Transportation Public Finance Statistics (TPFS)

Technical Documentation

July 2024

U.S. Department of Transportation
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Acknowledgments

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Acronyms and Abbreviations

AATF	Airport and Airway Trust Fund
ARIMA	Autoregressive Integrated Moving Average
BEA	Bureau of Economic Analysis
BTS	Bureau of Transportation Statistics
CATS	Certification Activity Tracking System
CSV	Comma Separated Values
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GTFS	Government Transportation Financial Statistics
HTF	Highway Trust Fund
NTD	National Transit Database
OMB	Office of Management and Budget
PHMSA	Pipeline and Hazardous Materials Safety Administration
S&L	State and Local
TET	Transportation Economic Trends
TPFS	Transportation Public Finance Statistics

1.0 Introduction

The Bureau of Transportation Statistics (BTS) produces the Transportation Public Finance Statistics data series (TPFS), which summarizes aggregate annual public sector cash flows related to transportation. TPFS data comprise transportation revenues and expenditures, including federal transfers to state and local governments. Data are presented by transportation mode, level of government, and revenue or expenditure type.

BTS developed a new tool that allows users to create and view customizable tables with transportation-related revenue, expenditure, and transfers. The tool allows users to filter the data by level of government, revenue type, expenditure type, whether the funds are from a trust fund, transportation mode, and year. Data are available in current or inflation-adjusted (chained) dollars. The data show trust fund expenditure at the level where it is spent. For example, federal trust fund money allocated to state and local governments appears in state and local expenditure.

The TPFS Technical Documentation provides detailed information about how the TPFS is developed including the content of the data tabulation tool, data visualizations, estimation methodology, and inflation approach. Visit the TPFS User Guide for general information on the TPFS scope and key concepts, terminology and definitions, example use cases, TPFS limitations, and a list of frequently asked questions.

Check out the TPFS User Guide.

The Technical Documentation has six sections:

1. Introduction
2. TPFS Data Structure
3. Data Sources
4. TPFS Development
5. Inflation Adjustment
6. Appendices

1.1 TPFS BACKGROUND

TPFS replaces the Government Transportation Financial Statistics (GTFS) data series. TPFS improves the data series in two key ways—by increasing the data granularity and releasing preliminary estimates.

TPFS provides additional information not found in the GTFS, such as the following:

- Federal trust fund cash flows vs. other federal cash flows.
- The split between capital and non-capital expenditure.
- Splits among user-based, own-source, and supporting revenue categories, including recategorizing some revenue earned by transit agencies to facilitate comparisons across modes.

1.2 TPFS RELEASE SCHEDULE

TPFS data are published in preliminary and final releases each year (Table 1). Each June, BTS publishes preliminary TPFS data for the calendar year closing 18 months prior (e.g., the preliminary TPFS release in June 2024 will contain preliminary data for calendar year 2022). This preliminary data release includes estimates for the small fraction of total elements in which actual data are not yet available. These estimated elements account for approximately 2 percent of total annual cash flows. Each December, BTS publishes final TPFS data for the same calendar year once actual data for *all* estimated values are available (e.g., the final TPFS release in December 2024 will contain actual data for calendar year 2022).

Table 1. Annual TPFS Release Schedule

Annual TPFS Release Schedule	
Preliminary data release (contains estimates)	June
Final data release	December

2.0 TPFS Data Structure

TPFS includes a new interactive data tabulation tool that allows users to create and view customizable tables that show transportation-related revenue, expenditure, and transfers. This tool shows the data in current or inflation-adjusted (chained) dollars.

Explore the TPFS interactive data tabulation tool.

TPFS categorizes revenue and expenditure based on the level of government that collects or spends the funds, respectively. The TPFS methodology does not include fund transfers from the Federal Government to other levels of government (e.g., grants) in federal expenditure. TPFS reports these cash flows as federal transfers. Expenditure of transferred funds are included in state and local expenditure. For example, federal trust fund money allocated to state and local governments appears in the state and local expenditure portion of aggregate public cash flows.

TPFS also distinguishes federal cash flows for transportation associated with federal trust funds from general fund cash flows. Many states also have transportation trust funds, which are included in state and local cash flows. Only federal trust fund cash flows are specifically tracked in TPFS.

2.1 TPFS DATA TABULATION TOOL

The TPFS data tabulation tool includes the following preset tables for years 2010, 2021, and 2022:

- Expenditure by mode and total expenditure;
- Revenue by mode and total revenue;
- Transportation revenue by level of government, type, and mode;
- Transportation expenditure by level of government and mode; and
- Federal transportation expenditure by mode.

These tables can be used as a starting point; through the dropdown options above the table, additional complexity can be added to the tables.

The tool can also be used to create custom tables. By clicking the headline “Or Create Custom Table (or customize table selected above),” tables can be customized by cash flow type, government level, trust fund, mode, revenue source, revenue type, expenditure type, and reference year. The data in the table can be downloaded into a CSV file.

Figure 1 and Figure 2 provide sample views of the new TPFS data tabulation tool user interface.

Figure 1. TPFS Data Tabulation Tool Interface

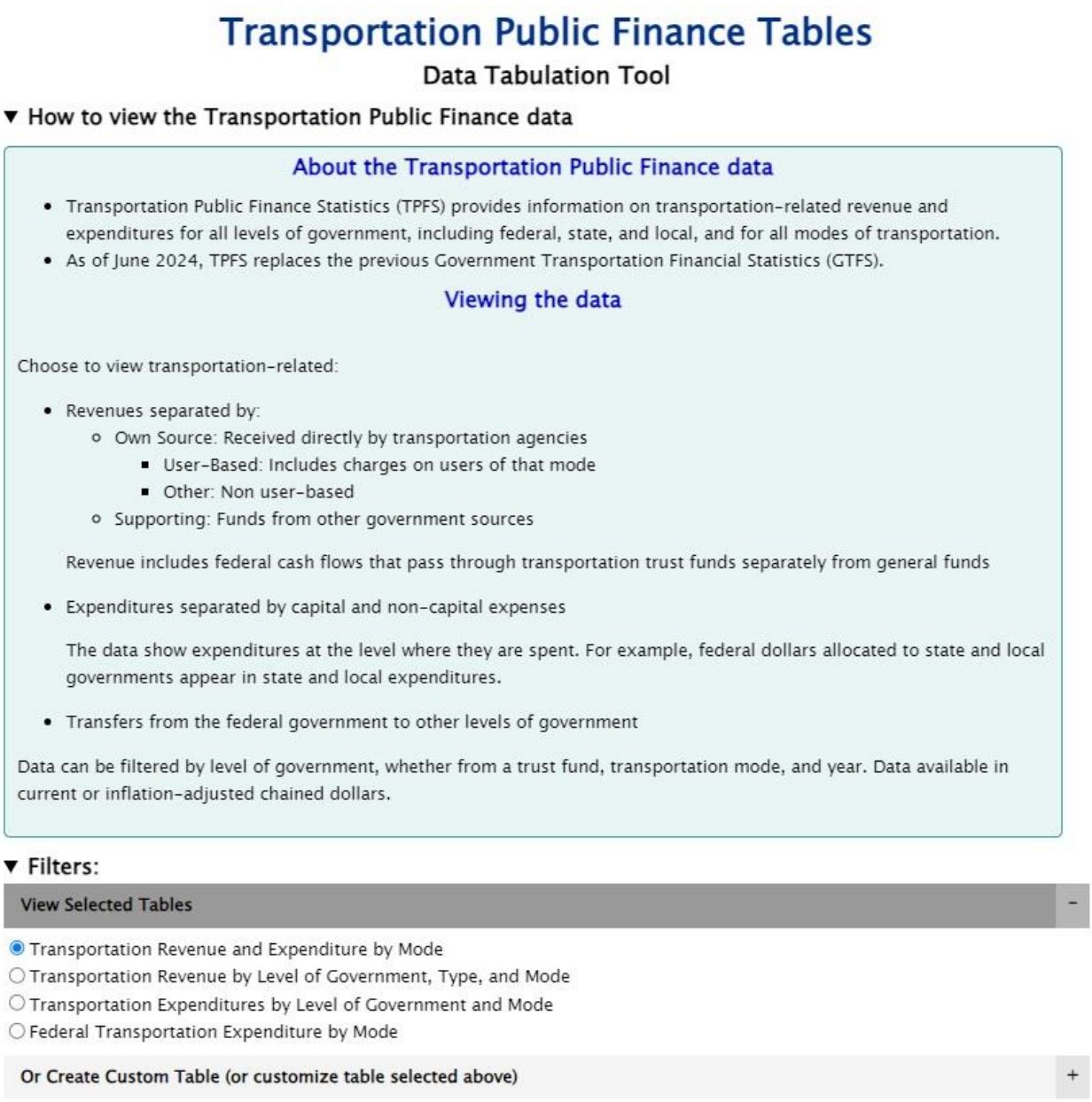


Figure 2. Sample TPFS View*

◉ Current dollars
○ Inflation-adjusted (chained 2017 dollars)

Download Table as CSV file.

Full dataset at data.bts.gov

Cash flow	Transportation mode	Dollars in 2010 (current)	Dollars in 2021 (current)	Dollars in 2022 (current)
Expenditure	Highways	191,365,191,000	247,111,054,000	254,495,664,091
	Transit	54,442,448,853	74,011,963,125	80,526,148,712
	Air	41,551,556,393	62,271,589,298	58,692,359,435
	Water	16,736,958,670	21,745,072,232	22,338,719,440
	Railroads	4,970,225,000	5,706,500,000	6,569,500,000
	Pipeline	170,000,000	270,000,000	280,000,000
	General	373,000,000	484,000,000	382,000,000
Total Expenditure	Total	309,609,379,916	411,600,178,655	423,284,391,678
Revenue	Highways	199,044,168,174	251,342,177,747	348,282,310,165
	Transit	54,397,351,716	77,443,214,331	121,689,344,910
	Air	42,154,657,190	58,486,447,175	56,474,937,735
	Water	15,825,433,688	21,914,264,395	22,341,143,384
	Railroads	5,312,285,000	7,128,400,000	5,795,900,000
	Pipeline	152,000,000	267,453,129	281,000,000
	General	373,000,000	484,000,000	382,000,000
Total Revenue	Total	317,258,895,768	417,065,956,777	555,246,636,194

* The values shown in the table may differ from those obtained from future releases of the TPFS.

2.2 TPFS TREND REPORTING

On the BTS Transportation Economic Trends (TET) pages, there are three TPFS pages that detail the trends in revenue, expenditure, and revenue vs. expenditure.

1. The Government Transportation Revenue page provides an overview of the trends in revenue from the most recent year of TPFS data. The page shows charts of transportation revenue by level of government, types of revenue by level of government, and revenue by mode. The charts display the data in current dollars or inflation adjusted (chained) dollars.
2. The Government Transportation Expenditure page provides an overview of the trends in expenditure from the most recent year of TPFS data. The page shows charts of total government transportation expenditure by level of government, expenditure by expenditure type and level of government, and expenditure by mode. The charts display the data in current dollars or inflation adjusted (chained) dollars. The page shows U.S. Census expenditure data by state and a section about Public-Private Partnerships—P3s.

3. The Government Transportation Revenue vs. Expenditure page provides an overview of the trends in revenue compared to expenditure from the most recent year of TPFS data. The page shows charts of revenue compared to expenditure by level of government and funding type, and revenue compared to expenditure by mode. The charts display the data in current dollars or inflation adjusted (chained) dollars. There is also a section that shows transportation revenue and expenditure by state and local governments and by mode.

2.3 DOWNLOADING DATA

The full dataset can be downloaded.

2.4 TROUBLESHOOTING

Having trouble?

Contact BTS: 202-366-DATA(3282) or answers@dot.gov.

Or ask a librarian.

3.0 Data Sources

Table 2 provides a high-level overview of the data sources used to develop TPFS products. Appendix A provides extensive detail about each source.

Table 2. TPFS Data Source Summary

Source	Owner	Mode(s)	Sources for Data Estimated in Preliminary Release	Approx. Source Data Publication Timing
Office of Management and Budget President's Budget Database	The White House	Transit, Air, Rail, Water, Pipelines, General Support	-	6 months after reference year
Treasury Bulletin	U.S. Department of the Treasury	Air, Water, Pipelines	-	6 months after reference year
Highway Statistics	Federal Highway Administration (FHWA)	Highways, Transit	Highways (Tables LDF, LGF-2, and LGF-21)	**SDF[1]:** 12 months after reference year **FE-10[1]:** 13 months after reference year **SF-1, SF-2[1]:**15 months after reference year **FA-5[1]:** 17 months after reference year **LDF, LGF-2, LGF-21[1]:** 24 months after reference year
National Transit Database	Federal Transit Administration (FTA)	Transit	-	14 months after reference year
Certification Activity Tracking System (CATS)	Federal Aviation Administration (FAA)	Air	-	4 months after reference year
Amtrak Annual Report and Audited Financial Statements	Amtrak	Rail	-	3 months after reference year
U.S. Census Survey of State and Local Governments	U.S. Census	Highways, Water	Highways, Water (U.S. Summary & State Estimates Tables)	24 months after reference year

[1] SDF, FE-10, SF-1, SF-2, FA-5, LDF, LGF-2, and LGF-21 are FHWA Highway Statistics table names.

4.0 TPFS Development

4.1 OVERVIEW

A majority (75 percent) of TPFS data sources are consistently available within 12 to 17 months of the end of the reference year (year when the revenue was raised or the expenditure was made), but some key tables take several months longer to compile and therefore delay the preparation and publication of TPFS. These include the following FHWA Highway Statistics and U.S. Census tables dealing with local government revenue and expenditure, which are typically not published until 24 months after the reference year:

- Federal Highway Administration (FHWA) Highway Statistics, Table LDF: Disposition of local government receipts from state and local highway-user imposts, including tolls[2];
- FHWA Highway Statistics, Table LGF-2: Disbursements by local governments for highways[3];
- FHWA Highway Statistics, Table LGF-21: Summary of local government funding for highways[4]; and
- U.S. Census, U.S. Summary & State Estimates Tables: Parking and sea and inland port facilities revenue and expenditure.

Each June, BTS will release the Preliminary TPFS, which will include linear estimates of the unavailable data, which account for about 2 percent of the total value of cash flows for the year. Each following December, BTS will publish the Final TPFS, which incorporates actual values.

[2] Table LDF summarizes local governments' receipts from motor-fuel taxes, motor-vehicle fees, special imposts on motor carriers, and tolls. This table includes receipts from state imposts that are transferred to local governments for distribution.

[3] Table LGF-2 summarizes the receipts and disbursements for highways by local governments, including toll facilities. Local government reporting is on a biennial basis with even-numbered years optional. Disbursements are the distributed revenue by local governments. This table is compiled from the reports of state and local governments.

[4] Table LGF-21 summarizes the receipts and disbursements of local governments for highways. Local government reporting is on a biennial basis with even-numbered years optional. This table is compiled from the reports of state and local governments.

4.2 PRELIMINARY TPFS RELEASE

BTS uses a time-series linear model to estimate the lagging data used in the Preliminary TPFS. This model uses 11 years of historical data where the single independent variable, the year, is used to estimate the dependent variable, the lagging data. Table 3 summarizes the Highway Statistics and Table 4 summarizes the U.S. Census source tables and data elements estimated in the Preliminary TPFS.

Table 3. Estimated Highway Statistics Data Elements

Source Table ID	Source Table Name	Data Element Estimated	Aggregated TPFS Value
LGF-2	Disbursements by local governments for highways	Capital Outlays	State & Local Expenditure
		Maintenance	
		Snow Removal	
		Other Traffic Services	
		Admin And Misc.	
		Law Enforcement and Safety	
		Interest	
LGF-21	Summary local government funding for highways	Appropriations from General Fund, Local	State & Local Revenue (Supporting)
		Property Taxes, Local	
		Other Local Imposts, Local	
		Miscellaneous, Local	
LDF	Disposition of local government receipts from State and local highway-user imposts, including tolls	Local Toll Revenue for Highway	State & Local Revenue (Own-Source)
		Local Motor Fuel Receipts for Highway	
		Local Toll Revenue for Transit	

Table 4. Estimated U.S. Census Data Elements

Source Table Name	Data Element Estimated	Aggregated TPFS Value
U.S. Summary & State Estimates Tables	Parking Facilities	State & Local Expenditure
U.S. Summary & Alabama-Mississippi	Sea and Inland Port Facilities	
U.S. Summary & State Estimates Tables	Parking Facilities	State & Local Revenue
U.S. Summary & Alabama-Mississippi	Sea and Inland Port Facilities	

4.2.1 Estimating Lagging Data

The method BTS uses to estimate lagging data strikes a balance between accuracy and simplicity. Comparing multiple estimation strategies, BTS found that the linear estimation technique performed just as well as and sometimes better than more complicated estimation methodologies.

The time-series linear estimation model uses a 11-year inclusive range of historical data (e.g., 2011–2021) providing 11 data inputs into the linear model. The functional form of the equation is shown in Figure 3 where:

- y_t is the data element estimated, includes 11 years of historical data (state and local highway expenditures, state and local highway revenues, and state and local items from Census) in year "t", the subscript “t” being the year for that data point.
- “year” is the year, including the last 11 years.
- B_{1t} is the slope of the estimation line, B_0 is the Y intercept, and u_t is the error term.

Figure 3 Excel Linear Forecast Equation Functional Form

$$y_t = B_0 + B_{1t} * year + u_t$$

4.3 DATA PRODUCT PREPARATION

BTS uses a long-format data set that contains historical values from 2010 in addition to estimates starting in 2022. The long-format data is created by pulling the data items from their respective sources described in Appendix A. BTS uploads the data into Socrata, where the full data set is publicly accessible. From Socrata, the data is passed to the Tableau visualizations in TET and the Data Tabulation Tool.

4.4 QUALITY ASSURANCE

To assure quality of TPFS data before publication, BTS reviews the percentage difference in the latest year's estimated and non-estimated values compared to the previous year's data. BTS flags and investigates potential discrepancies in which higher than expected differences exist before publication. BTS takes the following into account as part of the quality assurance process:

- Federal cash flows— federal trust fund and non-trust fund cash flows tend to exhibit different patterns.
    - Trust Fund— Federal trust fund expenditures are typically supported by user-based revenue, but trust funds for certain modes also receive periodic infusions of general fund revenue (highway, transit, air). As a result, total trust fund revenue for these modes can vary considerably and include large amounts of supporting revenue in certain years. The addition of general funds allows annual trust fund expenditure to exceed user-based revenue into the trust fund.
    - Non-Trust Fund— For non-trust fund cash flows, revenue and expenditure are typically equal. However, the amount of these cash flows may be highly variable as the federal government often increases general fund revenue to support additional expenditure or transfers during times of economic crisis or to introduce new policy initiatives.
- State and local cash flows— Total state and local funds available are typically close to expenditure amounts. The difference between the two is largely due to proceeds from debt issues. Some modal sources, such as air, report annual bond proceeds. Although proceeds from debt are not included in TPFS, this amount can serve as an additional reference point to check the total cash flows for the mode.

4.5 FINAL TPFS RELEASE

BTS will release the Final TPFS 6 months after publication of the Preliminary TPFS. The exact timing of its publication depends on the release of relevant Highway Statistics tables from FHWA. The Final TPFS supersedes the estimated Preliminary TPFS.

4.6 CAVEATS

Every estimation approach includes some level of error. BTS selected the time-series linear model due to similar error margins to the more complex Autoregressive Integrated Moving Average (ARIMA) models. The best performing model with the smallest prediction error, defined as the difference between the actual value and the estimate, however, may vary from year to year. Appendix B details error calculations. BTS may revisit the estimation strategy if other strategies start performing consistently better than the current strategy.

The timeline of FHWA's release of Highway Statistics tables used in the estimates (i.e., LGF-2, LGF-21, and LDF) vary from year to year; FHWA typically makes the data available by

November or December. Later publications of these tables may result in delayed publication of the Final TPFS.

5.0 Inflation Adjustment

The Bureau of Economic Analysis (BEA) uses a chaining approach, called the Fisher ideal price index, to create price indices. BTS replicates this process in adjusting TPFS data for inflation. Key inflation adjustment terms are defined as follows:

- **Current dollars** depict the dollar value of a good or service in terms of the price that is current at the time the good or service is sold. This contrasts with the value of the good or service measured in constant (or real) dollars.
- **Real dollars**, also known as constant dollars, are adjusted for inflation to better reflect real changes in any dollar denominated time series. BTS adjusts the TPFS into real dollars to give a more accurate picture of changes over time.
- **Chaining** is a method of adjusting real dollar amounts for inflation over time using a set of weights and averages. When a data series has different components, whose prices change at different rates over time, economists often use a process called chaining to compile the series.

The Fisher ideal price index is a geometric mean of a Laspeyres and a Paasche price index. The change in the index falls between the changes in the Paasche and Laspeyre price indexes. The annual changes in a Fisher price index are chained (multiplied) together using weights from two adjacent years to form a time series of changes. For example, the 1998–1999 annual percent change in prices uses quantities for 1998 and 1999 as weights, and the 1999–2000 annual percentage changes in prices uses quantities for 1999 and 2000 as weights.[5]

Table 5 shows how BTS adjusts the TPFS into real dollars after calculating the Fischer ideal price index. Appendix C details how BTS chained TPFS data.

Table 5. Deriving Real Dollars

Type of Measure	Year 1	Year 2	Year 3 (base year)	Year 4	Year 5
Nominal Dollars	$304	$304	$314	$309	$324
Fischer Ideal Price Index	0.9572	0.9946	NA	0.9622	1.034
Real Dollars (chained Year 3 dollars)	=Year 2 Real dollars/.9572 =$316/.9572 =$330	=Year 3 Real dollars/.9946 =$314/.9946 =$316	=$314	=.9622* Year 3 Real dollars = .9622*$314 =$302	=1.0340*Year 4 Real dollars =1.0340*$302 =312

[5] More information on the Fisher ideal price index as used by BEA can be found here: https://apps.bea.gov/scb/account_articles/national/0597od/maintext.htm

Appendix A: Data Compilation

HIGHWAYS

Data Source — Highway Statistics

Table — **FE-10**

Example of table appearance:

Figure 4. Highway Statistics FE-10, July 2024

ITEM	HIGHWAY ACCOUNT	MASS TRANSIT ACCOUNT 2/	TOTAL
I. Opening balance:			
A. Investments - U.S. Treasury special certificates of indebtedness	7,104,633,469.52	4,938,719,173.93	12,043,352,643.45
B. Uninvested - held by Bureau of the Fiscal Service	4,686,111,070.99	700,732,431.50	5,386,843,502.49
C. Uninvested - held by program agencies	2,473,358,790.78	1,238,938,750.82	3,712,297,541.60
D. Total balance	14,264,103,331.29	6,878,390,356.25	21,142,493,687.54
II. Receipts:			
A. Gross excise taxes (transferred General Fund receipts)			
1. Gasoline	23,577,587,716.35	4,367,355,551.09	27,944,943,267.44
2. Diesel and special motor fuels	11,520,754,096.82	1,532,412,697.60	13,053,166,794.42
3. Tires	712,989,420.58	0.00	712,989,420.58
4. Trucks and trailers	4,623,252,202.17	0.00	4,623,252,202.17
5. Federal use tax	1,585,394,151.08	0.00	1,585,394,151.08
6. Total excise taxes	42,019,977,587.00	5,899,768,248.69	47,919,745,835.69
B. Transfers to other funds			
1. To Land and Water Conservation Fund	840,000.00	160,000.00	1,000,000.00
2. To Sport Fish Restoration and Boating Trust Fund	393,658,000.00	49,842,000.00	443,500,000.00
3. To Airport and Airway Trust Fund & General Fund (aviation kerosene)	760,940,075.01	101,509,868.67	862,449,943.68
4. Total	1,155,438,075.01	151,511,868.67	1,306,949,943.68
C. Net excise taxes	40,864,539,511.99	5,748,256,380.02	46,612,795,892.01
D. Interest income			
1. Interest on investments (cash basis) 3/	728,164,404.97	249,763,130.76	977,927,535.73
2. Interest under Cash Management Improvement Act (net)	49,681.00	0.00	49,681.00
3. Total	728,214,085.97	249,763,130.76	977,977,216.73
E. Other income			
1. Motor carrier safety fines and penalties	15,844,191.19	0.00	15,844,191.19
2. Civil tax penalties related to highway excise taxes	(87,795.00)	0.00	(87,795.00)
3. Traffic safety fines and penalties	2,909,643.65	0.00	2,909,643.65
4. Transfer from General Fund per P.L. 114-94	90,000,000,000.00	28,000,000,000.00	118,000,000,000.00
5. Total	90,018,666,039.84	28,000,000,000.00	118,018,666,039.84
F. Total receipts	131,611,419,637.80	33,998,019,510.78	165,609,439,148.58

Approx. Availability — 13 months after reference year

Description — Cash flows to and from the Highway Trust Fund Highway and Mass Transit Accounts.

Units — Millions of dollars

Calculations — Highway Trust Fund (HTF) transfers to FHWA is a reference item used to calculate trust fund transfers to State and Local (S&L) from FHWA by subtracting direct trust funded expenditures.

Data Modifications — None

Other Resources — The Treasury Bulletin issued in March or June provides an annual report on the prior fiscal year's trust fund cash flows; other issuances of the Treasury Bulletin contain less detailed information. If table FE-10 is

	unavailable or if inconsistencies are noted, the Treasury Bulletin can be consulted as an alternative source.
Notes	None

Data Source	Highway Statistics
Table	**SDF**
Approx. Availability	12 months after reference year
Description	State highway-user revenues, including motor fuel tax, motor vehicle tax and fee, and state toll receipts. Receipts used for general purposes are not included in TPFS compilation.
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	This table summarizes data reported in greater detail in Tables MF-3, MV-3, SF-3B, and SF-4B.
Notes	Toll revenues are reported to Highway Statistics on a voluntary basis and are thus incomplete as not all states opt to report, and many only report revenues from some toll agencies.[6] Sometimes prior year data are used for some states if the reference year data are not available.

Data Source	Highway Statistics
Table	**LDF**
Approx. Availability	24 months after reference year
Description	Summarizes local governments' receipts from motor-fuel taxes, motor-vehicle fees, special imposts on motor carriers, and tolls. This table includes receipts from state imposts that are transferred to local governments for distribution, but these amounts are not included in TPFS compilation.
Units	Thousands of dollars
Calculations	None

[6] As of 2023, FHWA is planning to change from voluntary reporting to required submission of financial statements for toll agencies from which toll revenue data would be compiled by FHWA. This forthcoming methodological change may result in changing trends for Data Item 9, state toll revenues used for highways.

Data Modifications	None
Other Resources	See Tables LGF-21 and LGF-3B for a more detailed treatment of this data.
Notes	Local government reporting is on a biennial basis with even-numbered years optional. FHWA estimates data for states that opt not to report in even-numbered years and for states that are delayed in their reporting in other years.

Data Source	Highway Statistics
Table	**FA-5**
Approx. Availability	17 months after reference year
Description	Receipts and expenditures for highways by federal agencies.
Units	Millions of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	TPFS always sums table entries rather than relying on subtotals, as these are often incorrect. The Payments to (and expenditures in) Territories column moves around within the FA-5 table and sometimes appears twice.

Data Source	Highway Statistics
Table	**SF-1**
Approx. Availability	15 months after reference year
Description	Summary of revenues and other funds used by states for highways. The table provides data on highway-user revenues, bond proceeds, and payments from other governments, but only data regarding general, miscellaneous, and other state funds are included in TPFS compilation.
Units	Thousands of dollars
Calculations	None
Data Modifications	None

Other Resources	None
Notes	None

Data Source	Highway Statistics
Table	**LGF-21**
Approx. Availability	24 months after reference year
Description	Summary of revenues and other funds used by local governments for highways and expenditures for highways. Only data regarding general funds, property taxes, and other funds are included in TPFS compilation.
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	Some data items are estimated by FHWA.

Data Source	Highway Statistics
Table	**SF-2**
Approx. Availability	15 months after reference year
Description	State disbursements for highways
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	Some data items are estimated by FHWA.

Data Source	Highway Statistics

Table	**LGF-2**
Approx. Availability	24 months after reference year
Description	Local government disbursements for highways
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	Local government reporting is on a biennial basis with even-numbered years optional. FHWA estimates data for states that opt not to report in even-numbered years and for states that are delayed in their reporting in other years.

Data Source [Census Annual Survey of State and Local Government Finances]

Table **US Summary & State Estimates Tables**

Example of table appearance:

Figure 5. Census US Summary & State Estimates Tables, July 2024

	Description	United States Total				
		State & local government amount[1]	State & local government CV	State government amount	Local government amount[1]	Local government CV
		1	2	3	4	5
Line	Description	C1	C2	C3	C4	C5
1	Revenue1	5,731,179,510	0.04	3,975,040,333	2,395,164,866	0.11
2	General revenue1	4,076,400,107	0.05	2,690,251,254	2,025,174,543	0.11
3	Intergovernmental revenue1	1,120,200,979	0.04	1,006,124,537	753,102,131	0.10
4	From Federal Government	1,120,200,979	0.04	987,662,731	132,538,248	0.31
5	From State government1	0	0.00	0	620,563,883	0.10
6	From local governments1	0	0.00	18,461,806	0	0.00

Approx. Availability 24 months after reference year

Description Revenue, expenditure, debt, and assets for the 50 states and D.C. Only data on state and local cash flows related to parking are included in TPFS highways data compilation.

Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	As of the 2021 data release parking revenues and expenditures were line items 30 and 89, respectively. Note that line-item numbers change over time.

TRANSIT

Data Source	Highway Statistics
Table	**FE-10**
Approx. Availability	13 months after reference year
Description	Cash flows to and from the Highway Trust Fund's Highway and Mass Transit Accounts.
Units	Millions of dollars
Calculations	None
Data Modifications	None
Other Resources	The Treasury Bulletin issued in March or June provides an annual report on the prior fiscal year's trust fund cash flows; other issuances of the Treasury Bulletin contain less detailed information. If table FE-10 is unavailable or if inconsistencies are noted, the Treasury Bulletin can be consulted as an alternative source.
Notes	None

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
	Example of table appearance:

Figure 6. OMB Outlays XLSX, July 2024

Agency Code	Agency Name	Bureau Code	Bureau Name	Account Code	Account Name	Treasury Agency Code	Subfunction Code
001	Legislative Branch	00	Legislative Branch		Receipts, Central fiscal operations		803
001	Legislative Branch	00	Legislative Branch		Receipts, Central fiscal operations		908
001	Legislative Branch	00	Legislative Branch	241400	Charges for services to trust funds		803
001	Legislative Branch	05	Senate	0000	Senate		801

Subfunction Code	Subfunction Title	BEA Category	Grant/non-grant split	On- or Off- Budget	1962	1963	1964	1965
803	Central fiscal operations	Mandatory	Nongrant	On-budget	-628	-390	-469	-413
908	Other interest	Net interest	Nongrant	On-budget	0	0	0	-8
803	Central fiscal operations	Mandatory	Nongrant	On-budget	0	0	0	0
801	Legislative functions	Discretionary	Nongrant	On-budget	26946	29310	29914	33261

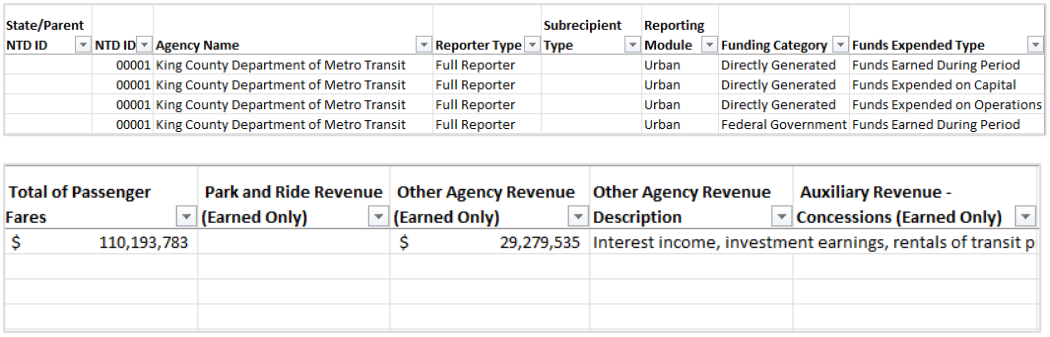
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	Federal funds transferred to S&L (sum of all non-grant FTA accounts) is a reference item used to calculate non-trust fund transfers to S&L from FTA by subtracting highway trust fund mass transit account transfers to S&L.
Data Modifications	For 2020, data elements were modified to include non-grant outlays for the Transit Infrastructure grant program in the total of all grant accounts and exclude this amount from the non-grant outlay total. This approach is consistent with prior GTFS reporting and validated by the description of the program and outlays provided in the Budget Appendix.
Other Resources	Federal transfer (grant) programs typically have two or more accounts in the Budget Database, for non-grant administrative outlays (direct federal expenditure) and grant outlays (transfers). Occasionally, especially when new programs are introduced, grant outlays may be incorrectly recorded as non-grant. If any of the following are noted, additional research may be needed to determine whether the data should be modified. • Orders of magnitude larger than typical non-grant outlays in a single year • An account with grant in the name that has only non-grant outlays The Budget Appendix provides a narrative description of programs and outlays. If inconsistencies are noted in the Budget Database, the Budget Appendix can be consulted as an alternative source of information on the purpose of program accounts and their outlays. A text search for the outlay account number in question can help locate the appropriate section quickly, or users can navigate by agency and account name.
Notes	None

Data Source [FTA National Transit Database]

Table **Annual Database, Revenue Sources**

Example of table appearance:

Figure 7: FTA Annual Database, Revenue Sources, July 2024



State/Parent NTD ID	NTD ID	Agency Name	Reporter Type	Subrecipient Type	Reporting Module	Funding Category	Funds Expended Type
	00001	King County Department of Metro Transit	Full Reporter		Urban	Directly Generated	Funds Earned During Period
	00001	King County Department of Metro Transit	Full Reporter		Urban	Directly Generated	Funds Expended on Capital
	00001	King County Department of Metro Transit	Full Reporter		Urban	Directly Generated	Funds Expended on Operations
	00001	King County Department of Metro Transit	Full Reporter		Urban	Federal Government	Funds Earned During Period

Total of Passenger Fares	Park and Ride Revenue (Earned Only)	Other Agency Revenue (Earned Only)	Other Agency Revenue Description	Auxiliary Revenue - Concessions (Earned Only)
$ 110,193,783		$ 29,279,535	Interest income, investment earnings, rentals of transit p	

Approx. Availability: 14 months after reference year

Description: The National Transit Database (NTD) collects and reports data annually from most public transportation operators in the United States. Revenue Sources database file contains the sum of funds that a transit agency earns from governmental and non-governmental sources, categorized by source of funds.

Units: Dollars

Calculations: None

Data Modifications: Prior to 2014, NTD used a different data schema. Data in the TPFS for these years are aggregated differently to conform to the current data schema.

Other Resources: NTD also publishes a variety of policy manuals and other resources.

Notes: Data must be filtered by Funds Expended Type to sum only funds earned during the period.

Financial data in the NTD Annual Report follow accrual accounting principles. Data may differ based on the date of access. Reporting agencies can update data after publication if errors or issues are identified.

Data Source [FTA National Transit Database]

Table **Annual Database, Capital Use**

Approx. Availability	14 months after reference year
Description	The National Transit Database (NTD) collects and reports data annually from most public transportation operators in the United States. Capital Use database file presents capital expenses for public transportation agencies, by mode, type of service (TOS), capital use type (existing vs. expanding) and function.
Units	Dollars
Calculations	None
Data Modifications	None
Other Resources	NTD also publishes a variety of policy manuals and other resources.
Notes	Financial data in the NTD Annual Report follow accrual accounting principles. Data may differ based on the date of access. Reporting agencies can update data after publication if errors or issues are identified.

Data Source	FTA National Transit Database
Table	**Annual Database, Operating Expenses**
Approx. Availability	14 months after reference year
Description	The National Transit Database (NTD) collects and reports data annually from most public transportation operators in the United States. Operating Expenses database file sums expenses incurred during day-to-day operations. Organized by mode, type of service, function, and object class.
Units	Dollars
Calculations	None
Data Modifications	None
Other Resources	NTD also publishes a variety of policy manuals and other resources.
Notes	Financial data in the NTD Annual Report follow accrual accounting principles. Data may differ based on the date of access. Reporting agencies can update data after publication if errors or issues are identified.

AIR

Data Source	Treasury Bulletin
Table	**Airport and Airways Trust Fund, Results of Operations**

Example of table appearance:

Figure 8. Airport and Airways Trust Fund, Results of Operations, July 2024

Description	IRC section (26 United States Code)	Amount
Balance Oct. 1, 2022		$12,282,862,738
FY 2022 Reconciliation Adjustment *		53,000,000
Reconciliation Adjustment		340,000,000
Receipts:		
Excise taxes (transferred from general fund):		
Liquid fuel in a fractional ownership flight	4043	18,298,830
Liquid fuel other than gasoline	4041	816,172,454
Gasoline	4081	14,849,298
Transportation by air seats, berths, etc.	4261 (a) (b)	15,740,164,952
Use of international travel facilities	4261 (c)	5,195,109,876
Transportation of property, cargo	4271	748,610,053
Gross excise taxes		22,533,205,463
Less refunds of taxes (reimbursed to general fund):		
Liquid fuel other than gasoline	4041	36,546,772
Gasoline		219,174,173
Total refunds of taxes		255,720,945
Net taxes		22,277,484,518
General Fund Payments		339
Refunds on Federal Payments (DOT)		46,246,523
Interest on investments		256,397,308
CMIA interest income		4,894
Aircraft Sales		8,146,000
Total receipts		22,588,279,582
Expenses:		
Operations		9,993,821,000
Grants in aid for Airports		3,145,000,000
Facilities and equipment		3,199,000,000
Research, engineering, and development		240,000,000
Air carriers		343,135,329
CMIA Interest Expense		339
General Adjustment		230,000,000
Total expenses		17,150,956,668
Offsetting collections		89,576,386
Balance Sept. 30, 2022		$18,202,762,038

*Adjustment made to correct the FY 2022 outlays for Payment to Air Carriers. The FY 2022 TF-1 incorrectly reported PAC outlays as $350 million.

Approx. Availability	6 months after reference year
Description	Results of operations for the Federal Aviation Administration's Airport and Airway Trust Fund
Units	Dollars
Calculations	None
Data Modifications	None
Other Resources	None

Notes	None

Data Source	OMB Public Budget Database
Table	**Receipts XLSX**
Approx. Availability	6 months after reference year
Description	Federal receipts
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	None

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	FAA outlays for grant programs (sum of all grant FAA accounts), is a reference item used to calculate FAA general fund outlays for grant programs by subtracting AATF expenditure for Grants-in-Aid for Airports. This general fund amount is assumed to be zero when the difference between the OMB reported grant outlays and the Treasury bulletin reported outlays for grants in air to airports is de minimis and the OMB database does not report any grant outlays apart from AATF grants in aid to airports. When there are no general funded (economic recovery) grant programs and no general fund contributions to Grants-in-Aid for Airports, minor differences represent normal variance between OMB rounded outlays and the Treasury Bulletin's more precise reporting.
Data Modifications	For 2022, FAA general fund non-grant outlays were adjusted to exclude Relief for Airports and FAA outlays. This amount was added to FAA outlays for grant programs. According to the Budget

	Appendix these outlays were for COVID support to airport sponsors.
Other Resources	See "Other Resources" in the Transit section of this Appendix for more information on working with the Outlays table in the OMB Public Budget Database.
Notes	None

Data Source	FAA Certification Activity Tracking System
Table	**Form 127**[7]
	Example of table appearance:

Figure 9. FAA CATS Form 127, July 2024

State	Hub Size	Airport Name	LOC_ID	FYE	Date Filed	Passenge	Landing F	Terminal a	Terminal/
CO	N	CORTEZ MUNICIPAL	CEZ	12/31/2024		0	0	0	0
WY	S	JACKSON HOLE	JAC	6/30/2024		0	0	0	0
WV	N	WOOD COUNTY	PKB	6/30/2024		0	0	0	0
FL	S	DESTIN-FORT WALTON	VPS	9/30/2024		0	0	0	0
VA	M	NORFOLK INTERNATIOI	ORF	6/30/2024		0	0	0	0
KY	N	BARKLEY REGIONAL	PAH	6/30/2024		0	0	0	0
PR	N	BENJAMIN RIVERA NOR	CPX	6/30/2024		0	0	0	0
MN	N	FALLS INTL	INL	12/31/2024		0	0	0	0

Approx. Availability	4 months after reference year
Description	The Certification Activity Tracking System (CATS) is a web-based application serving as a central location for gathering and disseminating congressionally mandated airport financial information.
Units	Thousands of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	Data may differ based on the date of access. Airport sponsors have 120 days after the sponsor's fiscal year end close to file Forms 5100-126 & 127 and they have the option to file an automatic extension of time to file for 60 days. If the sponsor still requires additional time to file, they may contact the Office of Airport Compliance and Management Analysis requesting more time and the reason for

[7] Scroll to View Summary Information. Under Form 127 select All Hub Sizes and appropriate reference year. Click submit to view summary report for all airports.

the delay. Some airports file late reports, which should result in a single audit finding. Many airports file forms using unaudited data to meet the filing deadline, and they l then adjust their reports with audited data when that information becomes available; this practice is allowable.

RAIL

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	None
Data Modifications	Prior to 2014, federal grants to Amtrak were reported as non-grant outlays in the OMB budget database. These accounts have been excluded from historical FRA direct expenditures, non-capital.
Other Resources	See "Other Resources" in the Transit section of this Appendix for more information on working with the Outlays table in the OMB Public Budget Database.
Notes	State and local expenditures of federal grants represent expenditure of federal grants as reported by OMB with no assumed matching funds. Grant expenditures are assumed to be for predominantly capital purposes based on the description of current grant programs.

Data Source	Management Discussion and Analysis of Financial Condition and Results of Operations (Amtrak Annual Report)
Description	Overview of Amtrak operations, changes in financial position, and liquidity in the fiscal year.
Approx. Availability	3 months after reference year
Units	Millions of dollars
Notes	Management Discussion and Analysis of Financial Condition and Results of Operations and Consolidated Financial Statements with

Report of Independent Auditors are typically posted as a single file.

Table **Total Revenues**

Example of table appearance:

Figure 10. Amtrak Annual Report Total Revenues, May 2024

Total Revenues (in millions)

	Year Ended September 30,			
	2023	2022	$ Change	% Change
Passenger related revenue:				
Ticket	$ 2,244	$ 1,769	$ 475	27 %
Food and beverage	56	44	12	27
Total passenger related revenue	2,300	1,813	487	27
Commuter and freight access	261	244	17	7
Reimbursable operating	192	169	23	14
Commuter operations	137	137	—	—
Commercial development (non-lease)	55	47	8	17
Miscellaneous	43	38	5	13
Total revenues from contracts with customers	2,988	2,448	540	22
State Supported route subsidy	348	329	19	6
Amortization of deferred state government capital assistance	146	142	4	3
State government capital assistance revenue	59	50	9	18
Lease revenue	32	28	4	14
Total revenues	$ 3,573	$ 2,997	$ 576	19 %

Table **Non-Operating Income (Expense)**

Example of table appearance:

Figure 11. Amtrak Annual Report Non-Operating Income (Expense), May 2024

Non-operating Income (Expense) (in millions)

	Year Ended September 30,			
	2023	2022	$ Change	% Change
Interest income	$ 124	$ 22	$ 102	464 %
Interest expense	(12)	(17)	5	(29)
Other expense, net	(23)	(2)	(21)	N/A
Total non-operating income, net	$ 89	$ 3	$ 86	N/A

Table **Total Operating Expenses**

Example of table appearance:

Figure 12. Amtrak Annual Report Total Operating Expenses, May 2024

Total Operating Expenses (in millions)

	Year Ended September 30,			
	2023	2022	$ Change	% Change
Salaries, wages, and benefits	$ 2,689	$ 2,356	$ 333	14 %
Train operations	342	287	55	19
Fuel, power, and utilities	335	303	32	11
Materials	222	194	28	14
Facility, communication, and office related	242	213	29	14
Advertising and sales	104	87	17	20
Casualty and other claims	64	82	(18)	(22)
Depreciation and amortization	898	895	3	—
Other	733	583	150	26
Indirect cost capitalized to property and equipment	(216)	(172)	(44)	26
Total operating expenses	$ 5,413	$ 4,828	$ 585	12 %

Notes

Non-cash accounting items presented in the table are excluded from TPFS data compilation, as detailed in the TPFS Source Data spreadsheet.

Table

Capital Expenditures

Example of table appearance:

Figure 13: Amtrak Annual Report Capital Expenditures, May 2024

Capital Expenditures

Our business is capital-intensive, requiring significant amounts of capital to fund the acquisition of assets. Our capital spending programs have been designed to assure our ability to provide safe, efficient, and reliable transportation services. We receive funds from state and local entities and from federal appropriations for our capital spending programs, including state of good repair spending on our infrastructure and modernization of our passenger car, locomotive, and trainset fleets.

The following table summarizes major capital expenditures by department for FY2023 and FY2022 (in millions):

	Year Ended September 30,	
	2023	2022
Engineering	$ 918	$ 720
Gateway and Trainsets	655	442
Mechanical	294	304
Other	743	568
Total	$ 2,610	$ 2,034

Data Source

Consolidated Financial Statements with Report of Independent Auditors (Amtrak Audited Financial Statements)

Description

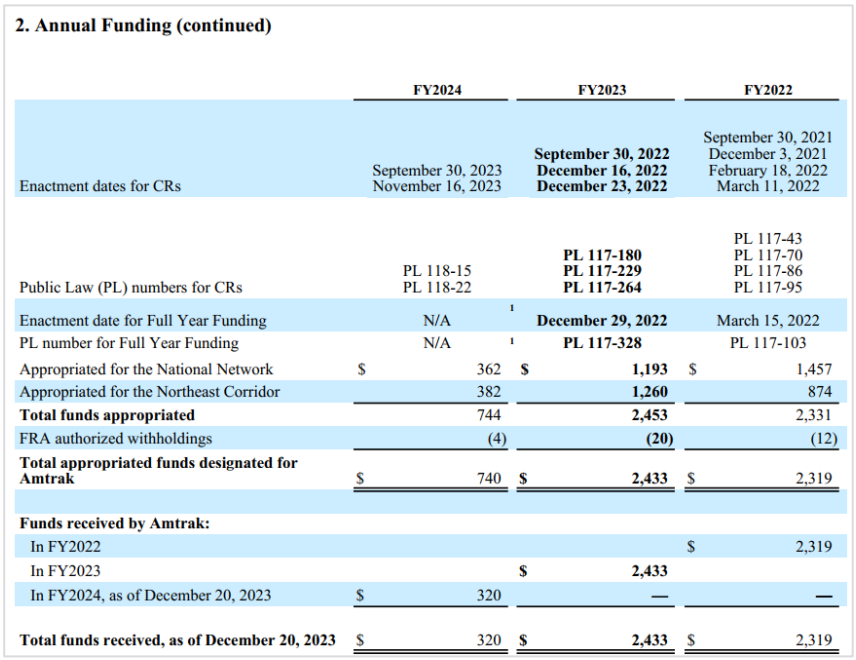
Amtrak audited financial statements

Table

Note 2. Annual Funding

Example of table appearance:

Figure 14. Amtrak Audited Financial Statements
Note 2. Annual Funding, May 2024



2. Annual Funding (continued)

	FY2024	FY2023	FY2022
Enactment dates for CRs	September 30, 2023 November 16, 2023	**September 30, 2022** **December 16, 2022** **December 23, 2022**	September 30, 2021 December 3, 2021 February 18, 2022 March 11, 2022
Public Law (PL) numbers for CRs	PL 118-15 PL 118-22	**PL 117-180** **PL 117-229** **PL 117-264**	PL 117-43 PL 117-70 PL 117-86 PL 117-95
Enactment date for Full Year Funding	N/A [1]	**December 29, 2022**	March 15, 2022
PL number for Full Year Funding	N/A [1]	**PL 117-328**	PL 117-103
Appropriated for the National Network	$ 362	**$ 1,193**	$ 1,457
Appropriated for the Northeast Corridor	382	**1,260**	874
Total funds appropriated	744	**2,453**	2,331
FRA authorized withholdings	(4)	**(20)**	(12)
Total appropriated funds designated for Amtrak	$ 740	**$ 2,433**	$ 2,319
Funds received by Amtrak:			
In FY2022			$ 2,319
In FY2023		**$ 2,433**	
In FY2024, as of December 20, 2023	$ 320	**—**	**—**
Total funds received, as of December 20, 2023	$ 320	**$ 2,433**	$ 2,319

Approx. Availability	3 months after reference year
Units	Millions of dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	Management Discussion and Analysis of Financial Condition and Results of Operations and Consolidated Financial Statements with Report of Independent Auditors are typically posted as a single file.

WATER

Data Source	Treasury Bulletin
Table	**Harbor Maintenance Trust Fund, Results of Operations**
Approx. Availability	6 months after reference year
Description	Results of operations for the federal Harbor Maintenance Trust Fund

Units	Dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	None

Data Source	Treasury Bulletin
Table	**Inland Waterways Trust Fund, Results of Operations**
Approx. Availability	6 months after reference year
Description	Results of operations for the federal Inland Waterways Trust Fund
Units	Dollars
Calculations	None
Data Modifications	None
Other Resources	None
Notes	None

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	Army Corps of Engineers non-capital expenditure is a reference item, which is multiplied by 40 percent to calculate the Prorated share of Army Corps non-capital expenditure attributable to Commercial Navigation activities. Forty percent is a typical share of Army Corps O&M obligations for commercial navigation, based on recent Budget Appendices.
Data Modifications	None

Other Resources	See "Other Resources" in the Transit section of this Appendix for more information on working with the Outlays table in the OMB Public Budget Database.
Notes	None

Data Source	Census Annual Survey of State and Local Government Finances
Table	**US Summary & State Estimates Tables**
Approx. Availability	24 months after reference year
Description	Revenue, expenditure, debt, and assets for the 50 states and District of Columbia. Only data on state and local cash flows related to sea and inland port facilities are included in TPFS water data compilation.
Units	Thousands of dollars
Calculations	S&L expenditure for sea and inland port facilities is a reference item used to calculate the capital and non-capital shares of S&L expenditure water transportation and is estimated for the Preliminary TPFS. For both the Preliminary and Final TPFS, equal shares of capital and non-capital expenditure are assumed based on consultation with BTS staff with expertise in ports and water freight and with the U.S. Army Engineer Research and Development Center (U.S. Army Corps of Engineers).
Data Modifications	None
Other Resources	None
Notes	As of 2021, data release parking revenues and expenditures were listed in line items 30 and 89, respectively. Note that line-item numbers change over time.

PIPELINE

Data Source	Treasury Bulletin
Table	**Oil Spill Liability Trust Fund, Results of Operations**
Approx. Availability	6 months after reference year
Description	Results of operations for the federal Oil Spill Liability Trust Fund
Units	Dollars

Calculations	None
Data Modifications	None
Other Resources	None
Notes	None

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	S&L expenditure of federal grants is calculated by summing the Trust funded portion of Pipeline Safety grants and Other Pipeline and Hazardous Materials Safety Administration (PHMSA) grant programs. Expenditure of grants are assumed to be for non-capital purposes based on the description of PHMSA grant programs and no matching funds are assumed.
Data Modifications	None
Other Resources	See "Other Resources" in the Transit section of this Appendix for more information on working with the Outlays table in the OMB Public Budget Database.
Notes	None

GENERAL SUPPORT

Data Source	OMB Public Budget Database
Table	**Outlays XLSX**
Approx. Availability	6 months after reference year
Description	Federal outlays
Units	Thousands of dollars
Calculations	None

Data Modifications	None
Other Resources	See “Other Resources” in the Transit section of this Appendix for more information on working with the Outlays table in the OMB Public Budget Database.
Notes	None

Appendix B: Estimation Error Calculation

BTS calculates the percentage difference to compare the estimation results to the actual values published in the source data. The equation below provides this “prediction error” and preserves the positive or negative direction of the error. A positive error indicates that the estimate is larger than the actual value; a negative error indicates that an estimate is smaller than the actual value. This error equation is used for both the Highway Statistics and the U.S. Census estimates.

$$prediction\ error\ = \frac{estimate - actual}{actual} \cdot 100$$

Appendix C: Inflation Adjustment and Methodology

BTS deflates current dollar values using separate price indexes for federal (National Income and Product Account (NIPA) Table 3.15.4 Line 19), state, and local transportation (NIPA Table 3.15.4 Line 31); and Amtrak (NIPA Table 3.15.4 Line 6). BTS calculates chained federal revenue and expenditure data by dividing the current dollar values for each mode by the federal transportation price indexes. Likewise, BTS calculates chained state and local revenue and expenditure data by dividing the current values for each mode by the state and local transportation price indexes. To calculate chained total expenditures, BTS calculates a chained weight total by applying the Fisher Ideal formula:

$$Q^{F_t} = \sqrt{\frac{\Sigma(P_{t-1} * Q_t)}{\Sigma(P_{t-1} * Q_{t-1})} * \frac{\Sigma(P_t * Q_t)}{\Sigma(P_t * Q_{t-1})}}$$

Where:
P_t is the price index at the observation period
P_{t-1} is the price index of the base year
Q_t is the dollar amount at the observation period
Qt_{-1} is the dollar amount of the base year

This formula calculates the year-to-year percent changes in total expenditures. These percentage changes are applied year by year to all current values before and after the base year (the year for which the chained value equals the current value) to generate a series of chain weighted totals.

For all chained dollar tables, BTS applied the above methodology, deflating federal, state, and local and Amtrak values, and then applying the Fisher Ideal chaining methodology to get the chained dollar sum.