Government Spending on Public Transportation and Other Infrastructure

Presentation to the National Tax Association’s 52nd Annual Spring Symposium

Nathan Musick
Microeconomic Studies Division

For information about the symposium, see https://tinyurl.com/yky328kj.
Public Spending on Infrastructure
Public Spending on Transportation and Water Infrastructure, by Level of Government, 2017

Amounts are in 2017 dollars.

Federal Government: $98 Billion (22%)

State and Local Governments: $342 Billion (78%)
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 for Capital and for the Operation and Maintenance of Transportation and Water Infrastructure, by Type of Infrastructure, 2017

- Highways
  - Capital: 53%
  - Operation and Maintenance: 47%
- Water Utilities
  - Capital: 28%
  - Operation and Maintenance: 72%
- Mass Transit and Rail
  - Capital: 34%
  - Operation and Maintenance: 66%
- Aviation
  - Capital: 31%
  - Operation and Maintenance: 69%
- Water Resources
  - Capital: 28%
  - Operation and Maintenance: 72%
- Water Transportation
  - Capital: 36%
  - Operation and Maintenance: 64%

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).
Shares of Public Spending for Capital and for the Operation and Maintenance of Transportation and Water Infrastructure, by Level of Government, 2017

Amounts are in 2017 dollars.
Financing Subsidies for Infrastructure Investment
Average Annual Amount of Federally Supported Financing of Infrastructure, by Subsidy Mechanism, 2007 to 2016

Billions of 2017 Dollars

<table>
<thead>
<tr>
<th></th>
<th>Highways</th>
<th></th>
<th>Mass Transit</th>
<th></th>
<th>Aviation</th>
<th></th>
<th>Water Utilities</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax-Exempt Bonds</td>
<td>14.0</td>
<td>73</td>
<td>8.8</td>
<td>77</td>
<td>6.1</td>
<td>96</td>
<td>14.5</td>
<td>53</td>
<td>43.5</td>
<td>68</td>
</tr>
<tr>
<td>Tax Credit Bonds</td>
<td>3.5</td>
<td>18</td>
<td>1.8</td>
<td>16</td>
<td>0.3</td>
<td>4</td>
<td>2.6</td>
<td>10</td>
<td>8.2</td>
<td>13</td>
</tr>
<tr>
<td>State Revolving Funds and Infrastructure Banks</td>
<td>0.2</td>
<td>1</td>
<td>*</td>
<td>**</td>
<td>n.a.</td>
<td>n.a.</td>
<td>8.8</td>
<td>32</td>
<td>9.0</td>
<td>14</td>
</tr>
<tr>
<td>Direct Federal Credit Programs</td>
<td>1.5</td>
<td>8</td>
<td>0.8</td>
<td>7</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.3</td>
<td>5</td>
<td>3.7</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19.2</strong></td>
<td><strong>100</strong></td>
<td><strong>11.5</strong></td>
<td><strong>100</strong></td>
<td><strong>6.4</strong></td>
<td><strong>100</strong></td>
<td><strong>27.3</strong></td>
<td><strong>100</strong></td>
<td><strong>64.4</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

n.a. = not applicable (no such programs exist); * = between zero and $50 million; ** = between zero and 0.5 percent.
The following costs are in present-value terms and can vary on the basis of a number of factors, including the interest rates prevailing when the financing is offered, the length of the repayment period, and the creditworthiness of borrowers.

- **Tax-exempt bonds**: 26 cents per dollar financed.
- **Tax credit bonds**: 19 cents per dollar financed.
- **State bank loans**: 23 cents to 43 cents per dollar financed, depending on the source of funds.
- **Federal credit programs**: 7 cents to 33 cents per dollar financed, depending on how the credit risk is measured.
Federal Support for Public Transportation
Federal Transit Spending Before the Coronavirus Pandemic

In 2019, the federal government spent $13 billion on public transportation, accounting for about one-sixth of total funding for that purpose.

Over roughly the past three decades, annual federal spending for public transportation (after being adjusted for inflation) has averaged about $14 billion.

On average, just over two-thirds of federal outlays for public transportation have gone to capital spending, and the rest have gone to operation and maintenance.
The Impact of the Pandemic on Transit Agencies’ Finances

Passenger Trips

- Billions of Trips

Operating Receipts

- Billions of 2020 Dollars
Supplemental Funding for Public Transportation

Public transportation has received nearly $70 billion in supplemental federal funding since March 2020.

- **Coronavirus Aid, Relief, and Economic Security (CARES) Act**: $25 billion
- **Consolidated Appropriations Act, 2021**: $14 billion
- **American Rescue Plan Act of 2021**: Almost $31 billion

By the end of fiscal year 2021, approximately $25 billion had been spent.
Reauthorization of Federal Transit Programs for the 2022–2026 Period
## Average Annual Federal Funding for Public Transportation Programs, 2016 to 2026

<table>
<thead>
<tr>
<th>Programs That Receive Annual Funding From the Highway Trust Fund</th>
<th>2016 to 2021 (Billions of dollars)</th>
<th>2022 to 2026 (Billions of dollars)</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urbanized Area Formula Funding</td>
<td>4.8</td>
<td>6.7</td>
<td>40</td>
</tr>
<tr>
<td>State of Good Repair Formula Program</td>
<td>2.6</td>
<td>3.7</td>
<td>42</td>
</tr>
<tr>
<td>Grants for Buses and Bus Facilities Program</td>
<td>0.8</td>
<td>1.1</td>
<td>38</td>
</tr>
<tr>
<td>Formula Grants for Rural Areas</td>
<td>0.7</td>
<td>0.9</td>
<td>29</td>
</tr>
<tr>
<td>Growing States/High-Density States Program</td>
<td>0.6</td>
<td>0.8</td>
<td>33</td>
</tr>
<tr>
<td>Enhanced Mobility of Seniors and Individuals With Disabilities</td>
<td>0.3</td>
<td>0.4</td>
<td>33</td>
</tr>
<tr>
<td>Other programs</td>
<td>0.2</td>
<td>0.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Subtotal, Highway Trust Fund</strong></td>
<td><strong>10.0</strong></td>
<td><strong>14.0</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programs That Are Funded From the Treasury's General Fund</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs that received annual funding from the FAST Act and IIJA</td>
<td>2.3</td>
<td>1.6</td>
<td>-30</td>
</tr>
<tr>
<td>Other programs</td>
<td>0.7</td>
<td>0.6</td>
<td>-14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programs that received funding from IIJA</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants for Buses and Bus Facilities Program (Low- or No-Emission Vehicle Program)</td>
<td>n.a.</td>
<td>1.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>State of Good Repair Formula Program</td>
<td>n.a.</td>
<td>1.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Enhanced Mobility of Seniors and Individuals With Disabilities</td>
<td>n.a.</td>
<td>0.1</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Subtotal, general fund</strong></td>
<td><strong>3.0</strong></td>
<td><strong>4.4</strong></td>
<td><strong>47</strong></td>
</tr>
<tr>
<td><strong>Total Funding</strong></td>
<td><strong>13.0</strong></td>
<td><strong>18.4</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>

FAST Act = Fixing America’s Surface Transportation Act; IIJA = Infrastructure Investment and Jobs Act; n.a. = not applicable.
Other Work From CBO About Federal Support for Infrastructure


Other Work From CBO About Federal Support for Infrastructure (Continued)


Infrastructure Banks and Surface Transportation (July 2012), www.cbo.gov/publication/43361.

Subsidizing Infrastructure Investment with Tax-Preferred Bonds (October 2009), www.cbo.gov/publication/41359.