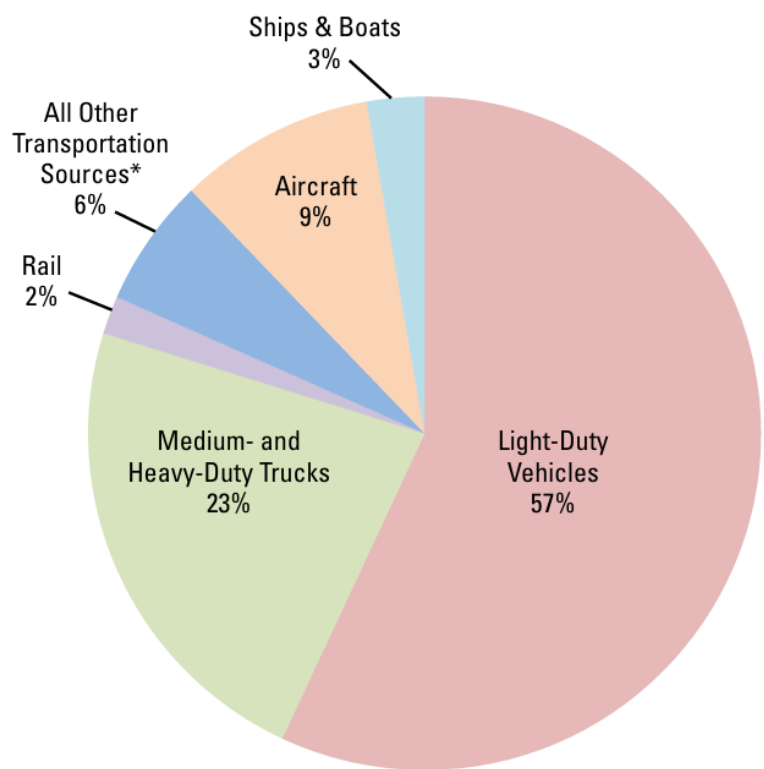


Next Stop: Sustainable Public Transit and Mobility

Rebecca Higgins, Eno Center for Transportation

Transportation and Climate Change: Basic Facts

Transport Sector: 28% of U.S. GHG emissions; 15% of global GHG emissions



Share of U.S. Transportation Sector
GHG Emissions by Source, 2022^{4,5}

Reducing Transport Emissions:

- Energy efficiency side solution:
Reduce emissions-intensity of vehicle miles traveled
→ Support transition from ICE to low/zero emission vehicles
- Demand side solution:
Reduce demand for miles traveled by high emissions vehicles
→ Support alternatives to single occupancy ICE vehicle travel

Transportation and Climate Change: Policy Tools

➤ Funding and other carrots

- Tax Credits and funding for purchase of zero emission vehicles or fleets
- Funding and tax credits for electric charging infrastructure
- Infrastructure Funding programs
- Transit benefits and other incentive programs

➤ Regulations, Pricing, and other sticks

- CAFE and GHG standards
- Congestion pricing, tolling, HOT lanes
- Carbon pricing

Public Transit as Sustainability Solution

- Per passenger emissions efficiency
 - Buses and trains can reduce greenhouse gas (GHG) emissions by up to two-thirds per passenger, per kilometer compared to private vehicles.
- Propulsion efficiency
 - Zero emission buses can reduce CO₂ emissions by upwards of 270,000 pounds per year compared to diesel and CNG buses
- Land-use efficiency
 - Mutual benefits of transit and denser land-use; both also support other zero-emission mobility options, e.g. biking and walking

Public Transit as Sustainability Solution

- Policy Tools for Advancing Transit for Sustainability
 - Networks of bus and rail facilitate the demand-side intervention of shifting transport modes away from single occupancy vehicles
 - Federal grants and loans opportunities to expand transit access and enable demand-side reduction of emissions
 - Public ownership of transit systems and existing reliance on federal funding facilitates use of both carrots and sticks to transition to ZEBs

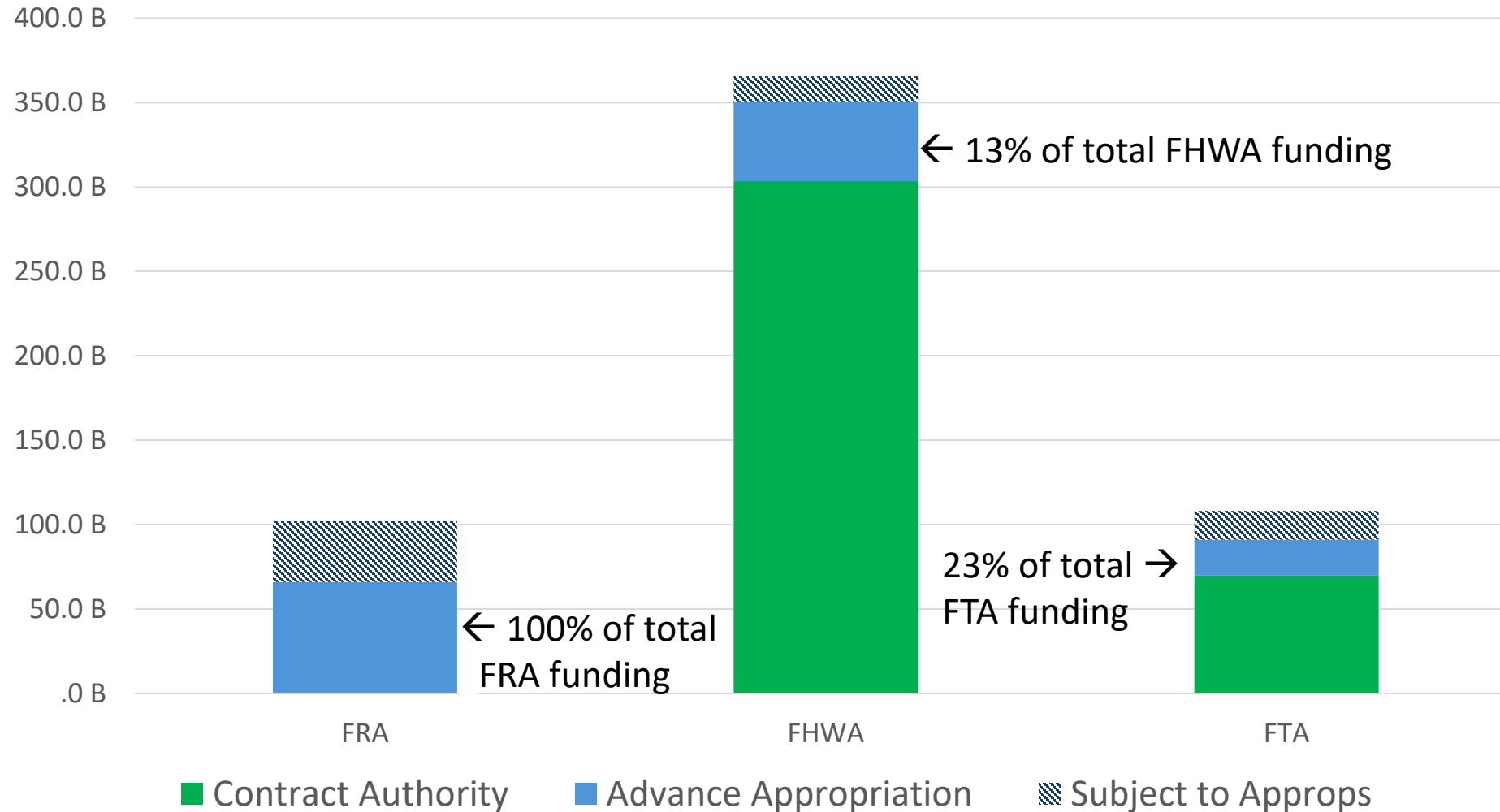
Transportation Reauthorization

- Committee Jurisdiction
 - House: Transportation and Infrastructure
 - Senate: Banking, Housing, and Urban Affairs (Public Transit); Commerce (Rail, Aviation, Safety); Environment and Public Works (Highways)
- Infrastructure Investment and Jobs Act
 - FY2022-FY2026
 - \$660.8 Billion in total authorized funding

Transportation Reauthorization

- Transportation Funding
 - Contract Authority – Dollars from Highway Trust Fund that are authorized and appropriated in the reauthorization
 - Subject to Appropriations – General Fund dollars, authorized but not appropriated in the reauthorization
 - Advanced Appropriations – 5 years of funding appropriated in Division J of IIJA authorization law
- Funding Shortfall
 - Reconciliation bill creates revenue for Highway account, not for transit account

IIJA Surface Transportation Funding



FTA Advanced Appropriation Programs

| | |
|--|---------|
| Capital Investment Grants | 8,000 M |
| Low-No Emissions Bus Competitive Grants | 5,250 M |
| State of Good Repair Grants | 4,750 M |
| All Stations Accessibility Program | 1,750 M |
| Ferry Service for Rural Communities | 1,000 M |
| Electric or Low-Emitting Ferry Program | 250 M |
| Enhanced Mobility of Seniors and Individuals with Disabilities | 250 M |