Public Spending on Transportation and Water Infrastructure, 1956 to 2017

October 2018

This publication updates the exhibits in CBO’s report Public Spending on Transportation and Water Infrastructure, 1956 to 2014 (March 2015), [www.cbo.gov/publication/49910](http://www.cbo.gov/publication/49910).
Public Spending on Transportation and Water Infrastructure
Public Spending on Transportation and Water Infrastructure, 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Bureau of the Census.

a. Includes water supply and wastewater treatment facilities.
b. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).
Public Spending on Transportation and Water Infrastructure Under Alternative Adjustments for Inflation, 1956 to 2017

Billions of 2017 Dollars

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

GDP = gross domestic product.

a. Those price indexes for government spending measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.

b. That price index measures the prices of goods and services that make up the nation’s GDP.
Public Spending on Transportation and Water Infrastructure as a Share of GDP, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

GDP = gross domestic product.
The Federal Government's and State and Local Governments' Shares of Spending on Transportation and Water Infrastructure, by Category of Spending, 2017

**Capital ($174 Billion)**
- Federal Government: $27 Billion (10%)
- State and Local Governments: $102 Billion (59%)
- CBO: $45 Billion (26%)

**Operation and Maintenance ($266 Billion)**
- Federal Government: $27 Billion (10%)
- State and Local Governments: $240 Billion (90%)

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.
Public Spending on Transportation and Water Infrastructure, by Category of Spending, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

a. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build transportation and water infrastructure.

b. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of goods and services consumed by governments, including materials and other inputs used to operate and maintain transportation and water infrastructure.
Shares of Public Spending for Capital and for the Operation and Maintenance of Transportation and Water Infrastructure, by Level of Government, 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.
Public Spending on Transportation and Water Infrastructure, by Level of Government, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.
Federal Spending on Transportation and Water Infrastructure
Federal Spending on Transportation and Water Infrastructure, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.
Federal Spending on Transportation and Water Infrastructure, by Type of Infrastructure, 1956 to 2017

- **Percent**

  - **Highways**
    - 1956: 47%
  - **Mass Transit and Rail**
    - 1956: 17%
  - **Aviation**
    - 1956: 17%
  - **Water Transportation**
    - 1956: 5%
  - **Water Resources\(^a\)**
    - 1956: 10%
  - **Water Utilities\(^b\)**
    - 1956: 4%

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

- a. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).
- b. Includes water supply and wastewater treatment facilities.
Federal Spending on Transportation and Water Infrastructure, by Category of Spending, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

a. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build transportation and water infrastructure.

b. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of goods and services consumed by governments, including materials and other inputs used to operate and maintain transportation and water infrastructure.
State and Local Spending on Transportation and Water Infrastructure
State and Local Spending on Transportation and Water Infrastructure, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.
State and local spending is net of federal grants and loan subsidies.
Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.
State and Local Spending on Transportation and Water Infrastructure, by Type of Infrastructure, 1956 to 2017

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Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

State and local spending is net of federal grants and loan subsidies.

<sup>a</sup> Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

<sup>b</sup> Includes water supply and wastewater treatment facilities.
State and Local Spending on Transportation and Water Infrastructure, by Category of Spending, 1956 to 2017

Billions of 2017 Dollars

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

State and local spending is net of federal grants and loan subsidies.

a. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of goods and services consumed by governments, including materials and other inputs used to operate and maintain transportation and water infrastructure.

b. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build transportation and water infrastructure.
State and Local Capital Spending on Transportation and Water Infrastructure, by Source of Funds, 1956 to 2017

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

Federal grants include the value of federal loan subsidies for the purchase of transportation and water infrastructure capital.

Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.
Public Spending on Transportation and Water Infrastructure, by Type of Infrastructure
Public Spending on Transportation and Water Infrastructure as a Share of GDP, by Type of Infrastructure, 1956 to 2017

Percentage of GDP

- **Highways**
- **Mass Transit and Rail**
- **Aviation**
- **Water Transportation**
- **Water Resources\textsuperscript{a}**
- **Water Utilities\textsuperscript{b}**

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

GDP = gross domestic product.

\textsuperscript{a} Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

\textsuperscript{b} Includes water supply and wastewater treatment facilities.
Public Spending for Capital and for the Operation and Maintenance of Transportation and Water Infrastructure, by Type of Infrastructure, 2017

- **Water Utilities**: Includes water supply and wastewater treatment facilities.
- **Water Resources**: Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

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Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

- a. Includes water supply and wastewater treatment facilities.
- b. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).
Public Spending for Capital and for the Operation and Maintenance of Transportation and Water Infrastructure, by Type of Infrastructure, 1956 to 2017

Billions of 2017 Dollars

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

a. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build transportation and water infrastructure.

b. Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of goods and services consumed by governments, including materials and other inputs used to operate and maintain transportation and water infrastructure.

c. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

d. Includes water supply and wastewater treatment facilities.
The Federal Government’s and State and Local Governments’ Spending on Transportation and Water Infrastructure, by Type of Infrastructure, 2017

<table>
<thead>
<tr>
<th>Infrastructure Type</th>
<th>Federal Share</th>
<th>State and Local Governments Share</th>
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<tbody>
<tr>
<td>Highways</td>
<td>26%</td>
<td>74%</td>
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<tr>
<td>Water Utilities</td>
<td>4%</td>
<td>96%</td>
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<tr>
<td>Mass Transit and Rail</td>
<td>23%</td>
<td>77%</td>
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<tr>
<td>Aviation</td>
<td>45%</td>
<td>55%</td>
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<tr>
<td>Water Resources</td>
<td>35%</td>
<td>65%</td>
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<tr>
<td>Water Transportation</td>
<td>44%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Source: Congressional Budget Office, using data from the Office of Management and Budget and the Census Bureau.

a. Includes water supply and wastewater treatment facilities.

b. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).
The Federal Government’s and State and Local Governments’ Spending on Transportation and Water Infrastructure, by Type of Infrastructure, 1956 to 2017

Billions of 2017 Dollars

Source: Congressional Budget Office, using data from the Office of Management and Budget, the Census Bureau, and the Bureau of Economic Analysis.

Dollar amounts are adjusted to remove the effects of inflation using price indexes for government spending that measure the prices of materials and other inputs used to build, operate, and maintain transportation and water infrastructure.

a. Includes water containment systems (dams, levees, reservoirs, and watersheds) and sources of freshwater (lakes and rivers).

b. Includes water supply and wastewater treatment facilities.
How Did CBO Prepare This Update?

The Congressional Budget Office updated this material using the methods that were described in an appendix to a 2010 report, modified by changes described in an appendix to a 2015 report. See *Public Spending on Transportation and Water Infrastructure* (November 2010), [www.cbo.gov/publication/21902](http://www.cbo.gov/publication/21902), and *Public Spending on Transportation and Water Infrastructure, 1956 to 2014* (March 2015), [www.cbo.gov/publication/49910](http://www.cbo.gov/publication/49910).

Specifically, CBO obtained data about federal outlays from the Office of Management and Budget and about state and local governments’ outlays from the Census Bureau. CBO then converted those nominal (current-dollar) data into real (inflation-adjusted) data, using two sets of price indexes created by the Bureau of Economic Analysis that track government expenditures and investment. One set of indexes measures the prices of materials and other inputs used by state and local governments to build transportation and water infrastructure and was applied to nominal capital spending to convert it into constant dollars; the other set measures the prices of materials and other inputs used to operate and maintain that infrastructure and was applied to spending for operation and maintenance.
Notes and Acknowledgments

All years referred to are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end.

Numbers in the figures may not add up to totals because of rounding.

Detailed spending tables are available as a supplement to this publication at www.cbo.gov/publication/54539.

Nathan Musick prepared this publication with contributions from Joseph Kile, Jeffrey Kling, Benjamin Plotinsky, Jorge Salazar, Chad Shirley, and David Wylie.