

## **Policy Update: Biden Administration Announces \$2.25 Trillion Infrastructure and Economic Stimulus Plan**

*Lewis-Burke Associates LLC – April 1, 2021*

On March 31, President Biden announced a signature legislative proposal focused on accelerating economic growth through an ambitious \$2.25 trillion stimulus plan. The American Jobs Plan would modernize America's infrastructure, spur climate action, strengthen workforce and education, and promote U.S. global competitiveness. If passed by Congress, these goals would be achieved through investments in scientific research, federal incentives and mandates, encouraging private sector participation and public-private partnerships, and policies that address broad and longstanding inequalities facing underrepresented or underserved populations. This analysis highlights proposed investments and new policies of most interest to the science, technology and education communities.

Some of the key areas of investment in this infrastructure and economic stimulus package would include:

- \$621 billion to rebuild and modernize traditional transportation, such as roads and bridges;
- \$182 billion to strengthen U.S. manufacturing and supply chains;
- \$180 billion for research and development, including \$50 billion for the National Science Foundation to create a new technology directorate focused on microelectronics, biotechnology, and other advanced technologies;
- \$40 billion to upgrade research infrastructure;
- \$137 billion to upgrade and/or build new public schools, child care facilities, and community colleges;
- \$100 billion for broadband expansion;
- \$100 billion for workforce development programs; and
- \$25 billion for Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) to expand research and development and research infrastructure as well as create 200 research incubators with graduate fellowships, pre-college programs, and other opportunities.

The likelihood of passing this infrastructure proposal, either in whole or in part, remains uncertain. Democrats have signaled support for major spending on infrastructure, clean energy, and climate programs to spur job growth and maintain U.S. competitiveness. However, coming on the heels of a \$1.9 trillion COVID aid package, the Biden Administration has tried to appease moderate Democrats by offsetting most of the cost of this new proposal. The American Jobs Plan would generate \$2 trillion in revenue through significant changes to U.S. tax policy and the repeal of several provisions in the *Tax Cuts and Jobs Act of 2017*. The partial offset would come from, among other things, increasing the corporate tax rate from 21 percent to 28 percent and taxing corporate offshore earnings.

Republicans have uniformly rejected the proposal's scope, scale, and tax increases. However, over the next few weeks, the Biden Administration and Democratic leadership will explore opportunities to advance a bipartisan package. Such a package would likely focus on transportation, manufacturing, and

research and development. If a bipartisan deal cannot be struck, the White House and Democratic leadership is ready to use the budget reconciliation process, similar to the last COVID package, which would require only a majority vote in the House and Senate to pass the package. Speaker Nancy Pelosi (D-CA) plans to pass an infrastructure package by July 4<sup>th</sup>. Timing in the Senate is less certain.

Congress will now work to translate the American Jobs Plan into legislation. This will entail input by many House and Senate committees to fill in details for where the Administration's proposal lacks specifics. It will also be an opportunity for Members of Congress to steer funding to parochial priorities or insert direction on how those funds are spent. The House and Senate will also have to decide whether to allow earmarks in this type of package.

This proposal is also only the first of several major White House priorities expected to be announced over the coming weeks. The White House plans to release a "skinny" fiscal year (FY) 2022 President's Budget Request with high-level figures on April 1, although it may slip to the week of April 5. This would kick off the FY 2022 congressional appropriations process. The Biden Administration plans to release full details of its FY 2022 budget in May. A second, multi-trillion dollar stimulus proposal – the American Families Plan – is expected to be unveiled in mid-April and will emphasize spending on education and healthcare. Congress will also take up a surface transportation bill – a separate piece of legislation requiring Congress to periodically re-authorize Department of Transportation programs that fund transportation projects – as well as the Endless Frontier Act and a broader innovation package. The consideration of these bills will likely precede consideration of the American Jobs Plan. With all this legislative activity, there are many opportunities to advance the priorities of research, higher education, and science and technology communities.

The following are highlights of the American Jobs Plan of interest to the science, technology, and education communities.

### **Infrastructure**

\$831 billion in the American Jobs Plan would be dedicated to investments in transportation, water, and broadband infrastructure. Most of this funding would support transportation construction. However, the proposal also references spending on infrastructure resilience and expands the definition of "infrastructure" to include several important items of interest:

- \$40 billion for **research infrastructure** at research institutions and national laboratories, including research facilities and computing centers and networks. The proposal does not specify distribution of funding across federal agencies, but it would include agencies such as the National Science Foundation and the Department of Energy. Half of the funds would be available to HBCUs and MSIs.
- An unspecified amount for basic research in areas to advance concepts such as "advanced pavements" and technologies that promote a "future proof" transportation system.
- The proposal calls for \$5 billion to redevelop former industrial and energy sites. Investments would come from numerous agencies, including additional support for the **Economic Development Administration (EDA) Public Works program** and lifting the \$3 million cap for projects.

### **Climate and Environment**

The proposal calls for several new initiatives and funding increases to support climate and environment R&D across several agencies:

- \$35 billion would be invested across the federal government to support **climate technology research and development** as well as mitigation techniques and practices. The proposal does not provide a detailed breakdown by federal agency but does highlight:
  - The creation of a new **Advanced Research Projects Agency for Climate (ARPA-C)** to fund high-risk, high-reward projects to reduce emissions, build resilience, and support climate research “across-the-board;”
  - \$15 billion for Department of Energy-funded clean energy demonstration projects (see Clean Energy Development section below); and
  - \$5 billion expand and grow existing **climate research** programs.
- \$50 billion for **climate resilience and resilient infrastructure** to modernize the electric grid, urban infrastructure, health resources, water, and food systems. This funding will likely go to the Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), and the Department of the Interior (DOI).
- The proposal mentions how technological developments can help mitigate and redress the impacts of **environmental disparities** including by investing in basic research for advanced carbon dioxide reduction methods like advanced pavements and other “**future proof**” **technologies**.
- The proposal would create a new Department of Energy **National Lab focused on climate issues** that would be affiliated with an HBCU.
- The proposal also calls for supporting rural communities by providing R&D funding to **Land Grant Universities** and helping push the agriculture industry toward net-zero emissions.

### **Clean Energy Development**

The proposal aims to make new clean energy research, development, and demonstration investments and upgrade energy infrastructure at the Department of Energy (DOE), including:

- \$15 billion to accelerate or launch new **clean energy demonstration projects**, including utility-scale energy storage, carbon capture and storage, hydrogen, advanced nuclear, rare earth element separations, floating offshore wind, biofuel/bioproducts, quantum computing, and electric vehicles. These investments are consistent with congressionally directed projects in the Energy Act of 2020 Congress passed with bipartisan support in December 2020.
- Part of the \$40 billion proposal for **research infrastructure** includes investments at DOE national laboratories to accelerate construction and upgrade user facilities, computing capabilities, and general purpose and support infrastructure.
- Part of the \$30 billion proposal for **Industries of the Future** includes additional funding for DOE for quantum information science, artificial intelligence and machine learning, biotechnology, and advanced communications.
- In addition to research and development investments, the proposal calls on establishing a new **Grid Deployment Authority** at DOE to help build a more resilient electric transmission system by leveraging existing rights-of-way along roads and railways and providing new financing tools to build new transmission lines.
- The proposal also would establish an **Energy Efficiency and Clean Electricity Standard** aimed at cutting electricity bills and pollution with the goal of moving toward 100 percent net zero emissions for electricity generation by 2035. This would help guide future DOE investments to help meet those goals.

## Global Competitiveness and Innovation

The proposal includes new funding for research and development, manufacturing, and supply chain programs across federal agencies to maintain U.S. leadership, advance emerging technologies, and create new jobs. Many of the proposed initiatives are consistent with bipartisan legislation Congress has already passed or is currently advancing. Some key funding proposal include:

### Industries of the Future

- \$50 billion for the **National Science Foundation**. The proposal calls for establishing a new technology directorate, consistent with proposals from the Endless Frontier Act and the National Science Foundation for the Future Act, to support collaborative, use-inspired and translational research in emerging technology areas. The proposal highlights investments in semiconductors, next-generation computing, advanced communications, clean energy technologies, and biotechnology.
- \$30 billion for **Industries of the Future** across federal agencies, including quantum science and technology, artificial intelligence and machine learning, advanced manufacturing, biotechnology, and next-generation communications, tied to job creation and opportunities for rural areas.

### Regional Innovation

- \$20 billion for **regional innovation hubs** and a **Community Revitalization Fund**. The proposal to create 10 hubs to support the growth of emerging industries is similar to the Endless Frontier Act and other recent regional innovation bills. The Community Revitalization Fund component is largely undefined with the proposal noting that it could support a host of community-based economic development activities, including promoting access to the innovation economy for rural and communities of color.
- \$25 billion for **HBCUs and MSIs** including \$10 billion in broad R&D investments and \$15 billion for up to 200 **centers of excellence and research incubators** to improve innovation and competitiveness.
- \$31 billion for a national network of small business incubators and innovation hubs to support **entrepreneurship in underserved communities**. Funding would also be provided to expand access to resources for small businesses, such as venture capital and R&D support.
- \$5 billion a new **Rural Partnership Program** to support economic and community development planning and capacity building in rural areas, including Tribal Nations. It is uncertain whether universities will have a role in this broad new initiative.

### Manufacturing and Supply Chain

- \$14 billion for the **National Institute of Standards and Technology (NIST)** to bring together industry, academia, and government to advance technologies and capabilities critical to future competitiveness.
- \$50 billion for **semiconductor research and manufacturing**, as called for in bipartisan legislation.
- \$50 billion to create a **new supply chain-focused office** at the Department of Commerce to support the manufacturing of critical goods and to monitor domestic industrial capacity.
- \$30 billion over four years for R&D related to **medical countermeasures manufacturing for biopreparedness and biosecurity**. This funding would include investments to expand the number of therapeutics in the national stockpile and accelerate vaccine production timelines and clinical trials.

## Education and Workforce

The plan also includes new investments to modernize schools, child care facilities, and expand workforce training programs. This would include:

### Education Facilities Funding

- \$50 billion in direct grants and \$50 billion leveraged via bonds for the upgrading of **existing K-12 public schools and building new schools**. The plan specifically calls out investments in energy-efficient and resilient buildings as well as kitchen upgrades.
- \$12 billion for **community college** infrastructure and technology needs.
- \$25 billion to upgrade and expand supply of **child care facilities** via a Child Care Growth and Innovation Fund open to states. The proposal also calls for expanded tax credit for employer-based child-care facilities.

### Workforce Development

- \$40 billion for a new **Dislocated Workers** program for wrap-around services, training programming, as well as specific sector-focused training efforts in areas such as clean energy, manufacturing, and caregiving.
- \$12 billion for **workforce training programming for underserved communities**, which would include \$5 billion for evidence-based community violence prevention efforts.
- \$48 billion for **existing workforce programs** in support of registered apprenticeships, pre-apprenticeships, career services, and adult literacy. Additionally, the plan calls for the creation of **career pathways programs for middle and high-schoolers** in STEM fields and in-demand sectors.

### *Sources and Additional Information:*

- Details of the American Jobs Plan can be found at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>.