tires, and super single tires (other than

[8] These fuels are subject to an additional 0.1-cent-per-gallon excise tax to fund the Leaking Underground Storage Tank ("LUST") Trust Fund, not the Highway Trust Fund. Secs. 4041(d) and 4081(a)(2)(B). That tax is imposed as an "add-on" to other existing taxes. These revenues are not credited to the Highway Trust Fund.

[9] Diesel-water emulsions are taxed at 19.7 cents per gallon. Sec. 4081(a)(2)(D). Diesel used in certain intercity buses is taxed at 7.4 cents per gallon. Sec. 6427(b)(1).

[10] The rate of tax for liquefied petroleum gas is 18.3 cents per energy equivalent of a gallon of gasoline. In the case of liquefied natural gas, the rate is 24.3 cents per energy equivalent of a gallon of diesel. The rate of tax is 24.3 cents per gallon in the case of any liquid fuel (other than ethanol or methanol) derived from coal, and liquid hydrocarbons derived from biomass. Other alternative fuels sold or used as motor fuel are generally taxed at 18.3 cents per gallon. For purposes of this pamphlet "alternative fuel" includes compressed natural gas. The rate for compressed natural gas is 18.3 cents per energy equivalent of a gallon of gasoline. See sec. 4041(a)(2) and (3).

[11] Sec. 4071(a). In general, these parameters would exclude tires for passenger automobiles and light trucks.

[12] Sec. 4072(a). "Tires of the type used on highway vehicles" means tires of the type used on motor vehicles that are highway vehicles, or vehicles of the type used in connection with motor vehicles that are highway vehicles. Sec. 4072(c). However, the term does not include the kind of tires used exclusively on mobile machinery vehicles, as defined in section 4053(8).

those designed for steering), the rate of tax is half the regular rate, 4.725 cents for each 10 pounds of maximum rated load capacity over 3,500 pounds.[13]

Retail sales tax on tractors, heavy trucks, and heavy trailers

A 12-percent retail sales tax is imposed on the first retail sale of heavy trucks (over 33,000 pounds), trailers (over 26,000 pounds) and certain highway tractors.[14] The taxable weight is the "gross vehicle weight," which is the maximum total weight of a loaded vehicle (all equipment, fuel, body, payload, driver, *etc.*). The tax is imposed on chassis and bodies. The sale of a truck or trailer is considered a sale of a chassis and a body. The Code also imposes the 12-percent tax on the price of parts or accessories installed on a taxable vehicle within six months of the date the vehicle was placed in service.[15]

Annual use tax for heavy vehicles

An annual use tax is imposed on heavy highway vehicles, at the rates shown below.[16]

Vehicle Weight	**Tax Rate**
Under 55,000 pounds	No tax
55,000-75,000 pounds	$100 plus $22 per 1,000 pounds over 55,000 pounds
Over 75,000 pounds	$550

The annual use tax is imposed for a taxable period of July 1 through June 30. Generally, the tax is paid by the person in whose name the vehicle is registered.

Overview of Highway Trust Fund expenditure provisions

Section 9503 authorizes expenditures (subject to appropriations) from the Highway Trust Fund through September 30, 2020, for the purposes provided in authorizing legislation in effect on the date of enactment of the "Fixing America's Surface Transportation Act" (also known as

[13] Sec. 4071(a). The term "biasply tire" means a pneumatic tire on which the ply cords that extend to the beads are laid at alternative angles substantially less than 90 degrees to the centerline of the tread. A "super single tire" means a single tire greater than 13 inches in cross section width designed to replace two tires in a dual fitment. It does not include any tire designed for steering.

[14] Sec. 4051. The tax does not apply to a tractor weighing 19,500 pounds or less that, in combination with a trailer or semitrailer, has a gross combined weight of 33,000 pounds or less.

[15] A vehicle is treated as placed in service on the date on which the owner of the vehicle took actual possession of the vehicle.

[16] Sec. 4481.

the "FAST Act").[17] Amounts equivalent to receipts from the highway excise taxes, as imposed through September 30, 2022, generally are transferred to the Highway Trust Fund.[18] Receipts attributable to the excise taxes imposed on motorboat gasoline and special motor fuels and on gasoline used as a fuel in the non-business use of small-engine outdoor power equipment are transferred from the Trust Fund to the Sport Fish Restoration and Boating Trust Fund through September 30, 2022, with the first $1,000,000 per fiscal year of such monies going to the Land and Water Conservation Fund instead.[19]

The Highway Trust Fund has two accounts: a Mass Transit Account and a Highway Account.[20] Both accounts are funding sources for specific transit and highway-related programs. Both accounts accrue interest on unexpended balances. The Mass Transit Account receives revenues equivalent to 2.86 cents per gallon of highway motor fuels excise taxes generally, except 1.43 cents per gallon for any partially exempt methanol or ethanol, 1.86 cents per energy equivalent of a gallon of diesel in the case of liquefied natural gas, 2.13 cents per energy equivalent of gasoline in the case of liquefied petroleum gas, and 9.71 cents per MCF (thousand cubic feet) for compressed natural gas. The Highway Account receives the balance of the monies dedicated to the Highway Trust Fund.

Projected balance of the Highway Trust Fund

The Congressional Budget Office ("CBO") projects that outlays from the Highway Trust Fund will exceed tax revenues and interest to the fund throughout the 2019-2029 budget window, see Table 1 below. As a result, a cumulative shortfall is projected by FY 2022. The cumulative shortfall is projected to reach $159 billion by FY 2029. Note that CBO's projections assume that taxes credited to the Highway Trust Fund will not expire as currently scheduled to in 2022. The CBO projections presented in this document are from CBO's January baseline and do not reflect the effect of legislation enacted by the 116th Congress, including the Consolidated Appropriations Act, 2019.[21]

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[17] Pub. L. No. 114-94.

[18] The Highway Trust Fund also receives receipts from penalties imposed for violation of certain highway-related excise tax provisions. Sec. 9503(b)(5).

The Trust Fund benefits from an additional, ongoing General Fund subsidy from costs of refunds for certain tax overpayments and excise tax credits for biodiesel, renewable diesel, and alternative fuels being borne by the General Fund.

[19] Sec. 9503(c)(4) and (5).

[20] Highway Trust Fund expenditures are subject to appropriations Acts. However, certain of the programs are classified as "contract spending," a category of Federal spending in which executive agencies are permitted to enter into contracts for spending with appropriations being enacted subsequently to liquidate the contracted expenditures. Highway Trust Fund spending further has benefited from special Federal budget "firewalls" designed to ensure that the monies are spent as authorized rather than being subjected to obligations ceilings enacted as part of deficit reduction measures.

[21] Pub. L. No. 116-6, February 15, 2019.

Table 1

Billions of Dollars, by Fiscal Year

January 23, 2019

	Actuals, 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
						Highway Account						
Start-of-Year Balance	41	33	24	14	4	a	a	a	a	a	a	a
Revenues and Interest[b]	38	38	38	37	37	37	37	37	36	36	37	37
Intragovernmental Transfers	*	0	0	0	0	0	0	0	0	0	0	0
Outlays	45	46	46	47	47	48	49	50	51	52	52	53
End-of-Year Balance	33	24	14	4	a	a	a	a	a	a	a	a
						Transit Account						
Start-of-Year Balance	15	12	9	5	0	a	a	a	a	a	a	a
Revenues and Interest[b]	6	6	5	5	5	5	5	5	5	5	5	5
Intragovernmental Transfers	0	0	0	0	0	0	0	0	0	0	0	0
Outlays	10	10	10	11	11	11	11	12	12	12	12	12
End-of-Year Balance	12	9	5	*	a	a	a	a	a	a	a	a
Memorandum:												
Cumulative Shortfall[a]												
Highway Account	n.a.	n.a.	n.a.	n.a.	-7	-20	-33	-47	-62	-78	-95	-113
Transit Account	n.a.	n.a.	n.a.	n.a.	-5	-10	-15	-21	-27	-33	-39	-46

Components may not sum to totals because of rounding; n.a. = not applicable; * = between 0 and $500 million.
CBO's January 2019 baseline estimate assumes that the 2019 obligation limitations are equal to the levels specified under Public Law 115-245, making further continuing appropriations for fiscal year 2019, which expired on December 21, 2018.

a. Under current law, the Highway Trust Fund cannot incur negative balances. However, following the rules governing baseline projections in the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline for surface transportation spending reflects the assumption that obligations presented to the Highway Trust Fund will be paid in full. The memorandum to this table shows the cumulative shortfall of fund balances, assuming spending amounts consistent with CBO's January 2019 baseline. Following the rules for baseline construction, those amounts are estimated by adjusting the obligation limitations enacted under P.L. 115-245, making further continuing appropriations for fiscal year 2019, by projected inflation. The Fixing America's Surface Transportation Act (FAST Act, P.L. 114-94) authorized obligation limitations that are higher than the amounts contained in CBO's January 2019 baseline.

b. Some of the taxes that are credited to the Highway Trust Fund are scheduled to expire on September 30, 2022, including the taxes on tires and all but 4.3 cents of the federal tax on motor fuels. However, under the rules governing baseline projections, these estimates reflect the assumption that all of the expiring taxes credited to the fund will continue to be collected after fiscal year 2022.

B. Airport and Airway Trust Fund Excise Taxes[22]

Revenues dedicated to the Airport and Airway Trust Fund

Excise taxes are imposed on amounts paid for commercial air passenger and freight transportation and on fuels used in commercial and noncommercial *(i.e.*, transportation that is not "for hire") aviation to fund the Airport and Airway Trust Fund.[23] The present aviation excise taxes are as follows:

Tax (and Code section)	Tax Rates
a. Domestic air passengers (sec. 4261)	7.5 percent of fare, plus $4.20 (2019) per domestic flight segment generally[24]
b. International air passengers (sec. 4261)	$18.60 (2019) per arrival or departure[25]
c. Amounts paid for right to award free or reduced rate passenger air transportation (sec. 4261)	7.5 percent of amount paid
d. Air cargo (freight) transportation (sec. 4271)	6.25 percent of amount charged for domestic transportation; no tax on international cargo transportation
e. Aviation fuels (sec. 4081):[26]	
i. Commercial aviation	4.3 cents per gallon

[22] The Airport and Airway Trust Fund excise taxes (except for 4.3 cents per gallon of the taxes on aviation fuels) are scheduled to expire after September 30, 2023. The 4.3-cents-per-gallon fuels tax rate is permanent. However, for Federal budget scorekeeping purposes, the statutory expiration date is disregarded and the full amount of the taxes is assumed to be permanent.

[23] Air transportation through U.S. airspace that neither lands in nor takes off from a point in the United States (or the 225-mile zone, described below) is exempt from the aviation excise taxes, but the transportation provider is subject to certain "overflight fees" imposed by the Federal Aviation Administration pursuant to Congressional authorization.

[24] The domestic flight segment portion of the tax is adjusted annually (effective each January 1) for inflation.

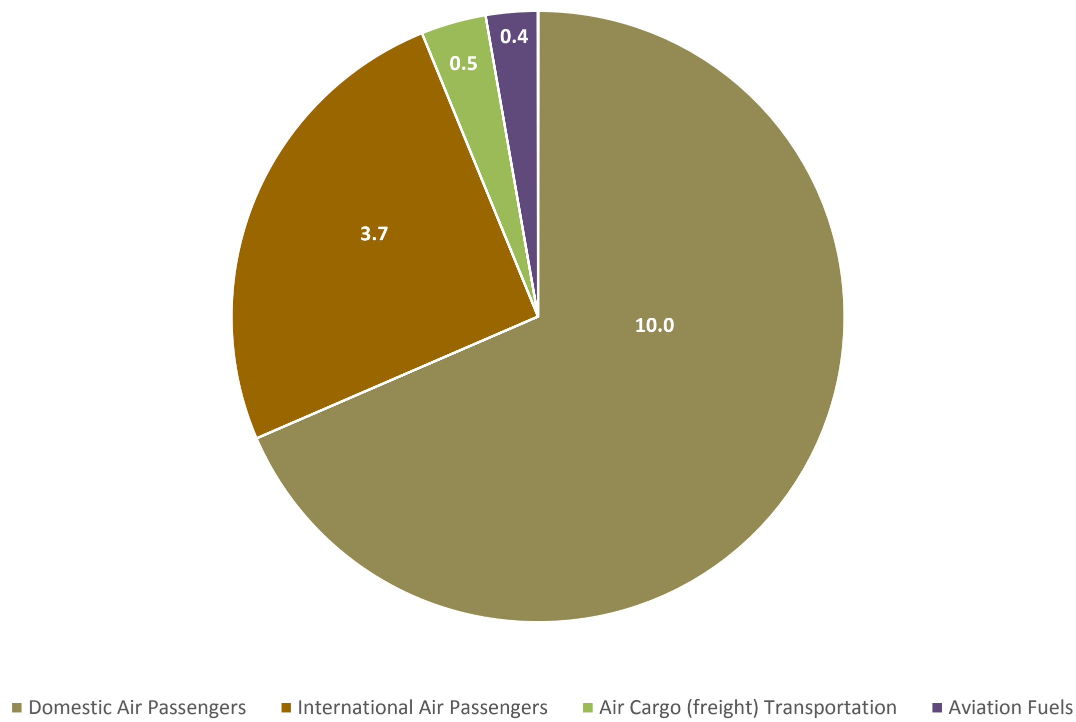
[25] The international arrival and departure tax rate is adjusted annually for inflation. For a domestic segment that begins or ends in Alaska or Hawaii, a reduced tax per person applies only to departures. For calendar year 2019, that reduced rate is $9.30 per departure (to/from mainland United States).

[26] Like most other taxable motor fuels, aviation fuels are subject to an additional 0.1-cent-per-gallon excise tax to fund the LUST Trust Fund.

Tax (and Code section)	Tax Rates
ii. Non-commercial (general) aviation: Aviation gasoline Jet fuel	 19.3 cents per gallon 21.8 cents per gallon
f. Surtax on fuel used in fractional ownership program aircraft (sec. 4043)	14.1 cents per gallon

For fiscal year 2017, domestic air passengers produced $10.0 billion in taxes; international air passengers produced $3.7 billion in taxes; air cargo (freight) transportation produced $0.5 billion in taxes, and aviation fuels produced $0.4 billion in taxes.[27] For fiscal year 2017, the total tax revenue for the Airport and Airway Trust Fund was $14.6 billion.

Figure 2.–AIRPORT AND AIRWAY TRUST FUND TAX RECEIPTS, Fiscal Year 2017 By Source ($ Billions)



[27] Internal Revenue Service, Statistics of Income Bulletin, Historical Table 20, "Federal Excise Taxes Reported to or Collected by the Internal Revenue Service, Alcohol and Tobacco Tax and Trade Bureau, and Customs Service, by Type of Excise Tax, Fiscal Years 1999-2017," 2018, available at http://www.irs.gov/pub/irs-soi/histab20.xls.

Overview of Airport and Airway Trust Fund expenditure provisions

In general

The Airport and Airway Trust Fund was established in 1970 to finance a major portion of national aviation programs (previously funded entirely with General Fund revenues). Operation of the Trust Fund is governed by parallel provisions of the Code and authorizing statutes.[28] The Code provisions govern deposits of revenues into the Trust Fund and approve expenditure purposes in authorizing statutes as in effect on the date of enactment of the latest authorizing Act. The authorizing Acts provide for specific Trust Fund expenditure programs.

Authorized expenditures from the Airport and Airway Trust Fund include the following principal programs:

1. Airport Improvement Program ("AIP") (airport planning, construction, noise compatibility programs, and safety projects);

2. Facilities and Equipment ("F&E") program (costs of acquiring, establishing, and improving the air traffic control facilities);

3. Research, Engineering, and Development ("RE&D") program (Federal Aviation Administration research and development activities);

4. Federal Aviation Administration Operations and Maintenance ("O&M") programs.

Projected balance of the Airport and Airway Trust Fund

CBO projects that tax revenues and interest to the Airport and Airway Trust Fund will exceed outlays of the fund throughout the 2019-2029 budget window, see Table 2 below. As a result, the end of year cash balance of the fund is expected to grow from $17.4 billion in FY 2019 to $57.6 billion in FY 2029. Note that CBO's projections assume that taxes credited to the Airport and Airway Trust Fund will continue to be collected after scheduled expiration.

[28] Sec. 9502 and 49 U.S.C. sec. 48101, et. seq.

Table 2

PROJECTED BALANCES OF THE AIRPORT AND AIRWAY TRUST FUND

Updated January 2019

Assumptions: Revenues and spending projections = CBO January 2019 Baseline
General Fund share of FAA Operations = 2019 amount adjusted for inflation
AIP contract authority extended at 2023 level starting in 2024
AATF is source of funding for payments to air carriers

	Est.	Projected									
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	By fiscal year, in millions of dollars										
CASH BALANCES											
BOY Cash Balance	15,348	17,433	20,028	22,873	25,959	29,349	33,106	37,217	41,688	46,561	51,852
Revenues	16,955	17,734	18,311	18,900	19,512	20,161	20,832	21,500	22,200	22,929	23,669
Interest	472	548	600	644	684	724	774	836	909	990	1,077
Outlays	15,342	15,687	16,065	16,457	16,806	17,128	17,495	17,865	18,236	18,628	19,016
EOY Cash Balance	**17,433**	**20,028**	**22,873**	**25,959**	**29,349**	**33,106**	**37,217**	**41,688**	**46,561**	**51,852**	**57,583**
BOY Uncommitted Balance	6,074	7,706	9,933	12,515	15,457	18,767	22,469	26,592	31,148	36,178	41,696
Change in Uncommitted Balance	1,632	2,227	2,582	2,941	3,311	3,701	4,123	4,556	5,031	5,517	6,031
EOY Uncommitted Balance	**7,706**	**9,933**	**12,515**	**15,457**	**18,767**	**22,469**	**26,592**	**31,148**	**36,178**	**41,696**	**47,726**
SUMMARY OF FUNDING											
PROJECTED BUDGET AUTHORITY FROM TRUST FUND											
AATF Share of Operations	8,851	9,028	9,214	9,400	9,594	9,798	10,002	10,205	10,409	10,630	10,842
Grants-in-Aid for Airports	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350	3,350
Facilities and Equipment	3,250	3,325	3,404	3,484	3,565	3,650	3,736	3,822	3,908	4,001	4,093
Research, Engineering, and Development	189	194	199	203	208	214	219	224	230	235	241
Payments to Air Carriers	155	158	161	165	168	172	175	179	182	186	190
Total Amounts Made Available for Obligation from Trust Fund	**15,795**	**16,055**	**16,328**	**16,602**	**16,885**	**17,184**	**17,482**	**17,780**	**18,079**	**18,402**	**18,716**
Trust fund resources as % of total aviation funding	*92%*	*92%*	*92%*	*92%*	*92%*	*91%*	*91%*	*91%*	*91%*	*91%*	*91%*
BUDGET AUTHORITY FROM GENERAL FUND											
Contribution to FAA Operations	**1,361**	**1,410**	**1,460**	**1,512**	**1,564**	**1,616**	**1,670**	**1,724**	**1,780**	**1,839**	**1,900**
General fund appropriation as % of total funding	*7.9%*	*8.1%*	*8.2%*	*8.3%*	*8.5%*	*8.6%*	*8.7%*	*8.8%*	*9.0%*	*9.1%*	*9.2%*
TOTAL PROJECTED BUDGET AUTHORITY FOR AVIATION PROGRAMS	**17,156**	**17,465**	**17,788**	**18,114**	**18,449**	**18,800**	**19,152**	**19,504**	**19,859**	**20,241**	**20,616**
REFERENCE											
Grants-in-Aid for Airports Obligation Limitation	*3,350*	*3,417*	*3,488*	*3,558*	*3,631*	*3,708*	*3,786*	*3,862*	*3,940*	*4,024*	*4,104*
Total New Discretionary Resources (BA plus oblim)	*17,156*	*17,532*	*17,926*	*18,322*	*18,730*	*19,158*	*19,588*	*20,016*	*20,449*	*20,915*	*21,370*
General fund appropriation as % discretionary resources	*7.9%*	*8.0%*	*8.1%*	*8.3%*	*8.4%*	*8.4%*	*8.5%*	*8.6%*	*8.7%*	*8.8%*	*8.9%*

BOY - Beginning of year
EOY - End of year

C. Inland Waterways Trust Fund Excise Tax

Tax and exemptions

A 29-cents-per-gallon excise tax is imposed on fuel used in powering commercial cargo vessels on a designated system of inland or intra-coastal waterways (the "inland waterways excise tax").[29] This tax is permanent. The tax applies to fuel used on any specified inland or intra-coastal waterway of the United States in the business of transporting property (other than fish or other aquatic animal life caught on the voyage) for compensation or hire, or in transporting property in the business of the owner, lessee, or operator of the vessel other than fish or other aquatic animal life caught on the voyage.[30] The inland waterways excise tax is a use tax, imposed on the boat operator.

Exemptions are provided for vessels designed primarily for use on the high seas which have a draft of more than 12 feet ("deep-draft ocean-going vessels"), for vessels used primarily for transportation of persons, and for State or local government vessels engaged in governmental business.[31]

Overview of Inland Waterways Trust Fund expenditure provisions

Operation of the Inland Waterways Trust Fund is governed by parallel provisions of the Code and authorizing statutes.[32] The Code provisions govern deposit of receipts from the fuel tax into the Trust Fund and approve general expenditure purposes. The authorizing statutes specify expenditure programs.

Amounts in the Inland Waterways Trust Fund are available, as provided by appropriation Acts, for making construction and rehabilitation expenditures for navigation on the inland and coastal waterways of the United States described in section 206 of the Inland Waterways Revenue Act of 1978, as in effect on the date of the enactment of Code section 9506. There is a limit of 50 percent that may be paid from the Inland Waterways Trust Fund for the cost of any construction under section 102(a) of the Water Resources Development Act of 1986 (as in effect on the date of enactment of Code sec. 9506). The remaining 50 percent is to be paid from the General Fund.

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[29] Sec. 4042. Like other taxable motor fuels, inland waterway fuels are subject to an additional excise tax of 0.1 cents per gallon to fund the LUST Trust Fund.

[30] The term inland or intra-coastal waterway of the United States means any inland or intra-coastal waterway of the United States which is described in section 206 of the Inland Waterways Revenue Act of 1978 and includes the Mississippi River upstream from Baton Rouge, Louisiana, the Mississippi River's tributaries, and specified waterways, including the Gulf of Mexico and Atlantic Intra-coastal Waterways, and the Tennessee-Tombigbee Waterway.

[31] Sec. 4042(c)(4) also provides an exemption with respect to use for movement by tug of exclusively LASH (lighter-aboard-ship) and SEABEE ocean-going barges released by their ocean going carriers solely to pick up or deliver international cargoes. However, LASH and SEABEE vessels are no longer in use.

[32] Sec. 9506 and 33 U.S.C. sec 2212.

Projected balance of the Inland Waterways Trust Fund

CBO projects that outlays from the Inland Waterways Trust Fund will exceed tax revenues and interest to the Fund beginning in FY 2022, see Table 3 below. As a result, the end of year cash balance of the fund is expected to shrink from $137 million in FY 2019 to $1 million in FY 2029.

Table 3

CBO January 2019 Baseline Estimates of Spending and Revenues for the Inland Waterways Trust Fund (IWTF)

Prepared for Joint Committee on Taxation **2/19/2019**

(fiscal years, $ millions)	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
BOY CASH BALANCE:	131	137	140	140	136	128	117	101	82	60	33
Tax Revenues	119	118	117	116	115	114	113	113	112	111	110
Interest	3	3	4	3	3	3	2	2	2	1	*
TOTAL:	122	121	121	119	118	117	115	115	114	112	110
2019 BA INFLATED:	116	118	121	123	126	128	131	134	136	139	142
EOY CASH BALANCE:	137	140	140	136	128	117	101	82	60	33	1

Notes:

1) * Denotes interest payment is estimated to be less than $500,000 because the portion of the fund available to invest throughout the year is small.

2) The budget authority provided in 2019 is inflated in the baseline to provide an estimate of the appropriation level for the outyears.

3) Each year 100% of the budget authority is transferred out of the trust fund to the Corps of Engineers construction account and expended over a few years.

4) **Estimates of trust fund balances reflect CBO's best estimate of likely outcomes under current law. Actual balances could be higher or lower, depending on the accuracy of revenue and spending estimates.**

BOY - Beginning of year
EOY - End of year
BA - Budget authority

D. Harbor Maintenance Trust Fund Excise Tax

Tax and exemptions

A 0.125-percent excise tax is imposed on the value of commercial cargo loaded or unloaded at taxable United States ports and on charges for transportation of passengers to or from such ports.[33] No tax is imposed on cargo movements within a U.S. port. The tax is permanent. Unlike most Federal excise taxes, the harbor maintenance excise tax is administered by U.S. Customs and Border Protection (rather than the Internal Revenue Service or the Treasury Department's Alcohol and Tobacco Tax and Trade Bureau (the "TTB")). Administrative rules applicable to the tax are those applicable to customs duties. Shippers and importers are liable for the tax.

The tax generally is imposed on all cargo (other than exports) and passengers that are loaded or unloaded at a U.S. port, defined as any channel or harbor in the United States that is open to public navigation. The tax does not apply to waterways where the inland waterways fuels excise tax is imposed or to ports with respect to which no Federal funds have been used since 1977 for construction, maintenance, or operation, or which were de-authorized by Federal law before 1985. Transportation at ports on the Columbia River is taxable only if the ports are downstream of the Bonneville lock and dam.

In addition to exported cargo, the tax does not apply to cargo shipped between the continental United States and Alaska (except for crude oil), Hawaii, and/or U.S. possessions, or to cargo shipped between Alaska, Hawaii, and/or such possessions for ultimate use or consumption in those locations. This exemption includes intra-state/U.S. possession cargo movements as well as passenger cruises within Alaska or Hawaii that also include travel in international waters, if the cruises do not include any stops at ports of call located outside the State from which the cruise begins. Transportation on regularly scheduled ferries transporting passengers (and their vehicles) that operate within the United States or between the U.S. and contiguous countries (*e.g.*, Canada) are not subject to tax. There is an exemption for cargo owned by nonprofit organizations that is intended for use in humanitarian or development assistance overseas and by U.S. government agencies. Ships' stores and fish (not previously loaded on shore) also are exempt.

Overview of Harbor Maintenance Trust Fund expenditure provisions

Operation of the Harbor Maintenance Trust Fund is governed by parallel provisions of the Code and authorizing statutes.[34] The Code provisions govern deposits of revenues into the Harbor Maintenance Trust Fund and approve general expenditure programs. The authorizing statutes specify expenditure programs.

The Harbor Maintenance Trust Fund generally is limited to financing the operations and maintenance costs for federally-authorized public harbors and channels for commercial

[33] Sec. 4461.

[34] Sec. 9505 and Pub. L. No. 104-303.

navigation incurred by the U.S. Corps of Engineers under section 210 of the Water Resources Development Act of 1986 (as in effect on the date of the enactment of the Water Resources Development Act of 1996). Harbor Maintenance Trust Fund expenditures have principally been for the operations and maintenance costs of access channels to deep-draft harbors, *i.e.*, dredging expenses and not channel deepening projects.

Certain ancillary activities directly related to maintenance dredging or related to keeping a waterway unobstructed also are financed from the Harbor Maintenance Trust Fund.[35] Further, the administrative costs of collecting the harbor maintenance tax (not to exceed $5 million for any fiscal year) are authorized to be paid from the Trust Fund.

Projected balance of the Harbor Maintenance Trust Fund

CBO projects that tax revenues and interest to the Harbor Maintenance Trust Fund will exceed outlays of the fund throughout the 2019-2029 budget window, see Table 4 below. As a result, the end of year cash balance of the fund is expected to grow from $9.5 billion in FY 2019 to $14.4 billion in FY 2029.

[35] See 33 U.S.C. sec. 2241(2).

Table 4

CBO January 2019 Baseline Estimates of Spending and Revenues for the Harbor Maintenance Trust Fund (HMTF)
Prepared for Joint Committee on Taxation **2/19/2019**

(fiscal years, $ millions)	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
BOY CASH BALANCE:	9,321	9,482	9,705	9,990	10,336	10,735	11,182	11,686	12,259	12,903	13,613
Tax Revenues	1,553	1,613	1,695	1,780	1,868	1,954	2,043	2,137	2,227	2,315	2,414
Interest	200	233	248	256	258	256	261	272	289	307	326
TOTAL:	1,753	1,846	1,943	2,036	2,126	2,210	2,304	2,409	2,516	2,622	2,740
2019 BA INFLATED:	1,592	1,623	1,658	1,690	1,727	1,763	1,800	1,836	1,872	1,912	1,952
EOY CASH BALANCE:	9,482	9,705	9,990	10,336	10,735	11,182	11,686	12,259	12,903	13,613	14,401

Notes:
1) The budget authority provided in 2019 is inflated in the baseline to provide an estimate of the appropriation level for the outyears.

2) Each year the budget authority is transferred out of the trust fund to other federal accounts (mostly to other accounts within the Corps of Engineers) and expended over a few years.

3) Estimates of trust fund balances reflect CBO's best estimate of likely outcomes under current law. Actual balances could be higher or lower, depending on the accuracy of revenue and spending estimates.

BOY - Beginning of year
EOY - End of year
BA - Budget authority

E. Tax-Exempt Financing for Public Infrastructure

Overview

Interest paid on bonds issued by State and local governments generally is excluded from gross income for Federal income tax purposes. Because of the income exclusion, investors generally are willing to accept a lower rate on tax-exempt bonds than they might otherwise accept on a taxable investment. This, in turn, lowers the borrowing costs for the beneficiaries of such financing.

Bonds issued by State and local governments may be classified as either governmental bonds or private activity bonds. Governmental bonds are bonds the proceeds of which are primarily used to finance governmental functions or which are repaid with governmental funds. Private activity bonds are bonds in which the State or local government serves as a conduit providing financing to nongovernmental persons (*e.g.*, private businesses or individuals). The exclusion from income for interest paid on State and local bonds does not apply to private activity bonds, unless the bonds are issued for certain permitted purposes ("qualified private activity bonds") and other Code requirements are met.

Like other activities carried out and paid for by State and local governments, the construction, renovation, and operation of governmental infrastructure projects are eligible for financing with the proceeds of governmental bonds. In addition, certain privately-used infrastructure projects may be financed with qualified private activity bonds.

Tax-exempt governmental bonds

In general

Present law does not limit the types of facilities that can be financed with governmental bonds. Thus, State and local governments can issue tax-exempt, governmental bonds to finance a broad range of infrastructure projects, including highways, railways, airports, sewage facilities, *etc*. However, while the types of projects eligible for governmental bond financing are not circumscribed, present law imposes restrictions on the parties that may benefit from such financing. For example, present law limits the amount of governmental bond proceeds that can be used by nongovernmental persons. Use of bond proceeds by nongovernmental persons in excess of amounts permitted by present law may result in such bonds being treated as taxable private activity bonds, rather than governmental bonds. The Code defines a private activity bond as any bond that satisfies (1) the private business use test and the private security or payment test ("the private business test"), or (2) "the private loan financing test."[36] Generally, private activity bonds are taxable unless issued as qualified private activity bonds.

[36] Sec. 141. For a more detailed description of the private activity bond tests, see Joint Committee on Taxation, *Overview of Selected Provisions Relating to the Financing of Surface Transportation Infrastructure* (JCX-97-15), June 23, 2015. This document can be found on the Joint Committee on Taxation website at www.jct.gov.

Qualified private activity bonds

Qualified private activity bonds are tax-exempt private activity bonds issued to provide financing for specified privately used facilities. The definition of a qualified private activity bond includes an exempt facility bond, or qualified mortgage, veterans' mortgage, small issue, redevelopment, 501(c)(3), or student loan bond.[37] Exempt facility bonds are often used to finance infrastructure projects.

To qualify as an exempt facility bond, 95 percent of the net proceeds must be used to finance an eligible facility.[38] Facilities eligible for this financing include the following:

- Airports,
- Ports (docks and wharves),
- Mass commuting facilities,
- Facilities for the furnishing of water,
- Sewage facilities,
- Solid waste disposal facilities,
- Qualified residential rental properties,
- Facilities for the local furnishing of electric energy or gas,
- Local district heating or cooling facilities,
- Qualified hazardous waste facilities,
- High-speed intercity rail facilities,
- Environmental enhancements of hydro-electric generating facilities,
- Qualified public educational facilities,
- Qualified green building and sustainable design projects, and
- Qualified highway or surface freight transfer facilities.[39]

Generally, qualified private activity bonds are subject to a number of additional eligibility restrictions that do not apply to governmental bonds. For example, the aggregate volume of most qualified private activity bonds is restricted by annual State volume limitations

[37] Sec. 141(e).

[38] Sec. 142(a).

[39] Sec. 142(a)(1)-(15).

(the "State volume cap").[40] For calendar year 2019, the State volume cap, which is indexed for inflation, equals $105 per resident of the State, or $316,745,000, if greater.[41]

Qualified private activity bonds also are subject to additional limitations under section 147, including a substantial user limit, a bond maturity restriction, a limit on financing land acquisition, a limit on financing existing property absent substantial rehabilitation, certain prohibited facilities, a public approval requirement, and a limit on financing issuance costs. Further, qualified private activity bonds are ineligible for advance refundings.[42]

Rules governing private activity bonds for selected infrastructure facilities

Airports

Exempt facility bonds may be issued to finance airports. Exempt facility bonds for airports are not subject to the State volume cap. However, all tax-exempt-bond-financed airport property must be governmentally owned. Property eligible for this financing includes land, terminals, runways, public parking facilities, and related equipment. Airplanes are not eligible for tax-exempt financing. Additionally, certain real property facilities (and related equipment) are excluded from this financing: (1) hotels and other lodging facilities; (2) retail facilities (including food and beverage facilities) located in a terminal, if the facilities are in excess of a size necessary to serve passengers and employees at the airport; (3) office buildings for individuals who are not employees of a governmental unit or of the public airport operating authority; and (4) industrial parks or manufacturing facilities.

Port facilities

Exempt facility bonds may be issued to finance port ("dock and wharf") facilities and related storage and training facilities. Facilities that are specifically ineligible for financing with airport bonds may not be financed with port bonds. Further, ships and other vessels are not eligible for private activity tax-exempt bond financing. All property financed with these bonds must be governmentally owned. Exempt facility bonds issued for ports are not subject to the State volume cap.

[40] The following private activity bonds are not subject to the State volume cap: qualified 501(c)(3) bonds, exempt facility bonds for airports, docks and wharves, environmental enhancements for hydroelectric generating facilities, and exempt facility bonds for solid waste disposal facilities that are to be owned by a governmental unit. The State volume cap does not apply to 75 percent of exempt facility bonds issued for high speed intercity rail facilities, 100 percent if the high speed intercity rail facility is to be owned by a governmental unit. Qualified veterans mortgage bonds, qualified public educational facility bonds, qualified green building and sustainable project design bonds, and qualified highway or surface freight transfer facility bonds also are not subject to the State volume cap, but the Code subjects such bonds to volume limitations specific to the category of bonds.

[41] Rev. Proc. 2018-57, 2018-49 I.R.B. 827, December 3, 2018.

[42] See sec. 149(d)(1).

Mass commuting facilities

Exempt facility bond financing for mass commuting facilities is subject to restrictions similar to those which apply to such bonds for airports and ports. All property financed with these bonds must be governmentally owned. Further, "rolling stock" (*e.g.*, buses and rail cars) is not eligible for financing with exempt facility bonds.

High-speed intercity rail facilities

The definition of an exempt facility bond includes bonds issued to finance high-speed intercity rail facilities.[43] A facility qualifies as a high-speed intercity rail facility if it is a facility (other than rolling stock) for fixed guideway rail transportation of passengers and their baggage between metropolitan statistical areas.[44] The facilities must use vehicles that are reasonably expected to be capable of attaining a maximum speed in excess of 150 miles per hour between scheduled stops, and the facilities must be made available to members of the general public as passengers.

Unlike other bond-financed transportation facilities, high-speed intercity rail facilities may be privately owned. However, if the bonds are to be issued for a nongovernmental owner of the facility, such owner must irrevocably elect not to claim depreciation or credits with respect to the property financed by the net proceeds of the issue.[45]

Seventy-five percent of the principal amount of the bonds issued for high-speed rail facilities is exempt from the volume limit.[46] If all the property to be financed by the net proceeds of the issue is to be owned by a governmental unit, then such bonds are completely exempt from the volume limit.

Qualified highway or surface freight transfer facility bonds

Present law authorizes the issuance of tax-exempt private activity bonds to finance qualified highway or surface freight transfer facilities. A qualified highway facility or surface freight transfer facility is any surface transportation or international bridge or tunnel project (for which an international entity authorized under Federal or State law is responsible) which receives Federal assistance under title 23 of the United States Code or any facility for the transfer of freight from truck to rail or rail to truck which receives Federal assistance under title 23 or title 49 of the United States Code.

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[43] Secs. 142(a)(11) and 142(i).

[44] A metropolitan statistical area for this purpose is defined by reference to section 143(k)(2)(B). Under that provision, the term metropolitan statistical area includes the area defined as such by the Secretary of Commerce.

[45] Sec. 142(i)(2).

[46] Sec. 146(g)(4).

Qualified highway or surface freight transfer facility bonds are not subject to the State volume limitations. Rather, the Secretary of Transportation is authorized to allocate a total of $15 billion of issuance authority to qualified highway or surface freight transfer facilities in such manner as the Secretary determines appropriate.[47]

The qualified highway or surface freight transfer facility bond provision was enacted in 2005 as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users ("SAFETEA-LU").[48] As reflected below, as of February 15, 2019, the Department of Transportation has made allocations of approximately $10.3 billion of the $15 billion it is authorized to allocate. Of the $10.3 billion that has been allocated, approximately $9 billion of bonds have been issued.[49]

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[47] See U.S. Department of Transportation, *Notice of Solicitation for Requests for Allocations of Tax-exempt Financing and Request for Comments*, 71 Fed. Reg. 642 (January 5, 2006) and Internal Revenue Service, Notice 2006-45, *Exempt Facility Bonds for Qualified Highway or Surface Freight Transfer Facilities*, 2006-20 I.R.B. 891 (May 15, 2006).

[48] Section 11143 of Pub. L. No. 109-59.

[49] U.S. Department of Transportation, Public Activity Bonds, Current Status, as of February 26, 2019, available at https://www.transportation.gov/buildamerica/programs-services/pab.

Bonds Issued ($000s)

Capital Beltway HOT Lanes, VA	$589,000
North Tarrant Express, TX	$400,000
IH 635 Managed Lanes (LBJ Freeway), TX	$615,000
Denver RTD Eagle Project (East Corridor & Gold Line), CO	$397,835
CentralPoint Intermodal Center, Joliet, IL	$150,000
CentralPoint Intermodal Center, Joliet, IL	$75,000
Downtown Tunnel/Midtown Tunnel/MLK Extension, Norfolk, VA	$675,004
I-95 HOV/HOT Lanes, Northern VA	$252,648
Ohio River Bridges East End Crossing, IN	$676,805
North Tarrant Express Segments 3A & 3B, Fort Worth, TX	$274,030
Goethals Bridge, Staten Island, NY	$460,915
U.S. 36 Managed Lanes/BRT Phase 2, Denver Metro Area, CO	$20,360
I-69 Section 5, Bloomington to Martinsville, IN	$243,845
Rapid Bridge Replacement Program, PA	$721,485
Portsmouth Bypass, OH	$227,355
I-77 Managed Lanes, NC	$100,000
CenterPoint Intermodal Center, Joliet, IL	$100,000
SH-288, TX	$272,635
CenterPoint Intermodal Center, Joliet, IL	$130,000
Purple Line, MD	$313,035
I-395 Express Lanes, VA	$232,995
Transform 66, VA	$737,000
AAF-Brightline Phase I, FL	$600,000
Central 70, CO	$114,660
I-75 Modernization Segment 3	$610,300

Subtotal…………………………………………………………………….………...$ 8,989,907

Allocations ($000s)

CenterPoint Intermodal Center, Joliet, IL	$150,000
AAF-Brightline Phase 2, FL	$1,150,000

Subtotal………………………………………………………………………….$1,300,000

Grand Total…………………………………………………………….…………$10,289,907

Public works facilities

Exempt facility bonds may be issued to finance various types of public works facilities, including facilities for the furnishing of water, sewage facilities, solid waste disposal facilities, local district heating or cooling facilities, and qualified hazardous waste facilities.[50] The foregoing facilities generally may be privately owned. Exempt facility bonds issued to finance

[50] Sec. 142(a)(4), (5), (6), (9), and (10).

such facilities are subject to the State volume cap, with the exception of solid waste disposal facilities that are to be owned by a governmental unit.

A facility for the furnishing of water must meet the following two requirements: (1) the water is or will be made available to the public (including electric utility, industrial, agricultural, or commercial users); and (2) either the facility is operated by a governmental unit or the rates for the furnishing or sale of the water have been established or approved by a State or political subdivision thereof, by an agency or instrumentality of the United States, or by a public service or public utility commission or other similar body of any State or political subdivision thereof.[51]

A local district heating or cooling facility means property used as an integral part of a local district heating or cooling system. Such a system must consist of a pipeline or network providing hot water, chilled water, or steam to two or more users for (1) residential, commercial, or industrial heating or cooling, or (2) processing steam. A local system must include facilities furnishing heating or cooling to an area consisting of a city and one contiguous county.[52]

A qualified hazardous waste facility is a facility for the disposal of hazardous waste by incineration or entombment that meets certain additional requirements specified in the Code.[53]

<u>Other bonds for which issuance authority has expired or has been repealed</u>

The authority to issue new tax credit bonds and direct-pay bonds was prospectively repealed by Public Law 115-97 (*i.e*., for bonds issued after December 31, 2017). The authority to issue two other types of tax-credit bonds, recovery zone economic development bonds and Build America Bonds, expired on January 1, 2011.

<u>Tax-credit bonds and direct-pay bonds, in general</u>

Tax-credit bonds provide tax credits to investors to replace a prescribed portion of the interest cost. The borrowing subsidy generally is measured by reference to the credit rate set by the Treasury Department. Tax-credit bonds include qualified tax credit bonds, which have certain common general requirements, and include new clean renewable energy bonds, qualified energy conservation bonds, qualified zone academy bonds ("QZABs"), and qualified school construction bonds.

An issuer could elect to issue certain tax credit bonds as "direct-pay bonds." Instead of a credit to the holder, with a "direct-pay bond" the Federal government pays the issuer a percentage of the interest on the bonds. The following tax credit bonds were permitted to be issued as direct-pay bonds: new clean renewable energy bonds, qualified energy conservation bonds, and qualified school construction bonds. QZABs could be issued as direct-pay bonds, but

[51] Sec. 142(e).

[52] Sec. 142(g).

[53] Sec. 142(h).

such an election was not available regarding any allocation of the national zone academy bond allocation after 2010 or any carryforward of such allocations.

Build America Bonds

The Build America Bonds program, part of the American Recovery and Reinvestment Act of 2009 ("ARRA"[54]), provided a subsidy to State and local governments to finance capital projects, including the development of infrastructure. As noted above, the authority to issue bonds under the program expired December 31, 2010.

Under the Build America Bonds program, an issuer could elect to have an otherwise tax-exempt bond, issued prior to January 1, 2011, treated as a "Build America Bond."[55] In general, Build America Bonds are taxable governmental bonds whose interest is subsidized by the Federal government by means of a tax credit to the holder ("tax-credit Build America Bonds") or, in the case of certain qualified bonds, a direct payment to the issuer ("direct-pay Build America Bonds").[56]

Although the authority existed to issue Build America Bonds that provided for a tax credit to the bond holder, most Build America Bonds were issued as "direct-pay Build America Bonds." Under a special rule, in lieu of the tax credit to the holder, the issuer is allowed a refundable credit equal to 35 percent of each interest payment made under such bond.[57]

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[54] Pub. L. No. 111-5.

[55] Sec. 54AA (as in effect prior to its repeal by sec. 13404(a) of Pub. L. No. 115-97).

[56] Tax-credit Build America Bonds could be issued to finance any governmental purpose for which tax-exempt governmental bonds (excluding private activity bonds under section 141) could be issued under section 103. The eligible uses of proceeds and types of financings for direct-pay Build America Bonds are more limited than for tax-credit Build America Bonds. Direct-pay Build America Bonds could be issued to finance only capital expenditures that could have been financed with tax-exempt governmental bonds.

[57] Sec. 54AA(g)(1) (as in effect prior to its repeal by sec. 13404(a) of Pub. L. No 115-97).

F. Public-Private Partnerships

Another mechanism for financing infrastructure is through the use of public-private partnerships.

<u>In general</u>

The U.S. Department of Transportation defines a public-private partnership broadly to include "a contractual agreement formed between public and private sector partners" that typically involves "a government agency contracting with a private partner to renovate, construct, operate, maintain, and/or manage a facility or system, in whole or in part, that provides a public service."[58] The private sector historically has participated in the design and construction of U.S. highways, most commonly as contractors to the public sector. A public-private partnership, however, generally shifts more of the economic risks (and attendant rewards) of a transportation project to the private sector than would be the case in a traditional public owner-private contractor relationship. For example, a public-private partnership might involve a private party taking on all the design and construction risks for a new project, or a private party operating a project for a period of years following construction, and obtaining an economic return based on the relative success of its management. State and local governments have shown increasing interest in public-private partnership arrangements as a means of shifting the increasing costs and risks of infrastructure development and maintenance to private parties, in exchange for those private parties receiving some economic benefit.[59]

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[58] U.S. Department of Transportation, Federal Highway Administration, *Innovative Program Delivery*, *Glossary*, "Public-Private Partnership (P3)," available at https://www.fhwa.dot.gov/ipd/glossary/.

[59] For background on infrastructure investment, see Congressional Budget Office, *Issues and Options in Infrastructure Investment* (May 2008), available at https://www.cbo.gov/sites/default/files/110th-congress-2007-2008/reports/05-16-infrastructure.pdf (public-private partnership discussion pp. 32-33). See also, Department of the Treasury, Office of Economic Policy, *Expanding our Nation's Infrastructure through Innovative Financing* (September 2014), available at https://www.treasury.gov/resource-center/economic-policy/Documents/3_Expanding our Nation's Infrastructure through Innovative Financing.pdf.

<u>Examples of public-private partnerships</u>[60]

<u>Long-term leases of existing transportation infrastructure assets</u>

Some private parties have acquired economic interests in the financing, maintenance, and operation of public highways after they are built.[61] Two arrangements, involving the Chicago Skyway and the Indiana Toll Road, illustrate how the public-private partnership concept can be applied to transfers of economic interests in existing highways from the public sector to private parties. The Chicago Skyway and Indiana Toll Road deals are structured as very long-term arrangements (99 years and 75 years, respectively). For tax purposes, each transaction can be seen as comprising three operating relationships, each of which in turn runs for the length of the overall arrangement:

1. A "lease" of the existing infrastructure (the highway itself and associated improvements) from the public owner to the private party;

2. A grant by the public owner to the private party of a right of way on the public lands underlying that infrastructure; and

3. A grant of a franchise from the public entity permitting the private party to collect tolls on the highway.

In return, the private party paid a large up-front amount to the public owner, and agreed to (i) operate and maintain the road, (ii) invest specified amounts in future improvements, and (iii) accept restrictions on the maximum tolls it could charge.[62] An umbrella concession

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[60] For purposes of this discussion, this pamphlet focuses on public-private partnerships involving long-term leases of transportation infrastructure assets by a private party, as well those involving the responsibility to design, build, finance, operate, and maintain new transportation infrastructure assets by a private party. The U.S. Department of Transportation categorizes public-private partnerships as either "new build facilities" or "existing facilities." For new build facilities, public-private partnerships are structured as design-build-finance-operate-maintain concessions "that bundle together and transfer to a private sector partner responsibilities for design, construction, finance, and long term operations and maintenance over the concession period." For existing facilities, public-private partnerships are structured as long-term lease and operations and maintenance concessions under which the private partner operates and maintains the facility, in some cases makes improvements to it, and pays an upfront concession fee for the right to operate the toll road and retain toll revenues. See U.S. Department of Transportation, Federal Highway Administration, *Innovative Program Delivery*, "P3 Defined," available at http://www.fhwa.dot.gov/ipd/p3/defined/default.aspx.

[61] For background on public-private partnerships, see CRS Report R45010, *Public Private Partnerships (P3s) in Transportation*, by William J. Mallett (November 2, 2017); CRS Report R43410, *Highway and Public Transportation Infrastructure Provision Using Public-Private Partnerships (P3s)*, by William J. Mallett (March 5, 2014); and U.S. Government Accountability Office, *Highway Public-Private Partnerships, More Rigorous Up-front Analysis Could Better Secure Potential Benefits and Protect the Public Interest*, GAO-08-44 (Washington, DC: February 2008).

[62] See summaries of these arrangements at U.S. Department of Transportation, Federal Highway Administration, *Innovative Program Delivery* "Project Profiles," available at https://www.fhwa.dot.gov/ipd/project_profiles/il_chicago_skyway.aspx and https://www.fhwa.dot.gov/ipd/project_profiles/in_indiana_toll.aspx.

agreement sets out the long-term rights and obligations of each party including dispute resolution mechanisms.

Design, build, finance, operate, and maintain new transportation infrastructure assets

Alternatively, some private parties take on all the design and construction activities and related risks for a new project (in accordance with standards specified by the public agency), as well as the financing, maintenance, and operation of the infrastructure assets after they are built. Two arrangements, involving the Denver Eagle, an approximately 40-mile commuter rail project (the "Eagle P3") and the Colorado U.S. 36 Express Lanes Project are examples of a public-private partnership where the public sector transferred the responsibilities to design, build, finance, operate, and maintain the project to the private party. This type of public-private partnership arrangement involves an exclusive right of the private party to design and build new public-use infrastructure assets in accordance with the public agency's specified standards, followed by a lease of the new infrastructure assets from the public owner to the private party for the term of the concession agreement.

Unlike public-private partnerships involving long-term leases of previously existing infrastructure assets, the private party in a design-build-finance-operate-maintain ("DBFOM") concession arrangement generally does not pay a large up-front amount to the public owner. Rather, the costs of construction are generally funded with equity capital, third-party debt, tax-exempt financing, federal loans, and/or federal grants. In return for operating and maintaining the infrastructure assets, the private party agrees to collect fees for the term of the agreement (*e.g.*, tolls from end users or availability payments from the public owner), which are structured to meet the debt service requirements, costs of operating and maintaining the infrastructure assets, and payments to equity investors. An umbrella concession agreement sets out the long-term rights and obligations of each party including dispute resolution mechanisms.[63]

Tax treatment of certain public-private partnerships involved in transportation infrastructure

Overall characterization of arrangement

As noted above, the parties to each of the representative public-private partnerships entered into an umbrella concession agreement that governs the overall business relationship. In general, whether involving existing or new infrastructure assets, the arrangement between the public and private parties is structured in such a way as to not constitute a partnership for Federal income tax purposes.[64]

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[63] See summaries of these arrangements at U.S. Department of Transportation, Federal Highway Administration, *Innovative Program Delivery*, "Project Profiles," available at https://www.fhwa.dot.gov/ipd/project_profiles/co_eagle_project.aspx and https://www.fhwa.dot.gov/ipd/project_profiles/co_us36_express_lanes_phase2.aspx.

[64] If the arrangement were characterized as a partnership for Federal income tax purposes, there would be many adverse consequences for both parties, including the possible application of section 470 (which limits deductions allocable to property used by governments and tax-exempt entities), as well as differences in the tax

Interest expense

Whether the arrangement involves existing or new infrastructure assets, the private party generally incurs interest expense on the debt used to finance the project.[65] Interest expense is generally deducted by a taxpayer as it is paid or accrued, depending on the taxpayer's method of accounting.[66] However, once paid or accrued, the interest deduction may be subject to a number of limitations.[67]

One important exception in the context of public-private partnerships is section 163(j), which limits a taxpayer's deduction for business interest for a taxable year to the sum of (1) business interest income of the taxpayer for the taxable year, (2) 30 percent of the adjusted taxable income of the taxpayer for the taxable year (not less than zero), and (3) the floor plan financing interest of the taxpayer for the taxable year.[68] The amount of any business interest not allowed as a deduction for any taxable year is treated as business interest paid or incurred in the succeeding taxable year and may be carried forward in this manner indefinitely.[69] The limitation

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depreciation rules for the related assets (see, *e.g.*, sec. 168(h)). For ease of illustration, this pamphlet does not discuss the various ways in which the private party can structure its business operations. For background on the choice of entity in the U.S., see Joint Committee on Taxation, *Choice of Business Entity: Present Law and Data Relating to Corporations, Partnerships, and S Corporations* (JCX-71-15), April 10, 2015. For background on the Federal tax system, see Joint Committee on Taxation, *Overview of the Federal Tax System as in Effect for 2018* (JCX-3-18), February 7, 2018. These documents can be found on the Joint Committee on Taxation website at www.jct.gov.

[65] Various types of debt may be used to finance infrastructure through a public-private partnership. See, *e.g.*, above discussion of "Tax-Exempt Financing for Public Infrastructure." For background on the Federal income tax treatment of debt and equity, see Joint Committee on Taxation, *Overview of the Tax Treatment of Corporate Debt and Equity* (JCX-45-16), May 20, 2016. This document can also be found on the Joint Committee on Taxation website at www.jct.gov.

[66] See, *e.g.*, Treas. Reg. sec. 1.461-4(e) (generally requiring an accrual method taxpayer to deduct interest as it economically accrues). For all taxpayers, if an obligation is issued with original issue discount ("OID"), a deduction for OID is allowable over the life of the obligation on a yield to maturity basis. Sec. 163(e). But see section 267 (dealing in part with interest paid to a related or foreign party). Generally, OID arises where interest on a debt instrument is not calculated based on a qualified rate and required to be paid at least annually.

[67] In addition to the limitations discussed herein, other limitations include, for example: denial of the deduction for the disqualified portion of the original issue discount on an applicable high yield discount obligation (sec. 163(e)(5)), denial of deduction for interest on certain obligations not in registered form (sec. 163(f)), and disallowance of deduction for interest relating to tax-exempt income (sec. 265). Interest may also be subject to capitalization. See, *e.g.*, secs. 263A(f), 460(c)(3), and 461(g).

[68] See sec. 163(j)(1). For a detailed discussion of section 163(j), see Joint Committee on Taxation, *General Explanation of Public Law No. 115–97* (JCS–1–18), December 2018, pp. 172-179. This document can be found on the Joint Committee on Taxation website at www.jct.gov.

[69] See sec. 163(j)(2).

applies at the taxpayer level.[70] In the case of a group of affiliated corporations that file a consolidated return, the limitation applies at the consolidated tax return filing level.

There are exceptions to the application of section 163(j).[71] For example, any real property development, redevelopment, construction, reconstruction, acquisition, conversion, rental, operation, management, leasing, or brokerage trade or business (referred to as an "electing real property trade or business") may elect out of the limitation. However, such business is then required to use the alternative depreciation system ("ADS") to depreciate any of the nonresidential real property, residential rental property, and certain improvements made to nonresidential real property.[72]

Treasury and the Internal Revenue Service have issued guidance to address the application of section 163(j) to certain public-private partnership infrastructure arrangements.[73] The guidance creates a safe harbor under which a taxpayer may treat a trade or business that is conducted in connection with a "specified infrastructure arrangement" as a real property trade or business for purposes of electing out of the section 163(j) interest limitation (and correspondingly for purposes of the requirement to use ADS to depreciate certain assets held by such business). A "specified infrastructure arrangement" is "a contract or contracts with a term in excess of five years between a government and a private trade or business under which a private trade or business has contractual responsibility to provide one or more of the functions of designing, building, constructing, reconstructing, developing, redeveloping, managing, operating, or maintaining qualified public infrastructure property."[74]

For purposes of the safe harbor, infrastructure property includes 17 types of infrastructure assets (*e.g.*, mass commuting facilities, high-speed intercity rail facilities, and surface transportation facilities, among many others).[75] Qualified public infrastructure property includes infrastructure property that is either owned by a government, or is not property of a regulated

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[70] Special rules applies to partnerships and S corporations. See sec. 163(j)(4).

[71] See sec. 163(j)(7).

[72] See sec. 168(g)(1)(F) and (8). For an explanation of ADS, see discussion below under "Recovery of investment in infrastructure assets." For a detailed discussion of the requirement for an electing real property trade or business to use ADS for certain assets, see Joint Committee on Taxation, *General Explanation of Public Law No. 115–97* (JCS–1–18), December 2018, pp. 133-139. This document can be found on the Joint Committee on Taxation website at www.jct.gov.

[73] Rev. Proc. 2018-59, 2018-50 I.R.B. 1018, November 26, 2018.

[74] Sec. 4.11 of Rev. Proc. 2018-59. The term "government" is defined for purposes of the safe harbor to include the U.S. or any agency or instrumentality of the U.S., a state or political subdivision of the U.S., including the District of Columbia and any possession or territory of the U.S., or any foreign government. Sec. 4.04 of Rev. Proc. 2018-59.

[75] See sec. 4.07 of Rev. Proc. 2018-59 for the detailed list, a majority of which is defined by reference to section 142 (relating to exempt facility bonds).

public utility business[76] and is owned by a private trade or business that operates under an arrangement in which rates charged for the use of or services provided by the infrastructure property are subject to regulatory or contractual control by a government, or government approval.[77] In addition, the infrastructure property (or services provided by the infrastructure property) must be available for use by (or made available to) the general public, with availability to electric utility, industrial, agricultural, or commercial users on the same basis as individual members of the general public.[78]

Long-term leases of existing transportation infrastructure assets

As described above, the arrangements involving long-term leases of infrastructure assets are intended to be treated for Federal income tax purposes as transfers of three separate property rights from the public owner to the private party, all in exchange for the lump sum cash payment: (1) a "lease" of the infrastructure assets, (2) a lease of the land underlying the infrastructure assets (the right of way), and (3) a grant of an intangible "franchise" right to collect tolls.

For Federal income tax purposes, the "lease" of the infrastructure assets generally is characterized as an outright purchase of those assets by the private party because the private party has acquired all the benefits and burdens of ownership of those assets for a term that significantly exceeds their expected remaining useful lives.[79] Land, by contrast, is deemed for Federal income tax purposes to have a perpetual useful life, and as a result the long-term ground lease would generally be characterized as such.

The concession agreement signed by the parties generally is for a period much longer than the economic useful life of the infrastructure assets, which (along with operating control) is the critical question in determining whether a purported lease should be recharacterized as a purchase of assets for tax purposes.[80] The private party's responsibilities under the agreement

[76] As described in section 163(j)(7)(A)(iv).

[77] Sec. 4.08(1) of Rev. Proc. 2018-59.

[78] Sec. 4.08(2) of Rev. Proc. 2018-59.

[79] Special U.S. tax rules apply to foreign investment in interests in U.S. real property. See secs. 897, 1445, 6039C, and 6652(f). Applicable interests include direct ownership of and leasehold interests in U.S. real property, as well as direct or indirect rights to share in the appreciation of the value of, or in the gross or net proceeds or profits generated by, U.S. real property. The Internal Revenue Service has indicated that, in certain cases, an intangible franchise right may properly be characterized as an interest in real property. Specifically, the Internal Revenue Service is considering issuing proposed regulations regarding the definition of an interest in real property that would address certain licenses, permits, franchises, or other similar rights granted by a governmental unit (including an agency or instrumentality thereof) that are related to the value of the use or ownership of an interest in real property. See Announcement 2008-115, 2008-48 I.R.B. 1228, and REG-130342-08, 73 Fed. Reg. 64901 (October 31, 2008). Such proposed regulations have not yet been issued.

[80] The Bureau of Economic Analysis estimates the service life of highways and streets to be 45 years, while the Chicago Skyway and Indiana Toll Road agreements are for terms of 99 years and 75 years, respectively.

may include all operations of the toll road, risk of loss, payment of utilities, maintenance, taxes, capital improvements, and other liabilities that arise during the term.[81] Accordingly, while the facts and circumstances of each transaction control its tax treatment, the parties may view these arrangements as a sale and purchase of a trade or business, and the concession agreement can be expected to include a provision describing the intended tax treatment in this manner.[82]

Allocation of up-front payment

The large up-front payment made by the private party to the public owner generally is treated as an amount paid to acquire various business assets. As a result, the parties generally must allocate the up-front payment to the following categories: (1) the acquisition of infrastructure assets (such as land improvements, computers, toll booths, and other property used to operate and maintain the highway); (2) a lease of the underlying land; and (3) the acquisition of intangible assets (such as a franchise and license for the right to collect tolls, along with any (generally unstated) goodwill or going concern value).[83] Significant value generally is assigned in public-private partnership arrangements to the intangible franchise right, *i.e.*, the right of the private party to collect tolls from users of the highway. The taxpayer's rationale for this allocation likely is that the right to collect tolls is the main revenue source and is the primary economic motivation for entering into the arrangement.[84]

As discussed below, the tax treatment of the assets in each of these categories varies. The tax allocation of the up-front payment therefore will determine the timing of the tax deductions associated with the investment.

Recovery of investment in infrastructure assets

A taxpayer generally must capitalize the cost of property used in a trade or business or held for the production of income and recover such cost over time through annual deductions for

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See U.S. Department of Commerce, Bureau of Economic Analysis, *BEA Depreciation Estimates*, available at https://apps.bea.gov/national/pdf/fixed assets/BEA_depreciation_2013.pdf.

[81] The terms of an agreement will vary depending on the particular arrangement. For example, the private party may not be required to pay certain real estate, sales, and other taxes. This discussion is not intended to be an exhaustive list of responsibilities.

[82] For example, Section 2.8 of the *Indiana Toll Road Concession and Lease Agreement*, (April 12, 2006) states: "This Agreement is intended for U.S. federal and state income tax purposes to be a sale of the Toll Road Facilities and Toll Road Assets to Concessionaire and the grant to the Concessionaire of an exclusive franchise and license for and during the Term to provide Toll Road Services within the meaning of sections 197(d)(1)(D) and (E) of the Internal Revenue Code of 1986, as amended, and sections 1.197-2(b)(8) and (10) of the Income Tax Regulations thereunder," available at http://www.in.gov/ifa/files/4-12-06-Concession-Lease-Agreement.pdf.

[83] Under section 1060, the parties must allocate purchase price in accordance with the relative fair market value of the assets acquired.

[84] There may also be value in a license by the government for the right of the private party to use the name of the highway.

depreciation or amortization.[85] The period for depreciation or amortization generally begins when the asset is placed in service by the taxpayer.[86] Tangible property generally is depreciated under the modified accelerated cost recovery system ("MACRS"), which determines depreciation for different types of property based on an assigned applicable depreciation method, recovery period,[87] and convention.[88]

The MACRS recovery periods applicable to most tangible personal property range from three to 20 years. The depreciation methods generally applicable to tangible personal property are the 200-percent and 150-percent declining balance methods,[89] switching to the straight line method for the first taxable year where using the straight line method with respect to the adjusted basis as of the beginning of that year yields a larger depreciation allowance.

The recovery periods for most real property are 39 years for nonresidential real property and 27.5 years for residential rental property.[90] The straight line depreciation method is required for the aforementioned real property.[91] In addition, nonresidential real and residential rental property are both subject to the mid-month convention, which treats all property placed in service during any month (or disposed of during any month) as placed in service (or disposed of) on the mid-point of such month.[92] All other property generally is subject to the half-year convention, which treats all property placed in service during any taxable year (or disposed of during any taxable year) as placed in service (or disposed of) on the mid-point of such taxable year.[93]

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[85] See secs. 263(a) and 167. In general, only the tax owner of property (*i.e.*, the taxpayer with the benefits and burdens of ownership) is entitled to claim tax benefits such as cost recovery deductions with respect to the property.

[86] See Treas. Reg. secs. 1.167(a)-10(b), -3, -14, and 1.197-2(f). See also Treas. Reg. sec. 1.167(a)-11(e)(1)(i).

[87] The applicable recovery period for an asset is determined in part by statute and in part by Treasury guidance. See sec. 168, Rev. Proc. 87-56, 1987-2 C.B. 674, and Rev. Proc. 88-22, 1988-1 C.B. 785. The "type of property" of an asset is used to determine the "class life" of the asset, which in turn dictates the applicable recovery period for the asset.

[88] Sec. 168.

[89] Under the declining balance method the depreciation rate is determined by dividing the appropriate percentage (here 150 or 200) by the appropriate recovery period. This leads to accelerated depreciation when the declining balance percentage is greater than 100.

[90] Sec. 168(c).

[91] Sec. 168(b)(3).

[92] Sec. 168(d)(2) and (d)(4)(B).

[93] Sec. 168(d)(1) and (d)(4)(A). However, if substantial property is placed in service during the last three months of a taxable year, a special rule requires use of the mid-quarter convention, which treats all property placed in service (or disposed of) during any quarter as placed in service (or disposed of) on the mid-point of such quarter.

Significant tangible transportation infrastructure assets acquired by the private party in a public-private partnership include the highways and any related bridges.[94] To the extent these assets are classified as land improvements, they are generally recovered using the 150-percent declining balance method, a recovery period of 15 years, and the half-year convention.[95] The roadbed underlying the highway, however, is treated as having an indefinite useful life, and therefore is not depreciable.[96]

Other tangible assets that may be acquired include computers, equipment, toll booths, building structures, and other tangible assets associated with operating and maintaining a toll highway. As with the land improvements, these assets generally are recovered through accelerated depreciation under MACRS using various recovery periods, generally five to seven years, or through straight-line depreciation over 39 years in the case of certain building structures. To the extent several requirements are met (including the property acquired being qualified property, as well as the acquisition and placed in service dates being within the requisite timeframe), an additional first-year depreciation deduction is allowed equal to 100 percent of the adjusted basis of qualified property placed in service before January 1, 2023 (January 1, 2024, for certain property with a recovery period of at least 10 years or certain transportation property).[97]

To the extent any of these assets were originally constructed or acquired with proceeds of tax-exempt bonds, depreciation is calculated under ADS using the straight-line method generally over longer recovery periods.[98] For example, land improvements are recovered over 20 years using the straight-line method if the project is financed with tax-exempt bonds, instead of 15 years under MACRS using the 150-percent declining balance method. The treatment of assets as tax-exempt bond financed property in the hands of the original owner (resulting in use of the longer recovery periods and the straight-line method) continues even if the tax-exempt bonds are

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Sec. 168(d)(3) and (d)(4)(C). Nonresidential real property, residential rental property, and railroad grading or tunnel bore are not taken into account for purposes of the mid-quarter convention.

[94] In addition to acquired tangible assets, the private party may incur capital improvement costs throughout the lease term. The costs of newly constructed assets or improvements will also be recovered through depreciation deductions once placed in service.

[95] Sec. 168(b)(2)(A) and Asset Class 00.3 of Rev. Proc. 87-56. Examples of land improvements include (among other things) sidewalks, roads, canals, waterways, bridges, fencing, and landscaping.

[96] Rev. Rul. 88-99, 1988-2 C.B. 33. In a public-private partnership arrangement, the roadbed is likely included as part of the right-of-way lease of the underlying land. See discussion below, "Recovery of investment in land."

[97] See sec. 168(k). For a detailed discussion of section 168(k), see Joint Committee on Taxation, *General Explanation of Public Law No. 115–97* (JCS–1–18), December 2018, pp. 124-128. This document can be found on the Joint Committee on Taxation website at www.jct.gov.

[98] Sec. 168(g)(1)(C) and (g)(5). The additional first-year depreciation deduction is not available for any property that is required to be depreciated under ADS. Sec. 168(k)(2)(D).

no longer outstanding or are redeemed.[99] Furthermore, any subsequent owners who acquire the property while the tax-exempt bonds are still outstanding are also subject to ADS.[100]

Recovery of investment in land

The amount of any up-front payment allocated to the lease of land generally is generally deductible by the private party for Federal income tax purposes over the term of the lease under section 467. In general, those rules take time value of money concepts into account, and effectively convert the lump-sum amount allocated to the land lease into a constructive loan used to fund a stream of level rent payments.[101]

Recovery of investment in intangible assets

Under section 197, when a taxpayer acquires intangible assets held in connection with a trade or business, any value properly attributable to a "section 197 intangible," such as a franchise right is amortizable on a straight-line basis over 15 years.[102] Additionally, any value attributable to licenses, permits, and other rights granted by governmental units (even if the right is granted for an indefinite period or is reasonably expected to be renewed indefinitely) is subject to 15-year amortization.[103] Goodwill and going concern value similarly are amortized on the same schedule.[104]

Some toll road arrangements have been reported to include revenue-sharing provisions not unlike royalty payments of a typical business franchise. These revenue-sharing provisions are viewed by some as a method for the public party to share in possible future economic upside

[99] Treas. Reg. sec. 1.168(i)-4(d)(2)(ii)(B).

[100] H.R. Rep. No. 97-760, 516 (1982). State and local governments may redeem outstanding tax-exempt bonds prior to the public-private partnership arrangement so that the acquired assets are not subject to ADS rules. To the extent State and local governments retire tax-exempt bonds and taxable bonds are issued or other taxable debt is incurred to finance the private party payment pursuant to a public-private partnership arrangement, the migration from tax-exempt to taxable financing may result in increased Federal tax receipts.

[101] Sec. 467(a).

[102] Sec. 197(a), (c), (d)(1)(F) and (f)(4). A franchise is defined as "an agreement which gives one of the parties to the agreement the right to distribute, sell, or provide goods, services, or facilities, within a specified area." Sec. 1253(b)(1).

[103] Sec. 197(d)(1)(D). Renewals of governmental rights are treated as the acquisition of a new 15-year asset. Treas. Reg. sec. 1.197-2(b)(8). A license, permit, or other right granted by a governmental unit is a franchise if it otherwise meets the definition of a franchise. Treas. Reg. sec. 1.197-2(b)(10). Section 197 intangibles do not include certain rights granted by a government not considered part of the acquisition of a trade or business. Sec. 197(e)(4)(B) and Treas. Reg. sec. 1.197-2(c)(13).

[104] Sec. 197(d)(1). Note that interests in land are specifically excluded from the definition of a section 197 intangible. See sec. 197(e)(2) and Treas. Reg. sec. 1.197-2(c)(3).

from toll collections.[105] To the extent payments are made by the private party pursuant to the arrangement, the revenue-sharing payments may be considered contingent serial payments and deductible in the year paid or incurred.[106] If a payment does not meet the requirements to be treated as a contingent serial payment, the amount may be treated as contingent purchase price allocated to the franchise and recovered over the remaining life of the franchise intangible asset.[107]

Design, build, finance, operate, and maintain new transportation infrastructure assets

Unlike public-private partnerships involving long-term leases of previously existing infrastructure assets, the private party in a DBFOM concession arrangement does not make a large upfront payment to the public agency, and is generally not treated as owning the new infrastructure assets for Federal income tax purposes upon completion of construction.[108] The concession agreement entered into by the parties generally is for a period shorter than the economic useful life of the infrastructure assets.[109] The private party's responsibilities under the agreement are generally to design, build, finance, operate, and maintain the infrastructure assets.[110] In addition, while the concession agreement might require the private party to maintain and repair assets as they wear out, the public agency might be treated as owning those parts and assets for Federal income tax purposes, depending on the terms of the agreement.

While the facts and circumstances of each DBFOM concession arrangement control its tax treatment, upon completion of construction, the parties generally treat these arrangements as a lease of the assets to the private party from the public agency.[111] Accordingly, with respect to public-private partnerships involving the responsibility to design, build, finance, operate, and maintain new infrastructure assets, the main tax issues involve accounting for project construction income and costs, as well as income and expenses from the provision of

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[105] Government Accountability Office, *Highway Public-Private Partnerships, More Rigorous Up-front Analysis Could Better Secure Potential Benefits and Protect the Public Interest*, GAO-08-44 (Washington, DC: February 2008), p. 44.

[106] Sec. 1253(d)(1). In general, contingent serial payments must be payable at least annually throughout the entire term of the agreement in either substantially equal amounts or in amounts based on a fixed formula.

[107] Treas. Reg. sec. 1.197-2(f)(2).

[108] For a more detailed description, see above discussion of DBFOM concession arrangements under "Examples of public-private partnerships."

[109] For example, the Bureau of Economic Analysis estimates the service lives of railroad replacement track and other railroad structures to be 38 and 54 years, respectively, while the Eagle P3 agreement is for a term of 34 years. See U.S. Department of Commerce, Bureau of Economic Analysis, *BEA Depreciation Estimates*, available at https://apps.bea.gov/national/pdf/fixed assets/BEA_depreciation_2013.pdf.

[110] The terms of an agreement will vary depending on the particular arrangement.

[111] See, *e.g.*, Part 2 of the *Regional Transportation District and Denver Transit Partners, LLC Concession and Lease Agreement*, (July 9, 2010), available at http://www.rtd-fastracks.com/ep3_18.

concessionaire services (*e.g.*, for operating and maintaining the infrastructure assets).[112] In addition, the private party may finance the costs of any payments to the public agency and/or its costs of performing construction and concessionaire services.[113]

Project construction income and costs

A long-term contract is defined as any contract for the manufacture, building, installation, or construction of property when such contract is not completed within the same taxable year in which the contract was entered into.[114] Thus, since the construction of the infrastructure assets by the private party is in connection with a long-term contract with the public agency (*i.e.*, a contract for the construction of property that spans more than one tax year), section 460 generally applies to the private party's construction activities. Note, however, that the private party's operation and maintenance activities under the DBFOM concession agreement are not subject to section 460, but rather should be accounted for using a permissible method of accounting other than a long-term contract method.[115]

Under section 460, the private party generally accounts for its construction income and costs using the percentage-of-completion method of accounting.[116] Under this method, the taxpayer must include in gross income for the taxable year an amount equal to the product of (1) the gross contract price, and (2) the percentage of the contract completed during the taxable year.[117] The percentage completed during the taxable year is determined by comparing costs allocated to the contract and incurred before the end of the taxable year with the estimated total contract costs.[118] Costs allocated to the contract typically include all costs (including depreciation and production period interest) that directly benefit or are incurred by reason of the

[112] With respect to the tax treatment of any rights of way necessary to construct, operate, and maintain the infrastructure assets, see discussion above under "Long-term leases of existing transportation infrastructure assets."

[113] With respect to the deductibility of interest, see discussion above under "Interest Expense."

[114] Sec. 460(f)(1). See also Treas. Reg. sec. 1.460-1(b)(1). However, a contract for the manufacture of property is not considered a long-term contract unless the contract involves the manufacture of (1) any unique item of a type which is not normally included in the finished goods inventory of the taxpayer, or (2) any item which normally requires more than 12 calendar months to complete. Sec. 460(f)(2).

[115] See Treas. Reg. sec. 1.460-1(d) and (e) (requiring the bifurcation of a contract into two (or more) contracts for purposes of the tax accounting rules if the contract covers activities that are subject to section 460 (*e.g.*, construction) and activities not subject to section 460 (*e.g.*, operation and maintenance services).

[116] Sec. 460(a).

[117] See Treas. Reg. sec. 1.460-4. This calculation is done on a cumulative basis. Thus, the amount included in gross income in a particular year is that proportion of the expected contract price that the amount of costs incurred through the end of the taxable year bears to the total expected costs, reduced by the amounts of gross contract price included in gross income in previous taxable years.

[118] Sec. 460(b)(1).

taxpayer's long-term contract activities.[119] The allocation of costs to a contract is made in accordance with regulations.[120] Costs incurred with respect to the long-term contract are deductible in the year incurred, subject to general accrual method of accounting principles and limitations.[121] Upon the completion of a long-term contract, a taxpayer must pay (or receive as a refund) interest computed under the look-back method to the extent that taxes in a prior contract year were underpaid (or overpaid) due to the use of estimated contract price and costs rather than the actual contract price and costs.[122]

As previously noted, the private party in a DBFOM concession agreement generally is not treated as owning the infrastructure assets being constructed; rather the public agency is contracting with the private party for the construction of new infrastructure assets that the public agency will own. Thus, upon completion of the construction phase, the private party generally does not own any assets subject to depreciation or amortization.[123]

Issues may arise during the operation and maintenance phase of the concession agreement if the private party is responsible for repair and maintenance costs, and is treated for tax purposes as owning any improvements made, based on the terms of the agreement.[124] In general, unless the private party's construction of improvements on leased property are intended by the parties to constitute rent, the private party's improvement costs should be capitalized and depreciated by the private party. Depreciation allowances for improvements made on leased property are determined under MACRS (as discussed above), even if the MACRS recovery period assigned to the property is longer than the term of the lease.[125]

Concessionaire income and expenses

The private party in a DBFOM concession arrangement generally accounts for its concessionaire income and expenses not subject to section 460 (*e.g.*, income and expenses related to its operation and maintenance activities under the concession agreement) using its

[119] See sec. 460(c).

[120] Treas. Reg. sec. 1.460-5.

[121] Treas. Reg. secs. 1.460-4(b)(2)(iv) and 1.460-1(b)(8).

[122] Sec. 460(b)(2). The rate of interest for both underpayments and overpayments is the rate applicable to overpayments of tax under section 6621. Sec. 460(b)(2)(C) and (b)(7).

[123] See also section 263A(c)(4) (exempting costs accounted for under section 460 from the general capitalization requirements of section 263A).

[124] Treasury regulations provide that a taxpayer may deduct the repair and maintenance costs of tangible property if such amounts are not otherwise required to be capitalized. Treas. Reg. sec. 1.162-4(a). Section 263(a)(1) prohibits a current deduction for certain capital expenditures. Treasury regulations generally require taxpayers to capitalize amounts paid or incurred that are for a betterment to a unit of property, restore a unit of property, or adapt a unit of property to a new or different use. Treas. Reg. sec. 1.263(a)-3(d).

[125] Sec. 168(i)(8); Treas. Reg. sec. 1.167(a)-4.

methods of accounting for such items of income and expense (*e.g.*, a cash, accrual, or special method of accounting).[126] Taxpayers using the cash method generally recognize items of income when actually or constructively received and items of expense when paid.[127] Taxpayers using an accrual method generally accrue items of income when all the events have occurred that fix the right to receive the income and the amount of the income can be determined with reasonable accuracy.[128] Taxpayers using an accrual method of accounting generally may not deduct items of expense prior to when all the events have occurred that fix the obligation to pay the liability, the amount of the liability can be determined with reasonable accuracy, and economic performance has occurred.[129]

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[126] See sec. 446(c) and Treas. Reg. 1.446-1(a)(1).

[127] A C corporation, a partnership that has a C corporation as a partner, or a tax-exempt trust or corporation with unrelated business income generally may not use the cash method. Exceptions are made for the aforementioned entities to the extent their average annual gross receipts do not exceed $25 million for the three prior taxable-year period. Sec. 448(b) and (c). The cash method may not be used by any tax shelter. Secs. 448(a)(3) and (d)(3) and 461(i)(3) and (4).

[128] See sec. 451.

[129] See sec. 461. For example, in the case of services or property provided by the taxpayer to others, economic performance occurs as the taxpayer provides such services or property. Sec. 461(h)(2)(B).