

INFRASTRUCTURE 2022

Infrastructure 2022: Essential Infrastructure: Lifelines and Access to Internet August 16, 2022 | Session Overview

Panel

Michelle L. Manary, Acting Deputy Assistant Secretary, Energy Resilience Division, U.S. Department of Energy
Christopher Lindsay, Vice President, Government Relations, IAPMO
Sarah Morris, Senior Advisor, National Telecommunications and Information Administration

Moderator

Craig A. Davis, PhD, PE, GE, Los Angeles Department of Water and Power (Ret)

Infrastructure 2022: Lifelines And Access to Internet Overview

This session of the Infrastructure 2022 series focused on clean water, electrical grid and powerline resiliency, and closing the digital divide as it pertains to the Infrastructure Investment and Jobs Act (IIJA).

According to the Environmental Protection Agency, there are an estimated six to 10 million lead service lines across the country. Cities have been taking measures to finance projects that identify and remove the bad lines, but it hasn't been enough. The U.S. is ranked 26th in the world for safe drinking water and sanitation by the Environmental Performance Index. Knowing that access to clean drinking water is a basic human right, the IIJA allocated \$55 billion to further reach this goal.

In January 2022, the U.S. Department of Energy launched the Building a Better Grid Initiative to make the nation's power grid more resilient to the impacts of climate change and increase access to reliable and affordable clean energy. The IIJA earmarked \$28 billion for resiliency of powerlines and over \$60 billion total for clean energy.

Closing the digital divide is more important than ever in the

wake of the COVID-19 pandemic. Americans need access to high-speed internet for work, study, and play. Lack of access to broadband infrastructure has become an equality issue in the U.S. The IIJA will work to combat this by delivering more than \$60 billion in funds to expand access to high-speed networks throughout the nation.

On August 16, 2022, the National Institute of Building Sciences hosted this installment of [Infrastructure 2022](#). The series is sponsored by Procore Technologies.

The panel included Michelle L. Manary, Acting Deputy Assistant Secretary, Energy Resilience Division, U.S. Department of Energy; Christopher Lindsay, Vice President, Government Relations, IAPMO; and Sarah Morris, Senior Advisor, National Telecommunications and Information Administration. The webinar was moderated by Craig A. Davis, PhD, PE, GE, Los Angeles Department of Water and Power (Ret).

The Water Delivery And Quality Challenge

Christopher Lindsay, Vice President, Government Relations, IAPMO, shared the diverse and complex challenges faced by the water/sanitation sector that impact homes and offices. These include aging infrastructure, water security,

access and affordability, new contaminants, and a shortage of skilled labor.

Ten million American households are without safe drinking water.

Regarding aging infrastructure, much of the nation's water and wastewater infrastructure was built in the 1970s and 1980s. On average, 14 percent to 18 percent of total daily treated potable water in the United States is lost through leaks.

That's 6 billion gallons of treated drinking water lost by the water systems every day.

When it comes to water security, 42 percent of the U.S. recently was impacted by drought, affecting 128 million people.

Congress is working to meet these incredible challenges with resources like the IIJA, Chips and Science Act, and Inflation Reduction Act. IIJA authorizes \$550 billion in new spending with water as a core priority, with \$55 billion. Lindsay said this represents the single-largest investment in our nation's drinking water system ever.

The latter two recent actions particularly provide resources to the water and sanitation sector. Said Lindsay: "From an industry point of view, we see this as just a down payment and more still needs to be done to improve the quality of our infrastructure in the United States, particularly as it relates to water and sanitation," Lindsay said.

Site reference:

- [IAPMO](#)

Building a Better Grid Initiative

Aging infrastructure – at least 25 years or older – greatly affects the wiring that goes into homes and commercial structures.

DOE launched in January 2022 the Building a Better Grid Initiative, said Michelle L. Manary, Acting Deputy Assistant Secretary, Energy Resilience Division, U.S. Department of Energy.

Building a Better Grid will support the development of nationally significant transmission projects and upgrades by engaging and collaborating early with states, tribal nations, and stakeholders to accelerate transmission deployment; enhancing transmission planning to identify areas of greatest need; deploying more than \$20 billion in federal financing tools; and facilitating an efficient transmission permitting process.

"We're engaging early and often," Manary said. "It really is about having these conversations, working with the states, utilities, developers, environmental groups, and communities – DOE is focusing on that upfront engagement with folks to figure out the issues and solve them and not wait for them to be solved on the back end."

There are four main buckets of funds that Congress allotted through the IIJA. They're divided into two camps: making the existing grid more reliable to handle the nation's needs to come and new infrastructure or transmission lines for a major rebuild and/or microgrids.

Site reference:

- U.S. Department of Energy – [Building a Better Grid Initiative](#)

Reliable And Affordable High-Speed Internet

The Bipartisan Infrastructure Law presents a historic moment for our country when it comes to infrastructure investments, said Sarah Morris, Senior Advisor, National Telecommunications and Information Administration (NTIA).

IIJA allocates \$65 billion in funds for high-speed internet. NTIA will administer \$48 billion of this new funding, the majority of which (\$42.45 billion) will come through the Title 1 – Broadband Equity, Access and Deployment Program (BEAD).

"We see this is our generation's moment to invest in the infrastructure that will connect every community to the internet," she said. "The digital divide is an injustice that has plagued our country for decades."

The COVID-19 pandemic laid bare just how serious a

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lack of internet access is for communities, with children still doing homework in fast food parking lots and adults struggling to participate in the workforce, due to a lack of connectivity at home.

By August 2022, every state and territory signed on and committed to participating in the NTIA programs, submitting letters of intent and application materials for initial planning grants.

“There’s interest in every corner in making this investment in high-speed internet infrastructure,” Morris said.

Site reference:

- [NTIA: Internet for All](#)

What’s Coming Up

The final Infrastructure 2022 webinar will cover preparedness and mitigating the climate crisis. It takes place December 6. For more information, visit the [Infrastructure 2022 webinar series](#).