

Senate Bipartisan Infrastructure Bill – What's In It for ITE Members?

The Fixing America's Surface Transportation Act (FAST Act) authorized \$305 billion for federal spending programs for surface transportation over fiscal years 2016-2020. With the one-year extension passed by Congress last year, the authorization now expires on September 30, 2021.

The ITE International Board of Direction approved a set of [ITE FAST Act Reauthorization Principles](#) in July 2019, and the Institute provided these to Congress for their consideration. In early August 2021, ITE also joined more than 80 organizations in encouraging the Senate to pass the bipartisan Infrastructure Investment and Jobs Act.

On August 10, 2021, the U.S. Senate voted 69-30 to pass the Infrastructure Investment and Jobs Act ([H.R. 3684](#)), more commonly referred to as the Senate bipartisan infrastructure bill. The Senate bill includes a reauthorization of surface transportation legislation covering fiscal years 2022-2026. The bill now moves to the House of Representatives for consideration.

The following is a list of the provisions in the Senate bill that should be of interest to ITE members, many of which are consistent with the ITE FAST Act Reauthorization Principles.

Overall Funding Levels

Increases funding levels by \$110 billion for roads, bridges, and major projects over levels in the FAST Act. Increases transit funding by \$39 billion.

National Highway Performance Program

Augments the purpose of the program to include a focus on measures that increase resiliency to the impacts of sea level rise, extreme weather events, flooding, and other natural disasters, such as earthquakes and rockslides.

Federal Share Payable

Provides for a Federal share payable of up to 100 percent for vehicle-to-infrastructure communication equipment and contractual provisions that provide safety contingency funds to incorporate safety enhancements to work zones prior to or during roadway construction activities.

Congestion Relief Program (\$250B)

Establishes a congestion relief program to provide competitive grants to States, local governments, and metropolitan planning organizations, for projects in large urbanized areas to advance innovative, integrated, and multimodal solutions to congestion relief in the most congested metropolitan areas of the United States.

The program allows States and MPOs to compete for grants for eligible projects within urbanized areas containing populations of more than 1,000,000 people. Grant awards shall be not less than \$10,000,000. Eligible projects consist of

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planning, design, implementation, and construction activities to achieve program goals, including the deployment and operation of mobility services, integrated congestion management systems, and systems that implement or enforce high occupancy vehicle toll lanes, cordon pricing, parking pricing, or congestion pricing.

Incentive programs that encourage travelers to carpool or use non-highway travel modes are also included. When selecting grants, the Secretary shall give priority to eligible projects located in urbanized areas that are experiencing high degrees of recurrent congestion. The Federal cost-share shall not exceed 80 percent of the total cost of a project.

Surface Transportation Block Grant Program (STBG) (\$72B)

Increases the amount of funding set aside within the program for the Transportation Alternatives Program (TAP), increases the minimum percentage of TAP funding that is sub-allocated on the basis of population to 59 percent, and provides a process by which States may opt to increase that percentage to as high as 100 percent. Also adds new eligibilities to STBG including electric vehicle charging infrastructure and vehicle-to-grid infrastructure, installation and deployment of intelligent transportation technologies, projects that facilitate intermodal connections between emerging transportation technologies, resilience features, and cybersecurity protections.

Highway Safety Improvement Program (HSIP) (\$15.575B)

Restores flexibility to fund certain non-infrastructure activities and behavioral safety projects, such as educational campaigns about traffic safety and enforcement activities, and allows a State to spend up to 10 percent of its HSIP funding on such projects.

New or clarified program eligibilities include leading pedestrian intervals, construction or installation of features, measures, and road designs to calm traffic and reduce vehicle speeds, installation or upgrades of traffic control devices for pedestrians and bicyclists, roadway improvements that provide separation between pedestrians and motor vehicles or between bicyclists and motor vehicles, and a pedestrian security feature designed to slow or stop a motor vehicle as an eligible highway safety improvement project.

Defines a “safe system approach” and “vulnerable road user,” and requires that when total annual fatalities of vulnerable road users in a State represents not less than 15 percent of the total annual crash fatalities in the State, that State shall be required to obligate not less than 15 percent of their HSIP funds for the following fiscal year for projects to address the safety of vulnerable road users.

Creates a Vulnerable Road User Assessment, to be integrated into the existing requirement for a State Strategic Highway Safety Plan, which requires states to gather and assess data on fatalities and serious injuries of vulnerable road users, and identify a program of projects to mitigate such safety risks.

Vulnerable Road User Research

Directs the FHWA Administrator to establish a research plan to prioritize research on roadway designs, the development of safety countermeasures to minimize fatalities and serious injuries to vulnerable road users, and the promotion of

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bicycling and walking. This includes research relating to roadway safety improvements, the impacts of traffic speeds, and tools to evaluate the impact of transportation improvements on projected rates and safety of bicycling and walking.

Vision Zero (\$5B)

Establishes a “Safe Streets and Roads for All” grant program for MPOs, local governments and tribal governments to develop and carry out comprehensive safety plans to prevent death and injury on roads and streets, commonly known as "Vision Zero" or "Toward Zero Deaths" initiatives.

Congestion Mitigation and Air Quality Improvement Program (CMAQ) (\$13.2B)

Adds eligibility for shared micromobility, including bike share and shared scooter systems. Permits the Secretary, at the request of an MPO, to assist that MPO with tracking progress made in minority or low-income populations as part of a performance plan. Clarifies when eligible transit operating costs are not subject to a time limitation or phase-out requirement.

Strengthening Mobility and Revolutionizing Transportation Grant Program (\$500M)

Provides grants to eligible entities to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation efficiency and safety.

Eligible projects include, but are not limited to, the use of automated transportation and autonomous vehicles; connected vehicles; intelligent sensor-based infrastructure; the integration of intelligent transportation systems with other existing systems and other advanced transportation technologies; improving the active management and functioning of traffic signals, including replacing outdated traffic signals and paying the costs of temporary staffing hours dedicated to updating traffic signal technology for an eligible entity serving a population of less than 500,000.

Safe Routes to School

Codifies the Safe Routes to School Program and amends it to apply the program through 12th grade to enable and encourage high school students to walk and bike to school safely.

Manual on Uniform Traffic Control Devices (MUTCD)

Directs the Department of Transportation to update the MUTCD, and to continue to update the manual no less than every three years thereafter. Requires that the initial update shall include protection of vulnerable road users, the safe testing of automated vehicle technology, and minimum retroreflectivity of traffic control devices and pavement markings.

Micromobility

Adds micromobility as an eligible use of funds for construction of walkways and bicycle transportation facilities.

Transportation Workforce

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Requires the Secretary to encourage States to develop a voluntary human capital plan for the immediate and long-term transportation-related personnel and workforce needs of the State. These voluntary human capital plans are to be publicly available and updated at least once every five years.

Provides authority to allow States greater flexibility to address surface transportation workforce development, training, and education needs, including activities that address current workforce gaps. Permits States to obligate funds for purposes such as pre-apprenticeships, apprenticeships, and career opportunities for on-the-job training, and vocational school support. Expands the eligibility of educational institutions beyond institutions of higher education. Authorizes the Secretary to award grants for training deployment purposes beyond the development, testing, and review of new curricula and education programs.

Performance Management Measures

Directs the Secretary to establish, in coordination with the Administrator of the Environment Protection Agency, a rulemaking that establishes the data elements necessary for States to estimate carbon dioxide emissions from on-road highway sources. Furthermore, one year after the rulemaking is established, the Secretary shall, in consultation with State departments of transportation, metropolitan planning organizations, and other stakeholders, promulgate a rulemaking that establishes measures for States to support the reduction in carbon dioxide emissions from on-road highway sources.

Travel Demand Data and Modeling

Requires the Secretary to carry out a study of forecasted travel demand data compared to actual observed travel, and to use the findings of that study to inform State and MPO use of travel forecasting to evaluate the impacts of transportation investments on travel demand, to support more accurate travel demand forecasting, and to enhance the capacity of States and MPOs to forecast travel and track observed travel behavior.

Complete Streets

Requires each State and metropolitan planning organization to spend a minimum amount of funding for either the adoption of complete streets standards and policies, development of a complete streets prioritization plan, active and mass transportation planning, regional and megaregional planning to address travel demand through alternatives to highway travel, or transit-oriented development planning. Provides an exemption for a State or MPO if it has Complete Streets standards and policies in place, and has developed an up-to-date prioritization plan.

Streamlining Environmental Reviews

Amends section 139 of title 23, United States Code, to provide new environmental review procedures and requirements for major projects. Under this section, the Department of Transportation is required to develop a schedule consistent with an agency average of two years to complete an environmental impact statement and requires accountability to the public when milestones are missed. Environmental documents under this section are limited to 200 pages unless a review is of unusual scope and complexity. The Secretary of Transportation is also directed to work with relevant Federal agencies to adopt appropriate categorical exclusions to facilitate project delivery.

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Transportation Management Plans

Requires the Secretary to clarify that only projects with a lane closure for three or more consecutive days are to be deemed significant and removes the requirement for a State to develop or implement a transportation management plan for any project that is not on the Interstate and that requires not more than three consecutive days of lane closures.

Intelligent Transportation Systems

Requires the Secretary to develop guidance for using existing flexibilities with respect to the systems engineering analysis. Specifically, requires the Secretary to ensure that the guidance clarifies criteria for low-risk and exempt intelligent transportation system projects to minimize unnecessary delays or paperwork burdens.

Formula Carbon Reduction Program (\$6.42B)

Establishes a carbon reduction program to reduce transportation emissions. Eligible projects include a project to establish or operate a traffic monitoring, management, and control facility or program, a public transportation project that is eligible for assistance under section 142 (Public Transportation), the construction, planning, and design of on-road and off-road trail facilities for pedestrians and bicyclists, a project for advanced transportation and congestion management technologies, a project for the deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle to infrastructure communications equipment, a project to replace street lighting and traffic control devices with energy-efficient alternatives, and the development of a carbon reduction strategy.

Requires that two years after the date of enactment a State, in consultation with any metropolitan planning organization designated within the State, shall develop a carbon reduction strategy.

Resilience

Establishes a formula and competitive program (Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)) (\$7.3B in formula, \$1.4B in grants) to help States improve the resiliency of transportation infrastructure. Resilience grants comprise resilience improvement grants, community resilience and evacuation route grants, and at-risk coastal infrastructure grants.

Directs the Secretary to designate 10 regional Centers of Excellence for Resilience and Adaptation and one national Center of Excellence for Resilience and Adaptation, which shall serve as a coordinator for the regional Centers, to receive grants to advance research and development that improves the resilience of regions of the United States to natural disasters, extreme weather, and the effects of climate change on surface transportation infrastructure and infrastructure dependent on surface transportation. Subject to the availability of appropriations, the Secretary shall provide to each Center of Excellence a grant of not less than \$5,000,000 for each of fiscal years 2022 through 2031 to carry out the activities.

Reconnecting Communities Pilot Program (\$500M)

Establishes a community connectivity pilot program through which eligible entities may apply for planning funds to study the feasibility and impacts of removing, retrofitting, or mitigating an existing transportation facilities that create barriers to mobility, access, or economic development, and for construction funds to carry out a project to remove, retrofit or

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mitigate an eligible facility and, if appropriate, to replace it with a new facility. Allows the Secretary to award planning grants and provide technical assistance to eligible entities. Planning grant awards may not exceed \$2,000,000, and the Federal cost-share for a project may not exceed 80 percent.

Allows the Secretary to award capital construction grants to owners of eligible facilities for eligible projects for which all necessary feasibility studies (and other planning activities) have been completed. Eligible projects include the removal and replacement of eligible facilities. Capital construction grants must be at least \$5,000,000. The Federal cost- share for a project may not exceed 50 percent, and the maximum Federal involvement shall not exceed 80 percent.

Study of Impacts of Roads from Self-Driving Vehicles

Directs the Secretary to initiate a study on the existing and future impacts of self-driving vehicles to transportation infrastructure, mobility, the environment, and safety, including impacts on the Interstate System, urban roads, rural roads, corridors with heavy traffic congestion, and transportation systems optimization. The study under shall include specific recommendations for both rural and urban communities regarding the impacts of self-driving vehicles on existing transportation system capacity. In carrying out the study the Secretary shall convene and consult with a panel of national experts in both rural and urban transportation. Not later than one year after the date on which the study under is initiated, the Secretary shall submit a report on the results of the study.

National Motor Vehicle Per-Mile User Fee Pilot

Directs the Secretary, in coordination with the Secretary of the Treasury, to establish a pilot program to demonstrate a national motor vehicle per-mile user fee. In carrying out the pilot program, the Secretary, in coordination with the Secretary of the Treasury, shall provide different methods that volunteer participants can choose from to track motor vehicle miles traveled. For the purposes of the pilot program, the Secretary of the Treasury shall establish, on an annual basis, per-mile user fees for passenger motor vehicles, light trucks, and medium- and heavy-duty trucks, which amount may vary between vehicle types and weight classes to reflect estimated impacts on infrastructure, safety, congestion, the environment, or other related social impacts.

Emerging Technology Research Pilot Program (\$25M)

Establishes a pilot program to conduct emerging technology research, specifically including advanced and additive manufacturing (3-D printing) technologies, as well as research into activities to reduce the impact of automated driving systems and advanced driver automation systems technologies on pavement and infrastructure performance, and to improve transportation infrastructure design.

Research and Technology Development and Deployment

Expands the objectives of the Turner Fairbank Highway Research Center to support research on non-market ready technologies in consultation with public and private entities. Establishes an open challenge and research proposal pilot program that provides grants for proposals to research needs or challenges identified or determined to be important by the Secretary.

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Authorizes a new Center of Excellence on New Mobility and Automated Vehicles to research the impact of automated vehicles and new mobility, such as docked and dockless bicycles and electric scooters.

Advanced Research Projects Agency-Infrastructure

Establishes the Advanced Research Projects Agency-Infrastructure (ARPA-I) to fund research and development on advanced transportation infrastructure technologies. ARPA-I would support novel, early-stage research as well as advance conceptual research into testing and development.

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