

The Surface Transportation Research and Development Act of 2021

Section-by-Section

Title 1 – Highway Transportation Research

Section 1. Short Title; Table of Contents.

Section 101. Authorization of Appropriations. – Authorizes appropriations for fiscal years 2021-2025 for Highway Safety R&D, the Highway R&D Program, the Technology and Innovation Deployment Program, the Advanced Transportation and Congestion Management Technologies Deployment Program, Training and Education, and the Intelligent transportation systems program. In nearly all cases the legislation provides for 6.5% year over year increases for such accounts and programs.

Section 102. Amendment to Highway Safety Improvement project definition. – Amends the definition of “highway safety improvement projects” to include projects for education; enforcement; research activities; and cybersecurity.

Section 103. Behavioral Traffic Safety Cooperative Research Program. – Provides an increase in funding for this program to support research projects such as driver impairment, distracted driving and other issues.

Section 104. Amendment to the Exploratory Advanced Research Program. – Expands the program to require grants to fund university research and to participate in interagency collaboration with other federal agencies, including NSF, NIST, and DOE.

Section 105. Amendment to the State Planning and Research Program. – Allows States to request the use of additional funding from their apportionment of Highway Trust Fund under the Federal-aid Highway Program for research.

Section 106. Road Weather Centers of Excellence. – Reauthorizes this program, which was last funded in 2009, and adds an additional focus on road weather research for automated vehicles and automated transportation systems.

Title II Multimodal Transportation Research

Section 201. Authorization of Appropriations.- Authorizes appropriations for fiscal years 2021-2025 for the University Transportation Centers (UTC) Program, the Bureau of Transportation Statistics, Transit Research and Development, the National Cooperative Rail Research Program, Hazardous Materials Research and Development, and the National Cooperative Freight Transportation Research Program. Doubles the UTC program from current spending and provides 6.5% year over year increases thereafter. For BTS and transit, provides an increase in funding over current spending and provides 2.5% year over year increases thereafter. For remaining programs provides flat funding for 6 years.

Section 202. Advisory Council on Transportation Statistics. – Reauthorizes a previously existing advisory council.

Section 203. Amendments to the University Transportation Centers Program. – Expands the number of National UTCs from 5 to 10 and Tier 1 UTCs from 10 to 20, increases the minimum and maximum grant size for each tier, as provided for in the funding provided in Sec. 201, adds new research priorities for UTCs, and reduces the match requirement for National and Regional UTCs to 50 percent in FY21 and FY22 and during national emergencies.

Section 204. Resilient Transportation Infrastructure Centers of Excellence. – Requires the Secretary to establish a research and development program to improve the resilience of transportation infrastructure across diverse regions of the United States to natural disasters, extreme weather, and the effects of climate change.

Section 205. Transportation Data for Healthy Living Study Pilot. – Requires the Secretary to carry out a study to inform land use and transportation planning for accessible health, food, education, and other essential services and activities through collecting and analyzing data to estimate how people travel to essential services and activities.

Section 206. National Cooperative Freight Transportation Research Program. – Requires the Secretary to reestablish the program and enter into an agreement with the National Academies of Sciences to develop a national freight research agenda.

Sec. 207. Vehicular Data Analytics Pilot Program. Requires the Secretary to establish a pilot program for the purposes of integrating vehicular onboard sensor data with existing data sets to improve safety, operations, and congestion relief strategies.

Sec. 208. Heavy Freight Automated Trucking Research Corridor. Requires the Secretary to establish a program to support research and development on automated and connected freight trucking and to establish a heavy freight automated trucking research and development corridor and related pilot programs.

Section 209. Strategic Transportation Research Program. - Requires the Secretary to enter into an agreement with the National Academies of Sciences to develop a research agenda for the surface transportation system that would address integrating advanced technologies and innovation, including advancing connected and autonomous technologies.

Section 210. Advanced Transportation Research and Innovation Program. – Requires the Secretary to establish a program administered by the Assistant Secretary of Research and Technology for interagency collaboration to support research that addresses the long-term scientific barriers to development of multimodal advanced transportation technologies and to support high-risk research and development to accelerate transformational transportation innovations.

Section 211. Rail Cooperative Research Program. – Reauthorizes this research program administered by the National Academies of Sciences which conducts research on freight,

intercity, and commuter rail to solve operating challenges, to adapt new technologies from other industries, and to introduce innovations into the rail industry.

Section 212. Multimodal Transportation Demonstration Program. – Provides authority to the Secretary to establish a program for the demonstration of advanced transportation technologies, including autonomous systems, for surface transportation modes, including highways, public transportation, freight, ports, and maritime for local transportation organizations and transit agencies serving populations of 250,000 or less.

Section 213. Advisory Council on Transportation Research and Development. – Requires the Secretary to establish a surface transportation research and development advisory board to review and make recommendations for general policy for the Department’s surface transportation R&D activities, its organization, its budget and its programs as they relate to national surface transportation policies.

Section 214. Transportation R&D Quinquennial Review and Strategic Plan. – Adds “security in transportation systems” to considerations for the strategic plan and requires the Secretary to update the Department’s R&D strategic plan on a regular five-year cycle.