Summary: Investing in a New Vision for the Environment and Surface Transportation in America (INVEST in America) Act

On June 3, House Democrats on the House Transportation and Infrastructure Committee introduced the Investing in a New Vision for the Environment and Surface Transportation in America (INVEST in America) Act, legislation that would re-authorize funding for federal aid for transportation related activities. This bill authorizes $494 billion in funding for transportation needs during the 5-year period of fiscal year (FY) 2022-25, and is intended to replace the current surface transportation authorization bill that expires on Sept. 30. The House Transportation and Infrastructure Committee has scheduled a markup for the bill on June 17. The committee has posted a fact sheet, bill summary and section-by-section analysis, which provide further details regarding the House bill.

On the Senate side, the Senate Environment and Public Works Committee approved S. 2302, America’s Transportation Infrastructure Act of 2019, but further action has not occurred on this bill, and it has not been brought to the Senate floor for a vote nor have other committees with jurisdiction over transportation-related matters in the Senate completed action on transportation re-authorization legislation. Given the uncertainties surrounding whether the House and Senate would be able to negotiate a new transportation reauthorization bill before the expiration of the current bill, it may be more likely that the House and Senate may agree to extend the terms of the current transportation authorization bill.

Below is a summary of the INVEST in America Act, with a focus on provisions that may be of particular interest that relate to transportation research.

The INVEST in America Act
- The bill authorizes $494 billion in funding for transportation needs during the period FY 2022-25 for surface transportation needs.

Federal Surface Transportation Programs
- The bill provides funding for the extension of federal surface transportation programs and authorizes appropriations for the Highway Trust Fund, the Federal Highway Administration, the Federal Transit Administration, the National Highway Transit Administration, the Federal Motor Carrier Safety Administration and other programs.
- The bill provides funding for Federal-Aid to Highways, makes programmatic infrastructure investments and provides funding for mass transit and public transportation programs.
- Funding is also provided through formula funds such as to the states through block grants to carry out transportation-related activities.

University Transportation Centers (UTC) Program
- Authorizes $96 million for each year during FY 2022-25 for the UTC Program.
- Research priorities identified include:
  o Improving the mobility of people and goods;
  o Reducing congestion;
- Promoting safety;
- Improving the durability and extending the life of transportation infrastructure and the existing transportation system;
- Preserving the environment; and
- Reducing greenhouse gas emissions.

- Grants are set to be made for amounts not greater than $4.250 million and not less than $2.250 million. The Secretary of Transportation shall also award one grant to a national-consortia in different focus areas. Criteria for the secretary to consider is also provided in the bill.
- The secretary is allowed to award grants to not less than one grant recipient within each of the following areas:
  - Transit;
  - Connected and automated vehicle technology;
  - Non-motorized transportation, including bicycle and pedestrian safety;
  - Developing metropolitan planning practices;
  - The surface transportation workforce, including current and future workforce needs and challenges; and
  - Climate change mitigation.
- Additional grants may also be considered. The bill provides further information regarding criteria selection.

Unsolicited Research Initiative as Part of the UTC Program
- The bill also asks the secretary to "establish a program under which an eligible entity may at any time submit unsolicited research proposals for funding..."
- $2 million in funding from the UTC program can be used by the secretary for this section, for each FY 2022-25.
- Institutions of higher education are among the eligible entities under this section to submit unsolicited research proposals.
- The bill provides criteria to follow for submitting proposals, including that the proposals "shall meet the purposes of the Secretary's 5-year transportation research and development strategic plan." In this section, the federal cost share for proposals "may not exceed 50 percent." The non-federal share of the project would be provided by the funding recipient, but costs associated with the project can be credited.

COVID-19
- The bill provides for Capital Investment Grants (CIG) COVID-19 to help to cover expenses related to the cost of projects funded through the Federal Highway Administration.
- There is an aim with CIG grants to provide funding to states and transit agencies to help to cover operating expenses and to cover the federal cost share that would apply for transportation related projects.

Climate
- The bill includes a "Climate Change and Resilience" section, which asks for transportation planning processes to assess strategies to reduce climate change impacts and to identify ways to improve the "resilience of the surface transportation system."
- The bill also includes climate change mitigation and impact requirements for long range transportation plans to include, such as: finding strategies to reduce "transportation
related sources of greenhouse gas emissions,” and to increase “rates of public transportation ridership, walking, bicycling, and carpools...”

- Risk based vulnerability assessments are also required in long range transportation plans.
- Resilience projects are also discussed for purposes of finding ways to improve “the resilience of the transportation system,” and climate change mitigation and impacts are expected to be included in long-range transportation plans.
- Language is also included related to a Congestion Mitigation and Air Quality Improvement Program.
- The secretary of transportation would also be required to establish a "carbon pollution reduction program to support the reduction of greenhouse gas emissions from the surface transportation system."
- The secretary is also asked to establish a community climate innovation grant program to provide grants for projects that reduce "greenhouse gas emissions," related to improving surface transportation.

**Innovation**

- The secretary is permitted to make funding available to carry out a "Mobility Innovation Sandbox Program" to conduct research on "mobility on demand and mobility as a service activity."
- The secretary is also allowed to make funding available to carry out research on "redesigning transit bus operator compartments to improve safety, operational efficiency, and passenger accessibility." Institutions of higher education are included as eligible entities for purposes of being able to carry out research for this section.
- Highway Trust Fund amounts are authorized to be appropriated to carry out:
  - A Highway Research and Development Program;
  - For a Technology and Innovation Deployment Program;
  - For a Training and Education program; for an Intelligent Transportation Systems Program; and
  - The University Transportation Centers Program.
- Additional funding is provided for:
  - Safe, Efficient Mobility Through Advanced Technologies;
  - Materials to Reduce Greenhouse Gas Emissions Program;
  - National Highly Automated Vehicle and Mobility Innovation Clearinghouse;
  - National Cooperative Multimodal Freight Transportation Research Program;
  - State Surface Transportation System Pilots;
  - National Surface Transportation System Funding Pilot; and
  - Other areas.
  - It is unclear which entities would be eligible to participate in these programs.
- A Materials to Reduce Greenhouse Gas Emissions Program is also created, which allows the secretary to award grants to eligible entities to conduct research and to support materials development, related to reducing greenhouse gases. This program specifies that institutions of higher education would be eligible to apply for these grants which are to be competitively awarded.
- The secretary is also directed to develop a “Transportation Research and Development 5-year Strategic Plan,” for FY 2017-2021 and for each 5-year period thereafter.
Electric Vehicle Infrastructure
- The bill provides funding for electric vehicle charging infrastructure stations, including providing for electric vehicle charging and hydrogen fueling infrastructure grants.

National Cooperative Multimodal Freight Transportation Research Program
- The secretary is directed to establish a national cooperative multimodal freight transportation research program.
- This section asks the secretary to enter into an agreement with the National Academy of Sciences (NAS) to carry out activities related to the program.
- Academic experts in specific areas are designated as being able to participate in the NAS-directed advisory committee activities, which will be tasked with creating a "national cooperative multimodal freight transportation research program," which would include the establishment of a National Research Agenda.

Technology and Innovation Deployment Program
- The bill includes language focusing efforts on deploying technologies aimed at reducing greenhouse gas emissions, accelerating pavement technologies and other areas.
- The bill also aims to ensure that recipients of federal surface transportation funds work to employ innovations aimed at improving transportation systems and providing efficiency and innovation.

Emerging Technologies
- The bill includes language related to emerging technologies, and suggests that efforts should be made to enhance mobility through advanced technologies.
- The bill amends the Intelligent Transportation Systems Program to add "greenhouse gas emissions reduction," and "congestion management" to the goal areas.

National Highly Automated Vehicle and Mobility Innovation Clearinghouse
- The bill allows the secretary to "make a grant to an institution of higher education engaged in research on the secondary impacts of highly automated vehicles," to "operate a national highly automated vehicle and mobility innovation clearinghouse."

Automated Vehicles Study
- The bill asks for a study to be initiated by the secretary to look at issues related to "the ability of automated vehicles to safely interact with other road users."
- The secretary is directed to establish a Working Group to study these issues, and academic experts on "automated vehicle technologies" are included in the list of eligible participants.

Nontraditional and Emerging Transportation Technology Council
- The secretary is also asked to establish a Nontraditional and Emerging Transportation Technology Council which appears to be an intramural group within the Department of Transportation.

Hyperloop Transportation
- The secretary is also asked to issue guidance to provide a "clear regulatory framework for the safe deployment of hyperloop transportation."
Education/Workforce
- The secretary is asked to submit a report to Congress describing the efforts the department makes to "encourage elementary, secondary, and post-secondary students to pursue careers in the surface transportation sector.
- The secretary is also required under the bill to "establish a task force on developing a 21st century surface transportation workforce," and provisions are also included related to workforce training and development.

Infrastructure Investments
- The bill includes a Programmatic Infrastructure Investment section that provides support for meeting targets to support the construction of National Highway System related projects, consistent with the plans of states, and to support progress toward performance targets established by states.
- There is also an effort to support the "resilience of" federal aid supported highway and bridge projects and transportation assets.
- Projects are also emphasized that reduce greenhouse gas emissions, and support is also mentioned for the installation of electric vehicle charging infrastructure.
- The bill suggests that there should be a focus on fixing existing roads, before building new highways.
- States would be required to spend a certain percentage of their funding on bridge repair and rehabilitation projects.
- A focus is also placed on fixing and inspecting bridges, highway safety and other infrastructure projects.
- The bill requires the secretary to establish a Projects of National and Regional Significance Program, which allows for grants to be provided, multi-year grant agreements. Eligibility is aimed at states or groups of states and units of local government, as well as other entities with a transportation function.
- A Community Transportation Investment Grant Program is also established related to transportation investments.
- The bill also establishes a Gridlock Reduction Grant Program that focuses on allowing States, metropolitan planning organizations or units of local governments to apply for grants for projects designed to reduce "traffic congestion."
- Investments in broadband infrastructure are also made in the bill in consultation with states.
- Public transportation also receives attention under the bill, with a focus on increasing utilization of public transportation and improving mobility innovations in transportation systems. The cost share for projects can be reduced by meeting zero emission incentives.
- The bill also includes "Buy America and Other Procurement Reforms," and includes provisions to make changes to formula funding for buses and other areas, including providing support for public transportation related "Frontline Workers and Passenger Safety." Highway Traffic Safety programs are also funded as well as other transportation safety related programs, including school bus safety.