

PUBLICATION

Revitalizing and Rebuilding America – Issue 6: Driving the Auto Sector into the Future

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Baker Donelson's public policy group and the Daschle Group are pleased to provide our sixth update on developments regarding infrastructure and appropriations legislation. This update is intended to provide information for the automotive sector on major policy implications of the recently passed Infrastructure Investment and Jobs Act (IIJA) that will soon become law. Additional updates on this legislation and the Build Back Better Act (BBBA), also known as the reconciliation bill, will be provided.

In Short

The House of Representatives passed the IIJA on November 5 with a bipartisan vote, 228 – 206. This followed a bipartisan 69-30 vote in the Senate on September 10. We expect President Biden to sign this legislation into law on November 15. The IIJA makes major investments in core infrastructure priorities – including roads and bridges, rail, transit, ports, airports, the electric grid, water systems, manufacturing, and broadband. The bill provides \$550 billion in new spending over five years for these priorities. A bipartisan section-by-section analysis of the bill can be found [here](#).

The IIJA has several implications for the U.S. automotive sector. The legislation creates federal programs designed to facilitate a major shift to electric, hydrogen, and hybrid vehicle production and adoption. It also provides incentives to achieve this. The IIJA is focused on manufacturing incentives, electric vehicle and alternative fuel infrastructure, research and industrial projects, and safety standards. As written, the BBBA would provide even more impactful policy for the auto sector, but its future remains uncertain. .

The following are detailed summaries of the provisions in the legislation. To fully assess eligibility, please contact one of our policy experts.

Manufacturing Incentives

The following programs provide funding for producers in the electric vehicle (EV) supply chain, particularly battery producers and recyclers.

- **\$3 billion** to establish a Battery Material Processing Grants program within the Department of Energy's (DOE's) Office of Fossil Energy and **\$3 billion** for Battery Manufacturing and Recycling Grants within the Office of Energy Efficiency and Renewable Energy. The goals of these grant programs are to expand the U.S. battery materials and mineral processing industry, expand advanced battery manufacturing and recycling capacity, and reduce U.S. reliance on certain foreign competitors. The grant amount limits range from \$50 million for demonstration, retooling, and retrofitting to \$100 million for commercial-scale projects. Priority consideration is given to entities that:
 - Are located and operate in the U.S.
 - Are owned by a U.S. entity
 - Deploy North American-owned intellectual property and content
 - Represent consortia or industry partnerships

- Will not use battery material supplied by or originating from a "foreign entity of concern"
- For manufacturers and recyclers, will not export recovered critical materials to a foreign entity
- **\$750 million** for the Secretary of Energy to establish an Advanced Energy Projects grant program
 - Qualified recipients include a manufacturer with sales below \$100 million, fewer than 500 plant site employees and annual energy bills between \$100,000 and \$2.5 million.
 - Qualified projects include those that re-equip, expand, or establish a manufacturing or recycling facility for the production or recycling of advanced energy property or proposals in former coal mining communities that install equipment at an existing facility to substantially reduce greenhouse gas emissions.
 - Priority will be given to projects that have the highest impact on reducing greenhouse gas emissions; create the highest amount of domestic jobs with an additional preference for low-income communities and former fossil fuel communities; have the greatest potential for technological innovation and commercial deployment; have the lowest levelized cost of generated or stored energy; have a measured reduction in energy consumption or greenhouse gas emissions; and have shorter project time.
- **\$200 million** for electric drive vehicle battery recycling and second-life programs to be established by the Secretary of Energy. The aim of this competitive grant program is to improve the recycling rates and second-use adoption rates of electric drive vehicle batteries.
 - Eligible research, development, and testing include, but is not limited to:
 - Technology to increase the efficiency of electric vehicle battery recycling and maximize the recovery of critical materials
 - Expanded uses for critical materials recovered from EV batteries
 - Product design and construction to facilitate disassembly and recycling
 - Strategies to increase consumer participation in recycling
 - Second uses of EV batteries
 - Commercialization and scale-up of battery recycling technologies
 - Priority consideration is given to projects that:
 - Include business commercialization plans that have the potential for the recycling of batteries at high volumes
 - Support the development of advanced manufacturing technologies that have the potential to improve the competitiveness of the U.S. EV battery manufacturing sector
 - Provide the greatest potential to reduce costs for consumers and promote accessibility and community implementation of demonstrated technologies
 - Increase disclosure and transparency of information to consumers
 - Support the development or demonstration of projects in economically distressed areas
- **\$15 million** to a grant program for retailers that sell covered batteries or covered battery-containing products to establish and implement a system for the collection of covered batteries for reuse, recycling, or proper disposal. This collection system must be at no cost to consumers and done on a regular basis.
- **\$10 million** for the Secretary of Energy to carry out the Lithium-ion Battery Recycling Prize Competition, which is an existing DOE [prize competition](#).

Electric Vehicle Charging and Alternative Fuels Infrastructure

- **\$13.2 billion** for the Congestion Mitigation and Air Quality Program to be used by states to purchase medium- and heavy-duty zero-emission vehicles and associated charging equipment. Funding is

allocated to states based on pollution data from each state.

- Substantial investments in clean buses include:
 - **\$5.25 billion** for a Department of Transportation (DOT) Low-No Program that provides states and localities to purchase or lease low- and zero-emission transit buses. This funding will include workforce development and training for diesel mechanics to keep their jobs working on the new buses.
 - **\$5 billion** for an Environmental Protection Agency (EPA) Clean School Bus Program that will disburse grants for states, localities, and nonprofit school transportation associations to purchase new school buses. Half of the money must be spent on zero-emission buses and the other half can be spent on either zero- or low-emission buses.
 - **\$1.3 billion** for DOT grants under 49 U.S.C. § 5339 to be used at bus facilities including to competitively procure zero-emission buses as part of a long-term fleet transition plan.
- **\$2.5 billion** for a new Alternative Fuel Corridors program at the Federal Highway Administration (FHA) that will provide charging and fuel infrastructure grants to communities within newly established corridors. These grants can be used for electric vehicles and vehicles that use hydrogen, propane (medium- or heavy-duty vehicles only), or natural gas as fuel. These grants are meant to be used to contract with a private entity to carry out these projects. 50 percent of the grant money must be used to install charging and fueling infrastructure in public spaces with priority given to rural areas, low- and moderate-income neighborhoods, and communities with higher amounts of multi-family, multi-unit housing.
- **\$250 million** for a new program to reduce truck emissions at port facilities. This funding can be used to electrify ports and provide charging infrastructure for electric heavy-duty vehicles.
- Charging infrastructure projects and "vehicle-to-grid" connection projects will now be eligible in the Surface Transportation Block Grant Program.
- Over the next year, the Department of Transportation (DOT) will begin the process of creating multiple tools for evaluating the future of hydrogen, natural gas, and propane-fueled vehicles in the United States. These tools will include:
 - A current map and five-year projection of concentrations of alternative fuel vehicle owners across the United States.
 - A five-year projection of where alternative fuel infrastructure will be needed to support current and future vehicle needs.
 - A new tool that allows states to compare and evaluate different alternative fuel adoption and use scenarios that account for "regionally specific characteristics."
- The DOT will also begin the process of updating the Manual on Uniform Traffic Control Devices to create a standard for electric vehicle chargers funded through the federal government. The IIJA requires that all chargers must use nonproprietary charging connectors that meet industry safety standards and use open access payment methods that are easily accessible and do not require a membership.
- The Secretaries of Energy and Transportation will convene a new 25-member Electric Vehicle Working Group with both public and private sector members to provide guidance and strategy on the

increased use of electric vehicles in the U.S. and how that will affect transportation and energy infrastructure.

Safety

Overall, the National Highway Traffic Safety Administration (NHTSA) and the Federal Motor Carrier Safety Administration (FMCSA) will receive \$11 billion in new funding for increased safety projects and programs.

Major safety related policy changes impacting the auto sector include:

- Allowing states to use 10 percent of their Highway Safety Improvement Program (HSIP) funding for non-infrastructure safety projects like traffic safety education. Additionally, HSIP funding can be used to fund projects that increase safety for both vehicles and the cyclists and pedestrians with whom they share the roads through traffic control devices, pedestrian security features, and new road designs.
- The new Safe Routes to School Program will create two-mile area zones around K-12 schools to ensure that children can get to and from school safely by foot or bike. Every state will receive at least \$1 million per fiscal year for this program and funding is disbursed through a formula that calculates the percentage of the nation's students enrolled in each state.
- As part of DOT's updates to the Manual on Uniform Traffic Control Devices, the Department will update the Manual to enable safe testing of autonomous vehicles and prepare regulations needed for the use of autonomous vehicles on public roads. Additionally, the Department will update minimum retroreflectivity requirements for traffic control devices and pavement markings.
- DOT will begin the process of updating and modernizing the New Car Assessment Program (NCAP) including the implementation of a rating system for crash avoidance technologies and creating a timeline for updating NCAP as new technologies emerge.
- The DOT and FHA will begin to develop a new third-party verification system for roadside safety hardware that uses testing results from independent crash test labs. In the meantime, the FHA will continue issuing federal-aid eligibility letters to states.
- The DOT will work with foreign governments and non-governmental organizations on the "global harmonization" of vehicle regulations to promote better motor vehicle safety. The goal of this policy is to synchronize domestic and international vehicle regulations and ease the regulatory burden on vehicle manufacturers.
- The DOT will be updating a range of motor vehicle safety standards including:
 - Requiring automatic emergency braking and underride guards in heavy-duty vehicles.
 - Considering updated safety standards for seat backs and requiring automatic shutoffs for keyless ignition devices in all motor vehicles.
 - Requiring that all new motor vehicles be equipped with forward-collision warning and automatic emergency braking systems, and lane departure and lane-keeping assist systems.
 - Updating standards for headlamps, hoods, and bumpers to better adapt to new technologies like adaptive headlamps and crash avoidance technologies.
 - Requiring all new passenger motor vehicles to be equipped with advanced drunk driving prevention technology that can passively monitor and accurately detect that a driver is impaired.

- States with legalized cannabis will be required to consider additional education campaigns about driving while high. Additionally, this bill directs the DOT to collaborate with the Department of Justice (DOJ) and the department of Health and Human Services (HHS) to report on how to improve access to cannabis products for scientific research on cannabis-improved driving.
- The DOT will now require motor vehicle manufacturers to report recall information to the Department including the number of affected and repaired vehicles on recalls. These will be included in a new annual DOT report on vehicle recalls.
- Finally, the bill addresses a long-standing issue surrounding the federal project approval process. Known as "One Federal Decision," all federal environmental reviews will be limited to two years with required public milestones, and Environmental Impact Standard reports cannot be longer than 200 pages unless there are special circumstances. There have been additional changes to the National Environmental Policy Act process also geared towards preserving the integrity of these studies while allowing safe projects to move forward on an effective timeline.

Research and Industrial Strategy

- The EPA and Department of Energy (DOE) will work together with outside stakeholders to develop an initial carbon intensity standard for clean hydrogen produced from other fuel sources beginning at two kilograms of carbon dioxide per kilogram of hydrogen produced. This standard will be updated in five years to account for industry advancements and changes. Hydrogen industry investments include:
 - **\$8 billion** for at least four DOE regional clean hydrogen hubs that will work on developing ways to produce, process, deliver, store, and use clean hydrogen.
 - **\$1 billion** for a hydrogen demonstration, commercialization, and deployment program designed to help decrease production costs for hydrogen producers.
 - **\$500 million** for a clean hydrogen manufacturing and recycling program.
- New U.S. Geological Survey (USGS) and DOE research programs will be created to help American companies create a domestic supply chain for clean energy technologies like electric vehicle batteries:
 - **\$320 million** for the USGS Earth Mapping Resources Initiative to create a comprehensive surface and subsurface map of American mineral resources.
 - **\$167 million** for a USGS energy and minerals research facility.
 - **\$140 million** for a DOE rare earth element demonstration project that will test the feasibility of a full-scale integrated rare earth element extraction, separation, and refinement facility.
 - **\$100 million** for a DOE grant program for pilot projects that process, recycle, or develop critical minerals.
- A new Advanced Research Projects Agency-Infrastructure (ARPA-I) will be created and receive separate appropriations as needed through 2024. ARPA-I will support both early-stage and testing and development-level research at universities, companies, and research foundations. It is important to note that ARPA-I is prohibited from duplicating existing DOT research. After three years, the National Academy of Sciences will evaluate whether ARPA-I is needed and should continue to exist.
- **\$25 million** for a new DOT Emerging Technology Research Pilot Program to study a range of topics including the impact of automated and connected driving systems and advanced driver-assistance systems on pavement and infrastructure performance, and how transportation infrastructure designs can be improved for the increased use of autonomous vehicles and advanced driver assistance

technologies.

- By early January 2022, the DOT will launch a formal one-year study of the impacts that autonomous vehicles could have on the current transportation system, the environment, and transportation safety. This study could lead to recommendations on policy changes for the FHA. During the study, manufacturers and developers will be provided an opportunity to provide input on the study through a panel convened by the Department.
- The DOE will study the lifecycle environmental impacts of electric vehicles and the role of Chinese forced labor in the electric vehicle supply chain.

More Auto Incentives to Come?

The BBBA, the other major component of the Biden Administration's agenda, includes even more incentives for auto companies. This legislation is still being negotiated by Congress and adjustments are inevitable. The House of Representatives' most recent version of the legislation includes the following impactful provisions:

- Allowing taxpayers to treat certain tax credit amounts as payments of tax. Payments in excess of tax liability can be refunded to the taxpayer, allowing the credits to be received as "direct pay." This direct payment would be allowed for:
 - Section 30C credit for alternative fuel refueling property
 - Section 48C qualifying advanced energy project credit
 - Section 48E advanced manufacturing investment credit
 - Section 45X clean hydrogen production credit
 - Section 45AA advanced manufacturing production credit
 - Section 45CC clean fuel production credit
- A new electric vehicle consumer tax credit of up to \$12,500 per new vehicle, \$4,000 per used vehicle, and 30 percent of a commercial vehicle's cost
- An extension through 2031 of major tax incentives, including the Qualified Fuel Cell Motor Vehicles and the Alternative Fuel Refueling Property Credit
- **\$29 billion** for a Greenhouse Gas Reduction Fund that will support the rapid deployment of low- and zero-emission technologies, including at least **\$2 billion** for charging/fueling infrastructure
- **\$20 billion** in Sec.48C tax credits for advanced energy property (includes electric vehicles)
- **\$8.98 billion** in federal procurement of electric vehicles through the General Services Administration and the U.S. Postal Service
- **\$5 billion** to replace Class 6 and Class 7 heavy-duty municipal vehicles with zero-emission heavy-duty vehicles
- **\$3.5 billion** in new grants for production of plug-in electric hybrid, plug-in electric drive, and hydrogen fuel cell electric vehicles and components
- **\$3 billion** for the DOE's Advanced Technology Vehicles Manufacturing loan program

- **\$600 million** through the DOE to provide financial assistance for the development of Level 2 publicly accessible EV chargers
- **\$200 million** for DC fast charging infrastructure through DOE
- **\$200 million** for hydrogen fueling equipment deployment through DOE
- **\$60 million** for additional Diesel Emissions Reduction Act (DERA) grants addressing diesel emissions from goods movement facilities like airports, railyards, and distribution centers

As discussed in our [fifth update](#) of *Revitalizing and Rebuilding America*, posted on November 4, the timing of this legislation remains uncertain, but we expect it to pass in a modified form sometime this year. We will provide additional updates on this legislation as it makes its way through Congress.