

Government Transportation Financial Statistics 2014

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Submitted by:



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1. Introduction

The government plays an important role in the U.S. transportation system, both as a provider of transportation infrastructure and an administrator and regulator of the system. The government spends a large amount of funds on building, rehabilitating, maintaining, operating, and administering the infrastructure system. These activities are primarily supported by government revenue generated from several sources including user fees, taxes from transportation and non-transportation-related activities, borrowing, or grants from Federal, State, and local governments.

This report provides government transportation financial statistics, namely transportation-related revenue and expenditures for all levels of government, including Federal, State, and local, and for all modes of transportation. The data are compiled based on the conceptual framework of the *Government Transportation Financial Statistics* (GTFS), which was established for the publication of the *GTFS 2014*. Based on the conceptual framework, MacroSys updated the statistics up to 2012 to the extent that the data are available. Within this report, MacroSys defines transportation revenue and expenditures, illustrates key statistical indicators, and discusses special characteristics of this report.

The key sources of data used in this report include information released from the Office of Management and Budget (OMB), the U.S. Census Bureau, the U.S. Department of Commerce's Bureau of Economic Analysis (BEA), the U.S. Environmental Protection Agency (EPA), the Air Transport Association (ATA), the Federal Highway Administration (FHWA), Federal Aviation Administration (FAA), Federal Transit Administration (FTA), Surface Transportation Board (STB), and Saint Lawrence Seaway Development Corporation.

2. Definition of Transportation Revenue and Expenditure

2.1 Transportation Revenue

Within this report, the government refers to Federal, State, and local governments and also includes government enterprises that are government agencies such as the Panama Canal Commission and mass transit agencies. Government enterprises covered in this report pay most of their outlays by selling goods and services to the public and maintaining their own separate accounts. They also receive funds from Federal, State, and local governments for financing some of their outlays. Although some government enterprises such as Amtrak[®] also receive financial assistance from public agencies, their revenues and expenditures are not included in this report because they are not government agencies. However, if a transportation related government enterprise receives any government financial assistance such as Federal grants to Amtrak[®], those grants are included in transportation expenditures.

To build and maintain the U.S. transportation infrastructure, the government relies on revenue generated and allocated for transportation purposes. The revenue dedicated to transportation is referred to as transportation revenue. Transportation revenue includes taxes and charges (i.e., fees) collected by the government from transportation and non-transportation-related activities and allocated to fund transportation programs. Income from investing transportation funds and receipts from compulsory payments to the government (i.e., fines and penalties) and donations from corporations and individuals devoted to transportation are also treated as transportation revenue. For the purpose of reporting, transportation revenue is classified and grouped into three categories: own-source revenue, revenue directed to other uses, and supporting revenue.

Own-source revenue: Refers to taxes and charges levied on transportation-related activities and used specifically for transportation purposes. Revenue generated in this category includes the following:

- Exercise taxes such as motor fuel taxes and aviation taxes.
- Property taxes such as motor vehicle taxes.
- Income taxes such as corporate taxes paid by transportation companies.
- Charges such as tolls and motor vehicle license fees.
- Fines and penalties such as speeding and parking violation tickets.
- Investment income such as interest income from Highway Trust Fund balance.
- Income from concession agreements where a publicly owned transportation infrastructure is operated on a concession basis by a private company.

Revenue directed to other uses: Includes funds that are raised from transportation-related activities but used to finance programs other than transportation. An example is receipts generated from motor fuel taxes that are directed to the general fund for other uses.

Supporting revenue: Includes funds that are collected from non-transportation-related activities but dedicated to support transportation programs. Examples include receipts received by State and local governments from sales or property taxes to finance transportation projects.

Figure 1 illustrates major categories of transportation revenue sources and uses. A more detailed discussion of revenue items within each of the three revenue categories is presented in Appendix A. The classification of transportation revenue into these three categories enables the tracking of critical relationships in public transportation financing. For example, it provides evidence on how much revenue is generated from transportation activities by looking at own-source revenue and revenue directed to other uses. It also shows how much the government spends on transportation by looking at own-source revenue and supporting revenue.

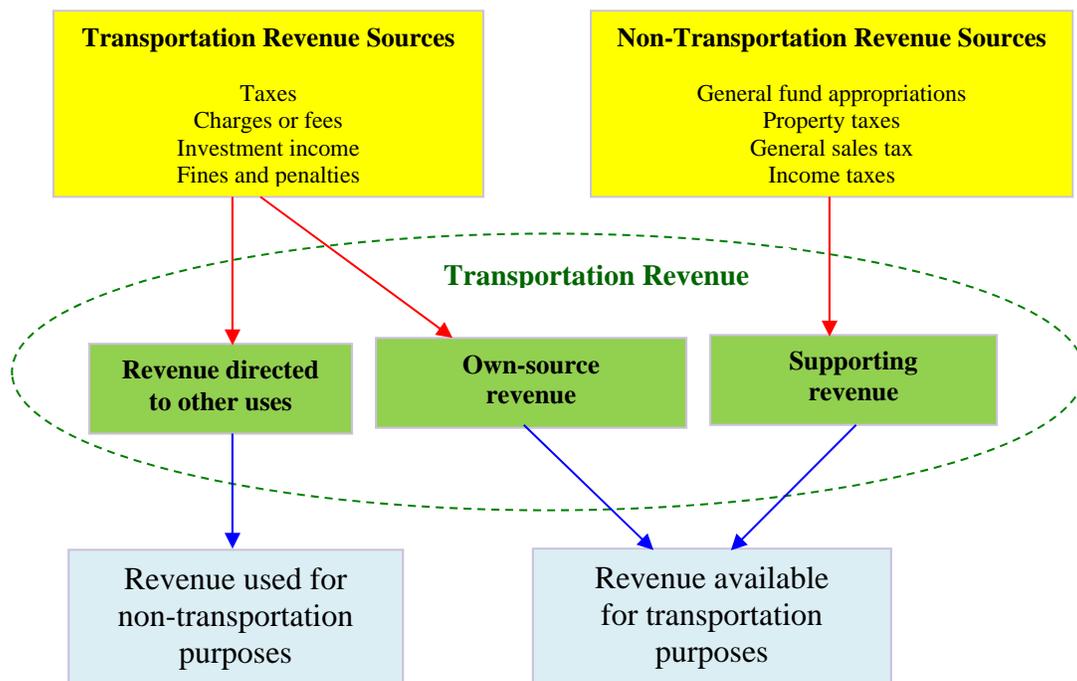


Figure 1. Major categories of transportation revenue sources and uses

2.2 Transportation Expenditure

As one of the key players in building and operating the U.S. transportation system, the government is responsible for expenditures incurred in capital investment, as well as the operation, maintenance, and safety of the system. Transportation expenditures refer to outlays

paid by the government for providing an efficient and safe transportation system, regardless of the sources of funding and of agencies that make payments.¹

In addition, transportation expenditures include outlays of government as a user of the transportation system, only if the outlays have direct relevance to the government's role as a provider of the infrastructure system. For example, government transportation agencies (i.e., mass transit agencies) assist people in commuting between residences and work places. As a result, the funds spent for that purpose are counted as transportation expenditures. Moreover, wherever there is an important transportation related public interest at stake, the special funding provided by the government to private companies to cover their capital and operating costs for the public interest is included in transportation expenditures. An example of such type of expenditure is the compensation to air carriers for their losses incurred as a result of the interruption of civil aviation after the September 11, 2001 event.

In this report, transportation expenditures are classified by the following categories:

- **Level of government:** Includes Federal, State, and local governments.
- **Mode of transportation:** Includes highway, transit, railroads, air, water, pipeline, and general support.
- **Revenue sources:** Include own-source revenue, supporting revenue, grants, and borrowing.
- **Purpose of spending:** Includes expenditures in capital investment, operations, and maintenance.

Transportation expenditures can be reported by the classification of one category or cross-classification of several categories. Figure 2 illustrates the relationship between revenue sources and expenditures.

¹Expenditure by non-transportation government agencies on purchasing transportation services is not included because the expenditure is for the consumption of transportation services rather than for the provision of transportation services.

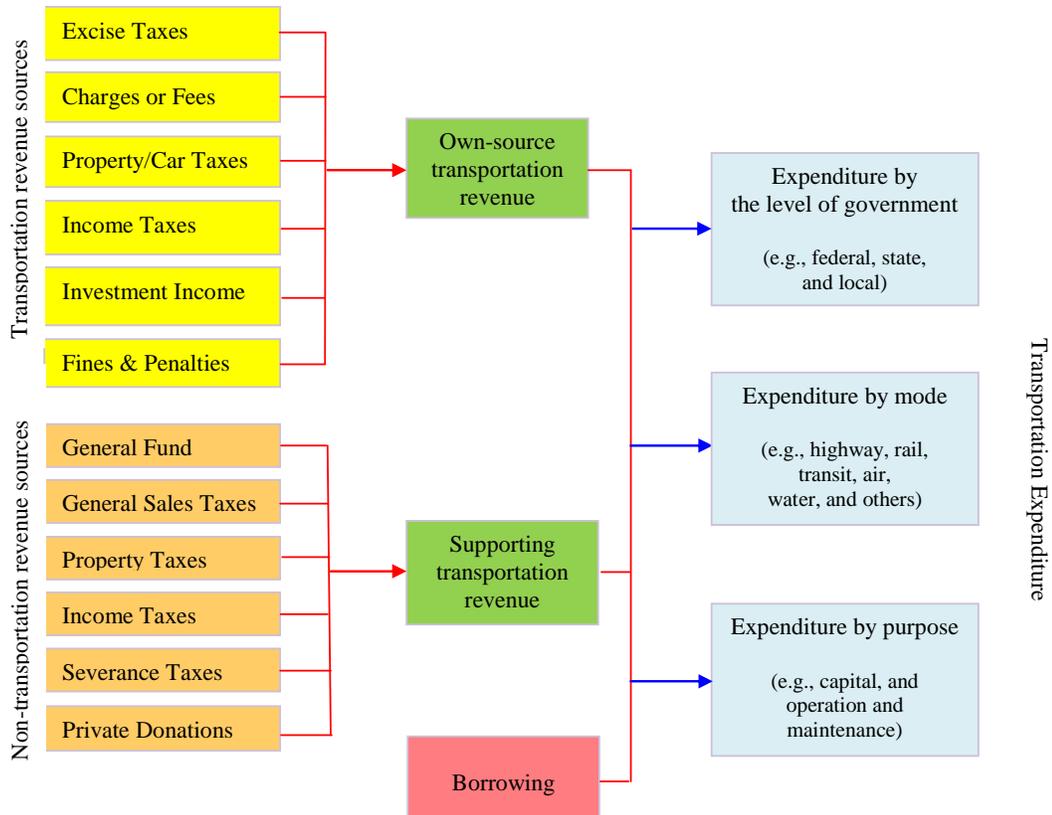


Figure 2. Transportation expenditures and funding sources

2.2.1 Intergovernmental Transfer of Funds—Grants

A substantial amount of funds are transferred between Federal, State, and local governments in the form of grants. Grants refer to unrequited payments received from other governments and are given for specific projects or programs for general financial support or for any other purpose. They may be transferred in cash or in-kind. For example, FHWA provides funds to State and local governments through the Federal-aid highways program for construction and improvement of the urban and rural highway system. State governments provide financial assistance to local governments for specific programs or unspecified general purposes. A portion of certain types of tax revenue collected by States is redistributed to local governments where they are collected. Local governments also transfer funds to State governments, especially in the form of matching share of funds for projects administered by the State.

To avoid the double counting, grants received by government agencies will be taken into account as expenditures, while grants provided by government agencies will not be counted as expenditures. For example, grants received by a local government will be counted as part of transportation expenditures by the local government, but they will not be counted as Federal and State transportation expenditures.²

²An assumption is that government agencies will spend grants received from other levels of government in the same year as they receive them. Data on grants are provided in table 16, 18, 20 and 22.

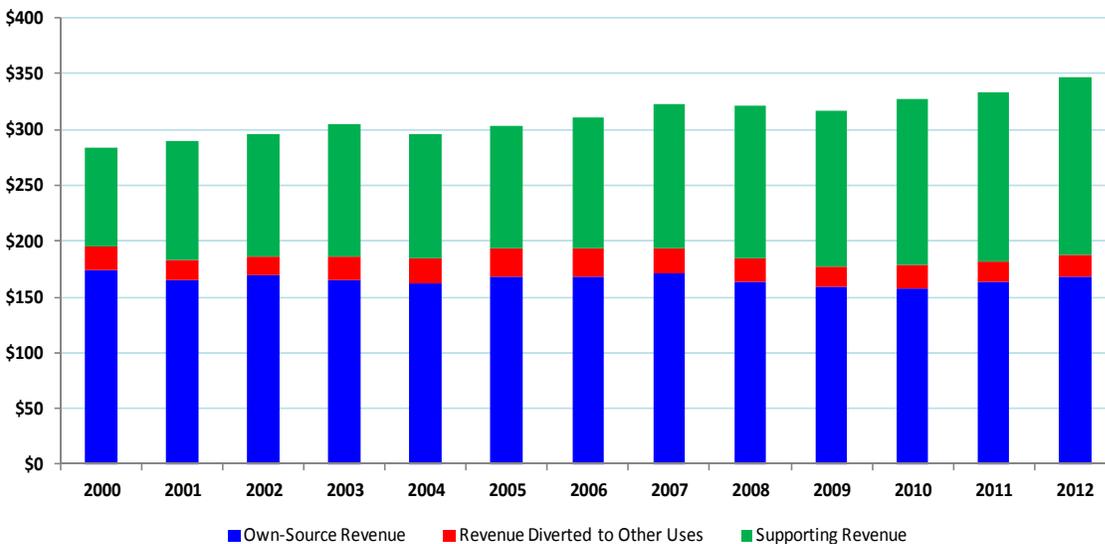
3. Presentation of Key Revenue and Expenditure Statistics

This section presents graphs that illustrate key statistics related to transportation finance.

Figure 3 shows transportation revenue by revenue source, including own-source revenue, revenue diverted to other uses, and supporting revenue.

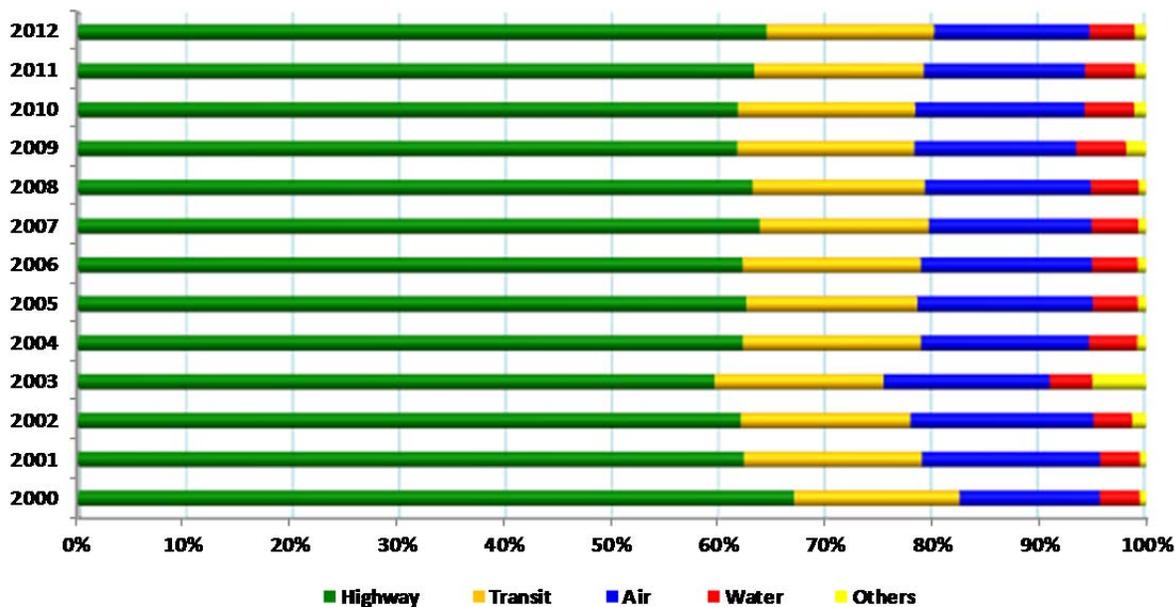
Total transportation revenue, which includes own-source revenue, revenue diverted to other uses, and supporting revenue, grew continuously from 2000 to 2012 except for declines in 2004, 2008, and 2009. The decline in total transportation revenue in 2008 and 2009 was mainly due to the sharp decrease in the government’s own-source revenue as a result of the Great Recession. Total revenue reached \$347 billion (in chained 2009 dollars) in 2012, which is nearly 22 percent higher than total revenue (i.e., \$284 billion in chained 2009 dollars) in 2000.

On average, about 57 percent of transportation revenue came from own-source revenue and 43 percent came from supporting revenue from 2000 to 2012. About 11 percent of revenue generated from transportation-related sources was diverted to other uses.



Source: Table 3B of the *Government Transportation Financial Statistics 2014*, which will be released separately.

Figure 3. Transportation revenue by type: 2000–2012 (in billions of chained 2009 dollars)



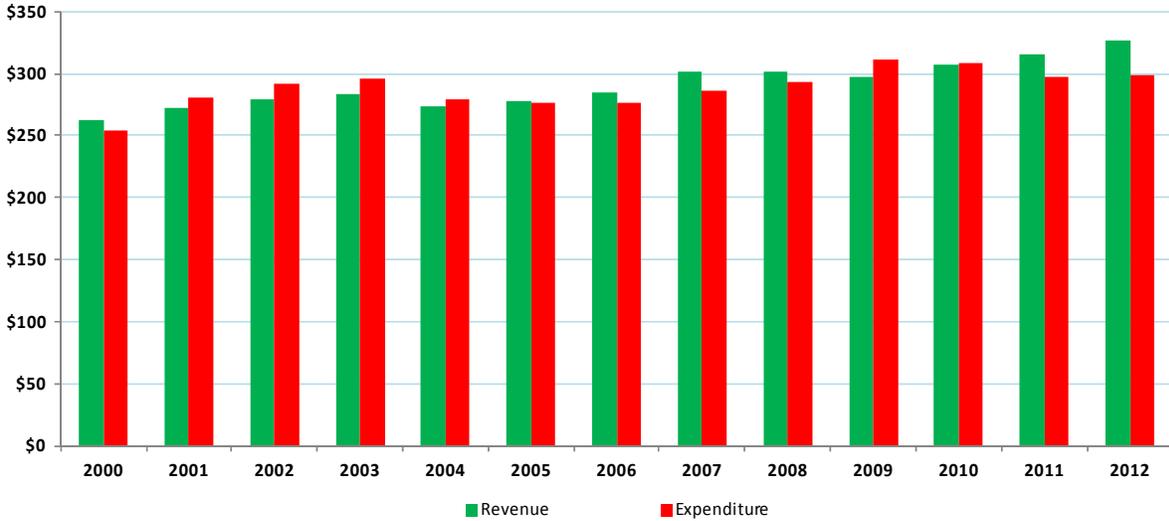
Note: The “others” mode includes rail, pipeline, and general support.

Source: Table 3B of the *Government Transportation Financial Statistics 2014*, which will be released separately.

Figure 4. Revenue allocated to transportation by mode (in billions of chained 2009 dollars)

Figure 4 shows revenue allocated to transportation according to mode (i.e., highway, transit, air, water, and others). Based on the revenue allocated to transportation, which is the sum of own-source revenue and supporting revenue, an average of 63 percent of total revenue was distributed to highways from 2000 to 2012 (see figure 4). The shares of total revenue distributed to transit, air, water, and other modes are on average 16, 16, 4, and 1 percent, respectively, over the same period. In 2012, revenue allocated to highway and transit reached a peak of \$210 and \$51 billion (in chained 2009 dollars), respectively. For the air mode, transportation revenue has ranged between \$34 to \$49 billion (in chained 2009 dollars) over the period from 2000 to 2012.

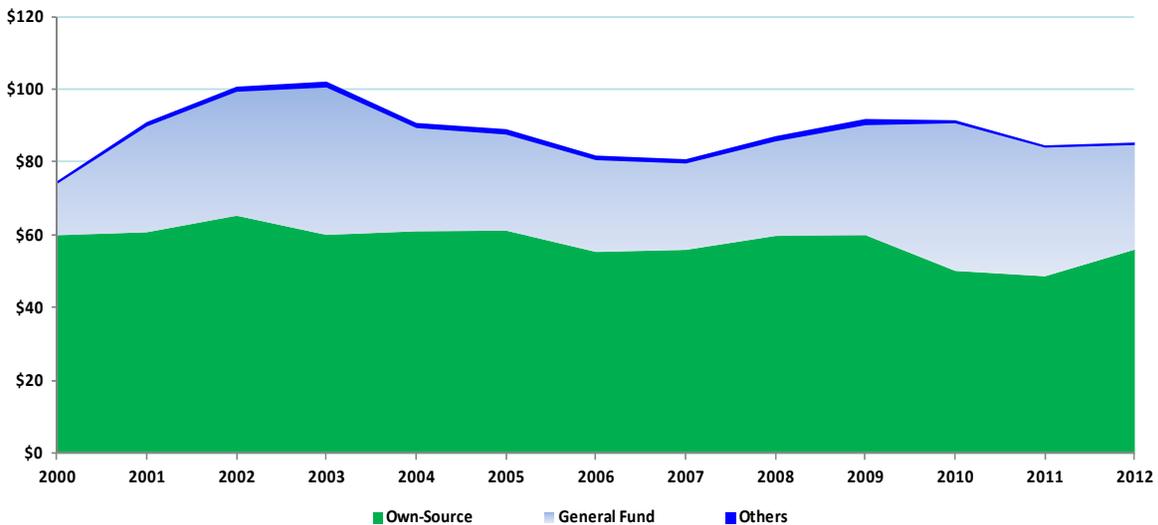
Figure 5 illustrates transportation revenue and expenditures from 2000 to 2012. An increase in safety protection for travelers after the September 11, 2001 event led to consecutive increases in transportation expenditures for three years from 2001 to 2003 with a cumulative increase of 16.4% over the level of 2000. In response to the Great Recession and to save and create jobs immediately, the American Recovery and Reinvestment Act of 2009 increased government spending on transportation infrastructure sharply, which pushed government transportation expenditure in 2009 to a record level of \$311 billion (in chained 2009 dollars). Among the 13 years from 2000 to 2012, transportation expenditure was higher than transportation revenue in six years, four years following the September 11, 2001 event (2001, 2002, 2003, and 2004) and two years following the American Recovery and Reinvestment Act (2009 and 2010).



Source: Table 2B of the *Government Transportation Financial Statistics 2014*, which will be released separately.

Figure 5. Transportation revenue versus transportation expenditure (in billions of chained 2009 dollars)

On average, from 2000 to 2012, 66 percent of Federal transportation expenditures relied on revenue generated from transportation-related activities (i.e., own-source revenue), while 33 and 1 percent of expenditures came from the general fund and other sources, respectively (see figure 6). Since the September 11, 2001 event, the Federal government has significantly increased the transfer from the general fund to the transportation fund. This transfer was \$14 billion (in chained 2009 dollars) in 2000. However, it averaged at about \$30 billion each year from 2001 to 2012.



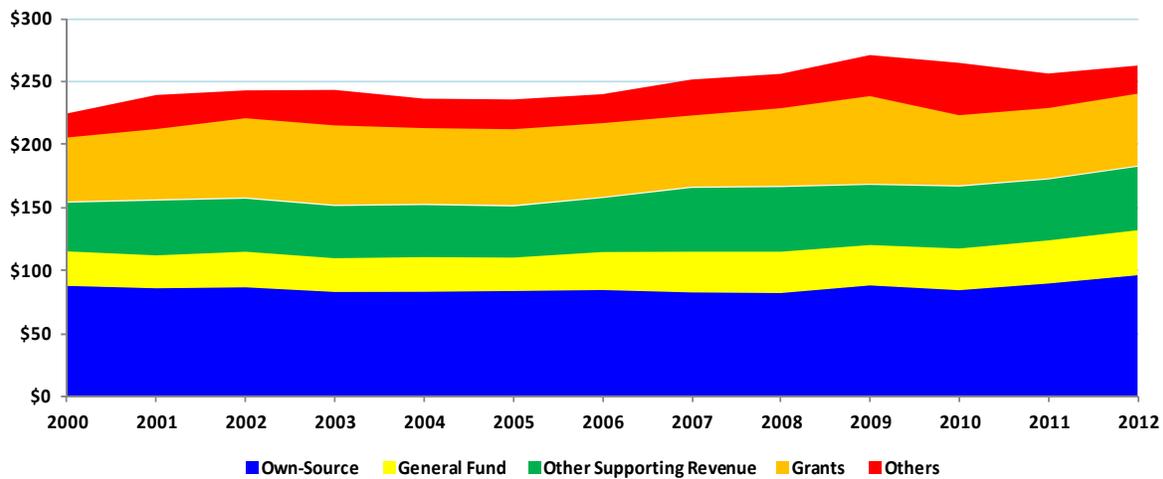
Note: The “others” funding source includes other supporting revenue and intra-governmental fund.

Source: Table 17B of the *Government Transportation Financial Statistics 2014*, which will be released separately.

Figure 6. Federal transportation expenditure by funding source: 2000–2012 (in billions of chained 2009 dollars)

Transportation expenditures incurred by State and local governments relied less on revenue generated from transportation-related activities (own-source revenue) (see figure 7). From 2000 to 2012, on average about 35 percent of State and local government transportation expenditures came from own-source revenue, while 30 percent of expenditures depended on the general fund and other supporting revenue. Grants between Federal, State, and local government supported about 24 percent of transportation expenditures incurred by State and local governments. Grants between governments included Federal grants to State and local governments, State grants to local governments, and local grants to State governments.

To stimulate the economy, total transportation expenditure by State and local governments reached the record level of \$270 billion (in chained 2009 dollars) in 2009, which was 20 percent higher than in 2000. Of that amount, \$168 billion was supported by own-source revenue, the general fund, and other supporting revenue. Grants accounted for about \$70 billion.



Note: The “others” funding source includes borrowing and unknown.

Source: Table 17B of the *Government Transportation Financial Statistics 2014*, which will be released separately.

Figure 7. State and local transportation expenditure by funding source: 2000–2012 (in billions of chained 2009 dollars)

4. Data Related Issues

4.1 Current Versus Constant Dollars

GTFS includes revenue and expenditure statistics expressed in current and constant dollars. The statistics in current dollars are converted to the 2009 constant dollars by using the chained-dollar price index. Chained-dollar (or constant dollar) estimates provide dollar values of revenue and expenditures that are adjusted to remove the effects of inflation. They are computed by dividing the current dollar estimates by the chain-type price index and multiplying by 100.

The chain-type price index of government transportation consumption and gross investment is used as the deflator for this purpose. The same index is used for Federal, State, and local government revenue and expenditure. The data for the price index are obtained from BEA's National Income and Product Accounts Tables.

4.2 Key Data Sources

GTFS provides updated and revised government transportation revenue and expenditure statistics from 2000 to 2012. Below is a list of the principal data sources that make periodic revisions, corrections, or updates to their data, requiring corresponding revisions to the historical data series of GTFS. More detailed description of data sources are presented in Appendix B.

Public Budget Database: The Federal government transportation finance data are primarily obtained from OMB's *Public Budget Database*. To improve the accuracy of data, OMB makes periodic revisions and corrections to the data in the database. The current GTFS report reflects all the revisions or changes made by OMB.

Highway Statistics: FHWA releases annual data of Federal highway receipts and expenditures reported in table FA-5 of the *Highway Statistics* report. The annual release and revisions affect the data on Federal highway receipts and expenditures in GTFS.

National Transit Database (NTD): NTD provides detailed information on outlays and receipts of transit agencies on an annual basis. The State and local government transit expenditures and revenues are obtained from this data source. For years 2001 and previously, revenue data were reported in NTD by different sources of funding of transit expenditure. The revenue reported during this period was not necessarily earned during the reporting period. Instead, the funds may have included revenue earned in prior years. Beginning in 2002, the data reported in NTD have been enhanced to cover revenue earned by transit agencies, which was not provided in earlier years. Consequently, the data in GTFS have been revised to reflect the actual revenue earned as opposed to revenue expended during the period.

Airport Financial Report: State and local government airport revenue is based on information from FAA's *Airport Financial Report*. The Airport Financial Reporting Program gathers and disseminates airport financial information on the FAA Web site and makes continuous revisions and updates to the data, requiring corresponding revisions in the GTFS report.

Corporate income taxes: The income tax payment of business establishments involved in providing transportation services are taken from BEA. As in the case of the chained price index data, the agency revises the income statistics on an annual basis. These revisions are also reflected in the GTFS data.

4.3 Data Gaps and Limitations

There are several data gaps that exist in GTFS that users need to take into account when interpreting the data. Those data gaps include the following:

- **State-specific statistics:** The *GTFS 2014* provides Federal, State, and local government transportation revenue and expenditures. While the data for State and local governments are reported at the aggregate level, data are lacking for individual State and local governments. That is due to the fact that no consolidated and consistent data are available from a single source that provides comprehensive financial statistics by State for all modes of transportation. Additionally, Federal grants are only available at the aggregate level by mode.
- **Water transportation expenditure:** All Federal outlays for water transportation, including outlays in the form of direct Federal spending or grants to State and local governments, are not covered in the data presented in this report because source data on federal outlays for water transportation are not available on a regular basis. In particular, Federal outlays for civilian transportation related programs or activities of the United States Army Corps of Engineers are not included.
- **State and local expenditures for railroads, pipeline, and general support:** The data in GTFS for railroads, pipeline, and general support include part of State and local expenditures funded by Federal grants only. The components of outlays that may be funded by other funding sources of State and local governments are not covered.
- **Property taxes:** Not all receipts from transportation-related property taxes are included in this report. For example, personal property taxes on motor vehicles and taxes on motor carriers based on assessed value of property are not included in State and local highway revenue.

5. Glossary

Capital expenditure: Capital expenditure includes outlays for adding new equipment and structures and for improving or enhancing the capacity and quality of the existing equipment and structures if the improvements last for more than 1 year. Capital expenditure enhances the capacity and efficiency of the transportation system, either by directly expanding the capacity or by improving the efficiency of the system (i.e., reducing travel times, improving access, reducing costs, or reducing adverse safety and environmental effects).

Chained 2009 dollars: Chained 2009 dollars data include dollar values of inflation-adjusted government revenues and expenditures and are provided using 2009 prices. These estimates are derived by dividing the current dollar values by chain-type price indexes.

Chain-type price index: This index measures movements in prices over time. Chain-type price indexes are compiled by BEA using Fisher's ideal price index formula. 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 Laspeyres and Paasche price indexes. The annual changes in Fisher's price index are chained (multiplied) together using weights from two adjacent years to form a time series of changes. For example, the 2000–2001 annual percent change in prices uses quantities for 2000 and 2001 as weight and the 2001–2002 annual percentage changes in prices uses quantities for 2001 and 2002 as weight.

Current dollars: Current dollars is defined as the dollar value of a good or service in terms of prices current at the time the good or service is sold. This contrasts with the value of the good or service measured in constant dollars.

Federal direct expenditure: Federal direct expenditure refers to all outlays of the Federal government, excluding grants.

Federal grants: Federal grants refer to financial assistance awards that provide payments in cash or in kind for a specified purpose. The Federal government is not expected to have substantial involvement with the State or local government or other recipient while the intended activity is being performed. The term "grants-in-aid" is commonly restricted to grants to State and local governments.

General fund: A general fund consists of accounts for receipts not earmarked by law for a specific purpose, such as income taxes and many excise taxes, the proceeds of general borrowing, and the expenditure of these moneys.

Intra-governmental fund: An intra-governmental fund includes revolving funds that conduct business-type operations primarily within and between Federal government agencies. The collections and the outlays of revolving funds are recorded in the same budget account.

Offsetting collections: Offsetting Collections are collections from the public that result from business-type or market-oriented activities and collections from other government accounts (i.e., intra-governmental transactions). These collections are deducted from gross disbursements

in calculating outlays rather than counted in governmental receipt totals. Some offsetting collections are credited directly to expenditure accounts, while others (i.e., offsetting receipts) are credited to receipt accounts.

Operation and maintenance expenditure: An operation and maintenance expenditure consists of recurrent payments to cover the cost of administration, operation, and normal maintenance and repair of the transportation infrastructure and facilities. Such outlays are crucial to maintain the nation's transportation infrastructure and provide a safe and efficient transportation system.

Own-source revenue: Own-source revenue consists of U.S. government receipts from transportation-related taxes and charges earmarked to fund transportation programs. There are two criteria that distinguish own-source from other types of transportation revenue: the revenue is generated from transportation sources, and it is used for financing transportation programs.

Revenue directed to other uses: Revenue directed to other uses consists of government receipts from transportation-related taxes and charges, which are not used for transportation purposes. Such revenue is raised from transportation sources and is used to finance activities other than transportation.

Supporting revenue: Supporting revenue consists of receipts that are generated from non-transportation sources but are designated to fund transportation programs. There are two criteria that distinguish supporting revenue from others. First, it is not generated from transportation sources, which implies that the receipts are raised through charges or taxes levied on industries or activities other than transportation. Second, it is designated to fund transportation programs.

Trust fund: A trust fund is an account established by law to hold receipts (such as specific taxes or revenues) collected by the Federal government and earmarked for financing special purposes and programs. To assure the financial soundness of a trust fund, it must be tracked separately to determine that outlays/expenditures do not exceed available revenue.

User charge or fee: A user charge or fee is an assessment on users for goods and services provided by the Federal, State, or local government. User charges, either directly or indirectly, are collected on a periodic or occasional basis in the form of license fees and excises. A user charge is paid at the time infrastructure services are consumed, as with the payment of fuel taxes tolls. In the narrow budgetary sense, a toll for the use of highway is considered a user fee since it is related to the specific use of a particular section of highway. Highway excise taxes on gasoline are considered a form of user charge in the economic sense; however, since the tax must be paid regardless of how the gasoline is used and because it is not directly linked to the provision of the specific service, it is considered a tax and recorded as a governmental receipt in the Federal budget.

Appendix A. Detailed Description of Transportation Revenues and Expenditures

This appendix provides a detailed discussion of transportation revenues and expenditures.

A.1 Transportation Revenues

As defined in section 2, transportation revenue includes three categories: own-source revenue, revenue directed to other uses, and supporting revenue. The following discussion presents each category in detail.

A.1.1 Own-Source Revenue

Own-source revenue includes receipts collected by government from transportation-related taxes and charges earmarked to fund transportation programs. There are two criteria that distinguish own-source from other types of transportation revenue: the revenue must be raised from transportation sources, and it must be used for financing transportation programs. The primary types of own-source revenue are excise taxes, charges or fees, property taxes, income taxes, investment income, and fines and penalties.

Excise Taxes

Excise taxes are compulsory payments to the government levied on the purchase of specific types of goods or services. Transportation excise taxes include fuel taxes, aviation taxes, and taxes on the purchase of other transportation goods and services. Transportation excise taxes are a direct levy on transportation activity and form the most important source of transportation revenue. Examples of excise taxes are as follows:

- **Fuel taxes:** Users of the transportation infrastructure system pay partially for the services they receive through taxes on motor vehicle fuels, jet fuel used in commercial and non-commercial aircraft, railroad fuel, and fuels used by vessels and motor boats. The major portion of the revenue raised through fuel taxes is dedicated for transportation purposes. This portion of fuel tax receipts is counted as own-source transportation revenue because it comes from transportation sources and is used for transportation purposes. The portion of fuel tax receipts that is allocated to finance non-transportation programs is counted as revenue directed to other uses.
- **Aviation taxes:** The government imposes taxes on the use of the aviation system. Such taxes consist of aircraft tires and tube taxes, aircraft use taxes, taxes on payments to airlines for frequent flyer and similar awards by banks and credit card companies, international departure and arrival taxes, passenger ticket taxes, taxes on flights to rural airports, waybill freight taxes, flight segment taxes, and security charges. The revenue raised through aviation taxes are used to pay for the construction, maintenance, and operation of airports and airport facilities (e.g., air traffic control system), airport security, environmental protection, etc.

- **Other sales taxes:** Another way users pay for using the transportation system is through sales taxes on transportation equipment and parts, such as motor vehicles, trucks, trailers, and buses. Such taxes are imposed as a percentage of the value of goods sold. That portion of the sales tax receipts to fund transportation-related activities is treated as own-source revenue. However, a major portion of the sales tax receipts goes to the general fund and is used to finance non-transportation programs. Therefore, this portion is counted as revenue directed to other uses.

Charges or Fees

Transportation charges or fees are assessments in return for transportation goods and services provided by the Federal, State, and local governments. The charges and fees for government services are intended to cover the costs of regulatory services as well as non-regulatory services. Examples of charges and fees include tolls, public parking fees, motor vehicle license fees, transit fares, airport and water port charges, and safety related assessments such as air passenger security fees. Some charges and fees are described as follows:

- **Tolls:** A toll is the most direct form of user charge that is levied on users of transportation infrastructure for services provided to them by toll facilities including highways, bridges, tunnels, turnpikes, ferries, canals, and seaways. Toll facilities are operated by either public enterprises, State transportation departments, or local operating authorities. A toll is a payment for the use of the toll facility and is paid only by those who actually use the facility. Most of the revenue from tolls is spent on administration, operations, law enforcement and safety, maintenance, capital outlays, and bond retirement for the facility from which it was raised or used for funding other transportation programs. Some portion of toll revenue is used for general purposes and is included in revenue directed to other uses.
- **Parking fees:** Parking fees are imposed on users of on-street and off-street public parking lots or public garages. Local government authorities operate and collect the fees from the use of public parking facilities. The receipts are designated to finance the operational activities of the parking facilities and other highway and transit programs and are counted as own-source revenue.
- **Motor vehicle fees:** There are two main types of motor vehicle fees: licensing fees and operator license fees. Licensing fees, such as fees for title registration, license plates, vehicle inspection, vehicle mileage and weight, etc., are imposed on owners or operators of motor vehicles for the right to use public highways. Operator license fees are payments for the privilege of driving commercial or private motor vehicles. Licensing fees and operator license fees are both intended to cover the cost incurred by the U.S. government in granting and administering these rights and privileges. They are payments for using the transportation system. These fees are also used to fund highway patrol services, emergency towing services, and other highway services such as removal of abandoned vehicles.
- **Transit fares:** Public mass transit agencies provide transit services by operating in a variety of modes, including motorbuses, light and heavy rail, street trolleys, vanpools,

ferryboats, and cable cars. The transit agencies charge fares in exchange for the transit service they render to the public. The revenue generated from public mass transit systems operated under contract by private transportation providers is also included. The direct link between the use of the transit system and the payment of the fare make it natural to include transit fares in transportation revenue.

- **Airport charges:** State and local governments finance the outlays of operating airport facilities with income generated from fees like hanger rentals, landing fees, parking fees at airport lots, terminal area rental charges, concessions, passenger facility charges, and other charges for the use of airport facilities. Landing fees are charged on the basis of aircraft landing weights and frequency of landing. Terminal rent is assessed on the size of the terminal area occupied by each airline. Concessions are a form of public-private partnership in which public authorities authorize a private firm to run public services on its behalf and in which the private firm assumes the operating risks and collects revenue by charging fees. In return, the concessionaire pays a certain amount of money to airport authorities. Passenger facility charges are imposed on each passenger boarding an airliner at an airport. Proceeds from airport charges are used for operations and capital expenses of airports.
- **Water port charges:** State and local government agencies and public port authorities own and operate most of the U.S. maritime infrastructure system. They levy facility charges and spends money on the development and operation of port facilities, including construction of wharves and piers, docking and terminal facilities, cargo loading and unloading equipment, and dockside rail and truck transport improvements. Public port authorities charge fees for shipping services (i.e., dockage, storage, etc), facility rentals, concession rents, and canal tolls, as well as for the use of commercial and industrial water transport and port terminal facilities. The Federal government also collects revenue in the form of user fees (e.g., harbor maintenance user fee) imposed on commercial port users.
- **Pipeline user fees:** These fees are an assessment on natural gas and hazardous liquid pipelines on a per mile basis. Pipeline operators pay these fees. The receipts are dedicated for funding State transportation department pipeline safety activities, including the daily operations and program activities of the Office of Pipeline Safety.
- **Hazardous materials emergency preparedness fees:** The government assesses registration fees on shippers and carriers of hazardous materials (i.e., solid and hazardous wastes, petroleum products, radioactive wastes, etc). The money is dedicated to finance hazardous materials transportation safety activities, including regulatory development, enforcement, training, and information dissemination.

Property Taxes

Property taxes are proportionally levied on the value of property. Property refers to fixed property (i.e., land, buildings, structures, etc.) as well as liquid property such as bank accounts, stocks, and bonds. Property taxes are the most important revenue source for local governments. Some State governments also collect revenue from property taxes.

As part of the property tax collection effort, State and local governments levy property tax on transportation industries and on transportation infrastructure, right-of-ways, and other transportation assets owned by non-transportation industries. Individuals also pay property taxes on privately owned transportation equipment, including motor vehicles, boats, etc. The receipts are used to fund various government programs, including transportation.

State and local governments also dedicate receipts from taxes on non-transportation properties to fund transportation programs. Almost all State and local governments dedicate property tax receipts from non-transportation sectors in funding transportation improvements. This amount includes receipts from all types of properties including properties owned by transportation industries, as well as properties owned by other industries and individuals. The receipts of property taxes from non-transportation sectors that are used for transportation are classified as transportation-supporting revenue.

There are two reasons that State and local governments use property tax receipts as a way of funding transportation programs. First, because transportation developments (e.g., building roads) benefit property owners, the owner, in effect, is paying the rent for the infrastructure service allowing access to the property. Accessibility is a major determining factor of property value; therefore, the development and maintenance of street and road networks plays a major role in upholding and increasing the property value. With the access to the property provided by highways and streets, the property will be more valuable compared to the situation where the property is not accessible. Therefore, it is argued, property owners who benefit from transportation developments should pay the costs of the development. Second, transportation services provide broad public benefits, and those who benefit from the service should pay for the costs.

Income Taxes

Income taxes are levied on profits of corporations and businesses as well as on income of individuals such as wages and salaries, interest, and dividends. While business income taxes are assessed as a percentage of the net income earned, individual income taxes are levied on the gross income earned.

Transportation companies engaged in freight and passenger transportation services as well as those involved in transportation supporting services pay income taxes to the government. Workers in the transportation sector, including in private transportation establishments; public enterprises; and Federal, State and local transportation agencies, also pay annual income taxes to the government. The income on which the taxes are assessed is generated from transportation activities. The receipts from taxing such income should, therefore, be treated as transportation revenue because they are raised from transportation activities. The portion of transportation revenue from income taxes is included in own-source transportation revenue if designated for transportation purposes. In reality, most of the income tax receipts from transportation activities are directed to the general fund for purposes other than transportation. This portion of the tax receipts is considered as revenue directed to other uses.

Investment Income

The government invests transportation funds that are not used in the current period and generates interest income or profit from purchase and sale of securities. The income earned from investing transportation fund balances, if used for transportation, is counted as own-source revenue. For example, the Federal government invests transportation trust fund balances and any interest income earned is deposited back into the respective trust funds to be used for transportation. The funds were all used for transportation purposes.

Fines and Penalties

Users of the transportation infrastructure may pay fines and penalties when violating transportation laws and regulations or for environmental damages they inflict when using the transportation system. The receipts from these sources are transportation revenue since the fines and penalties are directly related to transportation activities. The amount of receipts assigned for funding transportation activities is counted as own-source transportation revenue.

A.1.2 Revenue Directed to Other Uses

Revenue directed to other uses consists of government receipts from transportation-related taxes and charges, which are not used for transportation purposes. Such revenue is raised from transportation sources but is used to finance activities other than transportation. The difference between own-source revenue and revenue directed to other uses is not where it comes from but what it is used for. While own-source revenue is used to finance transportation programs, revenue directed to other uses is dedicated to finance programs other than transportation. Therefore, the sources of revenue directed to other uses is the same as those of own-source revenue as discussed above, which include excise taxes, charges or fees, property taxes, income taxes, investment income, and fines and penalties. The following list highlights some practical examples of transportation revenue dedicated for funding non-transportation programs:

- **Motor fuel taxes:** A portion of the receipts from motor fuel taxes is directed to the general fund for deficit reduction. Some examples of using motor fuel taxes for other purposes are as follows:
 - A Federal fuel tax of 2.5 cents per gallon on gasohol and certain other alcohol blends is deposited to the general fund for deficit reduction.
 - A fraction of proceeds from taxes on fuels used by motorboats is transferred to the Aquatic Resources Trust Fund and to the Land and Water Conservation Fund for cleanup and prevention of environmental damages caused by transportation and non-transportation activities. The amount used for cleanup and prevention of damages caused by non-transportation activities is considered as revenue directed to other uses.
 - The Federal government transfers 0.1 cents of the motor fuel tax per gallon to the Leaking Underground Storage Tank Trust Fund to be used for cleanup and prevention of damages caused by transportation and non-transportation activities.

- **Fuel tax paid by railway companies:** Freight railroad companies pay Federal fuel taxes, and the money is directed to the general fund for deficit reduction. Currently, the railroad tax rate is 4.3 cents per gallon of diesel fuel consumed, and all of the tax receipt is deposited to the general fund for deficit reduction.
- **Property tax:** Receipts from transportation property taxes are used for non-transportation purposes. For example, railroad companies pay property taxes, and most of the proceeds go to the general fund for deficit reduction.
- **Business income tax:** Annual income tax payments of private companies involved in the business of freight and passenger transportation are mostly deposited into the general fund to be used for various purposes other than transportation.
- **Individual income tax:** Individual income taxes paid by employees working for transportation establishments such as air carriers, trucking companies, and railroad companies are deposited to the general fund to be used for various purposes other than transportation.
- **Repayment of loans:** Repayment of loans (i.e., loans used for funding transportation outlays) is largely paid out from money collected through taxes and charges on transportation activities. The repayment of loans financed from such sources should be treated as revenue directed to other uses because the fund comes from transportation sources. The purpose of the repayment is not for transportation activity.

A.1.3 Supporting Revenue

Supporting revenue consists of receipts that are generated from non-transportation sources but are designated to fund transportation programs. The supporting revenue shows the amount of money coming from the rest of the economy for funding transportation. The most common sources of supporting revenue are general fund appropriations, general sales taxes, property taxes, income taxes, severance taxes, and gifts and donations. Since supporting revenue is raised from sources other than transportation, there is no direct link between the payment of the taxes or fees and the use of transportation infrastructure network. Some important sources of supporting revenue include the following:

- **General fund:** The general fund is a government account whose receipts are collected through various revenue raising instruments, such as taxes, lottery income, fines and penalties, etc., and it is not earmarked by law for a specific purpose. Federal, State, and local governments use a substantial amount of money from the general fund each year to finance transportation projects.
- **General sales taxes:** General sales taxes are imposed on the value of goods sold or services provided. Sales taxes provide State and local governments with an opportunity to generate revenue from the broad tax base they are imposed on. Proceeds from sales taxes are treated as supporting revenue if they are earmarked for transportation activities.

- **Property taxes:** Property taxes are proportionately levied on the value of property. State and local governments dedicate some property tax receipts to finance transportation programs. The portion of property tax receipts from outside of the transportation sector that is dedicated to financing transportation projects is counted as supporting revenue.
- **Income taxes:** Some State and local governments earmark a portion of income taxes of individuals working in non-transportation sectors and business engaged in activities other than transportation for transportation purposes.
- **Severance taxes:** Such taxes are imposed on the removal of natural resources (e.g., oil, gas, coal, other minerals, timber, fish, etc.) from land or water. They are assessed on the value or quantity of products removed or sold. State and local governments use receipts from severance taxes to fund transportation. Since such receipts are generated from taxes on non-transportation activities, they are classified as supporting revenue.
- **Gifts and donations:** Included in gifts and donations are money or any other asset (i.e., equipment, land, building, etc) transfers from corporation, individuals, nonprofit institutions or any other sources other than government. Only those gifts and donations dedicated for transportation are included and classified as supporting revenue because they are generated from sources other than transportation.

A.2 Transportation Expenditures

Transportation expenditures include government outlays for transportation-related activities. Transportation activities include construction, operation, and maintenance of the transportation infrastructure and facilities, as well as administrative, regulatory, and research activities that support the building and operation of the transportation system.

Transportation expenditures are classified into two groups: (1) operations and maintenance and (2) capital expenditures based on the time span of the effects of outlays on the transportation system. Both current operations and capital expenditures affect the capacity and efficiency of the transportation system. Capital expenditures have effects on future and long-term improvements to the transportation system, while current operations expenditures are focused on current and short-term improvements.

A.2.1 Operations and Maintenance Expenditures

Operations and maintenance expenditures are recurrent payments used to cover the costs of administration, operation, and normal maintenance and repair of the transportation infrastructure and facilities. Such outlays are crucial to maintain the nation's transportation infrastructure and provide a safe and efficient transportation system. Recurrent general expenses associated with research, training, law enforcement, and safety activities of Federal, State, and local government agencies are also classified in operations and maintenance expenditures.

Outlays for normal repair and maintenance activities constitute expenses for the upkeep of buildings, infrastructure, and equipment in working order, which are not permanent structural improvements that significantly extend their service life. Repair and maintenance are activities

undertaken periodically in order to maintain the productive capacity of capital assets over their expected service lives. They are not intended to improve the capital assets or their performance, but simply maintain them in good working order or to restore them to their previous condition in the event of breakdown.

A.2.2 Capital Expenditures

Capital expenditures are composed of outlays for adding new equipment and structures and for improving or enhancing the capacity and quality of the existing equipment and structures if the improvements last for more than one year. Capital expenditures can help enhance the capacity and efficiency of the transportation system, either by directly expanding the capacity or by improving the efficiency of the system (i.e., reducing travel times, improving access, reducing costs, or reducing adverse safety and environmental effects).

There are three principal types of capital expenditures, namely expenditures on transportation infrastructure and facilities, expenditures on rolling stock, and expenditures on other machinery and equipment. Expenditures on infrastructure include outlays for building new infrastructure facilities or for the rehabilitation and improvement of existing facilities. In other words, capital expenditures in infrastructure constitute outlays for building new facilities or for rehabilitating existing facilities. Rehabilitation in this case refers to major renovation, reconstruction, or enlargement. Expenditures on rolling stock consist of money paid out for purchase of fixed assets such as motor vehicles, airplanes, boats, trucks, and vessels. Other machinery and equipment consist of all machinery and equipment other than rolling stock, which are used in the transportation sector.

Capital expenditures can be accounted for on either a gross or on a net basis. Gross capital expenditures refer to outlays on fixed assets including depreciation.³ Net capital expenditures refer to outlays on fixed assets minus depreciation. The net capital expenditures represent the net addition to the capital stock. Therefore, net capital expenditures give outlays for additional transportation capacity, whereas the amount of capital spending used to offset the depreciated capital represents government spending for maintaining the existing transportation capital stock in operating order. The data on capital expenditures in this report are gross capital expenditures (before depreciation). The report does not provide data subdivided into net capital expenditures and depreciation due to lack of data.

³Depreciation is the decline in the value of capital assets due to normal physical deterioration, obsolescence, or normal accidental damage.

Appendix B. Data Sources

This appendix presents data sources by mode and level of government. Table B-1 and table b-2 list data sources for transportation revenue and expenditure, respectively, by mode and by level of government.

Table B-1. Data sources and methods for transportation revenue.

Mode	Level of Government	Data Source
Highway	Federal	All except noted: FHWA, <i>Highway Statistics Series</i> , annual issues, tables FE-10, FE-210, and FA-5. Obtained from: http://www.fhwa.dot.gov/policy/ohpi/hss/index.cfm .
		General funds allocated to support highway operations and research; emergency relief program; federal-aid highway; highway infrastructure; highway traffic safety, etc.: The White House. <i>Office of Management and Budget</i> . Obtained from: http://www.whitehouse.gov/omb/ .
		Motor fuel tax receipts for leaking underground storage tank (Lust) trust fund: U.S. EPA's Performance and Accountability Report, "Principal Financial Statements." Obtained from: http://www.epa.gov/ocfo/par/index.htm .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
Highway	State and local	All except noted: U.S. DOT, FHWA, "Highway Statistics," annual issues, Tables MF-2, MV-2, SDF, LDF, MF-3, MV-3, and SF-1. Obtained from: http://www.fhwa.dot.gov/policy/ohpi/hss/index.cfm .
		Revenue from parking facility charges: U.S. Census Bureau, "State and Local Government Finances," annual issues. Obtained from: http://www.census.gov/govs/local/ .
Transit	Federal	All except noted: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
	State and local	U.S. DOT, FTA, "National Transit Database (NTD)," annual issues. Obtained from: http://www.ntdprogram.gov/ntdprogram/ .

Rail	Federal	All except noted: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		Railroad safety inspection fees: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Public Budget Database." Obtained from: http://www.whitehouse.gov/omb/ .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
	State and local	U.S. DOT, STB, "Statistics of Class I Freight Railroads," annual issues. Obtained from: http://www.stb.dot.gov/econdata.nsf/FinancialData?OpenView .
Air	Federal	U.S. DOT, FAA, "Budget in Brief," annual issues. Obtained from: http://www.faa.gov/about/budget/ .
		Executive Office of the President of the United States, OMB, "Budget of the United States Government: Public Budget Database." Obtained from: http://www.whitehouse.gov/omb/ .
		Executive Office of the President of the United States, OMB, "Budget of the United States Government Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		ATA, "Airline Industry Taxes and Fees," U.S. Aviation Excise Taxes and User Fees. Obtained from: http://www.airlines.org/economics/taxes/ .
		Motor fuel tax receipts for leaking underground storage tank (Lust) trust fund: U.S. EPA's Performance and Accountability Report, "Principal Financial Statements." Obtained from: http://www2.epa.gov/planandbudget .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
	State and local	U.S. DOT, FAA, "Airport Financial Report," Form 127. Obtained from: http://cats.airports.faa.gov/ .
		U.S. DOT, FAA, "Airport Financial Report," Form 126. Obtained from: http://cats.airports.faa.gov/ .

Water	Federal	All except noted: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		Tariff Filing Fees, Tonnage Fee, and Marine Safety Fees: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Public Budget Database," http://www.whitehouse.gov/omb/ .
		Motor fuel tax receipts for leaking underground storage tank (Lust) trust fund: U.S. EPA's Performance and Accountability Report, "Principal Financial Statements," http://www.epa.gov/ocfo/par/index.htm .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D, http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
	State and local	The U.S. Census Bureau, "State and Local Government Finances," annual issues. Obtained from: http://www.census.gov/govs/www/estimate.htm .
Pipeline	Federal	All except noted: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .
General Support	Federal	All except noted: Executive Office of the President of the United States, OMB, "Budget of the United States Government: Appendix," annual issues. Obtained from: http://www.whitehouse.gov/omb/ .
		Emergency Preparedness Fund: Executive Office of the President of the United States, OMB, "Budget of the United States Government, Public Budget Database." Obtained from: http://www.whitehouse.gov/omb/ .
		Corporate income tax: BEA, "National Income and Product Accounts (NIPA) Tables," Table 6.18D. Obtained from: http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N .

Table B-2. Data sources and methods for transportation expenditure.

Mode	Level of Government	Data Source
Highway	Federal	All except noted: U.S. DOT, FHWA, “Highway Statistics,” annual issues, Table FA-5. Obtained from: http://www.fhwa.dot.gov/policy/ohpi/hss/index.cfm . Federal Motor Carrier Safety Administration: Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
	State and local	U.S. DOT, FHWA, “Highway Statistics,” annual issues, Tables SF-1, SF-2, SF-21, LGF-2, LGF 21, SDF, and FA-3. Obtained from: http://www.fhwa.dot.gov/policy/ohpi/hss/index.cfm . Parking: The U.S. Census Bureau, “State and Local Government Finances,” annual issues.
Transit	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
	State and local	U.S. DOT, FTA, “National Transit Database (NTD),” annual issues. Obtained from: http://www.ntdprogram.gov/ntdprogram/data.htm .
Railroads	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
Air	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
	State and local	The U.S. Census Bureau, “State and Local Government Finances,” annual issues. Obtained from: http://www.census.gov/govs/www/estimate.html .
Water	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
	State and local	The U.S. Census Bureau, “State and Local Government Finances,” annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .

Pipeline	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpoaccess.gov/usbudget/browse.html .
	State and local	Only state and local pipeline expenditure funded by federal grants are included based on data from Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
General Support	Federal	Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .
	State and local	Only state and local pipeline expenditure funded by federal grants are included based on data from Executive Office of the President of the United States, “Office of Management and Budget: Analytical Perspective,” Detailed Functional Tables, annual issues. Obtained from: http://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET .

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<http://www.stb.dot.gov/econdata.nsf/FinancialData?OpenView>, as of May 2014.