



U.S. Department of Transportation
Federal Transit Administration



FACT SHEET:
PUBLIC TRANSPORTATION INNOVATION
Section 5312

	FY15/ MAP-21	FY16 (millions)	FY17 (millions)	FY18 (millions)	FY19 (millions)	FY20 (millions)	TOTAL (millions)
Research, Development, Demonstration, Deployment, & Evaluation	\$7.5	\$20.0	\$20.0	\$20.0	\$20.0	\$20.0	\$100.0
Low or No Emission Vehicle Component Testing	-	\$3.0	\$3.0	\$3.0	\$3.0	\$3.0	\$15.0
Transit Cooperative Research Program	\$3.0	\$5.0	\$5.0	\$5.0	\$5.0	\$5.0	\$25.0
5312 PROGRAM TOTAL*	\$10.5	\$28.0	\$28.0	\$28.0	\$28.0	\$28.0	\$140.0

**Amounts above are funded from the Highway Trust Fund. Additional funds authorized from the General Fund are subject to annual appropriations and not included above.*

PROGRAM PURPOSE: To advance innovative public transportation research and development.

Statutory References: 49 U.S.C. Section 5312 / FAST Section 3008

Eligible Recipients: Federal Government departments, agencies, and instrumentalities of the Government, including Federal laboratories; State and local governmental entities; providers of public transportation; private or non-profit organizations; institutions of higher education; and technical and community colleges.

Eligible Activities:

Research: Activities shall focus on (A) providing more effective and efficient public transportation service, including services to seniors; individuals with disabilities; and low-income individuals; (B) mobility management and improvements and travel management systems; (C) data and communication system advancements; (D) system capacity, including train control; capacity improvements; and performance management; (E) capital and operating efficiencies; (F) planning and forecasting modeling and simulation; (G) advanced vehicle design; (H) advancements in vehicle technology; (I) asset maintenance and repair systems advancement; (J) construction and project management; (K) alternative fuels; (L) the environment and energy efficiency; (M) safety improvements; or (N) any other area that is important to advance the interests of public transportation.

Innovation and Development: Activities shall focus on (A) the development of public transportation research projects that received assistance that were successful; (B) planning and forecasting modeling and simulation; (C) capital and operating efficiencies; (D) advanced vehicle design;

(E) advancements in vehicle technology; (F) the environment and energy efficiency; (G) system capacity, including train control and capacity improvements; or (H) any other area that is important to advance the interests of public transportation.

Demonstration, Deployment and Evaluation: A demonstration, deployment, or evaluation project that receives assistance shall seek to build on successful research, innovation, and development efforts to facilitate (A) the deployment of research and technology development resulting from private efforts or Federally funded efforts; or (B) the implementation of research and technology development to advance the interests of public transportation.; or (C) the deployment of low or no emission vehicles, zero emission vehicles, or associated advanced technology. A comprehensive evaluation must be conducted within 2 years from the date a demonstration or deployment project receives assistance; to evaluate the success or failure of the project and to describe any plans for broad-based implementation of the innovation promoted by successful projects.

Low or No Emission Vehicle Component Testing (Low-No Testing): At least one institution of higher education shall be competitively selected to operate and maintain a facility to conduct testing, evaluation, and analysis of low or no emission vehicle components intended for use in low or no emission vehicles. The institution(s) shall have: (I) the capacity to carry out transportation-related advanced component and vehicle evaluation; (II) laboratories capable of testing and evaluation; and (III) direct access to or a partnership with a testing facility capable of emulating real-world circumstances in order to test low or no emission vehicle components installed on the intended vehicle. Component testing is voluntary, however, a low or no emission bus model must still comply with Section 5318 Bus Testing.

Transit Cooperative Research Program (TCRP): Through a cooperative agreement, the National Academy of Science will administer a public transportation cooperative research program. An independent governing board will continue to recommend public transportation research, development and technology transfer activities.

What's Changed?

- The 5312 program is authorized for funding from both the Highway Trust Fund and General Fund. In addition to the amounts in the chart above which are authorized from the Highway Trust fund, FAST authorized an additional \$20 million from the General Fund, which is subject to annual appropriations.
- The creation of a voluntary Lo-No Testing Program for components, which is separate and apart of the Bus Testing Program (Section 5318). This program also requires FTA to publish a performance report on the assessments conducted.
- TCRP, formerly authorized in Section 5313, is now included in this section and is now funded by the Trust Fund as opposed to the General Fund.
- Annual Research Report on projects, evaluations, and benefits is posted to FTA's website rather than submitted to the Congress.

Funding:

Federal Share: The Government share of the cost of a project carried out under this section shall not exceed 80 percent. However, for the Lo-No Testing, the Government share is 50 percent.

Non-Government Share: The non-Government share of the cost of a project carried out under this section may be derived from in-kind contributions. For the Lo-No Testing, the remaining 50 percent is to be paid from the fees established and collected.

Additional Information:

- Departmental Coordination: FAST requires FTA to submit its comprehensive annual modal research plan to the Assistant Secretary for Research and Technology for review and approval prior to expending funds.
- Small Business Innovation Research (SBIR): Pursuant to the Small Business Innovation Development Act of 2000 (P.L. 106-554), a portion of the 5312 funds must be set aside for the Department's SBIR program to address high priority research that will demonstrate innovative, economic, accurate, and durable technologies, devices, applications, or solutions to significantly improve current transit-related service including transit vehicle operation, safety, infrastructure and environmental sustainability, mobility, rider experience, or broadband communication.

For Additional Information on FTA and the FAST Act, please visit: www.fta.dot.gov/fast.html