FMI

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2024

# THE SEVEN BIGGEST TRENDS
## AFFECTING INFRASTRUCTURE IN 2025

There are several reasons to be optimistic about the civil infrastructure market over the next three to five years, given the potential for significant public sector spending combined with additional investment by private companies.

**So: Is your organization ready to navigate these key trends driving the market?**

The passage three years ago of the Infrastructure Investment and Jobs Act (IIJA) marked a sea change for public investment in infrastructure in the U.S. With the IIJA, the federal government committed to spend more than $1.2 trillion for roadways, bridges and other critical infrastructure projects.

Spending over the last few years has surpassed long-term trends because of the IIJA. Since the act went into effect, states have received nearly $300 billion for transportation projects — and there's still nearly as much yet to be spent under the provisions of the act.

States have also received about $16 billion of the IIJA's $28 billion formula bridge program allocation, and the remaining 43% is to be spent over the next few years on bridge improvements. Other categories of IIJA investment include energy, broadband, clean water, environmental and resilience. Most categories still have substantial amounts yet to be allocated under the law.

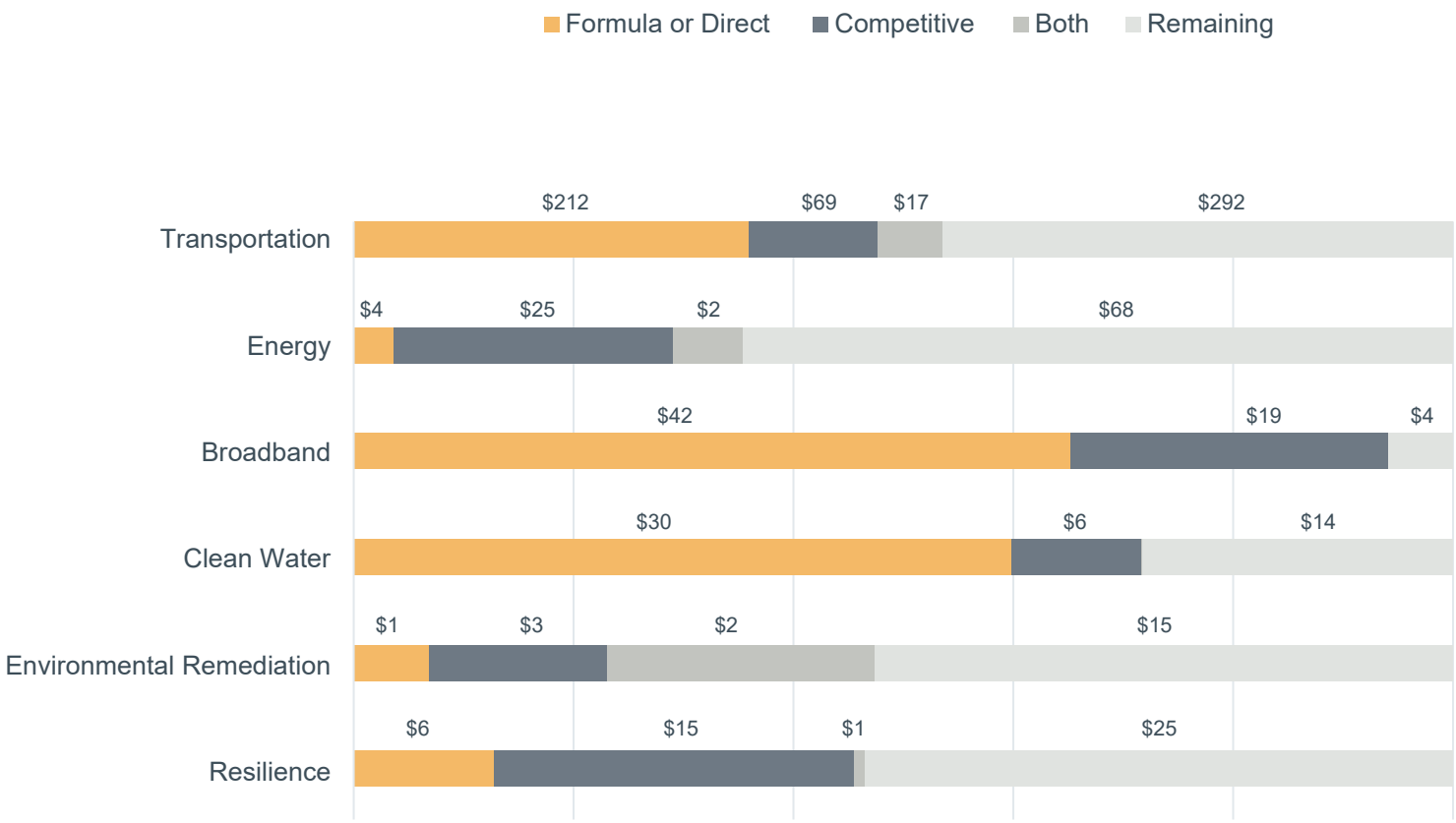
Despite this investment, the U.S. continues to trail many developed nations in annual spending on infrastructure, and much of its vast networks of highways, bridges and water systems are nearing the end or exceeding their expected lifespans, according to the American Society of Civil Engineers' Report Card for America's Infrastructure.

The U.S. ranks near the bottom of the Group of 20 (G20) countries in terms of infrastructure investment as a percentage of gross domestic product, according to the latest figures from the Public-Private Infrastructure Advisory Facility. And in 2019 the World Economic Forum ranked the U.S. just 13th globally in its infrastructure quality assessment, which is often cited publicly as a reason to increase infrastructure spending.

The U.S. will need to invest well above its historic levels in the coming years to maintain and improve its infrastructure network, making FMI optimistic about the civil infrastructure construction sector in the next three to five years. However, there are risks that temper this optimism regarding the longer term.

As follows are the key trends influencing our outlook, and which we recommend considering in your long-range planning.

## Progress of IIJA-Awarded Funding, by Sector and Funding Type
Values are in billions of dollars




Source: The White House's Investing in America agenda

## America's Infrastructure on the Brink

- Dams in the U.S. have exceeded their 50-year lifespan by six years.
- Water pipes on average are five years beyond their 40-year lifecycle.
- America's bridges are nearing the end of their 50-year lifespan.
- Roads have surpassed their 20-year useful life by nine years.
- Rail infrastructure is 28 years into its 30-year lifecycle.
- Water treatment plants are five years beyond their 40-year lifespan.

In this white paper, we'll break down the trends we see affecting the infrastructure construction market in the next few years and highlight areas of caution when it comes to the mid- to long-term outlooks.

# TREND 1

## POPULATION GROWTH AND URBANIZATION ARE INCREASING INFRASTRUCTURE DEMAND.

People living in cities and surrounding suburbs accounted for about 83% of the U.S. population in 2020, up from 64% in 1950. This urbanization trend is expected to continue, with people living in cities expected to account for 89% of America's population by 2050.

The continuing population shift from rural areas is expected to challenge the capacity of transit systems, roadways and utility systems in developed areas, driving the need for further infrastructure investment and increasing subsequent construction activity.

This population shift also puts increasing pressure on aging infrastructure, which will require investments in maintenance and repairs. For example, the ASCE gives the U.S. wastewater infrastructure a D+ rating, including 15% of treatment facilities that have reached or exceeded capacity. Additional strains on these types of critical infrastructure will require municipalities to come up with ways to fund maintenance and repairs as well as additional capacity.

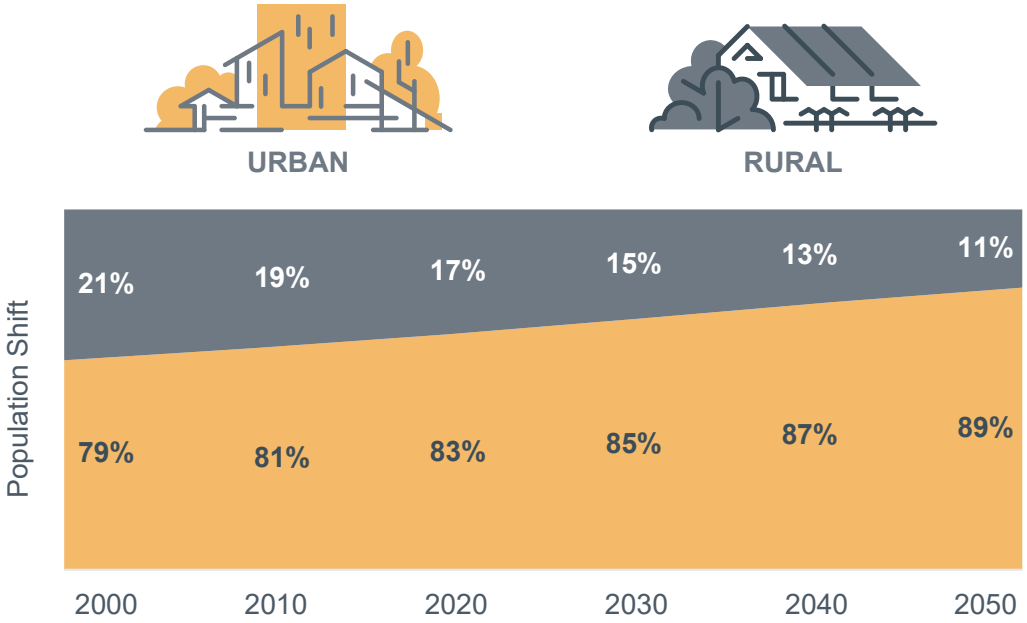
PEOPLE LIVING IN CITIES AND SURROUNDING SUBURBS ACCOUNTED FOR ABOUT

**83%**

OF THE U.S. POPULATION IN 2020, UP FROM 64% IN 1950.

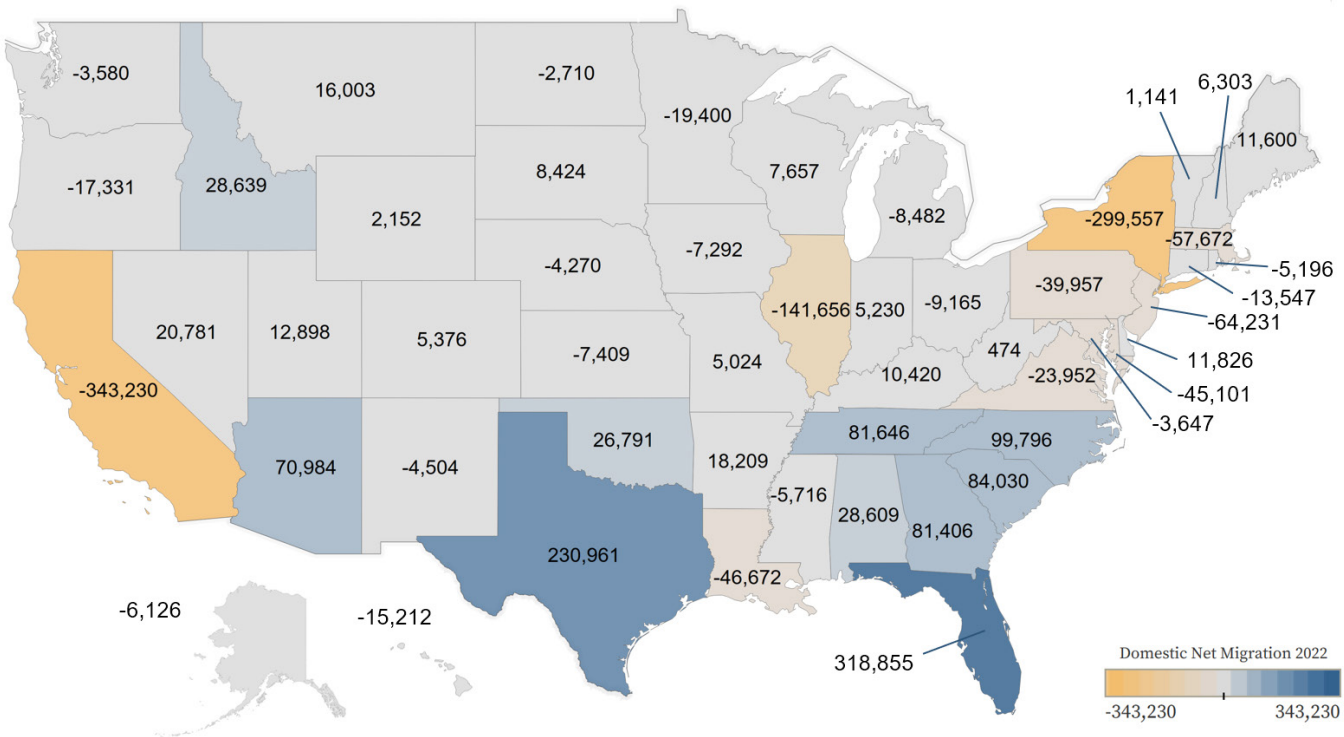
Significant population migrations also are expected to affect construction activity, particularly as workers and businesses continue to move to the Sun Belt region. Florida and Texas are among the states expected to see further growth in population and construction activity in the coming years, while California, Illinois and New York are all experiencing declines.

## Urbanization of the U.S.




Source: Statista

## Domestic Net Migration by State




Source: © 2024 Mapbox © OpenStreetMap | U.S. Census 2022

# TREND 2

## RISING NATURAL DISASTER COSTS ARE FUELING INVESTMENT IN RESILIENT INFRASTRUCTURE.

The past decade includes eight of the top 10 years on record for natural disasters exceeding $1 billion in damages, driving municipalities and private firms to invest substantially in coastal resiliency measures such as buried electric cables and distributed energy resources (small-scale technologies that store and disperse energy when needed).

The U.S. government is mandating that state departments of transportation (DOTs) develop climate resiliency plans to qualify for federal funding and designated more than $50 billion to enhance climate adaptation and resilience nationwide, particularly in communities most vulnerable to flooding, wind damage and other extreme weather.

This mandate will shift where states invest and how they design, bid on and execute projects. Contractors will also likely see increased demand for projects to fortify roads, bridges and other structures against extreme weather events, rising sea levels and other climate-related risks.

Power outages, primarily due to damage from increasingly severe weather, cost the U.S. economy nearly $150 billion annually. Electric utilities are already investing substantially in relocating power lines to reduce wildfire risks in California and make the electric grid more resistant to hurricanes and other natural disasters in Florida. In addition, the IIJA designated $3 billion for battery energy storage and the IRA extended tax credits to batteries, helping drive smaller-scale technology that enhances distribution and energy resiliency.

### COST TO STATE GOVERNMENTS OF COASTAL RESILIENCE MEASURES

SINCE THE 1960S, THREE STATES HAVE SPENT MORE THAN $1 BILLION ON BEACH RENOURISHMENT PROJECTS TO ADDRESS DAMAGE FROM NATURAL DISASTERS.

FLORIDA
**$1.9 Billion**

NEW JERSEY
**$1.5 Billion**

NORTH CAROLINA
**$1.1 Billion**

Source: National Oceanic and Atmospheric Administration / U.S. Army Corps of Engineers

## How Utilities Are Addressing Extreme Weather Events

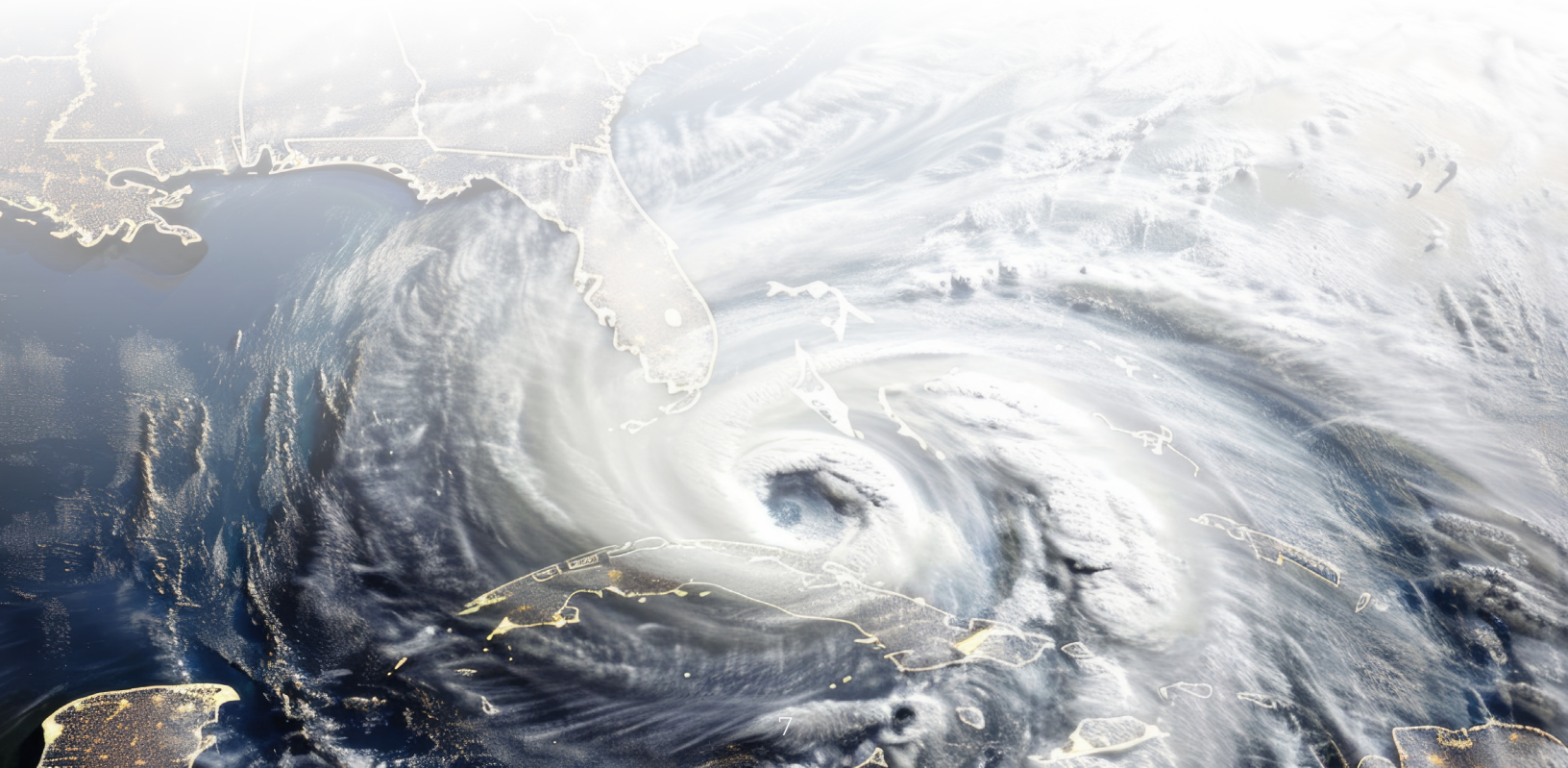
Florida Power & Light (FPL) invested heavily in resilient infrastructure to protect against increasingly severe natural disasters, particularly hurricanes.

- Over the past decade, FPL hardened its infrastructure, upgraded its transmission lines and deployed advanced smart grid technologies.
- The company allocated $30.3 million in 2023 to install fault locators and manhole monitors to quickly identify outages and extend the life of its critical equipment.
- FPL increased its base electric rates by $692 million in January 2022 and another $560 million in 2023 as part of a four-year plan to boost its capacity and manage challenges from climate change.

Source: FPL

At the same time, the ASCE is developing new standards for climate resilience, which will require engineering and construction firms to adopt new practices. These are likely to include the use of more durable building materials, the incorporation of more green infrastructure solutions and the deployment of advanced engineering techniques to account for evolving climate conditions.

The 2023 wildfires in Maui, which destroyed much of the town of Lahaina, also highlighted the significant financial and social costs associated with natural disasters and the need to invest in resilient infrastructure. The cost to rebuild in Lahaina is estimated to exceed $5.5 billion.



# TREND 3

## GREEN TRANSITION AND ENERGY GRID TRANSFORMATION ARE PROMPTING SIGNIFICANT INVESTMENT.

The desire to reduce the nation's carbon footprint is driving significant allocations in renewable energy infrastructure, sustainable transportation systems and low-carbon construction materials, with investments in clean energy technologies in the U.S. expected to exceed $300 billion this year and outpace fossil fuel investments.

States are undertaking a variety of approaches as part of strategic initiatives to advance clean energy, from building offshore wind power in Maryland to issuing mandates for solar power and electric vehicle charging ports in new constructions in California.

The Energy Information Administration is forecasting a substantial increase in the use of renewables, with solar energy capacities expected to increase by 128% over a three-year period ending in 2025 and wind expected to grow by nearly 15% in the same period.

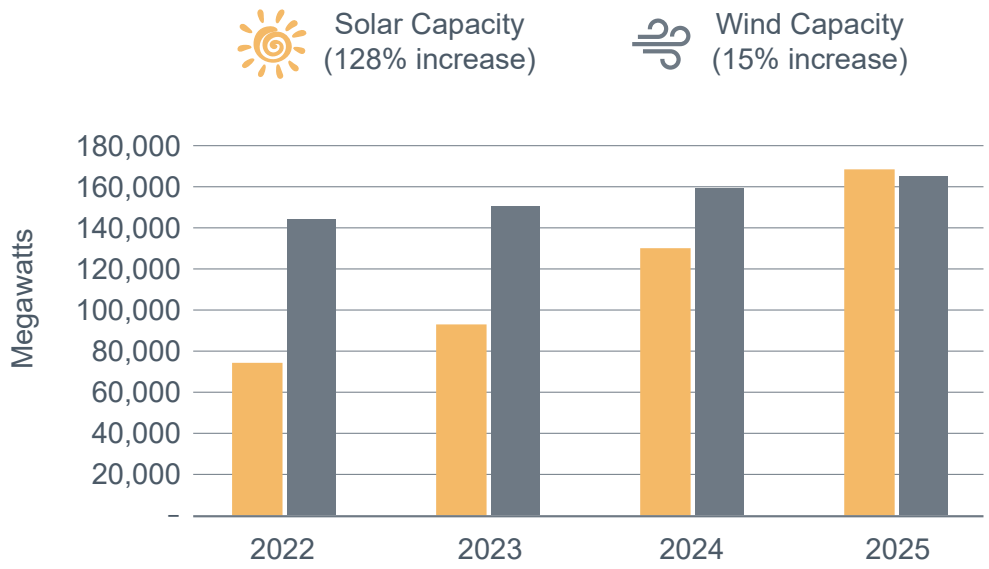
At the same time, new tools are being more widely used to assess the environmental impact of construction materials over the lifecycle of a building, including the Embodied Carbon in Construction Calculator (EC3) and Environmental Product Declarations (EPD). Both examples are gaining traction in the construction industry, intended to enable more sustainable construction practices, support compliance with regulations and facilitate informed decision-making.

State, federal and local initiatives are also driving changes in logistics and transportation to make the practices more sustainable. For instance, 26 states are actively moving to develop new electric vehicle charging stations as part of the $5 billion National Electric Vehicle Infrastructure (NEVI) program, which is designed to increase the nation's EV charging infrastructure and the use of electric buses nationwide. In Washington state, the nation's largest ferry system is seeking to transition its fleet to hybrid-electric power by 2040, securing more than $1.68 billion in funding to make it happen.

The government is working to electrify the nation's seaports, allocating $3 billion through the Clean Ports program and nearly $1 billion through the Clean Heavy-Duty Vehicles grant program.

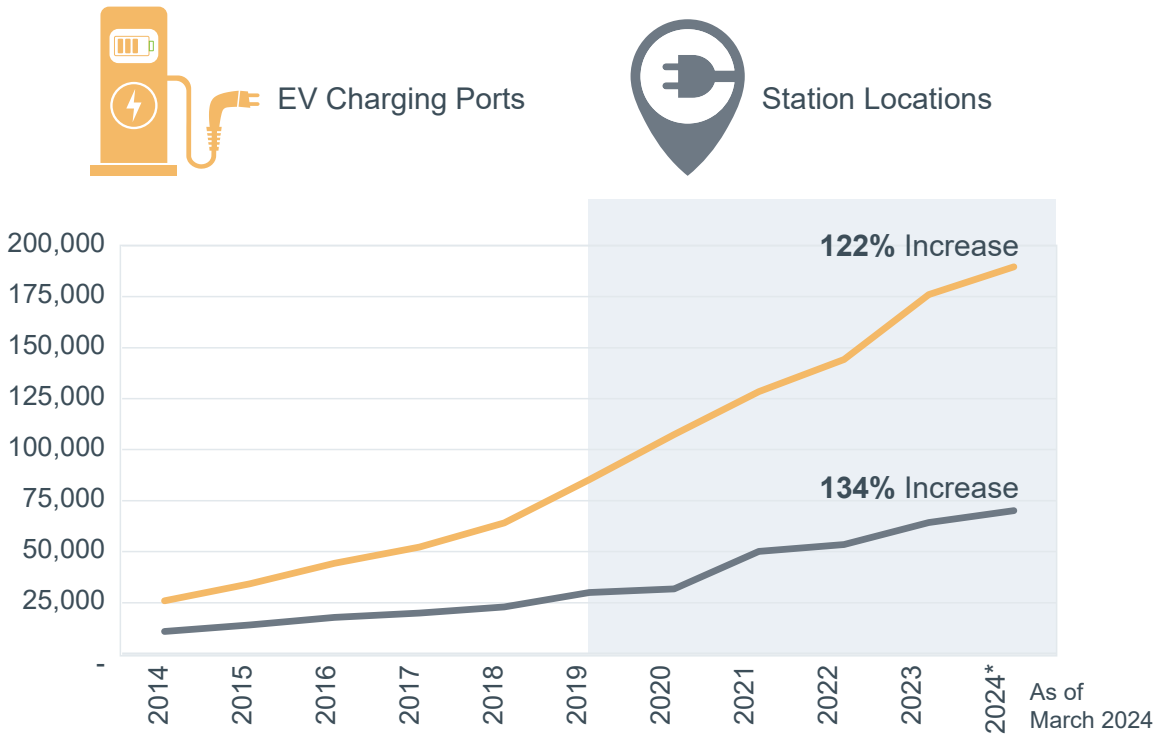
Additionally, a recent report by Goldman Sachs highlights a growing need for substantial investments in the power grid, driven by the increasing energy demands of AI and data centers. As cited in the report, data centers are projected to account for 8% of U.S. electricity demand by 2030 — growth that the grid's current capacity cannot support. Improving power generation and transmission infrastructure will help solve some of the issues, Goldman says.

## FUTURE RENEWABLE ENERGY CAPACITY




Source: U.S. Energy Information Administration

## U.S. PUBLIC AND PRIVATE ELECTRIC VEHICLE CHARGING INFRASTRUCTURE




Source: EIA (Energy Information Administration)

# TREND 4

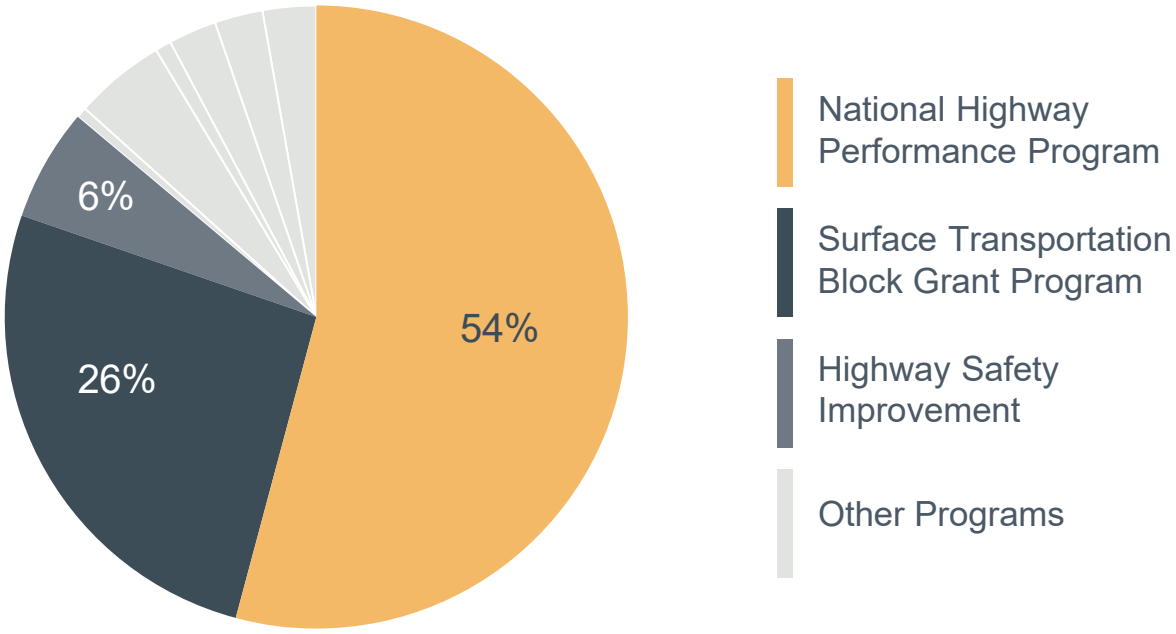
## THE FEDERAL GOVERNMENT WILL CONTINUE TO FUND INFRASTRUCTURE PROGRAMS AFTER CURRENT SPENDING ALLOCATIONS EXPIRE.

The wave of investment by the U.S. government is boosting spending on infrastructure projects such as roads and bridges, which we expect will serve as a baseline for government infrastructure spending going forward.

Previous federal highway programs such as the Transportation Equity Act for the 21st Century (TEA-21); Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); and the Fixing America's Surface Transportation Act (FAST) were granted extensions as Congress worked on new funding bills. If this pattern holds, the next major federal highway program is unlikely to be finalized before 2028 or 2029.

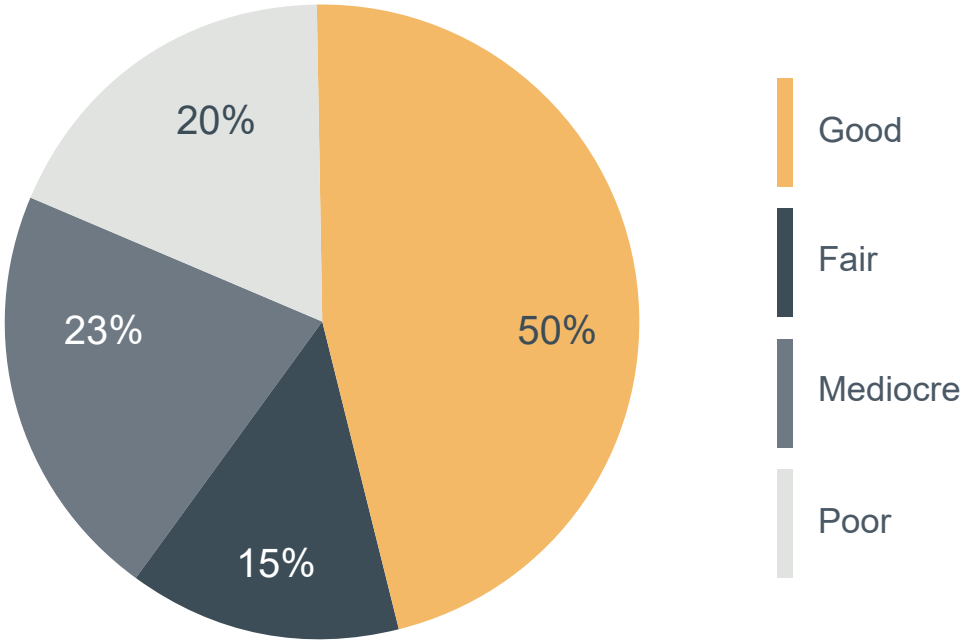
Infrastructure spending is expected to remain stable due to the current state of the nation's roads, bridges, and other critical assets, coupled with limited political momentum to reduce expenditure in this area. However, priorities within the programs could shift depending on the outcome.

## FUNDING DISTRIBUTION BY IIJA PROGRAM, 2022-2026




Source: FMI

## U.S. ROADWAY CONDITIONS




Source: U.S. American Society of Engineers' Infrastructure Report Card

# TREND 5

## INFLATION AND HIGH INTEREST RATES WILL CONTINUE TO IMPEDE GROWTH.

The combination of a rapid rise in inflation and higher interest rates has reduced the buying power of contractors and driven up the costs of construction.

There has been a pronounced rise in recent years in the prices of key materials, such as liquid asphalt, according to the National Highway Construction Cost Index. Those price increases have contributed to a surge in highway construction costs, which have risen by 67.5% from the fourth quarter of 2020 to the fourth quarter of 2023, resulting in the FHWA losing about $46 billion in purchasing power according to the Eno Center for Transportation.

Labor scarcity continues to drive wage inflation as construction companies need to hire beyond their usual rate to meet demand. According to the Associated Builders and Contractors trade group, the sector will need to hire an estimated 501,000 additional workers this year and recruit another 454,000 next year.

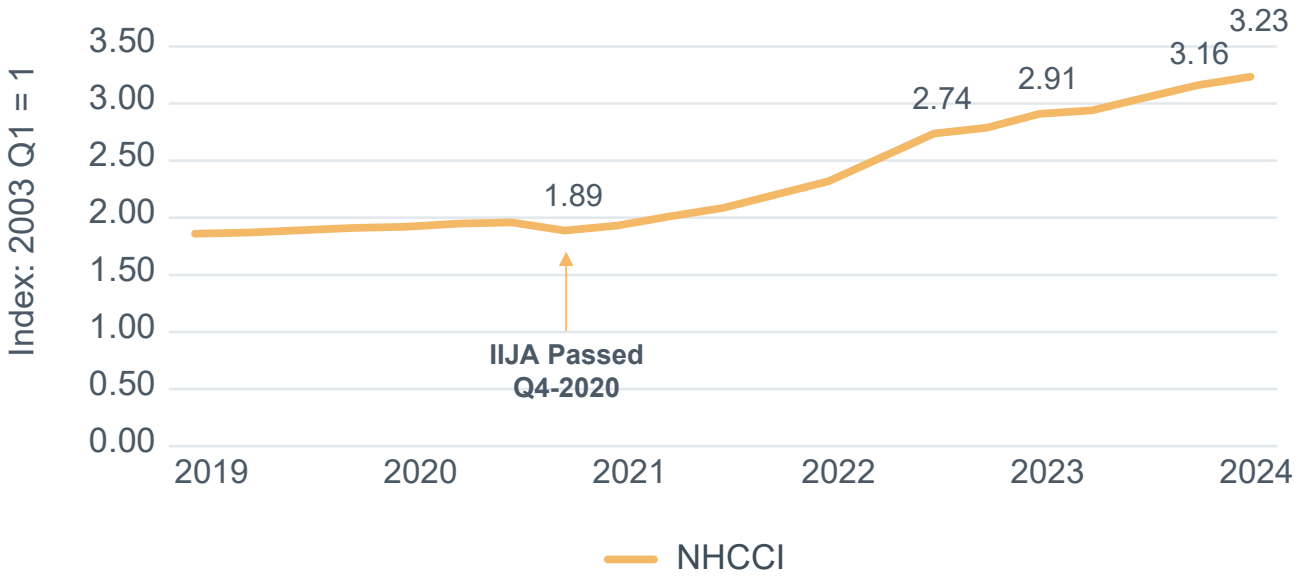
Supply chain disruptions are also driving up costs and delaying projects due to geopolitical events globally, such as the wars in Ukraine and the Middle East.

LABOR SCARCITY CONTINUES TO DRIVE WAGE INFLATION AS CONSTRUCTION COMPANIES NEED TO HIRE BEYOND THEIR USUAL RATE TO MEET DEMAND.

The IRA and CHIPS and Science Act allocated funds for moving manufacturing and other critical supply chain needs to the U.S. to mitigate the risk of future supply chain volatility.

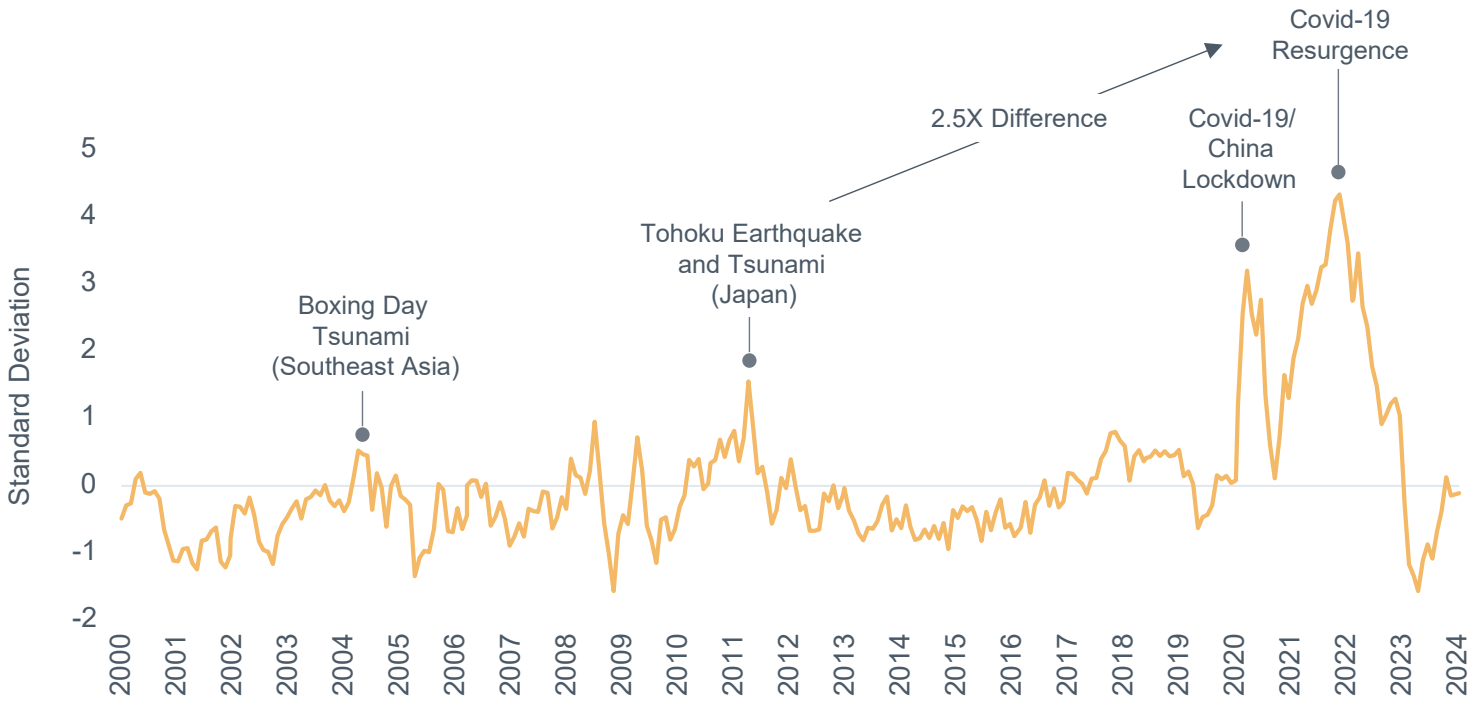
The Federal Reserve will likely continue cutting interest rates over the coming year, yet rates will likely remain well above the historically low levels seen prior to 2022. While many government-funded infrastructure projects are generally insulated from rate fluctuations, we believe private sector projects could continue to slow due to increased costs and restricted access to bank lending as rates remain higher.

## NATIONAL HIGHWAY COST CONSTRUCTION INDEX




Source: Federal Highway Administration

## GLOBAL SUPPLY CHAIN PRESSURE INDEX




Source: Federal Reserve Bank of New York

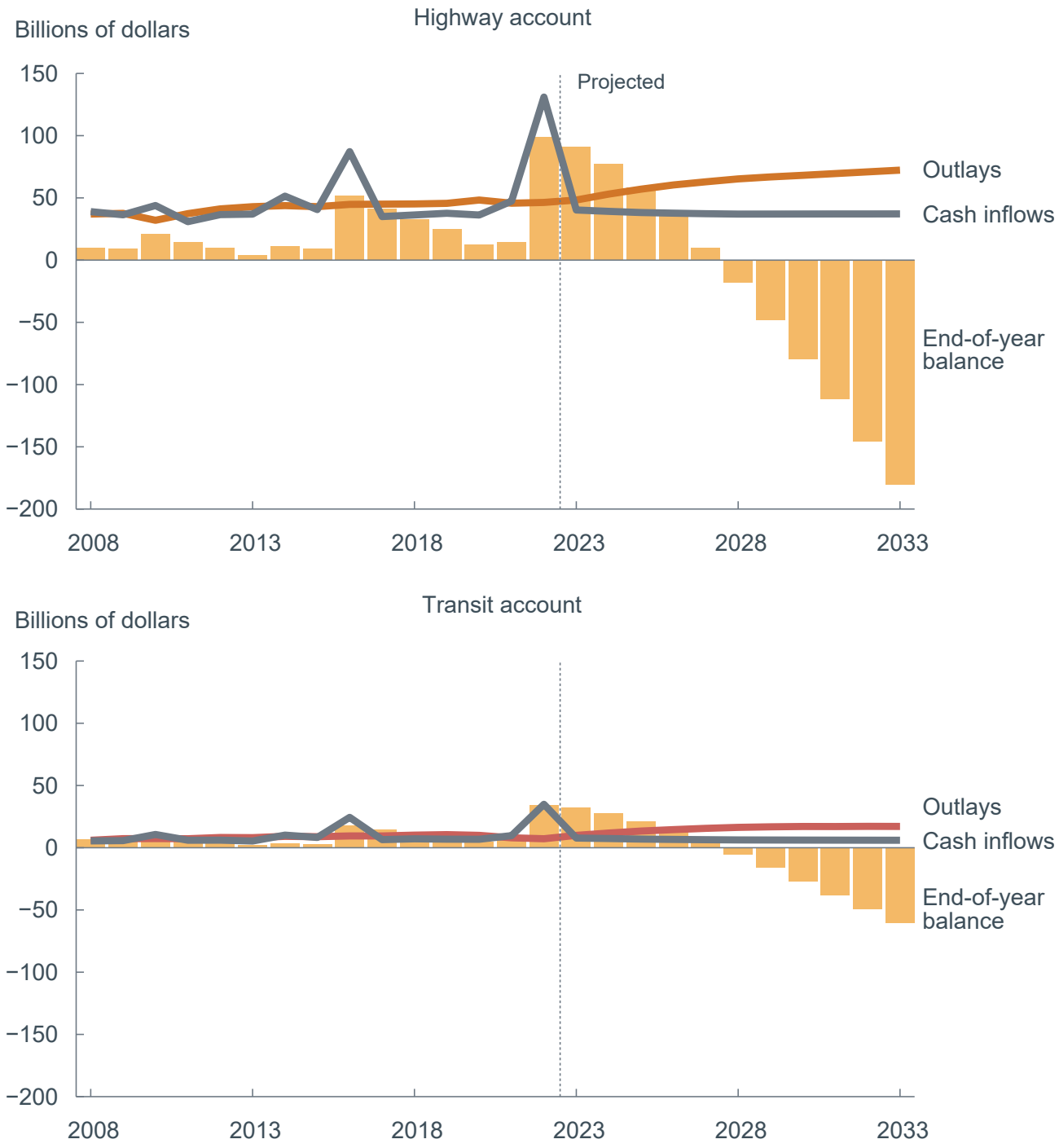
# TREND 6

## CHANGING CONSUMER BEHAVIOR IS DECREASING TRADITIONAL INFRASTRUCTURE FUNDING.

Increasingly, consumers are relying less on vehicles powered by traditional fuels or looking for more fuel-efficient alternatives. As people are consuming less at the gas pumps, the Highway Trust Fund (HTF) is projected to face a $241 billion shortfall by 2033 according to the Congressional Budget Office. Additionally, gas-powered engines continue to get more fuel efficient, reducing gasoline consumption and therefore gasoline tax revenue.

The IIJA has not been able to offset a decline in gasoline tax revenues, highlighting the need for new funding solutions to support roadway maintenance and construction. Potential solutions could include increasing gas taxes or implementing mileage-based user fees. Some states are also considering raising fees to register alternative fuel vehicles to offset some of the lost gasoline tax revenue. However, these scenarios face political challenges as highlighted by New York's recent pullback on first-in-the-nation congestion pricing, which was set to help fund public transit improvements.

# ANNUAL CASH INFLOWS, OUTLAYS, AND BALANCES OF THE HIGHWAY TRUST FUND'S ACCOUNTS IN CBO'S MAY 2023 BASELINE PROJECTIONS




Source: Congressional Budget Office

Outlays from the Highway Trust Fund have long exceeded the revenues credited to it from taxes, but intragovernmental transfers have ensured that the fund's two accounts have maintained a positive balance. In CBO's projections, the balances of both the highway account and the transit account are exhausted in 2028.

# TREND 7

## STATE AND LOCAL GOVERNMENTS PRIORITIZE FISCAL STABILITY AS REVENUE GROWTH CONTINUES AND SPENDING ADJUSTS.

State and local governments are shifting their focus from short-term spending surges to long-term fiscal stability. While revenues are still growing, general fund spending is projected to decrease by 6.2% in 2025, reflecting a strategic pullback after years of pandemic-driven expenditures, according to the NASBO Spring 2024 Fiscal Survey of States report. In 2024, general fund spending increased by 14.4%, largely due to one-time surpluses from federal aid. Now, as these surpluses diminish, states are adopting more conservative budgeting practices.

This transition signals a move away from aggressive spending. By 2025, the median growth in general fund expenditures is expected to slow to just 1.1%, a marked reduction from the double-digit increases of previous years. States are increasingly focused on stabilizing their budgets by aligning revenues with forecasts and limiting new spending initiatives. A key part of this strategy is building reserves, with many states growing their rainy-day funds to prepare for future uncertainties. In 2023, rainy day fund balances reached a record $176.9 billion, and states like Texas and New York are continuing to build reserves, while others, such as California, are drawing down funds to address current obligations.

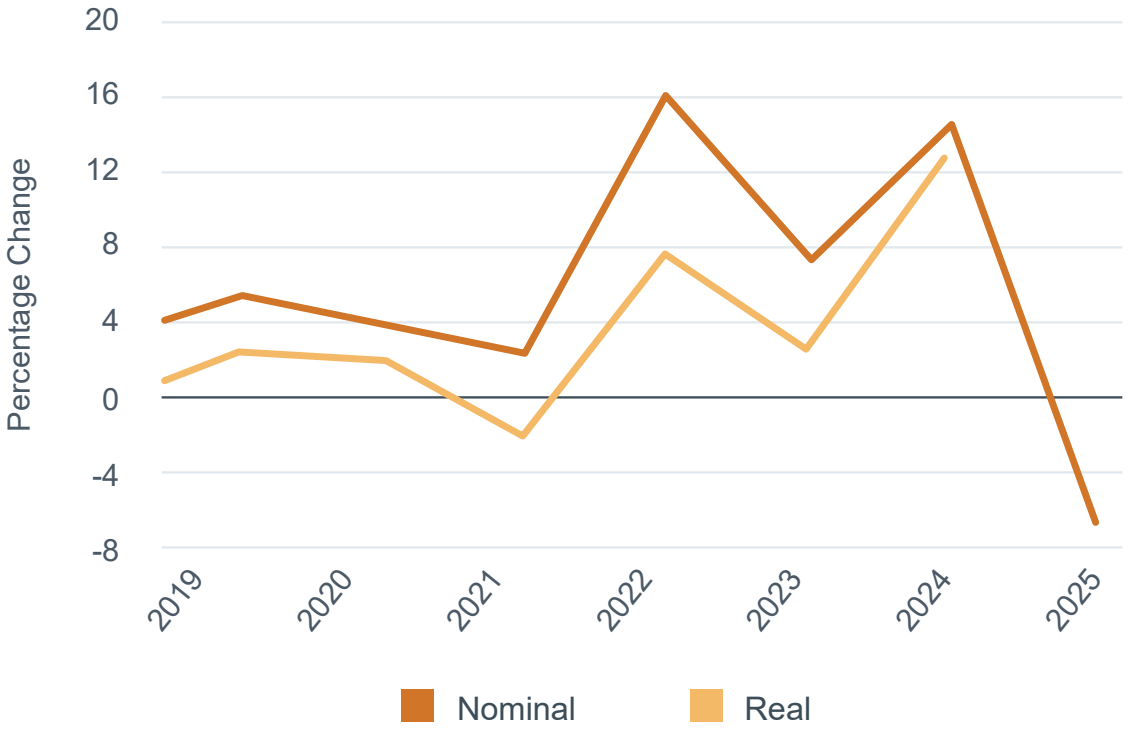
IN 2024, GENERAL FUND SPENDING INCREASED BY

**14.4%**

LARGELY DUE TO ONE-TIME SURPLUSES FROM FEDERAL AID.

This shift should not be viewed as a sign of financial strain, but rather as a realignment toward fiscal responsibility. States are prioritizing financial stability and reserving resources for potential future challenges, ensuring long-term budgetary health. This conservative approach is mirrored in broader economic forecasts, including the construction sector, where growth is expected to be more moderate in 2025 compared to the surplus-fueled surge in 2024. Overall, states are embracing a more measured approach, balancing revenue growth with cautious, sustainable spending.

## ANNUAL GENERAL FUND SPENDING CHANGES, FISCAL 2019 TO FISCAL 2025




Source: NASBO Fiscal Survey of States

# NEAR-TERM OPPORTUNITIES ABOUND

The enhanced focus on addressing aging infrastructure in the U.S. — and a funding influx by the federal government — presents an opportunity for civil infrastructure companies in the near term. Population growth and shifting demands and realities, such as the transformation of our energy system and investments needed to curb climate change, support ongoing spending in many infrastructure categories.

Many challenges loom, particularly since funding can only address a limited amount of the needs. As costs rise and interest rates remain high, the number of infrastructure projects that can be addressed will drop. Combine that with lower tax revenue and shifts in demand, and many areas will face tough choices about how to allocate funds.

## When thinking about your strategy, consider:

- The environment where you operate now and any geographic expansion plans.
- The short- and long-term implications for these challenges and opportunities.
- How you can integrate these changing market conditions into your planning processes.
- What support you and your teams need to understand the operating environment and adapt your strategies to meet these shifts.

It's important to understand these trends broadly, as well as how they are manifesting themselves in the specific geographies and sectors where you do business. Civil infrastructure companies will need sector specific insights and market research to fully integrate these trends into short- and long-term strategic plans.

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