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Infrastructure, the BIL & the Environmental Industry Environmental Business International Inc.

FEDERAL INFRASTRUCTURE FUNDING A GENERATIONAL OPPORTUNITY FOR THE ENVIRONMENTAL INDUSTRY

Less than half the trillion dollars of infrastructure funding has been spent — but BIL and IRA program funds are expected to last into the 2030s.

Halfway in to the 2022-2026 funding cycle authorized by the November 2021 Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, nowhere near half the more than trillion dollars lumped into the funding package has been dolled out, much less spent on shovel-ready or boots-on-the-ground projects. While it can be argued that much the first half of the money has gone to formulaic programs like state-managed highway funds and water programs and that agency overload has led to delays in awards in a number of competitive bid and grant programs, this means that there is some pretty heavy backlog to be worked through for the next few years.

Economic and industry analysts warn of a labor and materials supply crunch that will only further delay implementation or substantially raise the costs of a number of programs. However, delays may be beneficial in programs seeking to make generational investments in clean energy, the electricity grid, energy storage, carbon capture and other rapidly changing segments of the energy transition — not to mention innovations in transportation from electrification and the incumbent manufacturing, supplying and recycling of vehicles and batteries and all the specialty materials that go with it — but also optimizing the charging network and balancing private and public interests therein. And let's not forget the once more popular concept of a more ubiquitous autonomous driving network that many still believe is more likely in our future than 100% renewables or colonizing Mars.

And whereas power and transportation are the largest slices of federal funding from the BIL and 2022's IRA, environmental industry players are already lined up for a larger share of programs in water, remediation and resilience that arguably have a more short-term engineering focus and less of a transformational challenge than the other forms of infrastructure, and are likely to proceed at a more uniform pace. While this review understandably focuses

on the generational opportunity of the BIL and IRA, we felt it appropriate to reflect on perspectives from the past and share pages from EBJ's 2020 review of infrastructure at the end of this 2024 edition. Industry fundamentals have not changed much, but circumstances have, so how, and how fast, infrastructure evolves remains a challenge to predict, but its at least a future in which the environmental industry is increasingly playing a role.

With Congress' authorization of the monumental commitments of the BIL and IRA, the trillion dollar challenge of our generation is indeed how to make a truly lasting impression on U.S. infrastructure.

Inside EBJ: Infrastructure & the BIL

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A lasting impression on the roadways & waterways and highways & byways of all 50 states. A lasting impression on the interconnectivity and resilience of the electricity grid, the independent system operators and electricity generation assets both centralized and distributed that feed into and balance the grid for safe, accessible, affordable and sustainable power supply.

A lasting impression, or at least some kind of momentum shift, in public transportation that is suffering from decades of mostly misguided policy, chronic underfunding and a series of setbacks due to the pandemic of the 2020s. A lasting impression on a private and public national network of charging apparatus for electric vehicles available at a reasonable cost for residential, commercial, institutional and government usage.

A lasting impression on the supply chain, manufacture and domestic production of electric vehicles, batteries, solar panels, wind turbines, heat pumps, biogas, modular nuclear generation and safety infrastructure, hydrogen and its distribution and storage, carbon sequestration infrastructure, Rare Earth metals, and other elements of the energy transition crucial to atmospheric equilibrium — and that leads to global geopolitical balance and counterbalance with partners and adversaries.

A lasting impression on the sustainability, quantity and quality of our water supply (managed by green and gray infrastructure) with an emphasis on regional and local resiliency in the face of drought, flood and extreme weather,—all the while assuring it's affordability yet signaling to the consuming population it's true value through appropriate pricing and subsidies.

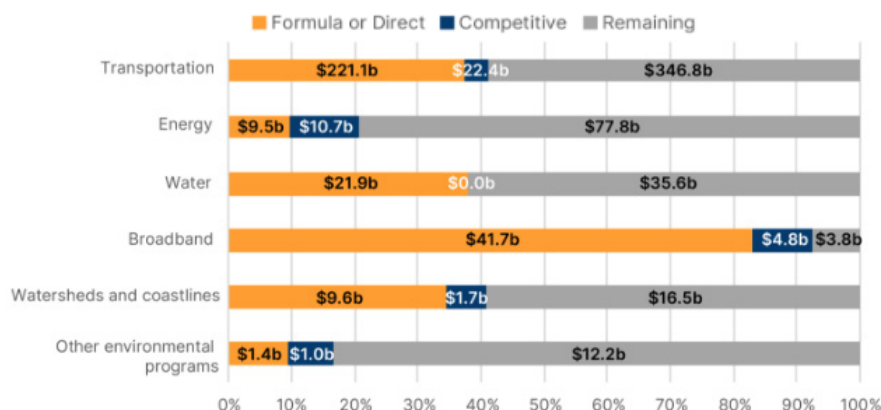
A lasting impression on internet access and more widespread availability of broadband, or subsequent generations of the instruments of digital connectivity governed for the benefit of society and human social interchange, and not to further divide and isolate individuals or the communities to which they belong.

A lasting impression on disadvantaged and marginalized communities that lack access to adequate infrastructure in the

Mid-Term IJA Report Card

Halfway through the five-year Infrastructure Investment and Jobs Act (IIJA, passed into law in November 2021) in June 2024, just 38% of funding has been announced, according to White House project funding and program allocations tracking. The 38% announced was a 13% increase in the 6 months to June 2024, an indication that the funding process was ramping up, but still lags what some had expected. At the middle of 2024, \$454 billion of the IIJA's \$1.2 trillion has been announced for a range of projects. The late July 2024 update of the most comprehensive database on federal funding that includes IIJA, Inflation Reduction Act and the CHIPS and Science Act (both passed into law in August 2022) total \$840 billion in spending. The \$840 billion is summarized by EBJ in the charts accompanying this review, and the project category summaries of the largest funded projects in resilience, climate resilience and water are derived from the same source. Announced project funding, captured mostly from agency reporting and press releases, is preliminary and non-binding, whereas awarded funding represents actual obligations, per the White House tracking of the IIJA or Bipartisan Infrastructure Law (BIL). The White House continues to release updated maps of the more than 56,000 projects and awards identified or underway at 4,500-plus localities around the country as of July 2024, a number up 40% from 40,000 projects in November 2023. The mid-August 2024 update has 68,000 project records. Outside the formula funding like DOT highway and EPA water funds, over half of IIJA's competitive awards are under \$1 million and another 29% of awards between \$1-\$10 million.

Progress & Remaining IJA Funds: End of November 2023



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DEWBERRY CONTINUES GROWTH IN INFRASTRUCTURE: BIL PROJECTS & CLIMATE ENGINEERING PRACTICE SUPPORT MITIGATION AND RESILIENCE

Dewberry serves federal, state and local, and commercial clients. Established in 1956, Dewberry is headquartered in Fairfax, Virginia, with more than 60 locations and 2,500 professionals nationwide. In 2023, revenue was \$711.45 million, with growth in key market segments such as transportation, water, and energy.

Ileana Ivanciu, SVP. Ms. Ivanciu is responsible for leading the firm's environmental services practice and prioritizing resources and investments to support the evolving needs of Dewberry's clients. She has more than four decades of experience and is based in the firm's Parsippany, New Jersey, office.

EBJ: How has business been for Dewberry over the past few years?

Ivanciu: Over the last few years Dewberry has continued to grow, including the acquisition of two firms: one focused on water in the southeast, and another in the field of mechanical, electrical, and plumbing engineering. Funding from the Bipartisan Infrastructure Law (BIL) enables us to help our clients prepare for the future by supporting projects that improve infrastructure while conserving resources, reducing harm to the environment, and lifting up our disadvantaged communities.

EBJ: What can you tell us about your environmental practice and how does it support other divisions within your company?

Ivanciu: We provide environmental services to Dewberry's broad range of clients, including water, energy, transportation, industrial, and community facilities. Our services span the life cycle of our clients' operations: planning, design, construction, operations, and maintenance. Our environmental professionals participate in industry associations at national and local levels, so that we can understand how industry and regulatory changes will affect our clients and their projects. For example, in transportation, we are active in the **Transportation Research Board**, the **American Public Transportation Association**, and the **American Council of Engineering Companies** committees that are focused on the environment and sustainability.

Working closely with designers, our professionals conduct the environmental studies required to comply with regulations, such as the National Environmental Policy Act (NEPA), and we are recognized for our success in obtaining regulatory approvals and permits without delay. During construction and operation, we monitor compliance with regulatory commitments. A critical aspect of our practice is how we work with clients to incorporate sustainable practices (climate mitigation) and resilience (climate adaptation) into their programs.

EBJ: How has the Bipartisan Infrastructure Law impacted funding availability for projects within your company?

Ivanciu: Dewberry has supported FEMA's work in administering floodplain mapping, hazard mitigation, disaster response, and recovery programs for more than 40 years. This prompted us to establish a climate engineering practice, where we work with clients to assess risk and vulnerability, develop climate action strategies, and implement community and infrastructure resilience projects.

These goals are supported by the Bipartisan Infrastructure Law (BIL), and examples of work to get projects funded and constructed through BIL include:

- In 2023, \$1.09 billion in BIL funds were granted to the **North Carolina Department of Transportation** (NCDOT) to design and build the first segment of the S-Line, a high-

performance passenger rail line to better connect North Carolina and Virginia, and rural and urban communities in North Carolina. Taking people out of cars and putting them on public transportation is a critical element in reducing greenhouse gas emissions—and it improves the quality of life in our communities by improving air quality, reducing traffic congestion, providing mobility for individuals without cars, and enhancing social interactions and connections. Dewberry supported NCDOT in preparing the grant application.

- In 2024, \$8.1 million in BIL funds were granted to the **Halifax County Service Authority** in Virginia, for water treatment plant upgrades that enhance the plant's overall efficiency and reliability. These upgrades will make the water supply more reliable especially during extreme weather events including droughts, eliminate the need for chemical additives in the filtration process, and prevent harmful substances from entering waterways. Dewberry prepared the grant application and is designing the project.

- In 2024, \$5.4 million in BIL funds were granted to the **Virginia Department of Transportation** to install a weather and traffic monitoring system that will facilitate emergency evacuations due to extreme weather events in Virginia's Tidewater and Chesapeake region. Known as Modernizing Operations for Virginia's Evacuation Resilience or MOVER, the project is funded by a PROTECT grant and involves the use of flood sensors, stream gauges, and traffic cameras to promote data-driven decisions in hazardous conditions, including flood, wind, fire, and landslides. Dewberry prepared the grant application for this project.

For every project that received BIL funding, there are many important projects that did not, so we continue to help our clients procure funding that will help bring their projects to life. Our grants and funding team assists clients with researching available funding opportunities and drafting funding applications.

EBJ: In your opinion, how effective has been the allocation and utilization of funds so far through the BIL?

Ivanciu: We witnessed some challenges during the implementation of the BIL. For example, some overburdened agencies have not had the personnel resources to apply for discretionary funding, while some formula funds have been assigned but are slow to be put into action. We have also seen some states that have declined formula funding due to political ideology and/or the inability to provide required state matching funding.

EBJ: What long-term impacts do you see the Bipartisan Infrastructure Law having on the environmental industry?

Ivanciu: The National Environmental Policy Act (NEPA) doesn't change very often. The BIL modified environmental review requirements, which enhance and expedite the environmental review that is required for federally funded projects. Modifications include new clear environmental review deadlines and clarity on the requirement for lead agencies to set specific expectations for lead and cooperating agencies.

The BIL responded to our changing climate by funding clean energy and resilience projects and accelerating innovation in these fields. We're hopeful that momentum for these projects will build and, in the long-term, will prove that our industry has the ingenuity to overcome climate threats. We're observing a fast shift in college graduates who are choosing environmental consulting over other professions because they see real opportunity to shape sustainable, resilient, and equitable civil infrastructure.

EBJ: It looks like a lot of your work for BIL-related projects so far has been assisting agencies with grants. What type of projects are the ones that have a better chance of receiving BIL funding?

Ivanciu: Projects that benefit disadvantaged communities will have a better chance of BIL funding. Executive Order 14008 "Tackling the Climate Crisis at Home and Abroad" established the Justice40 Initiative, which directs 40% of

benefits from federal climate, clean energy, affordable and sustainable housing, legacy pollution, water and wastewater infrastructure investments (including funding) to benefit disadvantaged communities. If projects can demonstrate benefits to disadvantaged communities, those projects are likely to be prioritized. This was reinforced with the publication of the BIL Guidebook.

Funding programs typically also identify priority projects, e.g., those that incorporate climate change adaptation or applicants i.e., rural non-governmental organizations (NGOs) within their funding guidelines; so potential applicants should review to determine which projects could be prioritized over others. Many of the newly established funding programs through BIL focus on climate change and resilience solutions.

EBJ: What would you say are the main requirements to obtain funding?

Ivanciu: Most importantly, obtaining funding depends on whether the applicant

and the project meet the eligibility requirements in a funding program. From there, it's critical for the applicant to tell the story of the need and the outcome if funded and to have all the necessary documents required in the submission guidelines. Demonstrating benefits from projects is key.

EBJ: Are there certain agencies that have a better chance at obtaining BIL funding? What characteristics would help them be a better candidate for BIL funding?

Ivanciu: Agencies that have more funding than others may have a better chance at obtaining funding than others. We recommend reviewing the breakdown of funding found in the BIL Guidebook.

EBJ: How is government addressing understaffing

Ivanciu: Many state and local government agencies charged with implementing BIL programs are hiring experienced third parties to manage the workload. Several federal agencies have hired thousands of employees to implement the BIL. ▣

Dewberry Recent Acquisitions

Dewberry Acquires Edmonds Engineering

In June 2021, Dewberry acquired **Edmonds Engineering**, a 75-plus person firm with five offices and a large footprint in the Southeast. The acquisition allows Dewberry to provide resources from a national firm with expertise across the U.S. and encompassing many markets and services. Welcoming Edmonds Engineering into Dewberry is a strategic move that will allow the company to better serve clients, given that both organizations have similar values and goals. Edmonds Engineering had a strong reputation as a mechanical, electrical and plumbing (MEP) firm in several market segments, including health care, education, laboratories, municipal, industrial, commercial, and federal.

Hydro Solutions Consulting Joins Dewberry

In April 2021, Dewberry acquired Florida-based **Hydro Solutions Consulting**. The 20-person firm has three locations across the state. The acquisition allows Dewberry to better serve new and existing clients and has been a strategic opportunity to expand Dewberry's water practice in Florida and the southeast.

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