Infrastructure funding 2023

After a good start in 2022, there's lots to do to deploy new federal infrastructure funds. Here are five priorities for right now.

Three new laws are accelerating federal investment in U.S. infrastructure: the Infrastructure Investment and Jobs Act (IIJA), Inflation Reduction Act (IRA), and the Creating Helpful Incentives to Produce Semiconductors for America (CHIPS and Science Act, or CHIPS). Together, they aim to address the U.S. infrastructure deficit, support energy transition, improve sustainability in the face of climate change, and use infrastructure projects to promote equity and well-being (and redress the negative social impacts of past projects).

To date, $185 billion in funding has been allocated to 10,000 projects.[1] It's a good start, but also a clear sign that further acceleration of applications is needed to meet the spending deadlines (IIJA and the domestic manufacturing incentives under CHIPS are authorized through 2026, and IRA through 2028). The transition to a clean energy future is a major source of urgency for additional projects. The Biden administration has set ambitious environmental targets, which coincide with a projected doubling in electricity demand by 2035.[2] Meeting these ambitious targets will require new clean energy infrastructure to be developed at a rate not yet encountered.

In 2023 IIJA funding recipients should look beyond quick-win shovel-ready projects and focus on shovel-worthy ones—next-generation projects that will transform U.S. infrastructure. To accelerate such projects, grant recipients (states, municipalities, utilities, and private sector construction and manufacturing firms) need to build delivery capability and capacity. Some case may also require innovative public and private financing to complement the federal monies.

A KPMG infrastructure agenda for 2023

1 Focus on priority areas through clear asset strategies

In the first year of IIJA, investment has focused on urgent repairs and improvements to existing assets, including bridge replacements, rehabilitation, preservation, and much-needed repairs to the condition of highway and public transport systems. With transportation receiving the lion's share of funding over five years, the FHWA has moved quickly to distribute $120 billion in funding.[3]

While IIJA has enabled several high-profile projects to advance, there have been relatively few next-generation projects to transition to a clean energy future and boost a broader digital economy. The notable exception is the National Electric Vehicle Infrastructure (NEVI) Formula program, with approved fiscal year 2022–2023 plans for every state already in place.

Agenda: Grant recipients should establish clear asset strategies for the coming decade—insights into risks, challenges, and opportunities that clearly set out the transition to next-generation asset classes. This will provide a clear roadmap for maintaining service

[1] General Services Administration, "Bipartisan Infrastructure Law (BIL) Maps Dashboard|D2D," October 28, 2022

[2] University of California, Berkeley, Goldman School of Public Policy, "2035 Report," June 2020

[3] Engineering News-Record, "IIJA Year One: Funds Flow but Regulations Face Criticism," November 15, 2022

performance in the short term and help prepare for long-term change through demand and necessary climate resilience. Research from the KPMG 2021 Global Construction Survey indicates that owners can achieve a 30 percent increase in return on investment when a clear strategic vision is established for their capital assets.

2 Overcome supply chain challenges through transparent procurement planning

Continued volatility in the economy, coupled with supply chain challenges and a tight labor market, will impact the effectiveness of the federal funding programs. States have reportedly experienced 20 percent to 40 percent hikes in project costs.[4]

This environment also creates challenges for contractors. Post-pandemic supply chains remain volatile, and supplier commitment to price and material availability remains uncertain. This strain will likely be most noticeable in the spring when construction season starts in the Northeast and Midwest.

Contractual risk transfer is an essential driver of project performance for both owner and contractor. We are currently seeing increased pressure from the contracting community to push back on risk allocation. We expect contractors to be more selective of the projects they are willing to undertake.

Agenda: Establish transparent procurement plans and engage contractors early in the process through market-sounding and derisk projects to make for attractive contracting models. The phasing of longer-term contracts to risk-share current material availability and costs is a sound option currently being considered by some asset owners.

3 Prioritize workforce development

The current infrastructure workforce is insufficient to meet the demands of funding bills.[5] In recent years, the sector has faced a "silver tsunami," exacerbated further by the "great resignation" experienced through the pandemic with workers seeking better workplace conditions. If federal funding is going to deliver the transformation impact intended, how we backfill essential infrastructure talent is a priority focus for the sector.

The challenge is making the infrastructure sector attractive. Early career workers (24 years or younger) account for just 11 percent of the infrastructure workforce. People of color and women also account for significantly lower percentages compared to other industries.[6] This represents a significant risk to program spending goals, with all programs including targets for minority- and women-owned businesses.

Critically, the industry needs to attract the workforce for the infrastructure business of tomorrow. To implement the programs enabled by the three infrastructure bills, the industry will need more than a supply of construction workers. They will need talent in engineering, manufacturing, and technology. States, counties, and cities will need experts in planning and permitting. By the time we reach peak program demand in 2028, high schoolers will be graduating from college or apprenticeships. Now is the time to ensure we establish career paths with attractive employment conditions and benefits, recognizing the monumental impact these workers will have on our society.

Agenda: Create actionable and transparent workforce plans that set out a decade's view of workforce needs. Plans should include collaboration between owners, contractors, trade associations, and educational institutions, and focus on improving industry attractiveness, diversity, and retention.

4 Accelerate capital program delivery excellence

There is an urgent need for accelerated improvement of today's delivery model for capital programs. In a recent KPMG infrastructure construction survey,[7] 91 percent of public sector owners experienced project failures in the previous year.

Organizations that run successful capital programs have shifted from thinking only about delivering projects to enabling the enterprise mission. They focus on outcomes, not just projects. They boost productivity and manage complexity with clear design objectives, standardized processes and practices, fast-moving decision-making workflows, and improved processes for governance, execution, monitoring, and reporting.

[4] Jenni Bergal, "Inflation Is Cutting Into States' Big Infrastructure Windfall," The Pew Charitable Trusts, November 30, 2022

[5] Alicia Wallace, "There aren't enough skilled workers for Biden's big infrastructure plan," CNN Business, December 13, 2021

[6] Caroline George, Joseph W. Kane, "Reversing America's poor track record on inclusivity in infrastructure jobs," Brookings Institution, May 17, 2021

[7] 2021 Global Construction Survey - KPMG Global

The new delivery model requires a fundamental shift in the use of technology across the capital program life cycle. Today, many projects still rely on paper records. The IIJA acknowledges the current digital gap and provides $550 million over five years to support the adoption of digital technologies. While the funding has yet to be released, the benefits speak for themselves. In Europe, digitally enabled projects have produced savings of 25 percent over projects that were not digitally enabled, and schedules were cut by 10 percent.

Agenda: Capital program organizations should assess their current capabilities, including their engineering and contractors, regional permitting, and other stakeholder offices, and establish organization, process, information, and technology improvement programs that accelerate the journey to capital program excellence.

5 Leverage new federal money with additional public and private capital

Infrastructure funding across federal, state, and local sources—and through revenue generation—only partially addresses today's infrastructure deficit. Modernizing infrastructure will also require more innovative financing models. For example, the shift to renewables and EVs will require $4.5 trillion to convert the U.S. electricity grid.[8]

Recipients of federal funds under the three new laws will likely need to bring in private capital. IRA may spur $1.7 trillion in public and private investment, according to Credit Suisse.[9] For critical infrastructure, private investment through public-private partnerships is not new. However, they represent only about 1–3 percent of infrastructure spending in the U.S., versus 10–20 percent in the UK and Canada.[10]

Well-designed public-private programs not only bring in needed capital but can also provide access to talent and efficient processes. Adding a private partner also transfers a portion of the risk. The IIJA acknowledges the benefits of innovative financing, project delivery, and collaboration with increased private equity bond caps, new value-for-money test requirements, and annual funding for professional services to build P3 capabilities.

Current economic and supply chain conditions and permitting challenges may discourage private partners. But engaging them early, adopting phased risk-share models, and enforcing transparency across the lifecycle will help make a partnership more attractive.

Agenda: Establish program-wide procurement strategies that leverage federal funding with additional private capital and private sector collaboration to support next-generation asset investments. Strategies should focus on building contractor confidence, engaging the market early, and adopting phased risk-share models to mitigate economic and planning uncertainty.

[8] Wood Mackenzie, "Deep decarbonisation: the multi-trillion dollar energy transition question," June 27, 2019
[9] The Economist, "America's government is spending lavishly to revive manufacturing," February 2, 2023
[10] Bipartisan Policy Center, "Methodology for Estimating Amount of Private Capital Attracted to U.S. Infrastructure," March 2019

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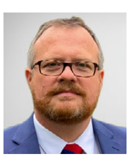

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