AVEVA

Build sustainable, resilient infrastructure solutions with AVEVA

The United States government has passed the Infrastructure Investment and Jobs Act, commonly known as the Bipartisan Infrastructure Law (BIL), allocating $1.2 trillion in funds to improve the electric grid, water infrastructure, bridges, airports, public transport, and more. AVEVA can help you modernize your operations with proven solutions for infrastructural innovation.

Worth $1.2 trillion, the Bipartisan Infrastructure Law (BIL) includes $550 billion in new funding to businesses, agencies, and municipalities over the next five years. Learn how your specific project can benefit from digital solutions that manage operations more efficiently and plan for a more sustainable future.

Renewing the electrical grid

Infrastructure plan ambition

- Modernize the electric grid to deliver clean electricity
- Build thousands of miles of new, resilient transmission lines to facilitate the expansion of renewable energy

What's in the bill

$65 billion to modernize the nation's grid

AVEVA solutions help you

- Scale new energy alternatives while maintaining reliable power availability. **San Diego Gas & Electric (SDG&E)** is leveraging digital technologies such as advanced analytics and intelligent visualization to improve system reliability and achieve carbon emission goals.
- Improve power-supply reliability for customers and a safer working environment for employees. **Alectra** implemented an advanced reliability-centered maintenance strategy that proactively identified a transformer issue, avoiding a potential $3 million in replacement costs and service outages.
- Better manage energy production complexities with a unified view of industrial data across the organization. **Santa Rosa Junior College (SRJC)** implemented a resilient, renewable-energy-powered microgrid with expected savings of $330,000 per year.

Delivering clean drinking water

Infrastructure plan ambition

- Modernize America's drinking water, wastewater, and stormwater systems
- Tackle new contaminants
- Support clean water infrastructure across rural communities

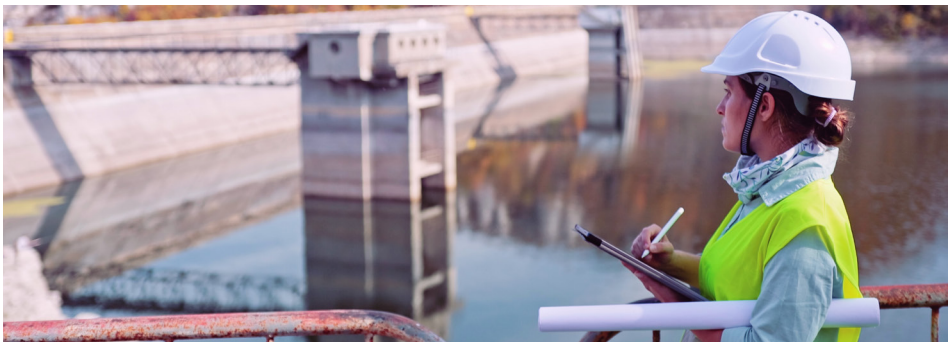
What's in the bill

$54 billion to repair water infrastructure

AVEVA solutions help you

- Optimize performance and productivity of existing assets. By combining data streams from disparate assets into a central location, **White House Utility District** reduced costs by $1 million and deferred a $15M+ capital expansion for 11 years.
- Drive resiliency and sustainable management of water and sanitation for all. The **City of Boise's** groundbreaking phosphorus removal facility removes 8,000 tons of wet solids from the Boise River every year, and it all operates on AVEVA's System Platform.
- Ensure water safety and reliability while meeting regulatory compliance. **Pima County** has increased operational efficiency 50% and reduced overall energy consumption by 10% with our situational awareness and mobile workforce solutions.

Creating resilient water infrastructure



Infrastructure plan ambition

- Make communities safer and water infrastructure more resilient to the impacts of climate change and cyber-attacks
- Invest in weatherization

What's in the bill

$50 billion to make communities safer and infrastructure more resilient

AVEVA solutions help you

- Optimize operations and reduce costs while keeping people healthy and safe. With improved automation and notification, **Spokane Water** reduced its lost water rate to 6%, one of the lowest in the United States.
- Improve water-use efficiency and maximize performance of aging infrastructure. At **Seminole County**, operators receive alerts before alarms occur, enabling them to address an issue before it becomes a problem and maintain safe water service to the county's 440,000 residents.
- Triage incidents quickly and safely during extreme weather events. **Hampton Roads Sanitation District (HRSD)** can now monitor weather changes, flooding levels, and wastewater system performance in real-time leading to greater system insights and faster response times.

Improving airports, ports, and waterways

Infrastructure plan ambition

- Upgrade Federal Aviation Administration assets to ensure safe and efficient air travel
- Invest in inland waterways, coastal ports, land ports of entry, and ferries

What's in the bill

- $25 billion for airport improvements
- $17.4 billion for waterway and coastal infrastructure, inland waterway improvements, ports, and land ports

AVEVA solutions help you

- Modernize airport control systems for greater operational efficiency. **AENA** now has a single system allowing enterprise visualization of 1,500,000+ signals across building management, flight operations support, power plant management, luggage handling.
- Build and operate efficient infrastructure of the future. With more than 30 million tons of cargo traveling through the port each year, **Port of Portland** chose AVEVA to coordinate operations and equipment maintenance – all while reducing inventory by at least 65%.
- Leverage advanced analytics to optimize local dredging situations. With improved data insights, **DEME** has mitigated project risk and realized savings of $400k+ on one asset type alone.

Modernizing public transit

Infrastructure plan ambition

- Repair and upgrade aging infrastructure
- Modernize bus and rail fleets
- Make transit stations accessible to all users
- Train the transit workforce to maintain and operate new vehicles

What's in the bill

- $39 billion to modernize transit
- $5.75 billion to replace thousands of transit vehicles with clean, zero-emissions vehicles

AVEVA solutions help you

- Improve fixed asset reliability. Maintenance workers at **Société de Transport de Montréal (STM)**, the public company that manages Montreal's subway and bus system, now has access to real-time information to spot asset anomalies, reducing maintenance time and improving customer experience in real time.
- Increase railway traffic without building new tracks. Shifting to condition-based and predictive maintenance has allowed **ProRail** to create a single pane of glass to drive higher availability and reduce unplanned downtime.
- Reduce development time and improve operational efficiency. **Norfolk Southern Railway** was able to cut development time by as much as 50% while increasing the work efficiency of both yardmasters and trainmasters.

Electrifying vehicles

Infrastructure plan ambition

- Build a national network of 500,000 EV chargers by 2030
- Replace 50,000 diesel transit vehicles
- Electrify 20% of our yellow school bus fleet

What's in the bill

- $7.5 billion to build a national network of electric vehicle charging infrastructure
- $5 billion for electric school buses

AVEVA solutions help you

- Enable true vehicle to grid integration. By shifting when and how much electricity the **JuiceBox** network draws from the grid, the Smart[Grid] System tailors EV charging parameters according to grid conditions to "maximize electric vehicle charging speed and efficiency while reducing costs."
- Develop new technologies to change the future of electric power. New battery technology is difficult, expensive, and time-consuming to develop, so **Blue Solutions** relies on AVEVA™ PI System™ to stay on top of production goals and accelerate development time.

Revitalizing American manufacturers and small businesses

Infrastructure plan ambition

- Strengthen manufacturing supply chains for critical goods
- Protect Americans from future pandemics
- Jumpstart clean energy manufacturing

What's in the bill

$500 million for energy and efficiency upgrades at small and medium-sized manufacturers

AVEVA solutions help you

- Accelerate the digital transformation of manufacturing operations, safeguarding quality and safety. **Genentech** realized a 50% acceleration in medicine manufacturing timescales.
- Increase production capacity. **New Belgium Brewing Co.** increased overall equipment effectiveness (OEE) by 20% and reduced downtime by more than 50%, allowing them to operate at full capacity and double case production.
- Improve visibility into plant operations and reduce unnecessary waste and costly delays. With improved insight into line performance, **Tyson Foods** prevented recalls and improved overall yield by 0.1% in the first six months, savings that paid for the improvement project.

Modernizing our nation's schools and childcare facilities

Infrastructure plan ambition

- Build, rehabilitate, and retrofit affordable, accessible, energy efficient, and resilient schools and childcare facilities

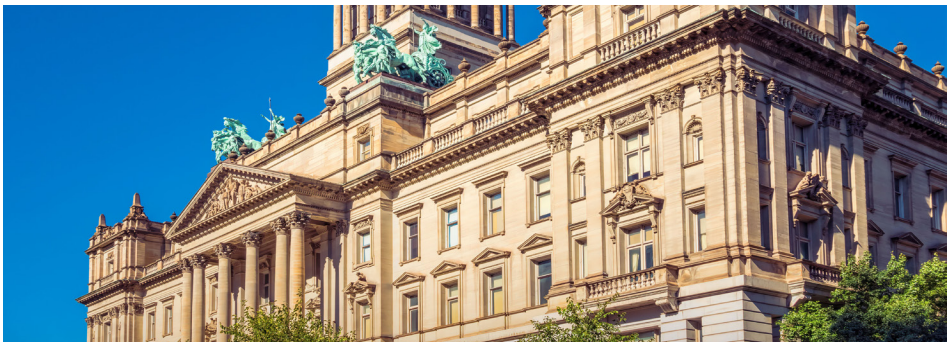
What's in the bill

$550 million for water and energy improvements at schools

AVEVA solutions help you

- Deliver affordable, energy efficient, and resilient schools. By using operational data to achieve carbon neutrality, **UC Davis** reduced gas usage by 62% and is now on track to be carbon neutral by 2025. UC Davis expects to save an estimated $197 million over 60 years.
- Meet energy reduction goals and increase equipment reliability. AVEVA is helping research campuses such as **NASA Langley Research Center, Harvard Medical School and the National Institutes of Health** improve efficiency and precisely monitor and control their experiments.
- Realize efficiency gains in the face of fluctuating energy demands, weather conditions, and fuel prices. **UMass** has reduced operation cost by three percent, or about $900,000 in savings per year. UMass's production results are now available outside the control room as an educational tool for students.

Upgrading buildings



Infrastructure plan ambition

- Invest in the modernization, sustainability, and resilience of federal buildings
- Build, preserve, and retrofit more than two million homes and commercial buildings

What's in the bill

$475 million for energy audits and building upgrades

AVEVA solutions help you

- Preserve and maintain historic and culturally significant buildings while making HVAC more efficient. The **Palace of Versailles** has improved operations safety and enhanced overall visitor experience while significantly shortening maintenance issues and reducing energy use.
- Modernize heating systems and improve energy efficiency. By unifying more than 1,200 municipal properties under a single, open building management system (BMS), the **City of Bremen** reduced energy consumption by 3% and realized cost savings of more than $43,000 per year.
- Improve the safety of indoor quality. **CosaTron** can now perform data analysis over time and provide high-value, remote air quality monitoring services for building owners and facilities managers alike, allowing clients to see air quality displays in real time on site.

AVEVA solutions

AVEVA offers industry-leading digital tools that are transforming operations across industries by centralizing and democratizing data. Our solutions are designed for real-time visibility, collaboration across teams and sites, and enabling organizations to work sustainably.

From New Belgium Brewing and the University of Massachusetts to the cities of Boise, Idaho, and Portland, Oregon, AVEVA has a strong footprint in America, improving efficiency, reducing operation costs, and preparing businesses, institutions, and municipalities for a sustainable future.

AVEVA is helping transform American infrastructure

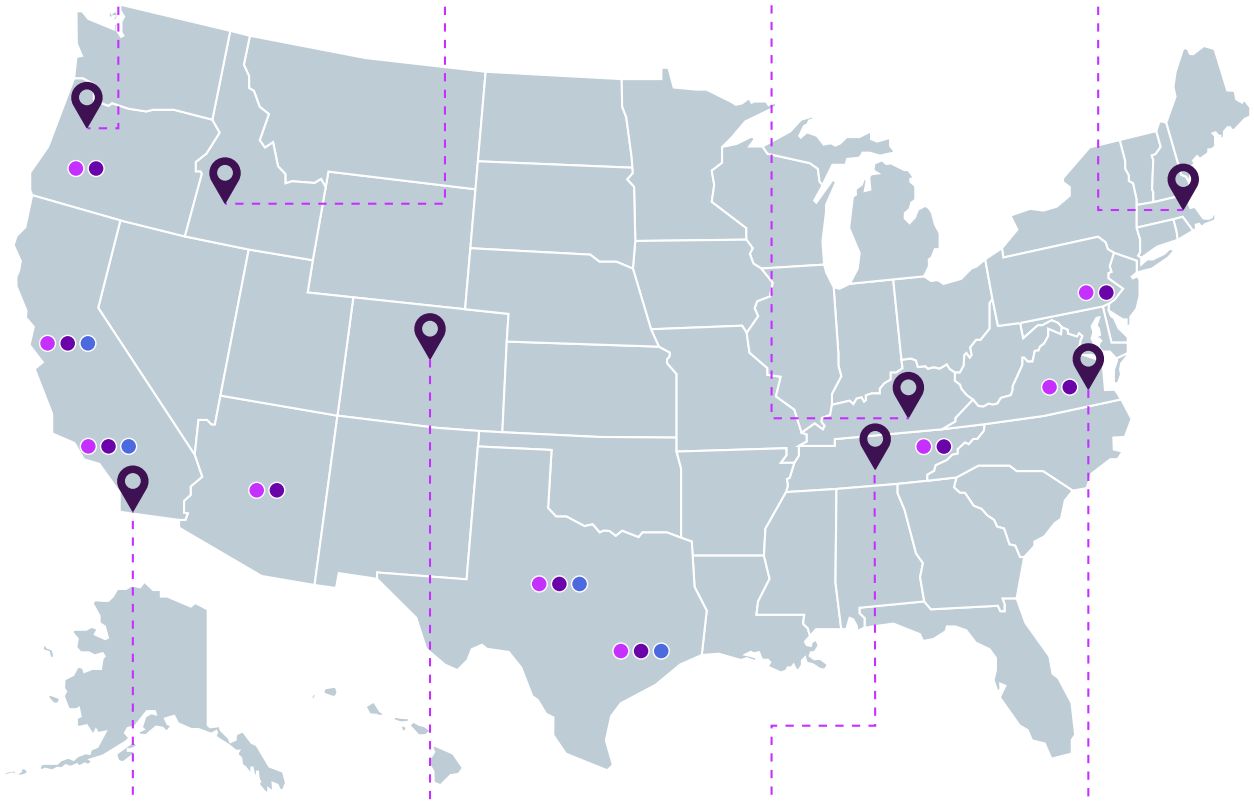
We work with customers in every state to help modernize and digitalize America's infrastructure

Port of Portland - operations and maintenance efficiency

City of Boise - Sustainable, resilient water management

Schneider Electric - smart manufacturing at brownfield factory

UMass - reduced operation costs by three percent per year



SDG&E - grid modernization and scale new energy resources

New Belgium Brewing - decrease downtime by 50%

CosaTron - improving the safety of indoor air quality

HRSD - triage incidents quickly, safely and remotely

AVEVA Locations — R&D Centers — Offices — Training Centers

Modernizing infrastructure for resilience and sustainability

AVEVA helps infrastructure operators ensure resiliency of their service networks by improving the functionality, comfort, safety, and efficiency of the built environment through digital modernization of aging infrastructure to integrate people, places, processes, and technology.

The **AVEVA™ PI System™** and **AVEVA™ Unified Operations Center** provide owner operators real-time insight into operations to reduce costs, improve safety and reliability, and enable data-based decisions for long-term strategic success.

Shaping a sustainable future for transmission and distribution

AVEVA helps organizations facilitate their transition to green energy with a resilient smart grid by giving them the digital tools to:

- Creating flexible grid systems to accommodate renewable energy sources and bi-directional energy flow
- Ensuring power availability through resilient smart grids that can react to changing environmental conditions and fluctuating demand
- Increasing resilience through improved fault detection, data management, and visualization for faster service restoration

Shaping a sustainable future for water

AVEVA empowers organizations to become more resilient through the sustainable management of water and sanitation for all by offering technology to:

- Optimize operations and reduce costs while keeping people healthy and safe
- Improve water-use efficiency and maximize performance of aging infrastructure
- Ensure water safety and reliability while meeting regulatory compliance

Shaping a sustainable future for transportation

AVEVA specializes in optimizing delivery for the connected industrial economy. We can help organizations update meet and exceed their goals for transportation upgrades, including:

- Minimizing greenhouse emissions and complying with increasing ESG regulations through efficient delivery networks and optimized value chains
- Shifting to alternative fuels and transportation modes to minimize costs and carbon intensity
- Building and operating the efficient infrastructure of the future through digital engineering, operations, and comprehensive data management

Get in touch

No matter how the infrastructure bill affects your operations, AVEVA can help you build and rebuild more sustainable systems with robust, intuitive industrial software solutions. **Contact us today.**

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