



2023

North American Engineering and Construction Industry Overview

First Quarter Edition



January 2023

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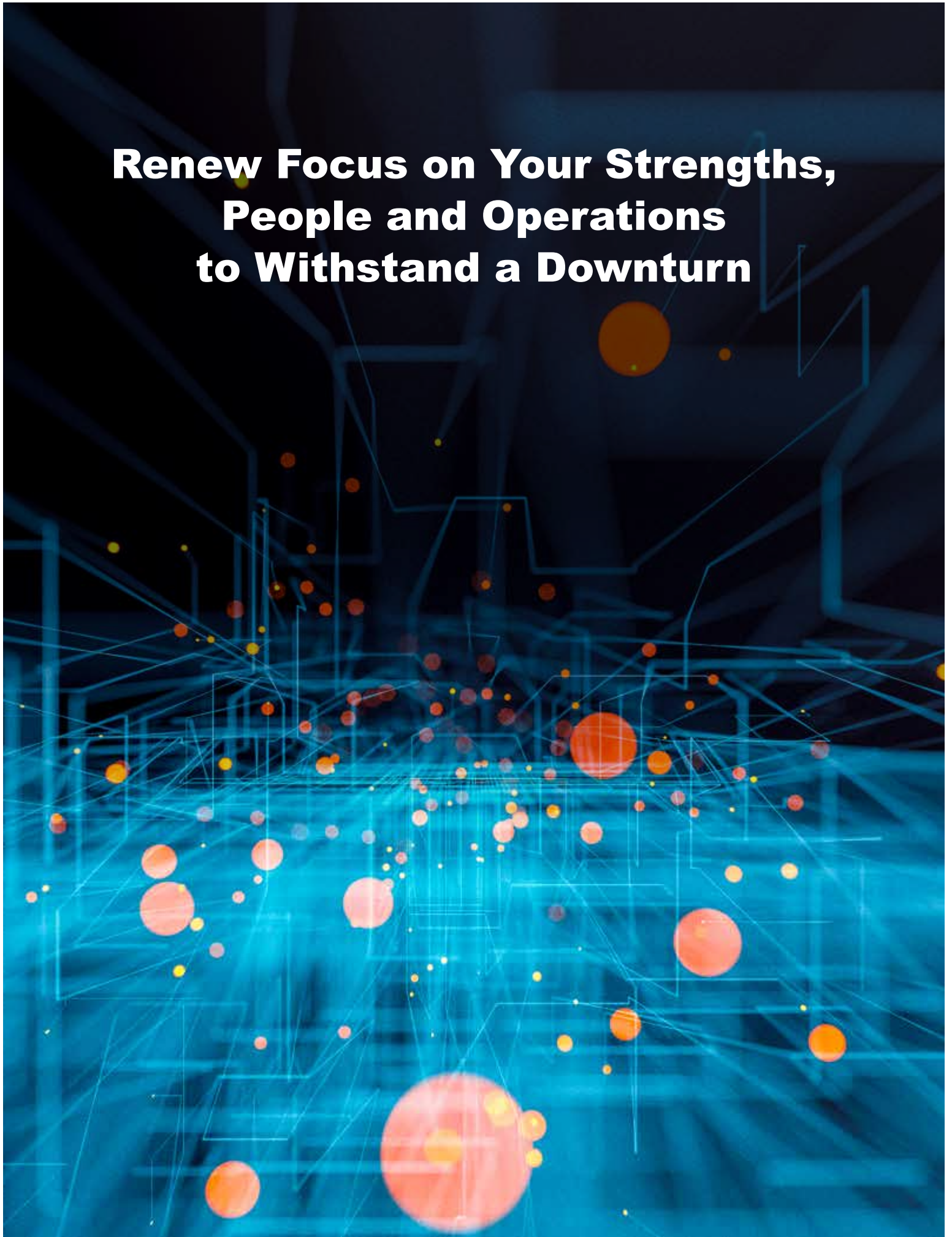
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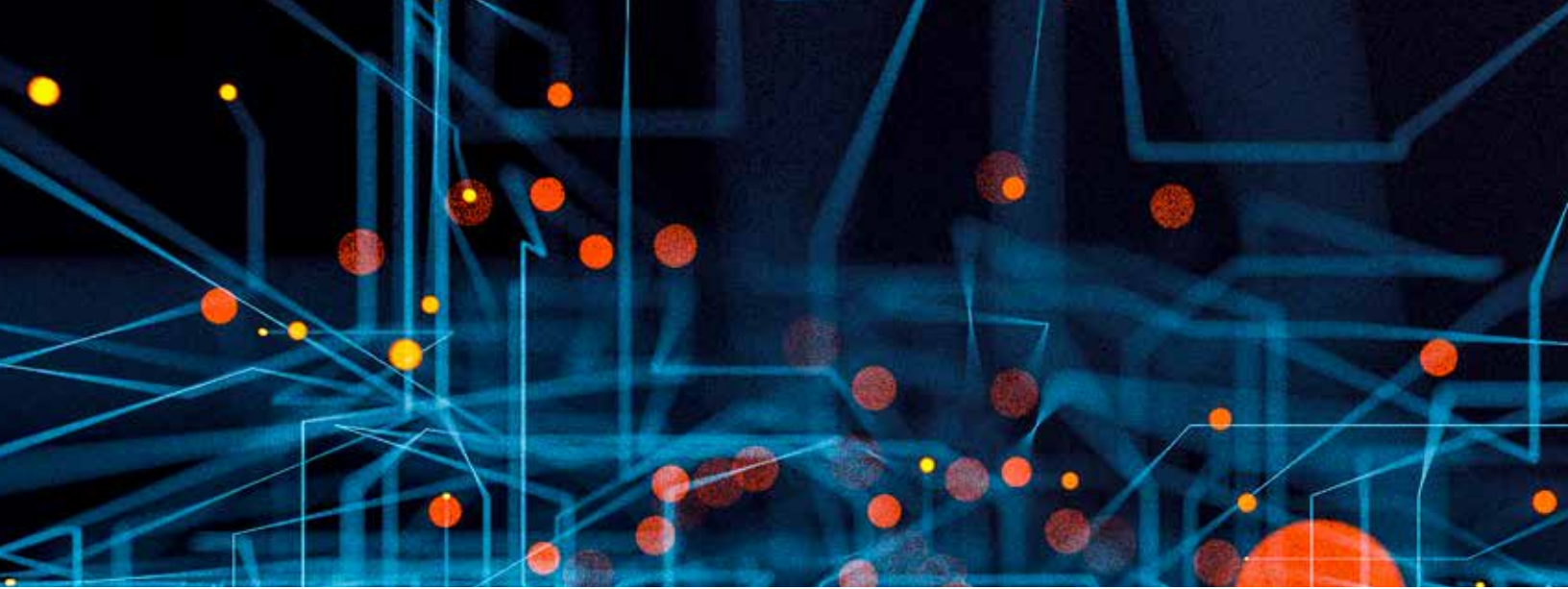
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**Renew Focus on Your Strengths,
People and Operations
to Withstand a Downturn**





Message from Chris Daum, CEO of FMI

As we enter 2023, much has been written about the current economic climate for the built environment. The operating conditions for many firms across our industry remain disrupted and uncertain nearly three years after the onset of the COVID-19 pandemic and the resulting market turmoil.

We continue to see near-record inflation, with December's consumer price index reading of 6.5% down from a mid-2022 peak, but significantly higher than the prior year. Supply chains still face disruptions across global markets, and companies across sectors of engineering and construction (E&C) continue to struggle to find the talent needed to execute new and existing projects.

Despite some of these challenges, many of our clients saw record back-

logs, earnings and revenue in 2022. Total construction spending for the U.S. is expected to end 2022 up 8%, driven primarily by residential building, multifamily, commercial and manufacturing.

“Obviously, there’s a lot going on in the world related to record-high inflation, supply chain challenges, resource challenges, but yet, construction and building has trudged forward,” says Keith Douglas, chief operating officer at [Rosendin](#), a \$2 billion, employee-owned electrical contractor. “Owners are still pushing through and wanting to build their projects, but we are starting to see some cracks out there.”

Some of those cracks are projected to come from the residential markets, which will be the biggest cause of a 2% forecast decline in construction spending for 2023. In contrast,

other segments, such as nonresidential building and nonbuilding structures, are expected to grow in 2023, each forecast to climb 8% in 2023, meaning a large portion of the industry will continue to see growth.

Given this uneven landscape, to compete in 2023, it is critical to understand your core competencies, markets and clients. Knowing your opportunities and challenges and having a plan for tackling them will help your company continue to be successful. Furthermore, firms that focus on their people and culture and execute a clear strategy will be more likely to weather the upcoming downturn.



COPING WITH THE CURRENT OPERATING ENVIRONMENT

When talking with our clients, we consistently hear that their top three challenges are around finding and retaining skilled workers both in the field and office, creating a cohesive and connected culture to nurture their workers through their careers and, in the short term, combating project delays.

Recent FMI [research around project delays and cancellation backs up](#) what we're hearing from clients. According to a survey conducted in September, 89% of respondents experienced owner-led project start delays in 2022. Another 44% saw supply chain-related project delays. Only 8% of those surveyed said they had not experienced any project start delays in 2022.

Dan Johnson, chief executive officer at [Mortenson Construction](#), a multi-billion-dollar general contractor, agrees, "We are entering 2023 with record levels of backlog, but we have also started to see the plates shift in

the last month with projects being canceled and projects being put on hold for a variety of reasons. Tech industry and related projects now are starting to be put on hold. Our renewable energy business is definitely something we see a lot of potential in the long term; but in the short term, our customers are struggling to get solar panels, so the projects are waiting for the supply chain to catch up."

His point about the outlook for different sectors varying greatly is an important one, and something you'll see throughout this quarter's forecast numbers. As Jay Bowman, head of our market research consulting practice, says, "Bull markets and bear markets coexist at all times."

The following sector-specific information considers inflationary pressures, incoming federal funding from a variety of sources, and the societal shifts that are impacting overall construction spending. It's not enough to look at the initial numbers; you need to delve into economic conditions that fluctuate greatly by sector and geography.

REFINE BUSINESS DISCIPLINE AND OPERATIONAL EXECUTION

While numbers and data are important, they can't replace having a comprehensive strategy and the tools to implement those plans, from training your people to implementing operational improvements. Now is the time to assess your business and plan for what's ahead. Putting in place the right teams and plans for business development and marketing will be a critical way to make sure you are rebuilding your backlogs with work that you can successfully execute.

"To be effective in any type of a strategy, it needs to be embraced by every individual within the organization."

— Dan Johnson
Chief Executive Officer
Mortenson Construction



If you haven't invested in clearly articulating your company's culture and what you stand for, then how can you expect your workers across various projects to embrace that and act according to your values?

Staying focused and [being selective about what projects you pursue](#) will be imperative in the coming months and years. To be selective, no matter the market conditions, design, engineering and construction firms need superior execution skills and strategic clarity around their core competencies.

“As backlogs continue to be strong, the best thing we can do to prepare is to ensure the new work we pursue is the right work,” says George Pfeffer,

chief executive officer and leadership team member of [DPR Construction](#), a \$6.8 billion, self-performing general contractor. “Our early sign, like most contractors, is that a slowdown of some sort is coming as, more than normal, our projects are pushing to later time frames. We need to pursue work that allows us the best opportunity to overcome shortages in skilled workforce as well as the volatility in commodities markets that affects procurement. The best way to do that, we think, is not to pursue new sectors, but to focus on the things we know we're best at.”

For many it can be difficult to know exactly what differentiates their company from others and how to position their teams to win work. That's why it's important to have a clear strategy and to communicate that strategy to everyone on a regular basis to ensure all teams are working toward the same goal.

“To be effective in any type of a strategy, it needs to be embraced by every individual within the organization,” says Johnson. “If they're not aware of it, then they're not going to be work-

ing toward it. So the more that you can communicate the strategy, answer the why, you're going to get a lot more people behind it. You're going to be far more successful.”

FOCUS ON CULTURE

For decades we've been talking about labor shortages, and given the current trajectory, those issues aren't going away anytime soon. We're losing experienced field leaders as well as project managers and company executives daily. With many younger workers about to face their first economic downturn in the workforce, having clear, consistent and confident leadership will be important for helping shepherd those employees through a downturn.

That's where communication becomes even more important. Being honest, transparent and clear about your business, the strategy you're implementing to be successful, and the culture that drives your business will help every employee feel a sense of ownership and pride in his or her work.

If you haven't invested in clearly articulating your company's culture and what you stand for, then how can you expect your workers across various projects to embrace that and act according to your values?

Pfeffer says that it's important to take time to make sure employees are clear on what's driving their decisions and actions. "Culture is simply the actions people choose to take," he says. "Our basic beliefs are that we have to operate from a basis of respect for the individual and we want to change the world. If you're

trying to decide instantaneously, and you have got to process all these inputs, the clarity should be in our core values, our beliefs that help drive your decisions and actions."

One critical way to solve the labor challenge is by [investing in training and development](#). Demonstrating to your employees that everyone is valued and taking an interest in making sure they're getting the skills needed to advance in their careers will help retain the workers you have and attract the ones you need.

"You have to continually recruit the people who work for you and invest in their futures."

— **Scott Winstead**
President
FMI Consulting

2023 M&A TRENDS

Given the overall strength of the industry, mergers and acquisitions (M&A) for middle-market companies in the built environment remain relatively active. This is in contrast to larger deals and capital markets activity, which are feeling the effects of uncertainties such as recession, inflation, geopolitical risks, deglobalization, soaring deficits and volatile financial markets.

We attribute this continued strength within FMI's coverage sectors partially to the fact that our typical deal size (\$40 million to \$600 million in enterprise value) can often be less sensitive to global risk factors when compared to larger deals. More importantly, we attribute this ongoing M&A activity to favorable mega-

trends that are driving the long-term growth of many of our sectors.

Emerging trends such as reshoring and government spending programs focused on infrastructure are also driving growth and M&A interest in many sectors of the built environment. For sectors we cover, including construction materials and energy solutions and clean tech, we are seeing increased government funding from bills such as the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA) drive substantial investment and interest from private equity, pushing companies to become acquisitive to compete.

Overarching and well-established trends that are helping drive today's M&A include the energy transition;

labor shortages; aging owners; private equity investment; rapid technology advancement; environmental, social and governance considerations; and deferred maintenance and underinvestment in U.S. infrastructure.

M&A trends move quickly, each sector behaves differently, and every company is unique. We remain cautious, given the immediate macro challenges, but optimistic, given the unique opportunities we see in over-coverage areas. These pages will provide you some insights by sector on where we see the market trending.

— **Tim Huckaby**
President
FMI Capital Advisors



DON'T FORGET LESSONS LEARNED FROM PREVIOUS DOWNTURNS

For most of us, this isn't the first time we've had to manage through a downturn. But during times like these, it's helpful to remember important lessons from previous recessionary environments. These include:

Make timely decisions. During the last downturn, we heard from many clients that they made the right decisions, but they just didn't act quickly enough. Don't wait to make necessary changes to ensure you are implementing your strategy and going after work that reinforces your plans.

Focus on your core competencies. Given the uneven outlook for different sectors in the industry, it might be tempting to move into a hot market. But doing so without proper research, thought and strategic plan-

ning could have dire consequences. Be sure you're going after work that you know you can execute well and make money doing so.

Concentrate on business development. Now is the time to stay close to your clients and truly listen to their needs. Equip your teams with the skills needed to continually win work on the differentiators you bring to the project. Simply reducing margins is often untenable but can be especially dangerous in a downturn.

Invest in your people, processes and systems. While it is important to maintain fiscal discipline and a healthy balance sheet during leaner times, you can't neglect your people. Labor markets remain competitive, and you need to make sure you retain the critical talent to lead your business now and through the next economic cycle.

Douglas said it best: "Having a strategic plan is vitally important for any business right now. And if they don't have one, I would encourage them to really think hard about that strategic plan because we're going to have to pull a lot of levers over the next few years just depending on certain conditions. And you've got to be ready for those. If something happens over here, you've got to be able to shift and pivot. And I think that's going to be the difference between companies that get through what's going to happen in the next couple years and companies that really thrive."



U.S. Engineering and Construction Outlook

Last year FMI altered its base case assumptions for our forecasts to include a recession in 2022 and 2023. As with historical contractionary cycles, the impact on the engineering and construction industry will be longer-lasting.

Economic factors influencing this forecast include ongoing shortages of key materials and labor across various industries; challenges and opportunities associated with the reopening of international borders; geopolitical territorial and trade tensions; impacts and volatility in real estate, financial and equity markets associated with a deeply inverted yield curve, ongoing quantitative tightening and rate hikes; and continued inflationary pressures tied to heightened living expenses, energy costs, strength in the U.S. dollar and rising wages.

There are also now multiple layers of interconnected government policy in place influencing new opportunities across various programs stemming from the Infrastructure Investment and Jobs Act (IIJA), the CHIPS and Science Act (CHIPS), and the Inflation Reduction Act (IRA). Combined, these policies will reinforce long-term economic competitiveness and resilience, and ultimately will become a major driving force across several key areas of our industry.




FMI anticipates the U.S. economy will fare better than that of most countries in the years ahead, as reflected by the strength in labor markets, the appetite for innovation, and these recent significant policies supporting long-term manufacturing, infrastructure and institutional investments. As a result, the engineering and construction industry is expected to play a major role in our economy's foundational strength over the coming years.

U.S. Key Takeaways

- Total engineering and construction spending for the U.S. is forecast to end 2022 up 8%, the same increases as in 2020 and 2021, all led primarily by residential construction.
- Looking to 2023, FMI forecasts a 2% decline in engineering and construction spending levels compared to 2022 due to an anticipated fall in residential construction.
- High-growth segments in 2022 include multifamily, residential improvements, commercial, manufacturing, sewage and waste disposal, water supply, and conservation and development construction, each with annual growth rates exceeding 10%.
- A limited number of segments are expected to end the year with growth rates between 0% and 4%, or roughly in line with historical rates of inflation. These segments include lodging, office, educational, transportation and communication. Elevated inflation in the industry in 2022 is driving output contraction across these segments.
- Only religious, public safety and power segments are expected to decline in 2022. Real losses in output (e.g., square footage, installed capacity, etc.) are projected to be significant, especially in power.
- The latest Nonresidential Construction Index (NRCI) score of 46.4, nearly flat from the previous quarter's score of 46.3, suggests ongoing concerns into the first quarter of 2023. Economic and industry sentiment fell slightly but is balanced by improving productivity and falling cost pressures in materials and labor. The index has remained under 50 for three quarters and indicates fewer future engineering and construction opportunities into 2023.

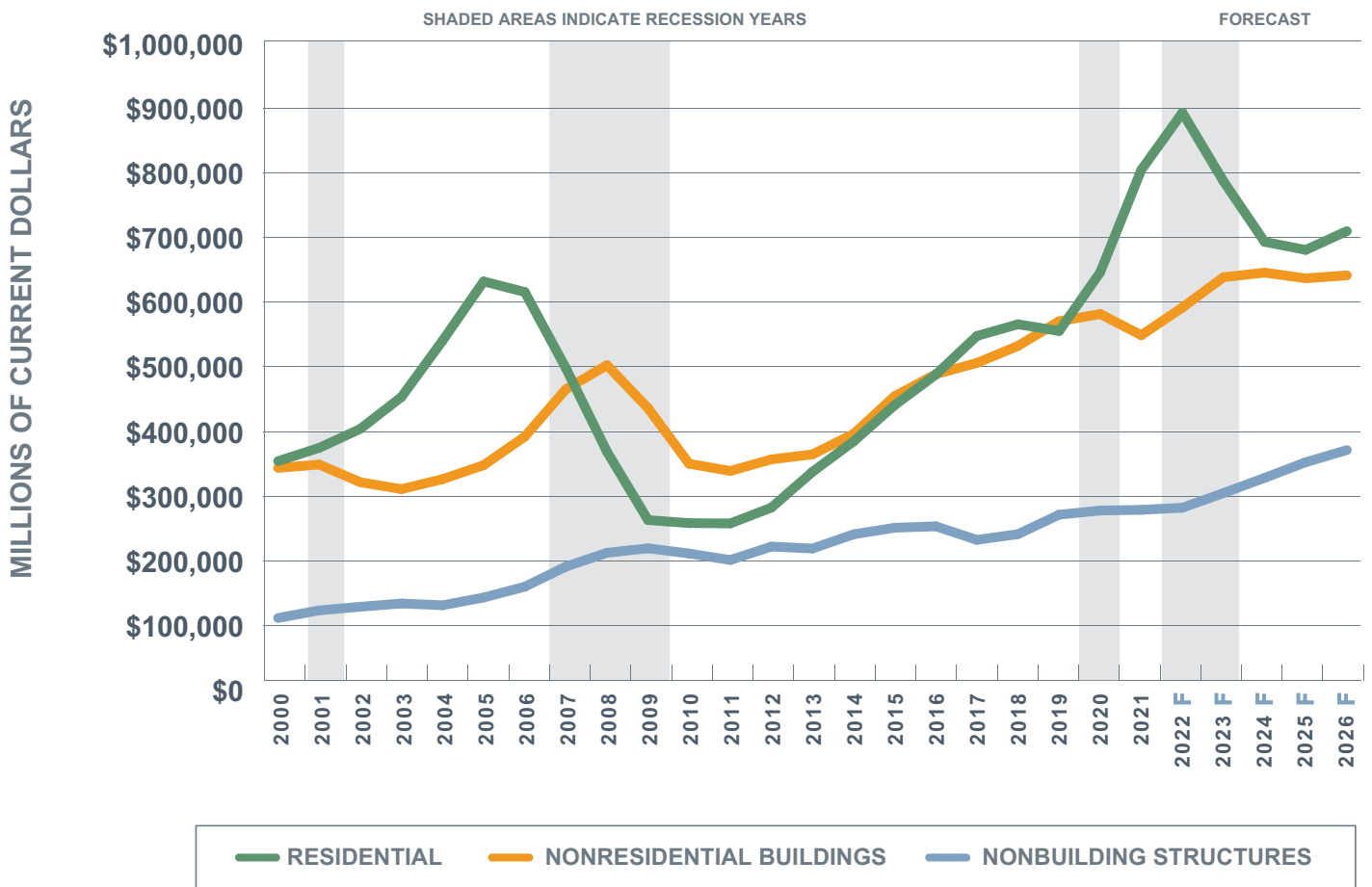
U.S. 2022 Segment Performance

2022/2021 Comparison

 <p>UP 5% or more</p>	 <p>STABLE 0% to 4%</p>	 <p>DOWN Under 0%</p>
<ul style="list-style-type: none"> Single-Family Multifamily Improvements Lodging Commercial Health Care Amusement and Recreation Manufacturing Highway and Street Sewage and Waste Disposal Water Supply Conservation and Development 	<ul style="list-style-type: none"> Office Educational Transportation Communication 	<ul style="list-style-type: none"> Religious Public Safety Power



Total Construction Spending Put in Place Estimated for the United States

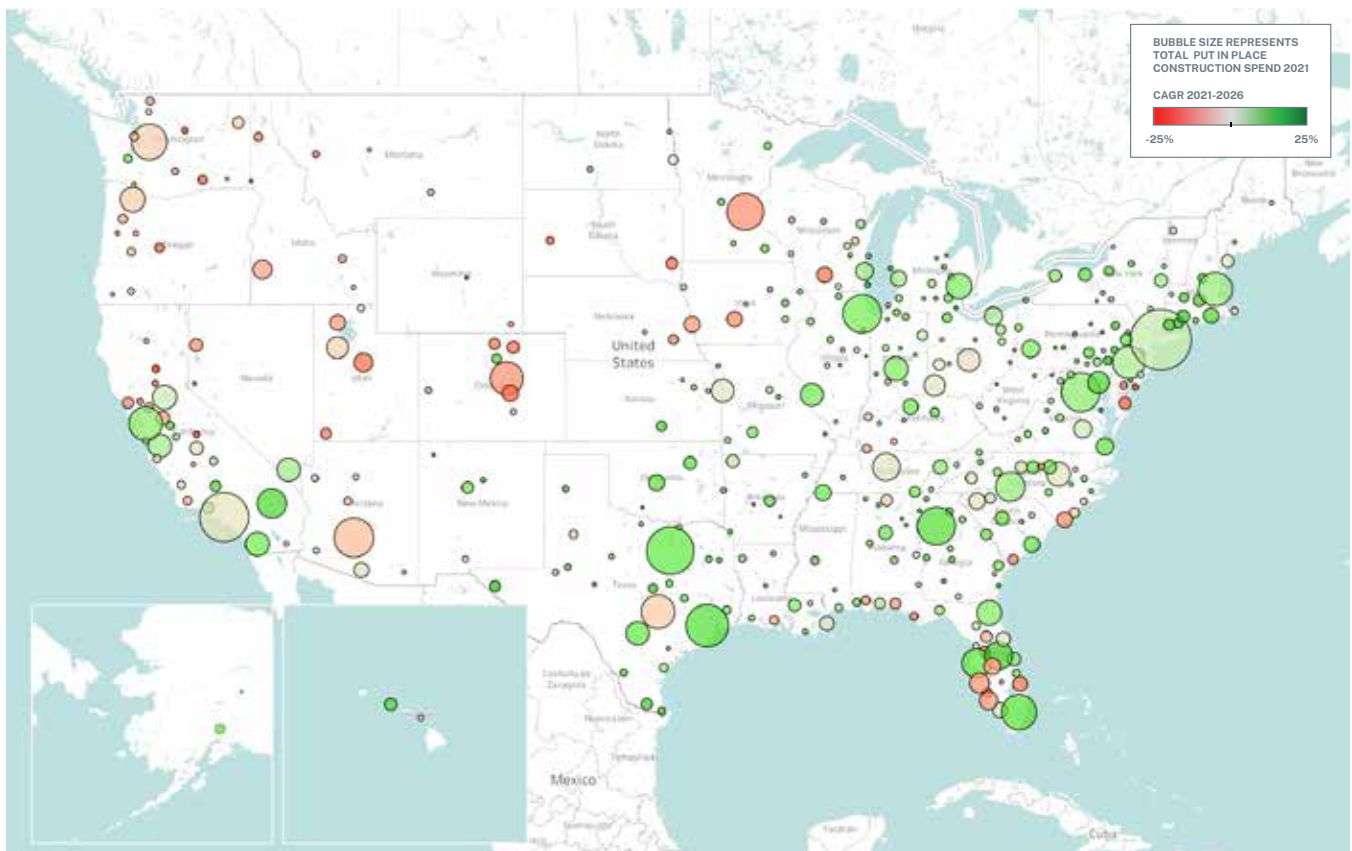


SOURCE: FMI FORECAST Q1 2023

First quarter forecast based on third quarter 2022 actuals and fourth quarter assumptions.

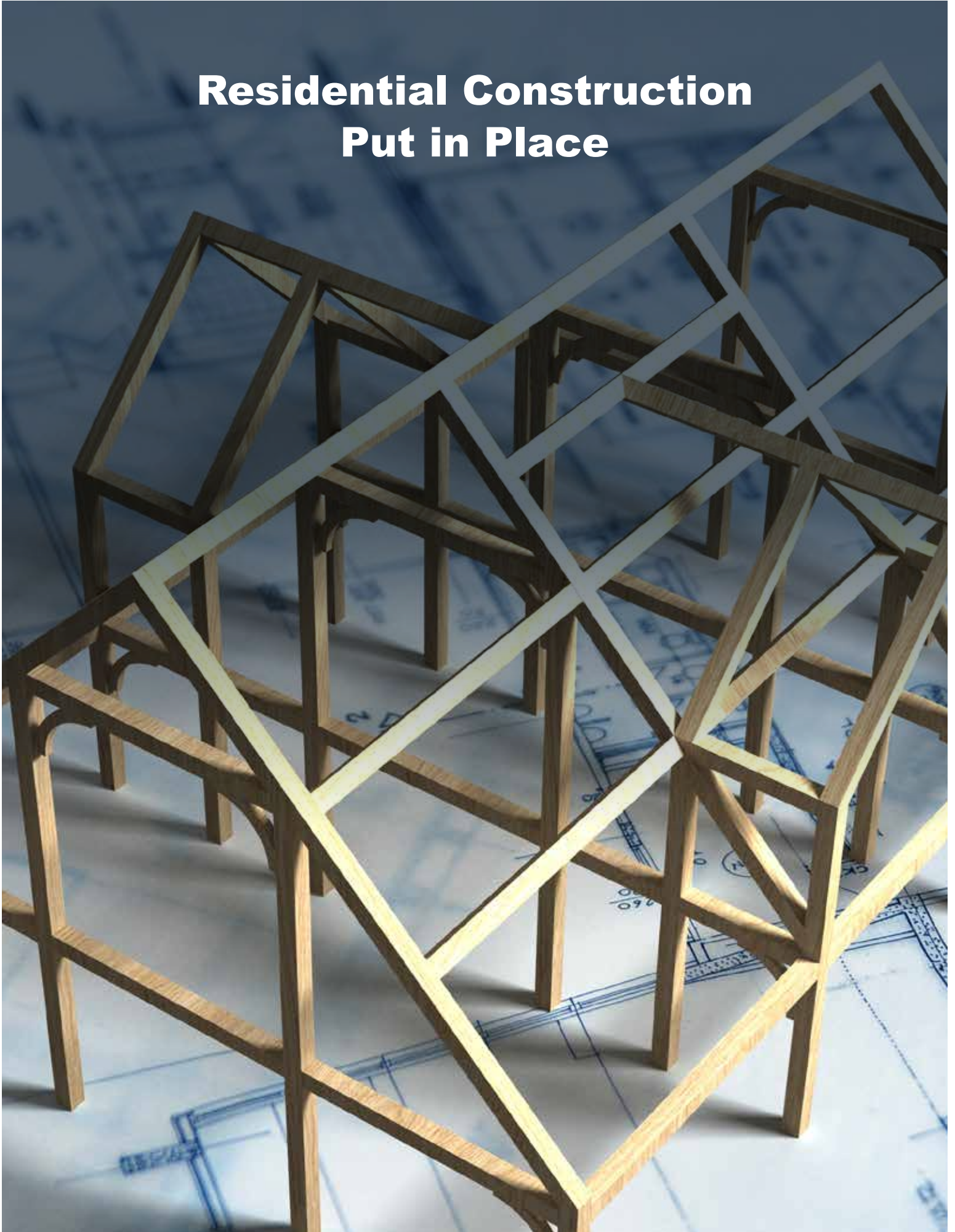


Total Construction Spending Put in Place 2021 and Forecast Growth (2021 through 2026) by Metropolitan Statistical Area

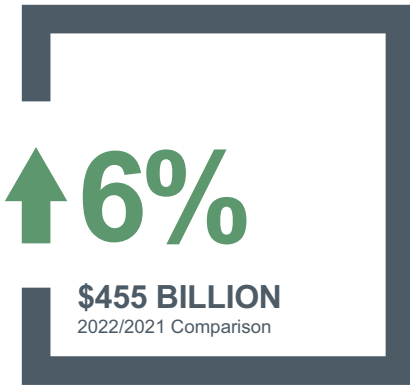


SOURCE: FMI FORECAST Q1 2023

Residential Construction Put in Place

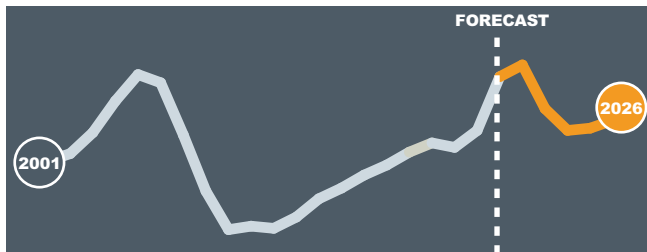


SINGLE-FAMILY RESIDENTIAL



DRIVERS:

- Unemployment rate
- Core CPI
- Income
- Mortgage rates
- Home prices
- Housing starts
- Housing permits



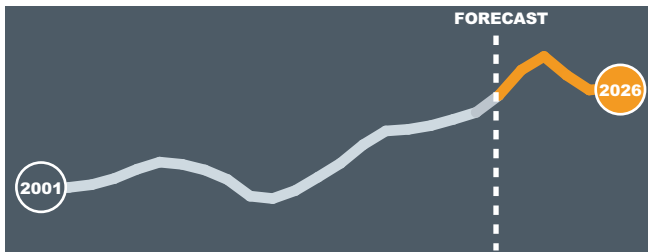
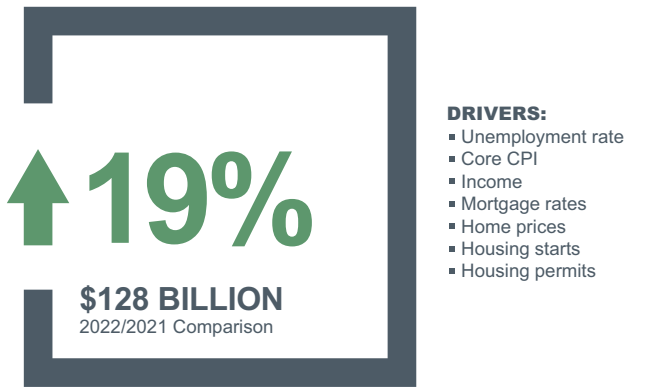
2023	DWN	-20%	\$362 B
2024	DWN	-13%	\$316 B
2025	STA	2%	\$321 B
2026	UP	5%	\$338 B



- Single-family home construction likely peaked in the summer of 2022, with future contraction anticipated well into 2025. The abrupt reversal in demand was led by the Federal Reserve’s measures to reduce inflation, including an aggressive rate hike schedule and quantitative tightening. These policies quickly lowered consumer purchasing power, builder sentiment, mortgage applications, starts and home prices through the second half of the year. At the same time, pandemic-fueled mobility slowed dramatically. FMI anticipates ongoing tight policies will weigh on labor markets through most of 2023, adding to homes available as consumer purchasing power is weakened.
- Single-family is entering 2023 firmly in a buyer’s market, with more than eight months’ supply of new homes available since April 2022. Though listings remain below 2019 levels, current market conditions favor a small group of motivated buyers who continue to be squeezed by inflation and restrictive policy. Future price cuts and builder incentives will be needed to close sales. Simultaneously, home ownership rates are expected to decline as current owners weigh future capital needs against falling prices, purchasing power and savings. Short-term investors will be enticed elsewhere to limit losses or pursue other opportunities.

- Homebuilders and building product manufacturers will look for cost savings measures to deliver more affordable products. As the current development pipeline nears completion in the summer, jobs will be shed, and builders are likely to shift to lower-cost homes and high-density units. Builders will continue to experience supply chain issues, especially where high demand in nonresidential and nonbuilding sectors overlaps with key inputs (e.g., concrete, mechanical, electrical and plumbing systems). One bright spot is the expanding single-family built-for-rent market. Though small, a rapid increase in starts in 2022 and occupancy rates nearing 95% suggest that the single-family built-for-rent segment remains underserved.

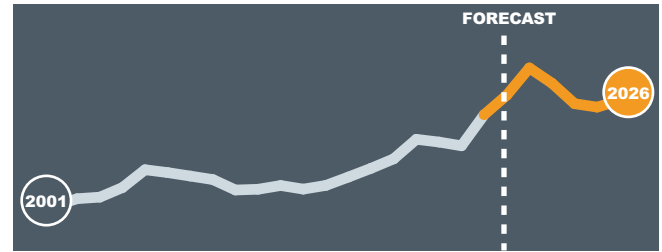
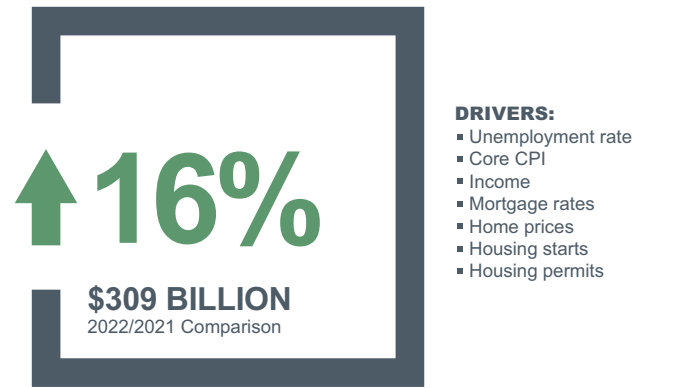
MULTIFAMILY RESIDENTIAL



2023	UP	8%	\$138 B
2024	DWN	-11%	\$123 B
2025	DWN	-10%	\$112 B
2026	STA	1%	\$113 B

- Demand for multifamily construction is expected to be resilient over the forecast period due to current monetary policies, high purchasing costs and a weakened consumer base. Market dynamics that include higher borrowing, maintenance and other living expenses will create a temporary period that will motivate would-be first-time buyers into rentals for longer until home prices are better aligned with incomes. Further, hybrid working and expected rises in unemployment rates support future demand for rentals.
- Construction spending is expected to drop briefly into 2024 and 2025. As of November, there were more than 900,000 new units in development; and with rent growth expected to slow in 2023, many multifamily developers will shift their focus toward lower-priced, high-density or suburban units to offer affordable rental options. Supply chain, profitability and productivity issues will continue to limit activity, though many are expected to innovate and invest into new delivery models such as increasing modular and prefabrication practices.
- Age-targeted and age-restrictive communities are expected to gain share and evolve, creating new demand for rentals that differentiate between the needs of younger and older people. Senior-focused communities will likely drive this market as they target those looking to capitalize on the equity they have in their current homes.

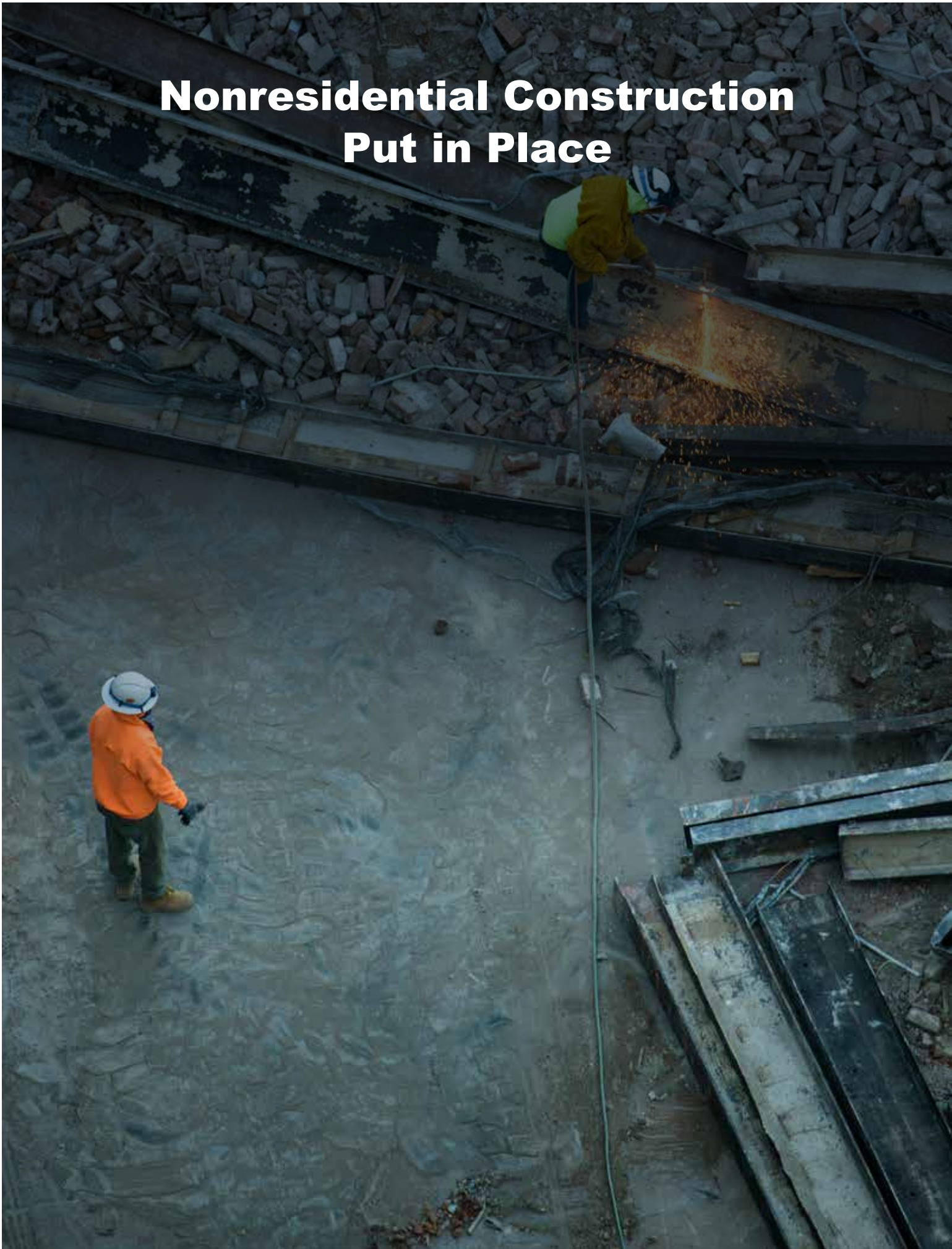
IMPROVEMENTS



2023	DWN	-8%	\$284 B
2024	DWN	-11%	\$252 B
2025	DWN	-2%	\$246 B
2026	STA	4%	\$257 B

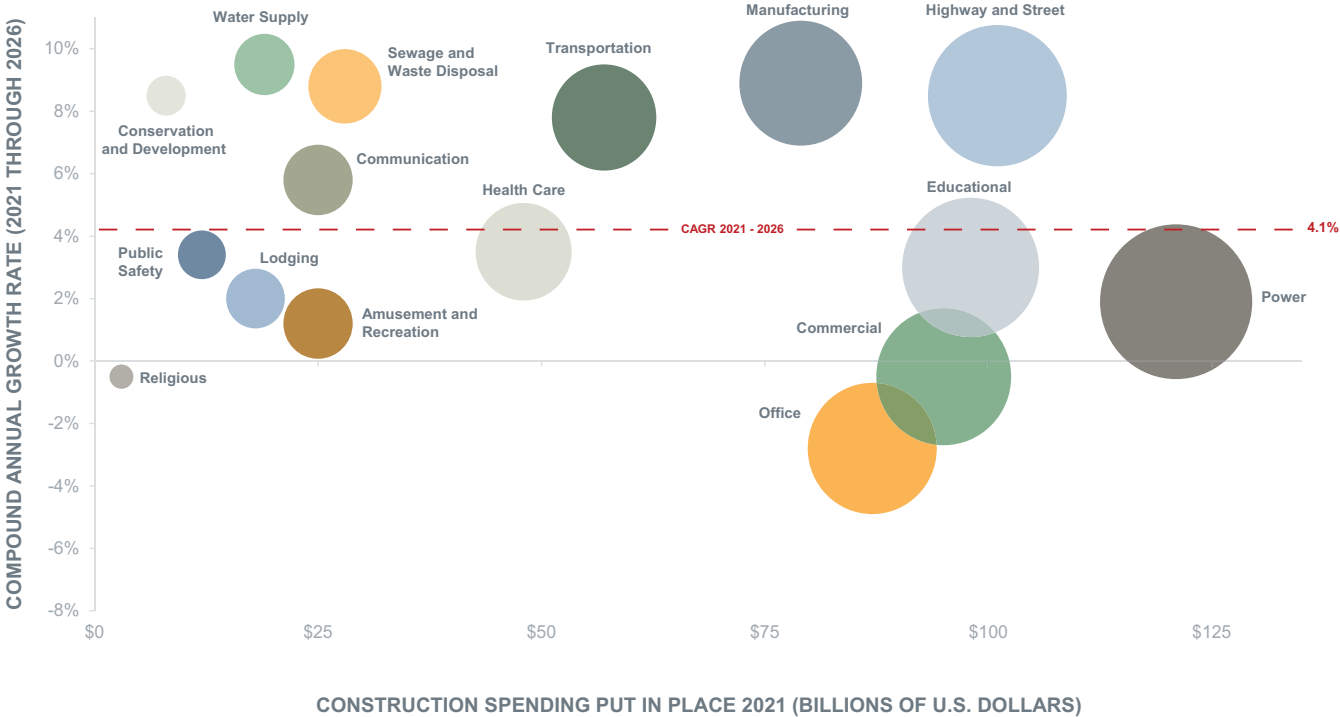
- Improvement spending is expected to enter a multiyear period of decline between 2023 and 2025. Those declines, however, will be modest compared to the volatility in new single-family or multifamily construction. Homeowners typically spend the most on improvements and renovations in preparation for a sale or just after purchasing a new home. Future contraction is the result of buyers opting to stay in place due to locked-in low interest rates, though spending will be counterbalanced against the use of improvements as an alternative to moving up.
- In prior years, homeowners utilized improvement projects as an investment. But from 2023 to 2025, those considerations will be challenged as home prices fall, purchasing power is reduced, and unemployment rises. Contractors and building product manufacturers will need to consider how economic pressures often encourage consumers to find more cost-effective ways to complete home projects, whether that's doing it themselves or buying less expensive products instead of luxury options (i.e., smart fixtures, PVC timber alternatives, tile, etc.).

Nonresidential Construction Put in Place





Total Nonresidential Construction Spending Put in Place 2021 and Forecast Growth (2021 through 2026) by Construction Segment



SOURCE: FMI FORECAST Q1 2023

Nonresidential Construction Index (NRCI) Q1 2011 to Q1 2023

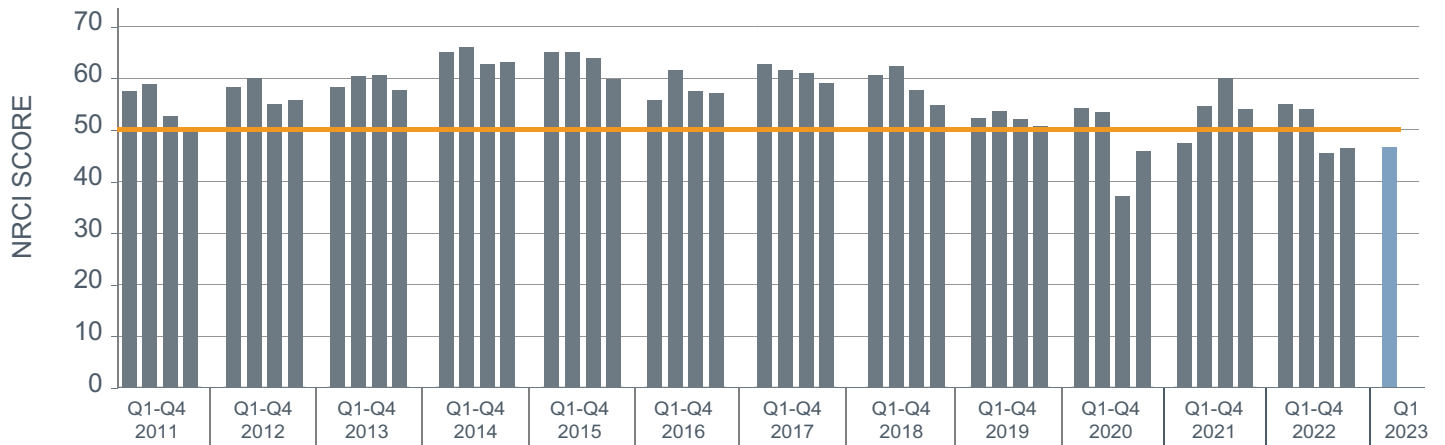
(Scores above 50 indicate expansion; scores below 50 indicate contraction)

**Current NRCI Reading
for Q1 2023**
(December 1-16)

46.4

Q1 2023 Score

46.3

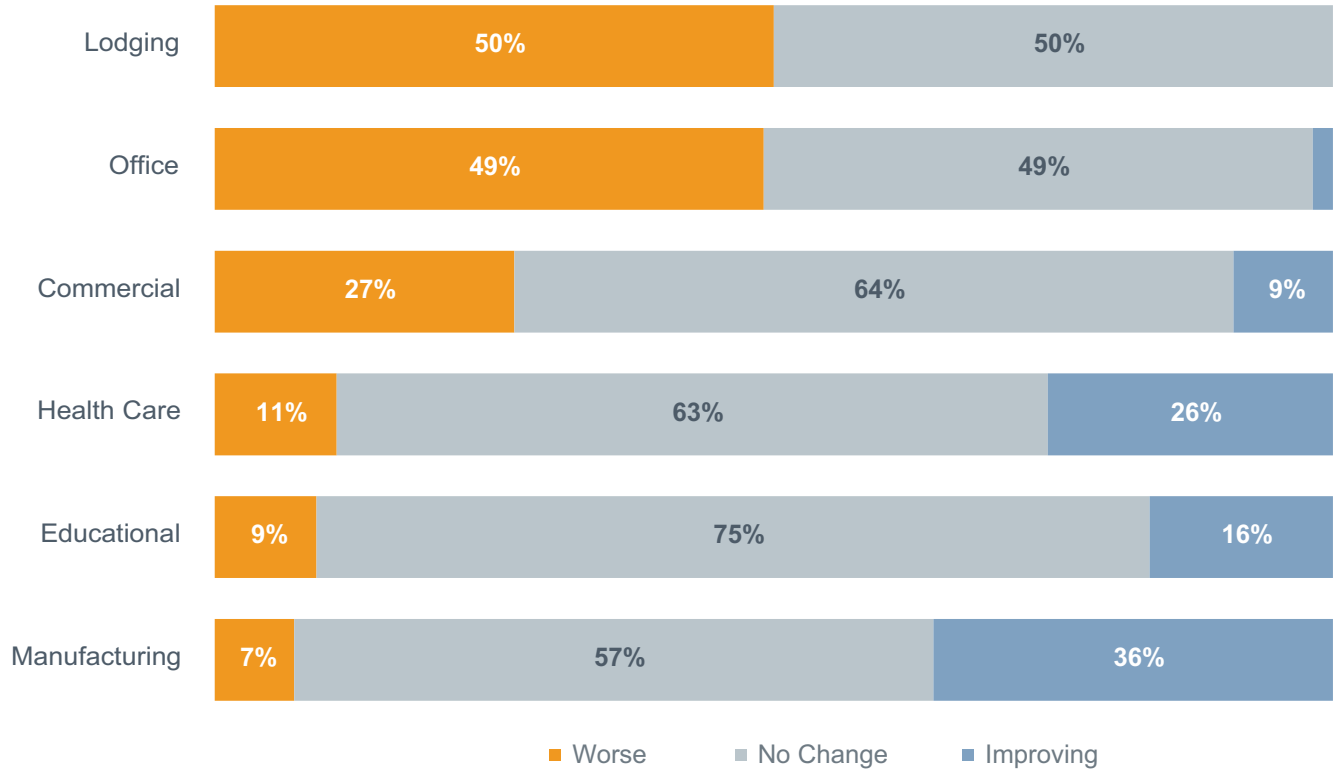


HCCI INDEX MOVEMENT		Q1 2023	Q4 2022
Overall U.S. Economy	↓	38.5	38.6
Economy Where We Do Business	↓	42.0	45.7
Our Engineering and Construction Business	↓	60.0	62.0
Engineering and Construction Where We Do Business	↓	46.0	52.2
Backlog	↓	54.7	57.1
Cost of Materials	↑	35.3	25.5
Cost of Labor	↑	24.0	14.7
Productivity	↑	50.0	44.0

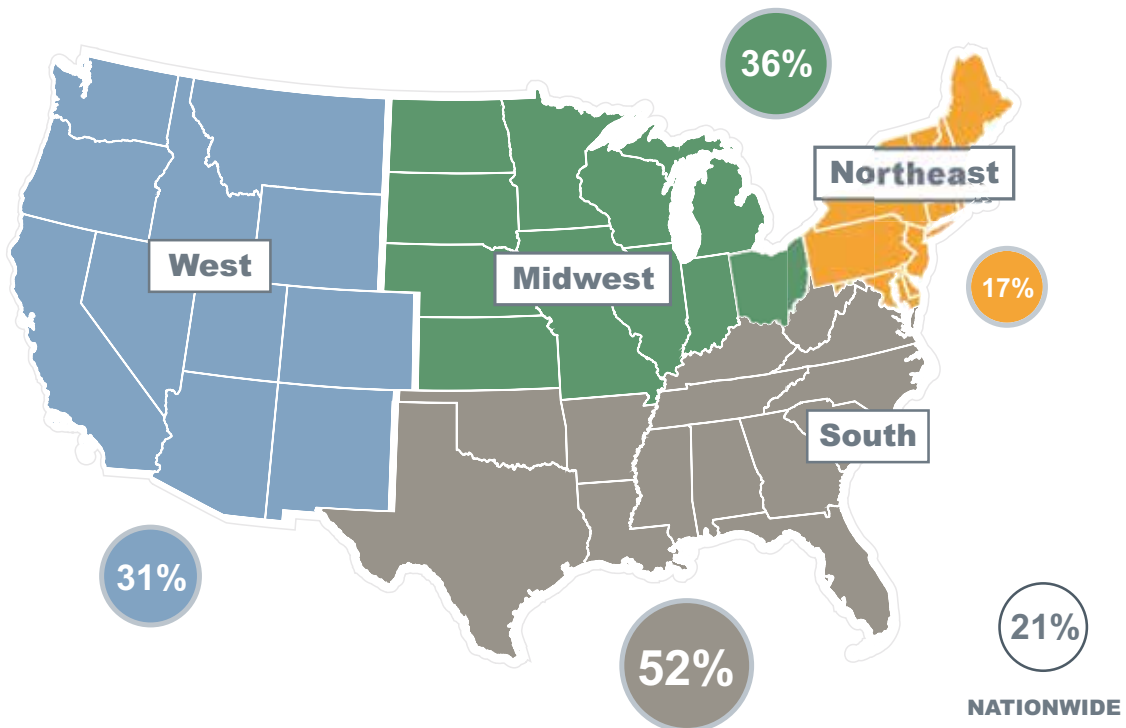
The data in the NRCI is presented as a sampling of construction industry executives voluntarily serving as panelists for this FMI survey. Responses are based on their experience and opinions, and the analysis is based on FMI's interpretation of the aggregated results.

If you are interested in participating in this important industry index, please submit a request via our [NRCI Participation Request form](#).

Perception of Change by Segment for Next Quarter

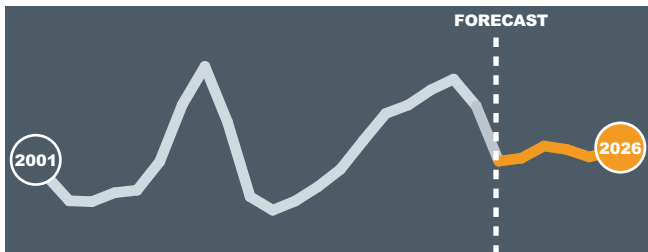
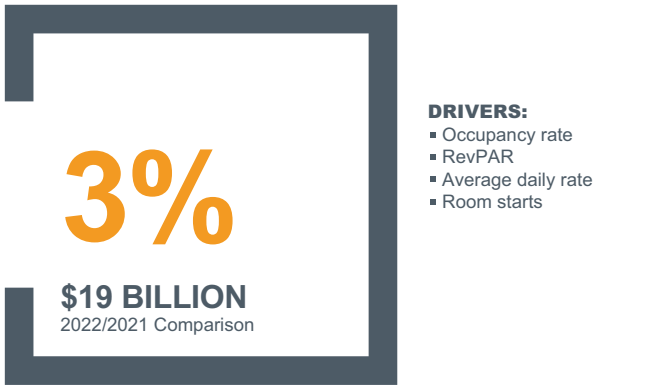


Where Survey Participants Work by Geography



Respondents are able to select more than one option.

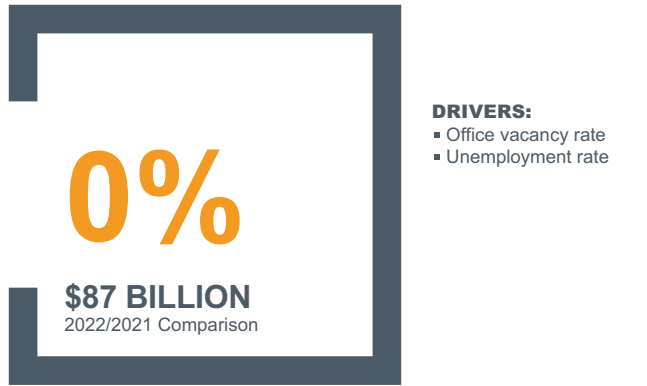
LODGING



2023	UP	12%	\$21 B
2024	DWN	-3%	\$20 B
2025	DWN	-7%	\$19 B
2026	UP	6%	\$20 B

- Though the hospitality industry rebounded in 2022 with the successful return of in-person events, labor availability and business travel are generally depressed and still evolving due to increased video technology adoption and hybrid working. Domestic travelers will be squeezed in the coming years by rising cost pressures and higher unemployment rates. Further, though international borders are now mostly reopened, war and trade tensions will continue to challenge travel. According to STR, year-end 2022 occupancy rates and revenue per available room (RevPar) remain below 2019 levels, and average daily rates (ADRs) modestly exceed historical prices.
- Between 2023 and 2025, the segment will see ongoing room upgrades and renovations, followed by a wave of new, large-scale hotel, convention center and resort developments. Owners today are generally able and eager to compete against aggregator business models (i.e., Airbnb). Additionally, many of the largest forthcoming projects will be accompanied and backed by major transportation investments via IJIA funds, led by many of the largest and/or fastest-growing states and cities.

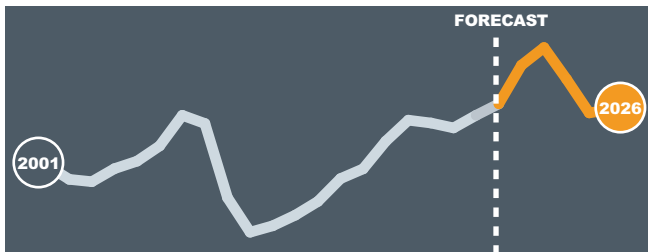
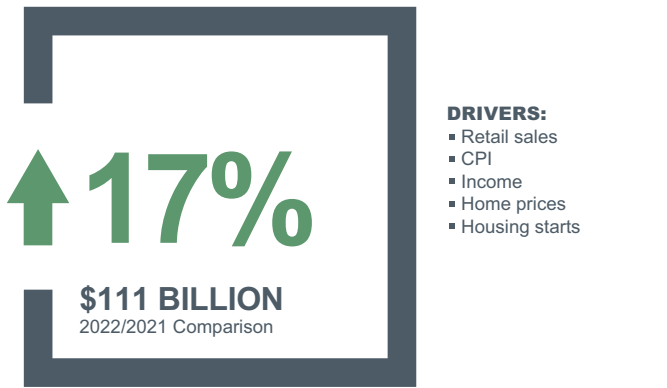
OFFICE



2023	STA	0%	\$87 B
2024	DWN	-9%	\$79 B
2025	DWN	-6%	\$74 B
2026	STA	1%	\$75 B

- Demand for office space will slowly recover over the forecast period as businesses grapple with continued inflationary pressure. Heading into 2023, sublease activity is at all-time highs, while businesses consider not renewing leases or selling property to reduce overhead without cutting labor. Additionally, many will keep some level of hybrid or flexible, in-person working models.
- Rising unemployment in 2023 will curtail some of the flexible and hybrid working models derived from the pandemic. However, overcapacity of existing traditional office space means that demand will favor the newer, most desirable spaces. Older and less desirable office spaces will be considered for repurpose. Further, speculative renovations will be challenged by falling property values as higher interest rates compound recessionary factors.
- Two areas of opportunity in office are data centers and headquarters relocations. Growth in data center construction remains aggressive and will continue to compete for resources against other strong segments, many of which are backed by stimulus or policy incentives (e.g., manufacturing, power). Headquarters relocations are expected to accelerate, though at a smaller scale, and will favor regions and states that provide desirable living and business conditions.

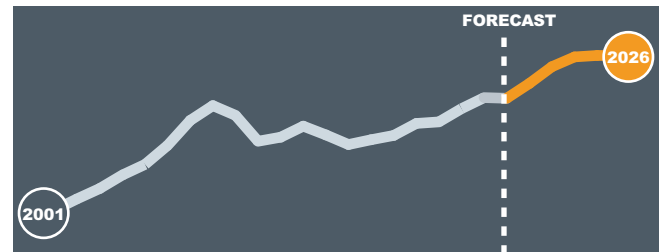
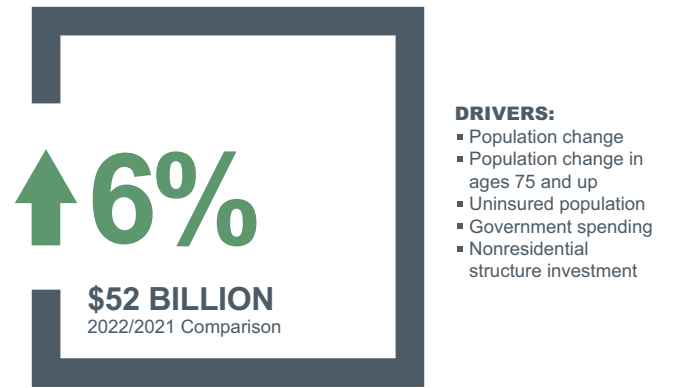
COMMERCIAL



2023	UP	7%	\$118
2024	DWN	-11%	\$105
2025	DWN	-14%	\$91
2026	STA	2%	\$92

- Despite economic headwinds, U.S. spending on goods in real terms remained stable through 2022 as COVID-19 restrictions eased and the services sector reopened rapidly. However, spending is shifting from discretionary toward necessities, discount retailers and online sellers, a trend that is expected to continue through 2023. E-commerce as a share of sales bottomed at the beginning of 2022 and grew through the third quarter to nearly 15% share, now exceeding year-over-year 2021 levels and pre-COVID 2020 levels at just under 12% share. As a result, construction spending within the commercial space will remain largely driven by warehouse and distribution centers, which now represent more than 50% of annual segment spending.
- Given the rapid rise in costs, rental rates are expected to increase. Future leasing demand will favor smaller spaces, mixed retail and e-commerce infrastructure. Additionally, larger big-box stores are expected to continue to renovate space to become more warehouse-like and implement automation to accommodate online-related offerings such as curbside pickup or same-day delivery.

HEALTH CARE



2023	UP	7%	\$55 B
2024	STA	4%	\$57 B
2025	STA	1%	\$58 B
2026	STA	0%	\$58 B

- Health care is the only institutional segment that experienced construction spending growth through 2022. Future investment is expected to remain strong, driven by an existing wave of development across large systems tied to demographic shifts, facility capacity and/or maintenance needs, and new technologies impacting health services. However, the existing large wave of hospital development is expected to be challenged by ongoing inflation concerns, volatile patient volumes, labor availability and lead time constraints for critical electrical and mechanical systems. These factors have been particularly hard on small and midsize systems, with 19 hospitals filing for bankruptcy in 2022 and many more temporarily closing services and/or operating capacity.
- As owners rein in inefficiencies, underutilized infrastructure will create opportunities for renovation and modernization investments. New facilities will increasingly use prefabrication and modularization to improve flexibility while compressing budgets and schedules. Facilities will also better plan for and integrate telehealth and cloud technologies to improve customer experiences. Convergence of the health care, technology and retail industries will drive increased personalized, virtual and hospital-at-home services via wearables and remote patient monitoring.

EDUCATIONAL



DRIVERS:

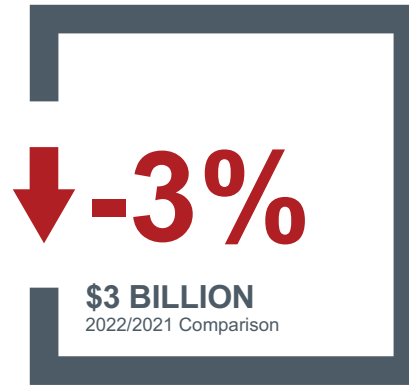
- Population change younger than age 18
- Population change ages 18-24
- Stock markets
- Government spending
- Nonresidential structure investment



2023	STA	3%	\$101 B
2024	UP	6%	\$107 B
2025	STA	4%	\$111 B
2026	STA	3%	\$114 B

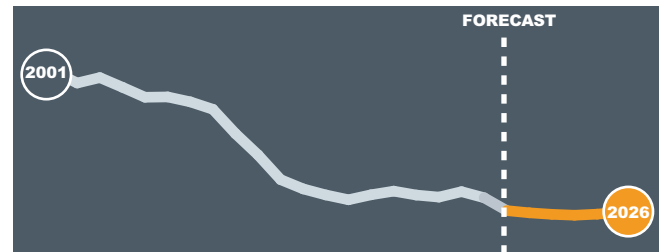
- In 2022 private educational spending, including primary, secondary and higher education, experienced strong, increased investment, while state and local owners pulled back. Through 2024, FMI anticipates ongoing private spending with some increase in state and local investment from new bond measures and retrofits funded by the IRA and the IJJA's Renew America's Schools grant program. Ever-increasing funding needs for maintenance and renovations, in addition to demand for added capacity, will continue to drive increased investment.
- Higher education continues to face concerns over rising college costs, growing student loan debts (and related uncertainties over debt forgiveness), and labor market strength, which are suppressing enrollments. Undergraduate and graduate enrollments declined 1.1% in 2022 and are down 7.5% from 2019 levels.
- The Renew America's Schools grant program seeks to distribute nearly \$500 million in funds from the IJJA toward efficient energy upgrades. Additionally, the 2023 omnibus spending bill was approved and allocates \$3.2 billion to the Department of Education. Approved funding levels this year were greater than expected, which should ease budget limitations and help with capital improvements.

RELIGIOUS



DRIVERS:

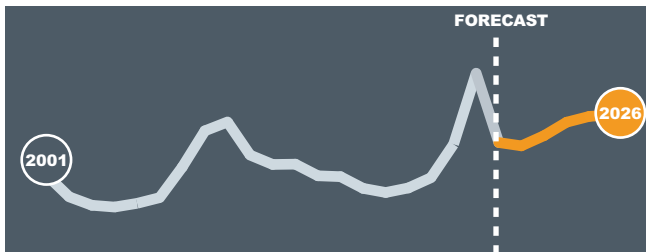
- GDP
- Population
- Income
- Personal savings



2023	DWN	-2%	\$3 B
2024	DWN	-1%	\$3 B
2025	STA	2%	\$3 B
2026	STA	3%	\$3 B

- Engineering and construction spending for religious facilities will continue a multiyear decline through 2025 as attendees drop and income levels are hurt, ultimately decreasing donations. The lasting permanence of hybrid attendance also indicates a drop in construction needs. Research from Lifeway reports that 1 in 4 churchgoers have not returned since the pandemic, despite 98% of churches returning to in-person meetings. Online attendance continues to climb, with 20% of adults surveyed by the Bara Group saying it was their primary way of attending services in 2022.
- Churches are closing at a faster rate than they are opening heading into 2023, presenting an attractive opportunity for retrofitting existing religious buildings instead of new construction. Owners actively investing in either new or updated facilities are likely to consider alternative community-facing options to improve engagement.

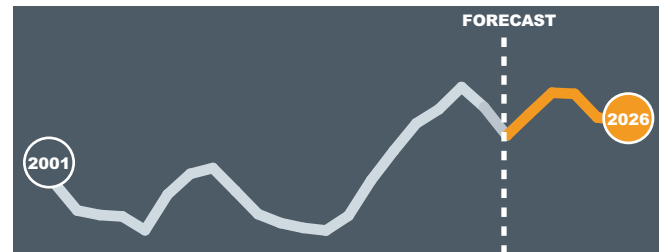
PUBLIC SAFETY



2023	UP	7%	\$13 B
2024	UP	8%	\$14 B
2025	STA	3%	\$14 B
2026	STA	1%	\$14 B

- Crime data for 2021 showed a meaningful drop in participation with fewer than two-thirds of U.S. districts providing information. Despite the decline, data indicates homicide rates fell slightly while violent crime is still significantly higher than pre-pandemic levels. Many law enforcement departments reported staffing challenges from low morale, increased scrutiny and difficulties in attracting new recruits.
- Funding for public safety institutions is climbing, and construction spending is expected to increase in 2023 and 2024. Federal law enforcement is a major component of the 2023 omnibus bill, with the Justice Department receiving a 10% funding boost to support staffing of various agencies. Additionally, the bill provided \$180 million more than originally requested for the Bureau of Prisons.
- Border safety investments also received significant attention in recent months, with the omnibus bill providing a 17% increase in funding for Border Patrol, including a 12% increase in funds for customs and border protection, and a one-time, \$1.6 billion appropriation for addressing short-term needs.

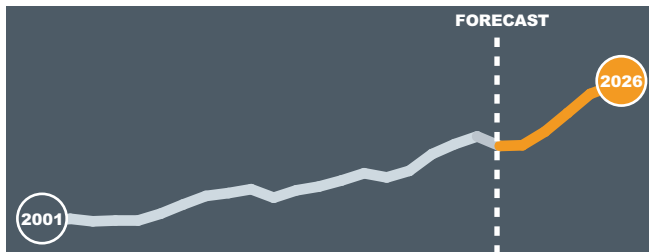
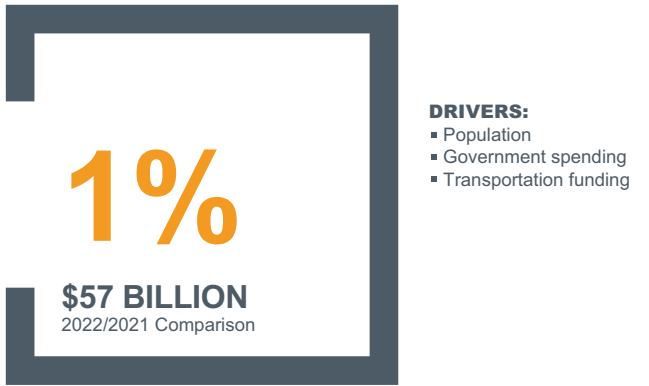
AMUSEMENT AND RECREATION



2023	UP	8%	\$30 B
2024	STA	0%	\$30 B
2025	DWN	-8%	\$27 B
2026	DWN	-1%	\$27 B

- As the services sector reopened in 2022, attendance at amusement and recreation facilities took off. For example, LiveNation reported more than 12,500 shows in 2022, up 25% from 2019 levels, with attendance per show up 20% on average. This demand fueled a significant pipeline of investment in entertainment, including several new sports stadiums (e.g., Tennessee Titans, Buffalo Bills, Kansas City Royals), convention centers and theme parks. However, many of these projects will reach completion in 2023 and 2024 and will face recessionary challenges.
- Well-positioned new entertainment and convention center venues, particularly those tied to significant transportation infrastructure investment, will become increasingly important to the future of favorable and rapidly growing secondary and tertiary metropolitan areas such as Austin, Nashville and markets across the Carolinas.
- Casino construction is expected to be limited in the next 12 to 24 months as the industry moves online. Though gambling continues to rise in popularity, much of the traffic and innovation is virtual, with real-time dealers and the incorporation of new technology that gives users a new and exciting feel while competing directly with brick-and-mortar locations.

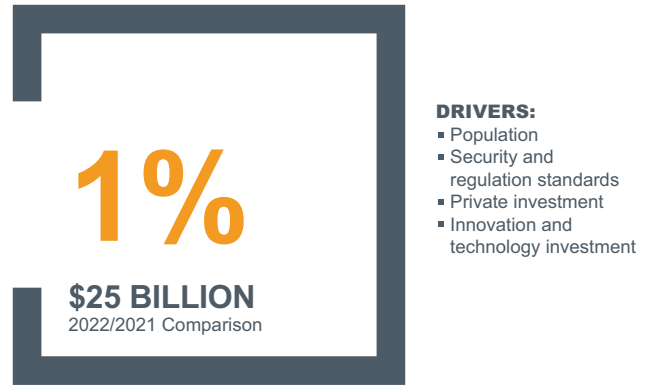
TRANSPORTATION



2023	UP	10%	\$63 B
2024	UP	13%	\$71 B
2025	UP	11%	\$79 B
2026	UP	5%	\$82 B

- The IIJA's influence on upcoming transportation spending has begun. Through 2022, more than \$185 billion across nearly 7,000 projects was announced. The outlook for transportation spending is strong in 2023 as travel and transport volumes remain elevated, IIJA funds are allocated, and many investors feel confident the worst of transportation volatility has passed.
- Electrification investments and clean transit facility upgrades represent an increasing area of focus, with more than \$3 billion announced by the Department of Transportation (DOT) to expand and/or renovate noncompliant transit facilities.
- Train and port infrastructure will see a meaningful jump in investment in the coming years from IIJA funding and increased local manufacturing and port activity. In 2022 the DOT awarded \$1.5 billion to improve freight movements through highway, multimodal and rail networks. The Federal Aviation Administration (FAA) awarded \$2 billion in terminal expansions and air traffic control facilities across 85 airports. Additionally, land ports started \$3.4 billion in upgrades across 26 facilities.

COMMUNICATION



2023	UP	5%	\$26 B
2024	UP	8%	\$28 B
2025	UP	9%	\$31 B
2026	UP	6%	\$33 B

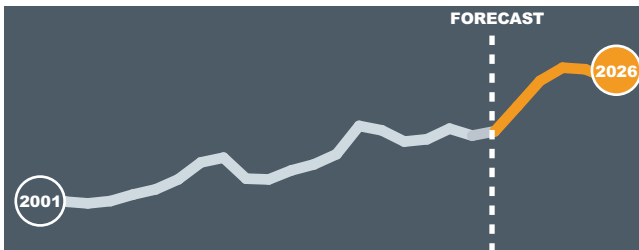
- High-speed 5G is expected to drive more than two-thirds of the mobile market by the end of the decade as construction investment continues to build infrastructure for faster and more reliable networks to accommodate the growing cloud, Internet of Things and virtual office demand.
- Telecommunications, manufacturing, office/data center, power and transportation are all driving connectivity needs alongside broad consumer demand. Communications hardware manufacturers are expected to experience resource constraints and pressure due to the current economic climate over the next several years.
- Just over two-thirds of the \$65 billion in IIJA's communications funds will be dispersed through the broadband equity, access and deployment initiatives, which will focus on middle-mile broadband infrastructure support and digital equity programs.

MANUFACTURING



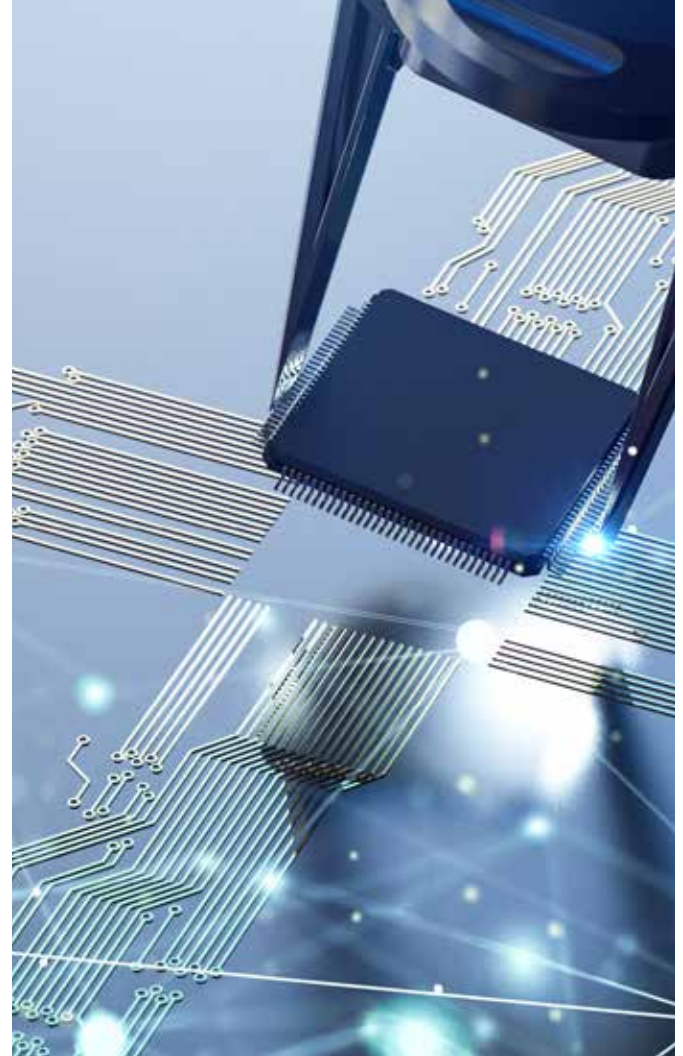
DRIVERS:

- PMI
- Industrial production
- Capacity utilization
- Durable goods orders
- Manufacturing inventories



2023	UP	20%	\$119 B
2024	UP	9%	\$129 B
2025	DWN	-1%	\$128 B
2026	DWN	-6%	\$121 B

■ Consumer spending shifted from services toward durable goods in 2021, a trend that reversed in 2022. However, demand for U.S.-manufactured products will increase during our forecast period for several reasons. First, trade disputes and geopolitical tensions increased the riskiness of global supply chains, improving the value of supply chain resiliency versus efficiency. Second, company onshoring efforts have spurred U.S. government investments such as the CHIPS Act, which authorizes more than \$200 billion in federal funding to promote and incentivize domestic semiconductor manufacturing. And third, Executive Order 14005 created the Made in America Office and increases the use of federal procurement to buy American-made goods, expanding the need for U.S. manufacturing.

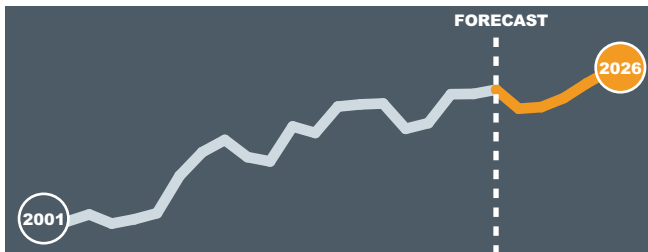
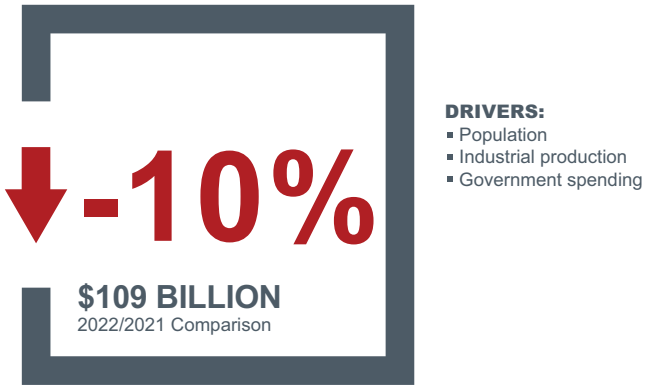


- Critical component and technology manufacturing is leading an American manufacturing revival. Several recent announcements and starts include multibillion-dollar megaprojects for LNG, semiconductor and battery manufacturing facilities. Domestic production of batteries received \$2.8 billion in IIJA funding for 20 companies across 12 states. Further, approximately \$858 billion of the \$1.7 trillion from the 2023 omnibus spending bill is directed to defense and related programs. Based on manufacturing projects in development and design phases, we anticipate the Middle Atlantic and the West South Central Census Divisions to lead investment growth over the five-year forecast period, each with compound annual growth rates (CAGRs) exceeding 10%. Though significant in size, expect future facilities to heavily incorporate the use of robotics and automation.
- Investments in a clean energy transition will continue to drive U.S. manufacturing of components. Solar manufacturing can only meet a third of domestic demand. Additionally, Europe's current energy crisis is reducing its manufacturing competitiveness and elevating the U.S. as a more attractive alternative.

Nonbuilding Structures Construction Put in Place



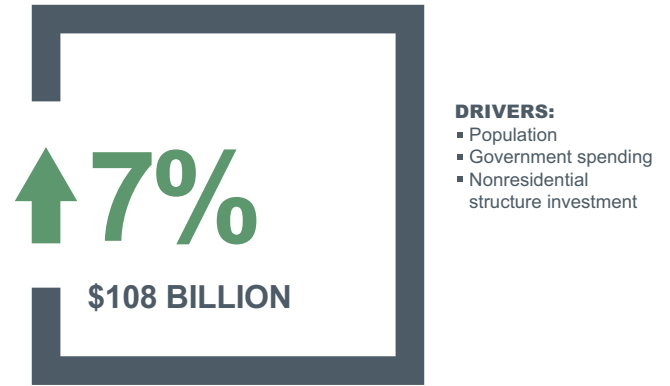
POWER



2023	STA	1%	\$110 B
2024	UP	5%	\$116 B
2025	UP	8%	\$125 B
2026	UP	7%	\$133 B

- National and geopolitical events triggered a renewed focus on the reliability of the U.S. electric grid. Currently, more than 60% of the U.S. grid is powered by fossil fuels while renewables nearly doubled their share of energy production since 2010. Traditional private electric infrastructure investments, which represent about two-thirds of the segment, fell sharply while renewable energy (i.e., solar and wind) production hit a record high in 2022. Renewable investments are expected to grow rapidly over the forecast period, though domestic energy production continues to exceed consumption. Even in gas-abundant areas (i.e., Texas), the Energy Information Administration (EIA) estimates wind and solar power generation will surpass natural gas in 2023. Further, continued renewable additions create significant transmission investment needs.
- Microgrid and distributed generation will continue to play a larger and increasingly important role in the evolution of the U.S. energy sector. Additionally, energy storage will be needed to pair with renewables and other critical and sensitive infrastructure (e.g., data centers, hospitals, transit, etc.). These technologies are rapidly improving and are expected to benefit from reshoring of manufacturing over the next several years. A recent report from the EIA suggests our current installed utility-scale battery storage capacity will more than triple, increasing from approximately 8 gigawatts to 30 gigawatts by 2025. This growth outpaces even the early phases of utility-scale solar investment.

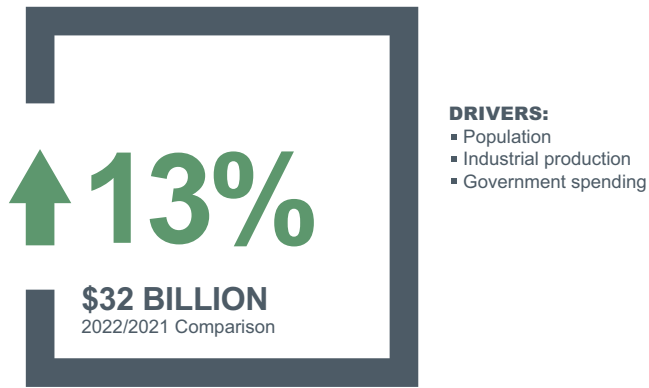
HIGHWAY AND STREET



2023	UP	13%	\$121 B
2024	UP	10%	\$133 B
2025	UP	8%	\$144 B
2026	UP	5%	\$151 B

- Spending accelerated at the end of 2022 due to the release of delayed IIJA funds. Because of timing and resource constraints, approximately 10% of programmed 2022 federal funds remained uncommitted at year-end and will carry forward to 2023. Further, recently committed funds will become actively installed over the next several years, resulting in annual spending growth above 10%.
- The inception of the IIJA launched multiple new bridge construction programs, leading to strong growth over the forecast period. Late 2022, several projects were awarded with Bridge Improvement Program (BIP) funds across California, Connecticut, Illinois, Kentucky and Ohio.
- The Federal Highway Administration estimates about \$1 trillion in backlog in system repairs and maintenance. Though the current wave of IIJA funding will prioritize those investments, inflation and higher input costs will result in only a moderate increase in completed work. Additionally, increased electric car adoption, improved fuel efficiency ratings and other recent emergency policies caused many states to revise gas tax and other user fees. The effectiveness and permanence of these revenue changes vary by state, but generally position state and local governments favorably to take advantage of new and expanded federal programs.

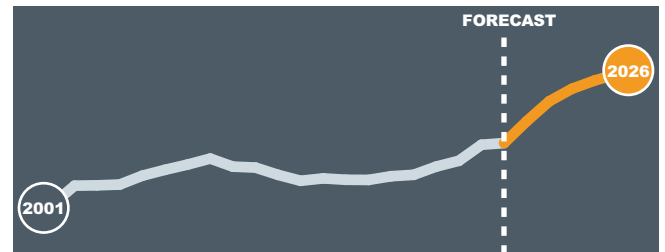
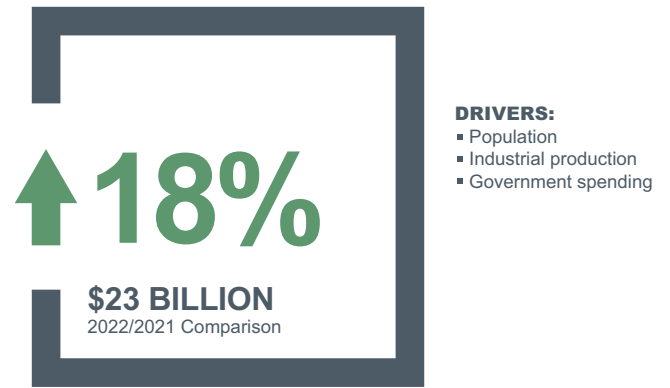
SEWAGE AND WASTE DISPOSAL



2023	UP	12%	\$36 B
2024	UP	9%	\$39 B
2025	UP	6%	\$41 B
2026	UP	5%	\$43 B

- The IIJA added more than \$50 billion to the Environmental Protection Agency (EPA) over the next five years to build and upgrade water and wastewater infrastructure. These funds included \$10 billion for addressing contaminants of emerging concern, including perfluoroalkyl and polyfluoroalkyl substances (PFAS). By the end of 2022, PFAS regulation and awareness overshadowed lead service line replacements, which were originally the focus of IIJA's water funding programs. Going into 2023, researchers are working through the first round of grants to address exposure and removal of PFAS from drinking water as well as how to manage and dispose of PFAS.
- Investment in sewage and waste disposal infrastructure will continue to grow as residential and industrial demands increase. Though residential development slowed sharply in recent months, consumer spending is at all-time highs, leading to more waste and heavier demands on aging and/or underbuilt infrastructure. Utilities are investing heavily in upgrades. While many owners are still catching up with deferred maintenance and upgrade needs, utilities are now challenged with new Build America, Buy America (BABA) regulation, requiring federally funded infrastructure projects to use equipment that is at least 55% domestically manufactured.
- Severe weather events are prompting resiliency programs to harden stormwater and sewage infrastructure to combat increased flooding and cross-contamination with effluents.

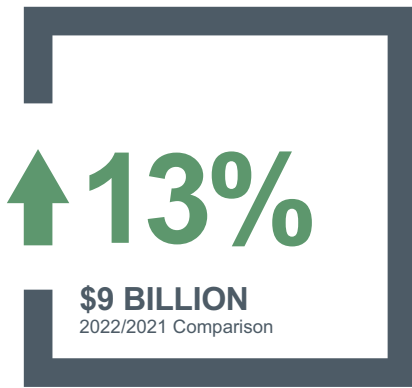
WATER SUPPLY



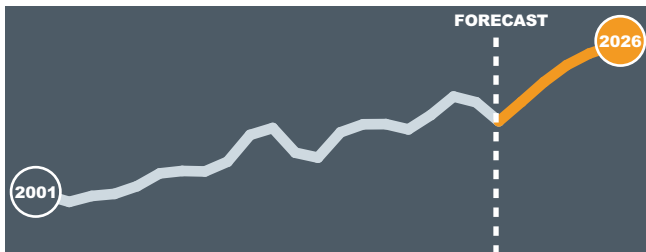
2023	UP	14%	\$26 B
2024	UP	8%	\$28 B
2025	UP	5%	\$29 B
2026	STA	4%	\$30 B

- The federal government is focused on the replacement of 6 million to 10 million lead pipes throughout the country. Supporting the initiative, the Water Infrastructure Finance and Innovation Act (WIFIA), along with the Biden-Harris Lead Pipe and Paint Action Plan, injected billions into the market. In 2022 the WIFIA funded \$13 billion in projects with another matching round supporting almost 90 project requests for 2023. Further, the IIJA added billions into the Drinking Water State Revolving Fund and the EPA's Water Infrastructure Improvements for the Nation (WIIN) Act. Expect ongoing increases to engineering and construction investments over the next several years.
- As the U.S. population continues to grow and investment flows into industrial manufacturing capacity, more clean water supply infrastructure will be needed. Future projects will be funded by the IIJA and higher user fees. Utilities have been raising rates for clean drinking water over the past several years to sustain aging pipe networks and to increase capacity. Similarly, agriculture and consumer water consumption will rise with population growth and increased economic productivity, propelling future water infrastructure spending.

CONSERVATION AND DEVELOPMENT



- DRIVERS:**
- Population
 - Government spending



2023	UP	12%	\$10 B
2024	UP	9%	\$11 B
2025	UP	6%	\$11 B
2026	STA	4%	\$12 B

- The IIJA and the 2022 Disaster Relief Supplemental Appropriations Act allocated more than \$22 billion to the U.S. Army Corps of Engineers in 2022, supporting more than 30 projects with plans to more than double investment in 2023. Future projects will focus on resiliency along coastlines, major waterways and disadvantaged communities that have seen increased flooding. Severe storms are now regularly causing billions of dollars in damages around the country. With dams and levees on average more than 50 years old, emphasis is on improving this critical infrastructure. Similarly, coastlines abutting large states with major metropolitan areas will see large multibillion-dollar investments to improve flood control.



- The fifth consecutive biennial Water Resources Development Act (WRDA) has appropriated more than \$21 billion to support \$34 billion of work to protect the Texas Gulf Coast against storm surges. These 25 projects are estimated to cost more than \$51 billion, but the act is also sending more than \$1 billion to Florida, Louisiana, New Jersey and New York to combat future storms. The Federal Emergency Management Agency (FEMA) and the WIIN Act also dedicated millions of dollars to projects through the National Dam Safety Program State Assistance Grant Program and High Hazard Potential Dam Grants. Further, U.S. dam and levee infrastructure will see \$730 million of spending over the coming years to fix aging structures.

Construction Put in Place Estimated for the United States Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	270,365	289,855	280,385	316,226	430,381	455,325	362,495	316,343	321,143	337,940
Multifamily	80,403	83,411	88,401	93,935	107,368	127,604	138,424	123,484	111,718	113,215
Improvements*	194,986	190,611	184,656	234,096	265,184	308,529	284,220	251,618	246,181	256,909
Total Residential	545,754	563,877	553,442	644,257	802,933	891,458	785,139	691,444	679,041	708,064
NONRESIDENTIAL BUILDINGS										
Lodging	28,660	31,464	33,461	28,483	18,236	18,775	21,040	20,410	19,013	20,098
Office	68,685	76,662	88,724	92,831	86,642	86,976	87,245	79,232	74,225	75,065
Commercial	87,626	86,422	84,345	89,714	94,553	110,936	118,442	104,998	90,711	92,233
Health Care	43,120	43,450	46,263	48,599	48,459	51,603	55,160	57,232	57,540	57,521
Educational	96,685	101,210	108,952	110,692	98,426	98,537	101,457	107,153	111,475	114,299
Religious	3,586	3,499	3,730	3,472	2,926	2,832	2,768	2,730	2,776	2,860
Public Safety	8,539	9,353	12,012	17,667	12,150	11,888	12,697	13,769	14,231	14,346
Amusement and Recreation	26,569	28,068	30,416	28,288	25,276	27,579	29,817	29,702	27,193	26,892
Transportation	46,137	53,219	57,448	60,734	56,689	56,976	62,780	70,688	78,761	82,355
Communication	23,696	24,502	22,184	23,876	24,696	25,052	26,352	28,424	30,862	32,814
Manufacturing	70,682	72,508	80,978	75,425	78,872	98,767	118,965	129,449	128,226	121,062
Total Nonresidential Buildings	503,985	530,357	568,513	579,781	546,925	589,922	636,723	643,788	635,014	639,545
NONBUILDING STRUCTURES										
Power	95,951	99,569	117,960	118,168	120,834	108,735	109,787	115,536	124,800	132,937
Highway and Street	89,620	91,745	99,402	102,321	100,679	107,870	121,483	133,208	144,018	151,405
Sewage and Waste Disposal	22,901	23,931	26,119	27,189	27,968	31,632	35,528	38,574	40,824	42,702
Water Supply	14,168	15,477	16,397	18,952	19,214	22,693	25,871	27,851	29,165	30,194
Conservation and Development	7,464	8,229	9,207	8,903	7,893	8,922	9,977	10,867	11,486	11,890
Total Nonbuilding Structures	230,104	238,951	269,085	275,533	276,588	279,853	302,646	326,038	350,293	369,128
Total Put in Place	\$1,279,843	\$1,333,185	\$1,391,040	\$1,499,571	\$1,626,446	\$1,761,232	\$1,724,507	\$1,661,270	\$1,664,349	\$1,716,736

Construction Put in Place Estimated for the United States Census Division

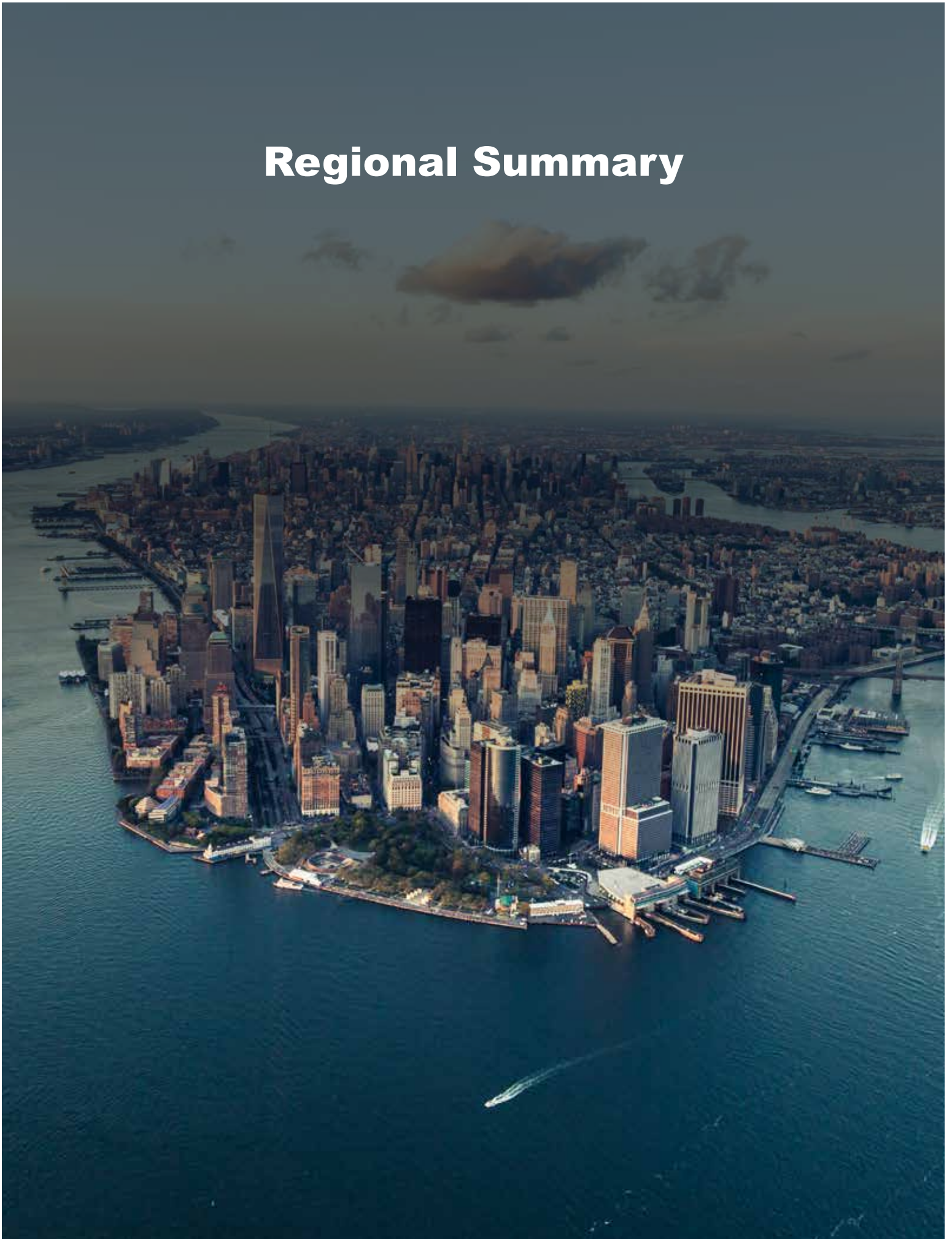
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	11.3%	7.2%	-3.3%	12.8%	36.1%	5.8%	-20.4%	-12.7%	1.5%	5.2%
Multifamily	1.6%	3.7%	6.0%	6.3%	14.3%	18.8%	8.5%	-10.8%	-9.5%	1.3%
Improvements*	19.0%	-2.2%	-3.1%	26.8%	13.3%	16.3%	-7.9%	-11.5%	-2.2%	4.4%
Total Residential	12.3%	3.3%	-1.9%	16.4%	24.6%	11.0%	-11.9%	-11.9%	-1.8%	4.3%
NONRESIDENTIAL BUILDINGS										
Lodging	5.8%	9.8%	6.3%	-14.9%	-36.0%	3.0%	12.1%	-3.0%	-6.8%	5.7%
Office	1.1%	11.6%	15.7%	4.6%	-6.7%	0.4%	0.3%	-9.2%	-6.3%	1.1%
Commercial	11.3%	-1.4%	-2.4%	6.4%	5.4%	17.3%	6.8%	-11.4%	-13.6%	1.7%
Health Care	6.3%	0.8%	6.5%	5.0%	-0.3%	6.5%	6.9%	3.8%	0.5%	0.0%
Educational	5.5%	4.7%	7.6%	1.6%	-11.1%	0.1%	3.0%	5.6%	4.0%	2.5%
Religious	-4.4%	-2.4%	6.6%	-6.9%	-15.7%	-3.2%	-2.3%	-1.4%	1.7%	3.0%
Public Safety	4.4%	9.5%	28.4%	47.1%	-31.2%	-2.2%	6.8%	8.4%	3.4%	0.8%
Amusement and Recreation	12.3%	5.6%	8.4%	-7.0%	-10.6%	9.1%	8.1%	-0.4%	-8.4%	-1.1%
Transportation	6.5%	15.3%	7.9%	5.7%	-6.7%	0.5%	10.2%	12.6%	11.4%	4.6%
Communication	6.8%	3.4%	-9.5%	7.6%	3.4%	1.4%	5.2%	7.9%	8.6%	6.3%
Manufacturing	-11.2%	2.6%	11.7%	-6.9%	4.6%	25.2%	20.4%	8.8%	-0.9%	-5.6%
Total Nonresidential Buildings	3.6%	5.2%	7.2%	2.0%	-5.7%	7.9%	7.9%	1.1%	-1.4%	0.7%
NONBUILDING STRUCTURES										
Power	-14.4%	3.8%	18.5%	0.2%	2.3%	-10.0%	1.0%	5.2%	8.0%	6.5%
Highway and Street	-3.8%	2.4%	8.3%	2.9%	-1.6%	7.1%	12.6%	9.7%	8.1%	5.1%
Sewage and Waste Disposal	-5.2%	4.5%	9.1%	4.1%	2.9%	13.1%	12.3%	8.6%	5.8%	4.6%
Water Supply	1.6%	9.2%	5.9%	15.6%	1.4%	18.1%	14.0%	7.7%	4.7%	3.5%
Conservation and Development	-3.6%	10.2%	11.9%	-3.3%	-11.3%	13.0%	11.8%	8.9%	5.7%	3.5%
Total Nonbuilding Structures	-8.4%	3.8%	12.6%	2.4%	0.4%	1.2%	8.1%	7.7%	7.4%	5.4%
Total Put in Place	4.6%	4.2%	4.3%	7.8%	8.5%	8.3%	-2.1%	-3.7%	0.2%	3.1%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

Regional Summary



Regional Key Takeaways

As seen in the regional summary table below, FMI expects the top three performing Census Divisions through 2023 year-end to include the **East North Central** (2.3%), **West South Central** (0.7%) and **Mid-Atlantic** (0.5%) states.

- Though losses are expected across the country, the Census Divisions that will see the lowest declines in residential spending in 2023 will include South Atlantic (-10.2%), Pacific (-11.2%) and New England (-11.8%) states.
- The top Census Divisions for nonresidential building spending in 2023 include the Middle Atlantic (10.7%), East North Central (8.9%) and West South Central (8.6%) states.
- The top Census Divisions for non-building structures spending in 2023 include the Middle Atlantic (9.9%), West South Central (9.3%) and South Atlantic (9.2%) states.

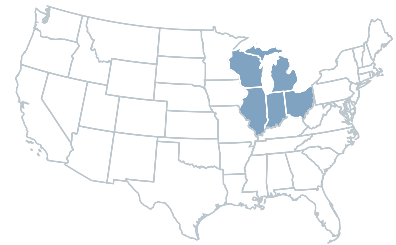
Total Construction Projected Growth 2021-2022



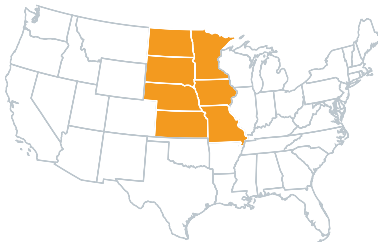
New England -1.4%



Middle Atlantic 0.5%



East North Central 2.3%



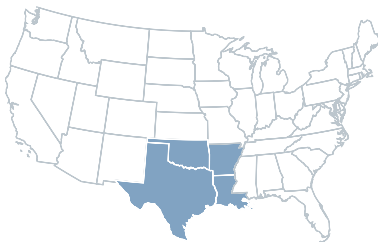
West North Central -5.2%



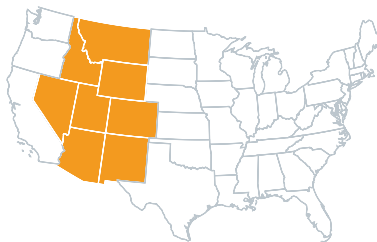
South Atlantic -2.9%



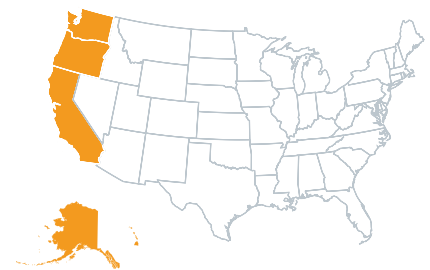
East South Central -1.6%



West South 0.7%



Mountain -4.9%



Pacific -4.3%

Regional Summary

	Year	Total Residential	Total Nonresidential Buildings	Total Nonbuilding Structures	Total Construction Put in Place	Projected Growth 2021-2022
Northeast	New England					
	2022	27,585	28,321	8,713	64,620	-1.4%
	2023	24,332	30,225	9,178	63,734	
	Mid-Atlantic					
	2022	71,056	76,572	23,019	170,648	0.5%
2023	61,428	84,757	25,298	171,482		
Midwest	East North Central					
	2022	46,005	76,088	29,940	152,033	2.3%
	2023	40,260	82,844	32,484	155,588	
	West North Central					
	2022	98,158	50,280	23,507	171,945	-5.2%
2023	84,718	53,571	24,660	162,948		
South	South Atlantic					
	2022	239,564	94,869	55,338	389,771	-2.9%
	2023	215,184	102,899	60,451	378,534	
	East South Central					
	2022	30,146	27,746	12,862	70,754	-1.6%
	2023	26,548	29,532	13,550	69,630	
	West South Central					
2022	103,167	111,428	63,353	277,948	0.7%	
2023	89,687	121,061	69,255	280,003		
West	Mountain					
	2022	97,103	36,421	25,609	159,133	-4.9%
	2023	84,342	39,508	27,562	151,412	
	Pacific					
	2022	178,674	88,196	37,510	304,380	-4.3%
2023	158,641	92,328	40,208	291,176		
U.S.	Total United States					
	2022	\$891,458	\$589,922	\$279,853	\$1,761,232	-2.1%
	2023	\$785,139	\$636,723	\$302,646	\$1,724,507	



Construction Put in Place Estimated for the New England Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	9,448	10,130	9,063	10,008	12,561	13,255	10,705	9,706	9,548	9,804
Multifamily	2,913	3,055	3,097	3,041	3,355	3,967	4,106	3,504	3,161	3,102
Improvements*	6,933	6,972	6,837	8,144	8,910	10,363	9,521	8,519	7,834	7,937
Total Residential	19,294	20,157	18,997	21,193	24,826	27,585	24,332	21,729	20,543	20,843
NONRESIDENTIAL BUILDINGS										
Lodging	1,670	1,965	2,082	1,802	1,226	1,249	1,301	1,187	1,107	1,146
Office	3,265	3,790	4,367	4,489	4,031	3,984	3,769	3,460	3,319	3,381
Commercial	4,669	4,507	4,124	4,481	4,586	5,351	5,751	5,647	5,147	5,030
Health Care	2,286	2,209	2,349	2,345	2,314	2,482	2,704	2,891	3,060	3,171
Educational	4,919	4,888	5,024	4,971	4,357	4,447	4,775	5,424	5,230	4,937
Religious	191	177	192	164	147	133	120	115	113	111
Public Safety	431	446	558	657	453	428	460	520	572	595
Amusement and Recreation	1,381	1,508	1,526	1,392	1,186	1,318	1,412	1,482	1,438	1,418
Transportation	2,334	2,848	3,103	3,195	2,963	3,188	3,566	3,926	4,277	4,488
Communication	1,260	1,252	1,129	1,220	1,247	1,275	1,366	1,488	1,638	1,776
Manufacturing	3,503	3,467	3,813	3,652	3,672	4,466	4,999	5,300	5,042	5,332
Total Nonresidential Buildings	25,908	27,056	28,267	28,368	26,182	28,321	30,225	31,439	30,941	31,386
NONBUILDING STRUCTURES										
Power	2,758	2,633	3,012	3,108	3,690	3,351	3,197	3,515	4,009	3,841
Highway and Street	2,823	2,714	2,965	3,191	3,034	3,452	3,813	4,138	4,402	4,565
Sewage and Waste Disposal	710	725	753	823	856	981	1,099	1,172	1,240	1,288
Water Supply	442	466	495	536	547	664	769	861	918	952
Conservation and Development	224	227	243	267	227	265	300	332	351	365
Total Nonbuilding Structures	6,958	6,765	7,467	7,925	8,355	8,713	9,178	10,019	10,920	11,011
Total Put in Place	\$52,160	\$53,979	\$54,731	\$57,487	\$59,363	\$64,620	\$63,734	\$63,187	\$62,404	\$63,240

Construction Put in Place Estimated for the New England Census Division

Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	11.4%	7.2%	-10.5%	10.4%	25.5%	5.5%	-19.2%	-9.3%	-1.6%	2.7%
Multifamily	9.5%	4.9%	1.4%	-1.8%	10.3%	18.3%	3.5%	-14.7%	-9.8%	-1.9%
Improvements*	34.7%	0.6%	-1.9%	19.1%	9.4%	16.3%	-8.1%	-10.5%	-8.0%	1.3%
Total Residential	18.4%	4.5%	-5.8%	11.6%	17.1%	11.1%	-11.8%	-10.7%	-5.5%	1.5%
NONRESIDENTIAL BUILDINGS										
Lodging	28.0%	17.7%	6.0%	-13.4%	-32.0%	1.8%	4.2%	-8.8%	-6.7%	3.5%
Office	-0.5%	16.1%	15.2%	2.8%	-10.2%	-1.2%	-5.4%	-8.2%	-4.1%	1.9%
Commercial	21.3%	-3.5%	-8.5%	8.6%	2.3%	16.7%	7.5%	-1.8%	-8.9%	-2.3%
Health Care	13.7%	-3.3%	6.3%	-0.2%	-1.3%	7.2%	9.0%	6.9%	5.8%	3.7%
Educational	10.6%	-0.6%	2.8%	-1.1%	-12.3%	2.1%	7.4%	13.6%	-3.6%	-5.6%
Religious	0.7%	-7.1%	8.2%	-14.2%	-10.3%	-9.6%	-9.6%	-4.4%	-2.2%	-1.3%
Public Safety	9.0%	3.5%	25.1%	17.7%	-31.0%	-5.5%	7.5%	13.0%	10.0%	4.0%
Amusement and Recreation	18.4%	9.2%	1.2%	-8.8%	-14.8%	11.2%	7.1%	4.9%	-3.0%	-1.4%
Transportation	12.0%	22.0%	9.0%	3.0%	-7.3%	7.6%	11.9%	10.1%	8.9%	4.9%
Communication	17.4%	-0.6%	-9.8%	8.1%	2.2%	2.2%	7.1%	9.0%	10.0%	8.4%
Manufacturing	-9.6%	-1.0%	10.0%	-4.2%	0.5%	21.6%	11.9%	6.0%	-4.9%	5.8%
Total Nonresidential Buildings	9.4%	4.4%	4.5%	0.4%	-7.7%	8.2%	6.7%	4.0%	-1.6%	1.4%
NONBUILDING STRUCTURES										
Power	-14.2%	-4.5%	14.4%	3.2%	18.7%	-9.2%	-4.6%	10.0%	14.0%	-4.2%
Highway and Street	-1.7%	-3.9%	9.2%	7.6%	-4.9%	13.8%	10.5%	8.5%	6.4%	3.7%
Sewage and Waste Disposal	-2.3%	2.0%	3.9%	9.4%	4.0%	14.6%	12.1%	6.7%	5.8%	3.9%
Water Supply	6.0%	5.5%	6.2%	8.2%	2.1%	21.4%	15.8%	11.9%	6.6%	3.7%
Conservation and Development	1.6%	1.4%	6.8%	10.1%	-15.0%	16.8%	12.9%	10.9%	5.5%	4.1%
Total Nonbuilding Structures	-6.6%	-2.8%	10.4%	6.1%	5.4%	4.3%	5.3%	9.2%	9.0%	0.8%
Total Put in Place	10.0%	3.5%	1.4%	5.0%	3.3%	8.9%	-1.4%	-0.9%	-1.2%	1.3%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

NEW ENGLAND STATES INCLUDE CONNECTICUT, MAINE, MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND AND VERMONT.



Construction Put in Place Estimated for the Middle Atlantic Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	27,391	28,833	27,542	29,915	38,268	39,691	30,814	27,066	25,422	26,088
Multifamily	8,023	7,641	8,198	8,034	6,744	7,248	8,127	6,706	6,098	5,988
Improvements*	19,863	17,980	17,872	21,203	22,606	24,117	22,487	19,683	18,571	19,163
Total Residential	55,278	54,454	53,612	59,151	67,618	71,056	61,428	53,455	50,091	51,239
NONRESIDENTIAL BUILDINGS										
Lodging	3,822	4,468	4,708	3,649	2,119	2,191	2,570	2,649	2,435	2,632
Office	9,228	11,566	13,633	13,431	10,966	10,077	9,594	9,031	8,851	9,062
Commercial	12,752	12,702	12,083	12,863	13,132	14,854	15,440	13,598	11,677	11,806
Health Care	6,185	6,469	6,966	7,306	7,265	7,942	8,797	8,938	8,605	8,284
Educational	13,682	14,854	15,730	16,177	12,951	13,212	13,586	14,436	15,333	15,953
Religious	521	502	538	473	398	368	350	344	336	338
Public Safety	1,174	1,276	1,620	2,244	1,501	1,439	1,907	2,310	2,133	1,833
Amusement and Recreation	3,772	3,904	3,957	3,381	2,777	3,030	3,412	3,817	3,363	3,108
Transportation	7,258	8,654	9,335	9,539	8,098	8,217	9,193	11,228	13,728	14,632
Communication	3,412	3,530	3,333	3,366	3,426	3,470	3,692	4,055	4,377	4,598
Manufacturing	10,652	10,674	11,197	9,886	9,461	11,770	16,216	20,188	20,935	20,604
Total Nonresidential Buildings	72,458	78,600	83,102	82,313	72,093	76,572	84,757	90,594	91,773	92,850
NONBUILDING STRUCTURES										
Power	8,359	8,553	9,701	9,042	8,505	7,902	8,460	9,417	10,208	10,618
Highway and Street	8,809	9,230	9,981	10,094	8,947	9,538	10,589	11,949	13,318	14,040
Sewage and Waste Disposal	2,237	2,302	2,453	2,498	2,330	2,636	2,953	3,210	3,436	3,581
Water Supply	1,412	1,572	1,714	1,926	1,741	2,050	2,258	2,375	2,542	2,630
Conservation and Development	714	781	857	928	775	893	1,037	1,120	1,136	1,075
Total Nonbuilding Structures	21,532	22,437	24,705	24,488	22,298	23,019	25,298	28,071	30,639	31,944
Total Put in Place	\$149,268	\$155,491	\$161,418	\$165,953	\$162,009	\$170,648	\$171,482	\$172,120	\$172,503	\$176,032

Construction Put in Place Estimated for the Middle Atlantic Census Division

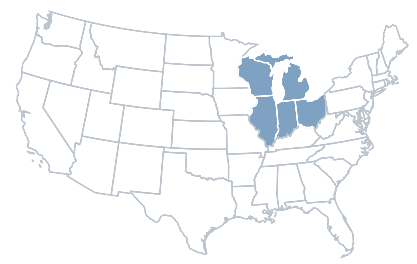
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	6.3%	5.3%	-4.5%	8.6%	27.9%	3.7%	-22.4%	-12.2%	-6.1%	2.6%
Multifamily	6.6%	-4.8%	7.3%	-2.0%	-16.1%	7.5%	12.1%	-17.5%	-9.1%	-1.8%
Improvements*	22.7%	-9.5%	-0.6%	18.6%	6.6%	6.7%	-6.8%	-12.5%	-5.7%	3.2%
Total Residential	11.7%	-1.5%	-1.5%	10.3%	14.3%	5.1%	-13.6%	-13.0%	-6.3%	2.3%
NONRESIDENTIAL BUILDINGS										
Lodging	0.2%	16.9%	5.4%	-22.5%	-41.9%	3.4%	17.3%	3.1%	-8.1%	8.1%
Office	-3.8%	25.3%	17.9%	-1.5%	-18.4%	-8.1%	-4.8%	-5.9%	-2.0%	2.4%
Commercial	13.3%	-0.4%	-4.9%	6.5%	2.1%	13.1%	3.9%	-11.9%	-14.1%	1.1%
Health Care	5.3%	4.6%	7.7%	4.9%	-0.6%	9.3%	10.8%	1.6%	-3.7%	-3.7%
Educational	5.2%	8.6%	5.9%	2.8%	-19.9%	2.0%	2.8%	6.3%	6.2%	4.0%
Religious	-5.7%	-3.6%	7.1%	-12.1%	-15.8%	-7.4%	-5.0%	-1.7%	-2.3%	0.5%
Public Safety	1.7%	8.7%	27.0%	38.5%	-33.1%	-4.1%	32.5%	21.1%	-7.7%	-14.1%
Amusement and Recreation	10.7%	3.5%	1.4%	-14.6%	-17.9%	9.1%	12.6%	11.8%	-11.9%	-7.6%
Transportation	4.6%	19.2%	7.9%	2.2%	-15.1%	1.5%	11.9%	22.1%	22.3%	6.6%
Communication	8.8%	3.5%	-5.6%	1.0%	1.8%	1.3%	6.4%	9.8%	7.9%	5.0%
Manufacturing	-6.0%	0.2%	4.9%	-11.7%	-4.3%	24.4%	37.8%	24.5%	3.7%	-1.6%
Total Nonresidential Buildings	3.4%	8.5%	5.7%	-0.9%	-12.4%	6.2%	10.7%	6.9%	1.3%	1.2%
NONBUILDING STRUCTURES										
Power	-27.9%	2.3%	13.4%	-6.8%	-5.9%	-7.1%	7.1%	11.3%	8.4%	4.0%
Highway and Street	-14.9%	4.8%	8.1%	1.1%	-11.4%	6.6%	11.0%	12.8%	11.5%	5.4%
Sewage and Waste Disposal	-14.6%	2.9%	6.5%	1.8%	-6.7%	13.1%	12.0%	8.7%	7.0%	4.2%
Water Supply	-6.1%	11.3%	9.0%	12.4%	-9.6%	17.8%	10.1%	5.2%	7.0%	3.5%
Conservation and Development	-10.2%	9.3%	9.8%	8.3%	-16.5%	15.3%	16.1%	8.1%	1.4%	-5.4%
Total Nonbuilding Structures	-19.9%	4.2%	10.1%	-0.9%	-8.9%	3.2%	9.9%	11.0%	9.1%	4.3%
Total Put in Place	2.0%	4.2%	3.8%	2.8%	-2.4%	5.3%	0.5%	0.4%	0.2%	2.0%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

MIDDLE ATLANTIC STATES INCLUDE NEW JERSEY, NEW YORK AND PENNSYLVANIA.



Construction Put in Place Estimated for the East North Central Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	13,751	14,458	13,763	15,350	20,934	21,699	14,396	12,439	12,958	14,039
Multifamily	4,833	4,916	5,243	5,682	6,583	7,814	8,775	8,236	7,541	7,130
Improvements*	10,729	10,256	10,247	12,894	14,264	16,492	17,089	14,835	13,852	14,196
Total Residential	29,313	29,630	29,253	33,926	41,781	46,005	40,260	35,510	34,351	35,365
NONRESIDENTIAL BUILDINGS										
Lodging	3,509	4,072	4,216	3,617	2,383	2,449	2,653	2,514	2,593	2,854
Office	8,362	9,653	10,512	11,283	10,936	10,620	10,190	9,290	9,526	9,927
Commercial	11,153	11,238	11,206	12,269	12,910	15,060	16,009	15,683	13,540	13,322
Health Care	5,535	5,667	6,031	6,256	6,145	6,597	7,118	7,408	6,968	6,744
Educational	12,110	12,806	13,233	13,469	11,821	11,504	11,581	12,134	12,436	12,689
Religious	446	427	465	458	396	391	383	370	378	391
Public Safety	1,069	1,078	1,352	1,834	1,193	1,157	1,184	1,286	1,497	1,454
Amusement and Recreation	3,325	3,415	3,625	3,238	2,819	3,064	3,286	3,416	3,230	3,141
Transportation	5,768	6,593	7,122	7,053	6,591	6,525	7,507	8,230	8,827	8,726
Communication	2,990	3,147	2,798	3,012	3,065	3,145	3,370	3,722	4,097	4,367
Manufacturing	8,733	9,588	10,626	10,669	11,678	15,576	19,563	20,369	19,870	16,322
Total Nonresidential Buildings	62,999	67,683	71,186	73,158	69,937	76,088	82,844	84,425	82,961	79,937
NONBUILDING STRUCTURES										
Power	10,503	10,639	12,052	11,820	12,627	11,579	11,733	12,271	13,311	13,915
Highway and Street	9,775	9,954	10,766	11,215	11,006	11,679	13,152	14,153	15,665	16,686
Sewage and Waste Disposal	2,377	2,653	2,878	2,882	2,937	3,293	3,722	4,065	4,287	4,508
Water Supply	1,438	1,545	1,654	2,011	2,064	2,470	2,809	3,020	3,154	3,247
Conservation and Development	767	830	924	900	806	919	1,067	1,211	1,318	1,380
Total Nonbuilding Structures	24,861	25,621	28,275	28,828	29,440	29,940	32,484	34,720	37,735	39,737
Total Put in Place	\$117,173	\$122,935	\$128,714	\$135,912	\$141,158	\$152,033	\$155,588	\$154,654	\$155,048	\$155,038

Construction Put in Place Estimated for the East North Central Census Division

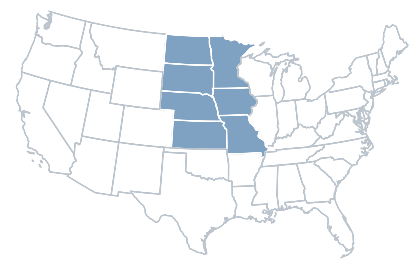
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	10.5%	5.1%	-4.8%	11.5%	36.4%	3.7%	-33.7%	-13.6%	4.2%	8.3%
Multifamily	-7.0%	1.7%	6.7%	8.4%	15.9%	18.7%	12.3%	-6.1%	-8.4%	-5.4%
Improvements*	14.4%	-4.4%	-0.1%	25.8%	10.6%	15.6%	3.6%	-13.2%	-6.6%	2.5%
Total Residential	8.5%	1.1%	-1.3%	16.0%	23.2%	10.1%	-12.5%	-11.8%	-3.3%	2.9%
NONRESIDENTIAL BUILDINGS										
Lodging	0.3%	16.1%	3.5%	-14.2%	-34.1%	2.8%	8.3%	-5.2%	3.1%	10.1%
Office	-4.7%	15.4%	8.9%	7.3%	-3.1%	-2.9%	-4.0%	-8.8%	2.5%	4.2%
Commercial	10.0%	0.8%	-0.3%	9.5%	5.2%	16.7%	6.3%	-2.0%	-13.7%	-1.6%
Health Care	6.3%	2.4%	6.4%	3.7%	-1.8%	7.3%	7.9%	4.1%	-5.9%	-3.2%
Educational	2.4%	5.7%	3.3%	1.8%	-12.2%	-2.7%	0.7%	4.8%	2.5%	2.0%
Religious	-6.9%	-4.4%	9.0%	-1.6%	-13.5%	-1.3%	-2.0%	-3.3%	2.2%	3.2%
Public Safety	1.2%	0.9%	25.4%	35.7%	-35.0%	-3.0%	2.4%	8.6%	16.4%	-2.8%
Amusement and Recreation	9.4%	2.7%	6.2%	-10.7%	-12.9%	8.7%	7.2%	4.0%	-5.5%	-2.8%
Transportation	5.6%	14.3%	8.0%	-1.0%	-6.5%	-1.0%	15.1%	9.6%	7.3%	-1.1%
Communication	4.4%	5.3%	-11.1%	7.6%	1.7%	2.6%	7.2%	10.5%	10.1%	6.6%
Manufacturing	-15.0%	9.8%	10.8%	0.4%	9.5%	33.4%	25.6%	4.1%	-2.5%	-17.9%
Total Nonresidential Buildings	0.6%	7.4%	5.2%	2.8%	-4.4%	8.8%	8.9%	1.9%	-1.7%	-3.6%
NONBUILDING STRUCTURES										
Power	-9.7%	1.3%	13.3%	-1.9%	6.8%	-8.3%	1.3%	4.6%	8.5%	4.5%
Highway and Street	-1.2%	1.8%	8.2%	4.2%	-1.9%	6.1%	12.6%	7.6%	10.7%	6.5%
Sewage and Waste Disposal	-4.6%	11.6%	8.5%	0.1%	1.9%	12.1%	13.0%	9.2%	5.5%	5.2%
Water Supply	2.8%	7.4%	7.1%	21.6%	2.6%	19.7%	13.7%	7.5%	4.4%	3.0%
Conservation and Development	-2.1%	8.2%	11.4%	-2.7%	-10.4%	14.0%	16.1%	13.5%	8.9%	4.7%
Total Nonbuilding Structures	-5.1%	3.1%	10.4%	2.0%	2.1%	1.7%	8.5%	6.9%	8.7%	5.3%
Total Put in Place	1.2%	4.9%	4.7%	5.6%	3.9%	7.7%	2.3%	-0.6%	0.3%	0.0%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

EAST NORTH CENTRAL STATES INCLUDE INDIANA, ILLINOIS, MICHIGAN, OHIO AND WISCONSIN.



Construction Put in Place Estimated for the West North Central Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	33,151	32,289	30,770	35,516	47,540	47,869	36,245	30,709	32,589	34,869
Multifamily	9,356	9,165	9,993	10,294	12,499	14,221	14,728	11,949	10,919	11,151
Improvements*	24,104	22,430	22,032	28,897	32,619	36,068	33,745	28,060	27,640	29,105
Total Residential	66,611	63,883	62,796	74,707	92,657	98,158	84,718	70,719	71,148	75,125
NONRESIDENTIAL BUILDINGS										
Lodging	2,357	2,423	2,549	2,190	1,513	1,546	1,776	1,724	1,416	1,372
Office	5,562	6,557	7,984	8,519	8,023	8,132	8,929	8,439	8,155	8,361
Commercial	7,419	7,219	6,865	7,292	7,694	9,071	9,528	7,816	6,799	7,004
Health Care	3,611	3,611	3,803	3,952	3,977	4,108	4,194	4,291	4,499	4,722
Educational	8,055	8,470	8,786	9,090	7,847	7,502	7,727	8,058	8,462	8,729
Religious	297	285	308	296	266	242	228	225	228	236
Public Safety	718	827	1,020	1,208	937	918	972	1,046	1,073	1,013
Amusement and Recreation	2,212	2,259	2,442	2,266	1,951	2,120	2,230	2,163	2,078	2,037
Transportation	3,763	4,357	5,195	6,114	6,443	6,132	6,258	6,653	7,194	7,519
Communication	1,952	2,047	1,826	1,988	2,075	2,052	2,156	2,321	2,495	2,633
Manufacturing	6,147	6,534	7,255	6,643	6,839	8,457	9,573	10,826	11,615	10,053
Total Nonresidential Buildings	42,093	44,587	48,033	49,558	47,564	50,280	53,571	53,563	54,014	53,680
NONBUILDING STRUCTURES										
Power	8,597	8,886	10,493	10,915	10,996	10,039	9,614	10,369	11,344	11,977
Highway and Street	7,973	7,915	8,429	8,568	8,293	8,755	9,713	10,691	11,621	12,160
Sewage and Waste Disposal	1,987	1,988	2,055	2,060	2,105	2,390	2,693	2,895	3,077	3,183
Water Supply	1,202	1,233	1,277	1,524	1,434	1,590	1,821	2,019	2,108	2,214
Conservation and Development	641	674	723	717	629	734	818	933	975	1,010
Total Nonbuilding Structures	20,400	20,696	22,977	23,784	23,457	23,507	24,660	26,907	29,124	30,544
Total Put in Place	\$129,104	\$129,166	\$133,805	\$148,048	\$163,678	\$171,945	\$162,948	\$151,188	\$154,286	\$159,349

Construction Put in Place Estimated for the West North Central Census Division

Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	8.1%	-2.6%	-4.7%	15.4%	33.9%	0.7%	-24.3%	-15.3%	6.1%	7.0%
Multifamily	-11.3%	-2.0%	9.0%	3.0%	21.4%	13.8%	3.6%	-18.9%	-8.6%	2.1%
Improvements*	13.8%	-6.9%	-1.8%	31.2%	12.9%	10.6%	-6.4%	-16.8%	-1.5%	5.3%
Total Residential	6.7%	-4.1%	-1.7%	19.0%	24.0%	5.9%	-13.7%	-16.5%	0.6%	5.6%
NONRESIDENTIAL BUILDINGS										
Lodging	1.9%	2.8%	5.2%	-14.1%	-30.9%	2.1%	14.9%	-2.9%	-17.9%	-3.1%
Office	-4.0%	17.9%	21.8%	6.7%	-5.8%	1.4%	9.8%	-5.5%	-3.4%	2.5%
Commercial	10.8%	-2.7%	-4.9%	6.2%	5.5%	17.9%	5.0%	-18.0%	-13.0%	3.0%
Health Care	4.9%	0.0%	5.3%	3.9%	0.6%	3.3%	2.1%	2.3%	4.9%	5.0%
Educational	3.1%	5.1%	3.7%	3.5%	-13.7%	-4.4%	3.0%	4.3%	5.0%	3.2%
Religious	-6.3%	-4.0%	7.9%	-3.6%	-10.4%	-8.8%	-5.7%	-1.6%	1.7%	3.4%
Public Safety	2.9%	15.2%	23.4%	18.4%	-22.5%	-1.9%	5.8%	7.7%	2.5%	-5.6%
Amusement and Recreation	10.1%	2.1%	8.1%	-7.2%	-13.9%	8.6%	5.2%	-3.0%	-3.9%	-2.0%
Transportation	4.3%	15.8%	19.2%	17.7%	5.4%	-4.8%	2.0%	6.3%	8.1%	4.5%
Communication	3.2%	4.9%	-10.8%	8.9%	4.4%	-1.1%	5.0%	7.7%	7.5%	5.5%
Manufacturing	-9.4%	6.3%	11.0%	-8.4%	3.0%	23.7%	13.2%	13.1%	7.3%	-13.4%
Total Nonresidential Buildings	1.8%	5.9%	7.7%	3.2%	-4.0%	5.7%	6.5%	0.0%	0.8%	-0.6%
NONBUILDING STRUCTURES										
Power	-13.3%	3.4%	18.1%	4.0%	0.7%	-8.7%	-4.2%	7.8%	9.4%	5.6%
Highway and Street	-5.4%	-0.7%	6.5%	1.6%	-3.2%	5.6%	10.9%	10.1%	8.7%	4.6%
Sewage and Waste Disposal	-6.4%	0.1%	3.3%	0.3%	2.2%	13.5%	12.7%	7.5%	6.3%	3.5%
Water Supply	0.9%	2.6%	3.6%	19.4%	-5.9%	10.9%	14.6%	10.9%	4.4%	5.0%
Conservation and Development	-3.9%	5.2%	7.2%	-0.9%	-12.2%	16.7%	11.4%	14.0%	4.5%	3.6%
Total Nonbuilding Structures	-8.6%	1.5%	11.0%	3.5%	-1.4%	0.2%	4.9%	9.1%	8.2%	4.9%
Total Put in Place	2.4%	0.0%	3.6%	10.6%	10.6%	5.1%	-5.2%	-7.2%	2.0%	3.3%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

WEST NORTH CENTRAL STATES INCLUDE IOWA, KANSAS, MINNESOTA, MISSOURI, NEBRASKA, NORTH DAKOTA AND SOUTH DAKOTA.



Construction Put in Place Estimated for the South Atlantic Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	59,880	65,256	65,853	76,896	110,527	120,391	99,289	87,030	91,253	96,280
Multifamily	16,723	19,769	21,866	24,258	30,371	38,745	42,136	40,164	35,995	37,459
Improvements*	43,981	44,726	44,283	56,040	64,786	80,428	73,759	67,564	70,331	74,004
Total Residential	120,585	129,751	132,002	157,194	205,684	239,564	215,184	194,758	197,579	207,743
NONRESIDENTIAL BUILDINGS										
Lodging	4,787	5,101	5,428	4,475	2,825	2,936	3,230	2,985	2,822	2,986
Office	12,410	13,105	15,014	15,576	14,904	14,690	14,360	12,922	11,804	12,218
Commercial	13,756	13,464	13,522	14,579	15,802	19,397	21,604	18,976	15,878	16,664
Health Care	6,630	6,461	6,946	7,239	7,162	7,536	8,199	9,010	9,143	8,598
Educational	14,953	15,367	16,769	16,925	15,263	15,086	15,509	16,231	16,840	17,375
Religious	550	542	583	545	480	510	527	514	526	557
Public Safety	1,320	1,348	1,770	2,689	1,840	1,881	1,977	2,072	2,015	2,064
Amusement and Recreation	4,103	4,339	4,812	4,630	4,176	4,726	5,184	5,096	4,651	4,410
Transportation	6,982	7,444	8,103	8,867	8,182	8,117	8,507	9,621	10,782	11,477
Communication	3,689	3,828	3,595	3,954	4,210	4,248	4,401	4,714	5,139	5,428
Manufacturing	10,789	11,047	12,021	11,118	12,206	15,744	19,399	21,524	20,252	18,711
Total Nonresidential Buildings	79,967	82,046	88,563	90,598	87,051	94,869	102,899	103,665	99,852	100,488
NONBUILDING STRUCTURES										
Power	19,373	19,567	23,407	23,268	25,107	23,843	24,414	25,026	26,539	28,549
Highway and Street	17,009	17,273	18,687	19,416	18,807	19,998	22,887	25,203	27,254	28,804
Sewage and Waste Disposal	4,321	4,356	4,697	4,878	5,093	5,798	6,576	7,081	7,500	7,974
Water Supply	2,611	2,661	2,752	3,250	3,448	4,147	4,822	5,199	5,464	5,637
Conservation and Development	1,395	1,510	1,684	1,570	1,317	1,552	1,752	1,855	1,944	2,013
Total Nonbuilding Structures	44,709	45,366	51,226	52,382	53,773	55,338	60,451	64,363	68,702	72,977
Total Put in Place	\$245,260	\$257,163	\$271,791	\$300,174	\$346,508	\$389,771	\$378,534	\$362,786	\$366,133	\$381,208

Construction Put in Place Estimated for the South Atlantic Census Division

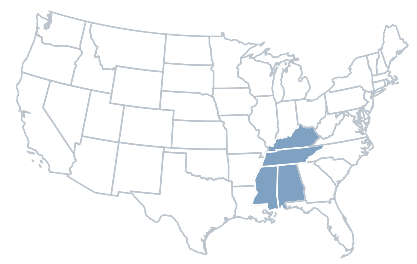
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	12.5%	9.0%	0.9%	16.8%	43.7%	8.9%	-17.5%	-12.3%	4.9%	5.5%
Multifamily	5.4%	18.2%	10.6%	10.9%	25.2%	27.6%	8.8%	-4.7%	-10.4%	4.1%
Improvements*	20.4%	1.7%	-1.0%	26.6%	15.6%	24.1%	-8.3%	-8.4%	4.1%	5.2%
Total Residential	14.2%	7.6%	1.7%	19.1%	30.8%	16.5%	-10.2%	-9.5%	1.4%	5.1%
NONRESIDENTIAL BUILDINGS										
Lodging	16.2%	6.6%	6.4%	-17.6%	-36.9%	3.9%	10.0%	-7.6%	-5.5%	5.8%
Office	20.2%	5.6%	14.6%	3.7%	-4.3%	-1.4%	-2.2%	-10.0%	-8.7%	3.5%
Commercial	15.3%	-2.1%	0.4%	7.8%	8.4%	22.7%	11.4%	-12.2%	-16.3%	4.9%
Health Care	8.2%	-2.5%	7.5%	4.2%	-1.1%	5.2%	8.8%	9.9%	1.5%	-6.0%
Educational	7.4%	2.8%	9.1%	0.9%	-9.8%	-1.2%	2.8%	4.7%	3.7%	3.2%
Religious	-2.4%	-1.5%	7.7%	-6.5%	-11.9%	6.1%	3.5%	-2.6%	2.4%	5.8%
Public Safety	6.2%	2.2%	31.3%	51.9%	-31.6%	2.2%	5.1%	4.8%	-2.7%	2.4%
Amusement and Recreation	14.7%	5.8%	10.9%	-3.8%	-9.8%	13.2%	9.7%	-1.7%	-8.7%	-5.2%
Transportation	8.6%	6.6%	8.8%	9.4%	-7.7%	-0.8%	4.8%	13.1%	12.1%	6.4%
Communication	9.4%	3.8%	-6.1%	10.0%	6.5%	0.9%	3.6%	7.1%	9.0%	5.6%
Manufacturing	-10.7%	2.4%	8.8%	-7.5%	9.8%	29.0%	23.2%	11.0%	-5.9%	-7.6%
Total Nonresidential Buildings	8.5%	2.6%	7.9%	2.3%	-3.9%	9.0%	8.5%	0.7%	-3.7%	0.6%
NONBUILDING STRUCTURES										
Power	-4.6%	1.0%	19.6%	-0.6%	7.9%	-5.0%	2.4%	2.5%	6.0%	7.6%
Highway and Street	-4.8%	1.6%	8.2%	3.9%	-3.1%	6.3%	14.4%	10.1%	8.1%	5.7%
Sewage and Waste Disposal	-4.0%	0.8%	7.8%	3.9%	4.4%	13.8%	13.4%	7.7%	5.9%	6.3%
Water Supply	3.5%	1.9%	3.4%	18.1%	6.1%	20.3%	16.3%	7.8%	5.1%	3.2%
Conservation and Development	-1.5%	8.3%	11.5%	-6.8%	-16.1%	17.8%	12.9%	5.9%	4.8%	3.5%
Total Nonbuilding Structures	-4.1%	1.5%	12.9%	2.3%	2.7%	2.9%	9.2%	6.5%	6.7%	6.2%
Total Put in Place	8.6%	4.9%	5.7%	10.4%	15.4%	12.5%	-2.9%	-4.2%	0.9%	4.1%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

SOUTH ATLANTIC REGION INCLUDES DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, MARYLAND, NORTH CAROLINA, SOUTH CAROLINA, VIRGINIA AND WEST VIRGINIA.



Construction Put in Place Estimated for the East South Central Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	8,472	9,060	8,895	10,694	14,916	15,708	12,351	10,963	11,296	11,911
Multifamily	2,259	2,234	2,327	2,486	2,997	3,357	3,932	3,827	3,386	3,294
Improvements*	6,293	6,158	5,984	7,926	8,903	11,081	10,265	9,230	8,786	8,973
Total Residential	17,024	17,452	17,206	21,106	26,816	30,146	26,548	24,020	23,468	24,178
NONRESIDENTIAL BUILDINGS										
Lodging	1,143	1,262	1,311	1,140	697	731	845	778	762	799
Office	2,697	3,199	3,802	4,111	4,608	4,917	4,982	4,256	3,973	4,096
Commercial	3,597	3,456	3,590	3,873	4,227	5,182	5,634	5,349	4,575	4,274
Health Care	1,751	1,773	1,934	1,912	1,940	2,546	2,698	2,471	2,341	2,286
Educational	3,905	4,174	4,498	4,390	3,896	3,969	4,215	4,409	4,562	4,661
Religious	144	139	150	144	127	127	125	126	128	132
Public Safety	345	359	446	706	450	421	431	461	496	526
Amusement and Recreation	1,072	1,114	1,251	1,197	1,118	1,264	1,387	1,643	1,589	1,458
Transportation	1,825	1,925	2,019	2,167	2,007	2,043	2,168	2,369	2,608	2,814
Communication	955	985	845	908	933	946	980	1,049	1,150	1,288
Manufacturing	2,816	3,353	4,059	3,616	4,132	5,601	6,067	5,620	5,493	5,775
Total Nonresidential Buildings	20,250	21,738	23,904	24,166	24,135	27,746	29,532	28,530	27,677	28,110
NONBUILDING STRUCTURES										
Power	4,304	4,291	5,122	5,422	5,781	4,977	4,860	5,189	5,449	5,697
Highway and Street	4,381	4,498	4,768	4,849	4,692	4,983	5,479	5,999	6,410	6,771
Sewage and Waste Disposal	1,036	1,056	1,173	1,232	1,266	1,446	1,623	1,755	1,874	1,977
Water Supply	627	650	716	850	879	1,055	1,151	1,196	1,258	1,341
Conservation and Development	334	368	418	390	345	403	438	459	474	497
Total Nonbuilding Structures	10,683	10,864	12,196	12,743	12,962	12,862	13,550	14,599	15,464	16,283
Total Put in Place	\$47,956	\$50,054	\$53,306	\$58,014	\$63,912	\$70,754	\$69,630	\$67,149	\$66,609	\$68,571

Construction Put in Place Estimated for the East South Central Census Division

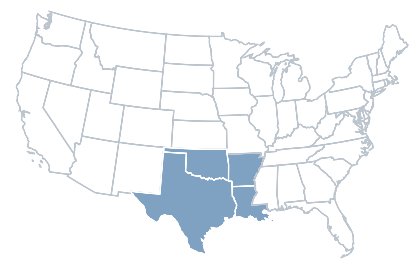
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	9.0%	6.9%	-1.8%	20.2%	39.5%	5.3%	-21.4%	-11.2%	3.0%	5.4%
Multifamily	-6.5%	-1.1%	4.2%	6.8%	20.6%	12.0%	17.1%	-2.7%	-11.5%	-2.7%
Improvements*	15.1%	-2.2%	-2.8%	32.5%	12.3%	24.5%	-7.4%	-10.1%	-4.8%	2.1%
Total Residential	8.7%	2.5%	-1.4%	22.7%	27.1%	12.4%	-11.9%	-9.5%	-2.3%	3.0%
NONRESIDENTIAL BUILDINGS										
Lodging	1.4%	10.4%	3.9%	-13.0%	-38.9%	4.9%	15.7%	-8.0%	-2.0%	4.9%
Office	-4.5%	18.6%	18.8%	8.1%	12.1%	6.7%	1.3%	-14.6%	-6.6%	3.1%
Commercial	10.3%	-3.9%	3.9%	7.9%	9.1%	22.6%	8.7%	-5.0%	-14.5%	-6.6%
Health Care	4.4%	1.3%	9.1%	-1.1%	1.4%	31.2%	6.0%	-8.4%	-5.3%	-2.3%
Educational	2.6%	6.9%	7.8%	-2.4%	-11.3%	1.9%	6.2%	4.6%	3.5%	2.2%
Religious	-6.7%	-3.3%	7.4%	-3.3%	-12.0%	0.0%	-1.9%	0.9%	1.9%	2.8%
Public Safety	1.4%	4.1%	24.4%	58.4%	-36.3%	-6.4%	2.4%	6.9%	7.6%	6.1%
Amusement and Recreation	9.6%	3.8%	12.3%	-4.3%	-6.6%	13.0%	9.7%	18.5%	-3.2%	-8.2%
Transportation	3.8%	5.5%	4.9%	7.3%	-7.4%	1.8%	6.1%	9.3%	10.1%	7.9%
Communication	3.6%	3.1%	-14.3%	7.5%	2.7%	1.4%	3.6%	7.0%	9.6%	12.0%
Manufacturing	-14.8%	19.0%	21.1%	-10.9%	14.3%	35.6%	8.3%	-7.4%	-2.3%	5.1%
Total Nonresidential Buildings	0.5%	7.4%	10.0%	1.1%	-0.1%	15.0%	6.4%	-3.4%	-3.0%	1.6%
NONBUILDING STRUCTURES										
Power	-17.6%	-0.3%	19.4%	5.9%	6.6%	-13.9%	-2.3%	6.8%	5.0%	4.5%
Highway and Street	-6.3%	2.7%	6.0%	1.7%	-3.2%	6.2%	10.0%	9.5%	6.8%	5.6%
Sewage and Waste Disposal	-7.4%	1.9%	11.1%	5.1%	2.8%	14.1%	12.2%	8.2%	6.7%	5.5%
Water Supply	-0.1%	3.7%	10.0%	18.7%	3.4%	20.0%	9.1%	3.9%	5.2%	6.6%
Conservation and Development	-4.9%	10.2%	13.5%	-6.7%	-11.7%	16.9%	8.6%	4.9%	3.2%	5.0%
Total Nonbuilding Structures	-10.9%	1.7%	12.3%	4.5%	1.7%	-0.8%	5.3%	7.7%	5.9%	5.3%
Total Put in Place	0.3%	4.4%	6.5%	8.8%	10.2%	10.7%	-1.6%	-3.6%	-0.8%	2.9%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

EAST SOUTH CENTRAL STATES INCLUDE ALABAMA, KENTUCKY, MISSISSIPPI AND TENNESSEE.



Construction Put in Place Estimated for the West South Central Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	28,462	30,224	30,970	37,181	55,743	60,058	48,092	40,196	41,443	44,472
Multifamily	7,928	7,629	8,131	8,824	10,808	12,300	13,379	12,348	11,195	11,752
Improvements*	16,676	15,627	15,379	20,333	26,002	30,809	28,217	23,710	23,115	25,145
Total Residential	53,066	53,479	54,479	66,337	92,553	103,167	89,687	76,255	75,753	81,369
NONRESIDENTIAL BUILDINGS										
Lodging	5,041	5,131	5,628	5,262	3,730	3,852	4,214	4,116	3,941	4,217
Office	11,897	12,935	14,987	16,821	15,856	16,843	18,056	15,905	14,327	13,903
Commercial	15,163	14,711	14,009	14,840	15,482	18,674	19,714	17,436	14,559	15,006
Health Care	7,650	7,734	8,243	8,726	8,770	9,175	9,793	10,046	10,298	10,847
Educational	17,400	17,900	19,837	20,152	18,868	19,310	19,929	21,114	22,106	22,747
Religious	635	633	704	640	539	530	524	536	552	567
Public Safety	1,520	1,690	2,224	3,561	2,522	2,566	2,680	2,856	3,035	3,191
Amusement and Recreation	4,731	5,009	5,610	5,508	5,102	5,576	6,139	5,634	4,970	5,291
Transportation	8,050	9,483	10,091	10,990	10,598	10,893	12,181	13,660	15,023	15,875
Communication	4,218	4,552	4,076	4,542	4,666	4,701	4,902	5,203	5,609	5,918
Manufacturing	12,425	12,606	14,955	14,264	14,982	19,308	22,930	24,934	26,024	25,542
Total Nonresidential Buildings	88,730	92,384	100,363	105,306	101,116	111,428	121,061	121,439	120,442	123,105
NONBUILDING STRUCTURES										
Power	23,406	25,197	30,640	30,472	30,045	25,242	25,792	26,999	29,283	30,971
Highway and Street	17,667	17,875	19,264	19,896	20,070	21,830	25,085	27,292	29,348	30,651
Sewage and Waste Disposal	4,892	5,101	5,795	6,551	6,980	7,943	8,902	9,752	10,267	10,639
Water Supply	3,517	3,932	4,205	4,779	4,853	5,808	6,715	7,128	7,337	7,528
Conservation and Development	1,875	2,076	2,391	2,481	2,284	2,530	2,762	2,992	3,201	3,347
Total Nonbuilding Structures	51,357	54,181	62,295	64,179	64,232	63,353	69,255	74,163	79,437	83,136
Total Put in Place	\$193,153	\$200,044	\$217,137	\$235,822	\$257,900	\$277,948	\$280,003	\$271,857	\$275,632	\$287,610

Construction Put in Place Estimated for the West South Central Census Division

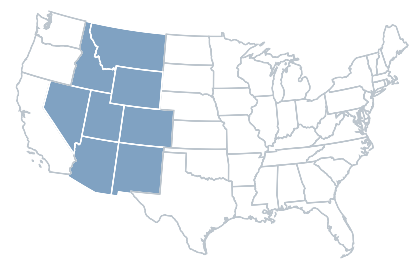
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	10.4%	6.2%	2.5%	20.1%	49.9%	7.7%	-19.9%	-16.4%	3.1%	7.3%
Multifamily	0.2%	-3.8%	6.6%	8.5%	22.5%	13.8%	8.8%	-7.7%	-9.3%	5.0%
Improvements*	16.9%	-6.3%	-1.6%	32.2%	27.9%	18.5%	-8.4%	-16.0%	-2.5%	8.8%
Total Residential	10.6%	0.8%	1.9%	21.8%	39.5%	11.5%	-13.1%	-15.0%	-0.7%	7.4%
NONRESIDENTIAL BUILDINGS										
Lodging	3.5%	1.8%	9.7%	-6.5%	-29.1%	3.3%	9.4%	-2.3%	-4.2%	7.0%
Office	-2.5%	8.7%	15.9%	12.2%	-5.7%	6.2%	7.2%	-11.9%	-9.9%	-3.0%
Commercial	7.5%	-3.0%	-4.8%	5.9%	4.3%	20.6%	5.6%	-11.6%	-16.5%	3.1%
Health Care	5.5%	1.1%	6.6%	5.9%	0.5%	4.6%	6.7%	2.6%	2.5%	5.3%
Educational	5.7%	2.9%	10.8%	1.6%	-6.4%	2.3%	3.2%	5.9%	4.7%	2.9%
Religious	-4.8%	-0.3%	11.2%	-9.1%	-15.7%	-1.6%	-1.2%	2.2%	3.0%	2.8%
Public Safety	3.4%	11.2%	31.6%	60.1%	-29.2%	1.7%	4.4%	6.6%	6.3%	5.1%
Amusement and Recreation	11.8%	5.9%	12.0%	-1.8%	-7.4%	9.3%	10.1%	-8.2%	-11.8%	6.5%
Transportation	5.9%	17.8%	6.4%	8.9%	-3.6%	2.8%	11.8%	12.1%	10.0%	5.7%
Communication	5.8%	7.9%	-10.5%	11.4%	2.7%	0.7%	4.3%	6.1%	7.8%	5.5%
Manufacturing	-13.1%	1.5%	18.6%	-4.6%	5.0%	28.9%	18.8%	8.7%	4.4%	-1.8%
Total Nonresidential Buildings	1.8%	4.1%	8.6%	4.9%	-4.0%	10.2%	8.6%	0.3%	-0.8%	2.2%
NONBUILDING STRUCTURES										
Power	-18.7%	7.7%	21.6%	-0.5%	-1.4%	-16.0%	2.2%	4.7%	8.5%	5.8%
Highway and Street	0.7%	1.2%	7.8%	3.3%	0.9%	8.8%	14.9%	8.8%	7.5%	4.4%
Sewage and Waste Disposal	-8.6%	4.3%	13.6%	13.0%	6.5%	13.8%	12.1%	9.5%	5.3%	3.6%
Water Supply	-1.4%	11.8%	6.9%	13.7%	1.6%	19.7%	15.6%	6.2%	2.9%	2.6%
Conservation and Development	-6.1%	10.7%	15.2%	3.7%	-7.9%	10.8%	9.2%	8.3%	7.0%	4.6%
Total Nonbuilding Structures	-10.3%	5.5%	15.0%	3.0%	0.1%	-1.4%	9.3%	7.1%	7.1%	4.7%
Total Put in Place	0.4%	3.6%	8.5%	8.6%	9.4%	7.8%	0.7%	-2.9%	1.4%	4.3%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

WEST SOUTH CENTRAL STATES INCLUDE ARKANSAS, LOUISIANA, OKLAHOMA AND TEXAS.



Construction Put in Place Estimated for the Mountain Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	25,932	29,201	28,008	32,030	45,124	48,024	39,166	33,796	31,681	32,508
Multifamily	9,691	10,204	10,306	10,822	13,138	15,832	16,954	14,407	12,881	12,601
Improvements*	20,076	20,290	19,333	24,570	28,861	33,247	28,222	25,892	23,629	24,094
Total Residential	55,700	59,695	57,648	67,423	87,123	97,103	84,342	74,095	68,191	69,204
NONRESIDENTIAL BUILDINGS										
Lodging	1,848	2,135	2,252	1,885	1,224	1,251	1,513	1,659	1,362	1,320
Office	4,363	4,787	5,244	5,458	5,127	5,255	5,087	4,552	4,207	4,429
Commercial	5,819	5,862	5,346	5,367	5,544	6,265	6,685	5,768	5,252	5,474
Health Care	2,832	2,887	2,986	3,336	3,530	3,659	3,784	3,991	4,173	4,262
Educational	6,318	6,683	7,361	7,416	6,419	6,213	6,375	6,631	6,977	7,332
Religious	233	234	257	241	192	184	181	183	188	194
Public Safety	558	631	789	1,102	753	738	764	815	853	890
Amusement and Recreation	1,751	2,059	2,323	2,038	1,880	2,066	2,224	2,103	1,883	1,947
Transportation	2,952	3,510	3,688	4,090	3,854	3,820	4,316	4,845	5,252	5,412
Communication	1,479	1,484	1,325	1,425	1,474	1,512	1,612	1,744	1,910	2,070
Manufacturing	4,556	4,494	4,928	4,226	4,445	5,458	6,968	8,038	7,035	6,345
Total Nonresidential Buildings	32,709	34,766	36,498	36,583	34,442	36,421	39,508	40,330	39,092	39,674
NONBUILDING STRUCTURES										
Power	8,108	8,465	10,016	10,280	10,633	9,736	9,891	10,366	11,328	12,677
Highway and Street	8,301	8,381	8,850	9,062	9,164	9,875	10,920	11,876	12,588	13,246
Sewage and Waste Disposal	2,111	2,222	2,408	2,641	2,791	3,182	3,593	3,902	4,138	4,305
Water Supply	1,277	1,482	1,550	1,732	1,770	2,102	2,340	2,585	2,785	2,939
Conservation and Development	681	796	848	732	648	715	818	889	931	979
Total Nonbuilding Structures	20,478	21,347	23,671	24,446	25,005	25,609	27,562	29,618	31,770	34,146
Total Put in Place	\$108,888	\$115,808	\$117,818	\$128,452	\$146,570	\$159,133	\$151,412	\$144,043	\$139,054	\$143,024

Construction Put in Place Estimated for the Mountain Census Division

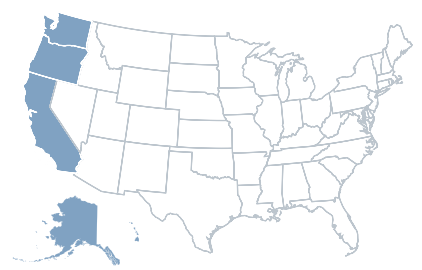
Change From Prior Year — Current Dollar Basis

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	17.7%	12.6%	-4.1%	14.4%	40.9%	6.4%	-18.4%	-13.7%	-6.3%	2.6%
Multifamily	12.2%	5.3%	1.0%	5.0%	21.4%	20.5%	7.1%	-15.0%	-10.6%	-2.2%
Improvements*	22.2%	1.1%	-4.7%	27.1%	17.5%	15.2%	-15.1%	-8.3%	-8.7%	2.0%
Total Residential	18.2%	7.2%	-3.4%	17.0%	29.2%	11.5%	-13.1%	-12.1%	-8.0%	1.5%
NONRESIDENTIAL BUILDINGS										
Lodging	6.6%	15.5%	5.5%	-16.3%	-35.1%	2.3%	20.9%	9.7%	-17.9%	-3.1%
Office	0.4%	9.7%	9.5%	4.1%	-6.1%	2.5%	-3.2%	-10.5%	-7.6%	5.3%
Commercial	15.9%	0.7%	-8.8%	0.4%	3.3%	13.0%	6.7%	-13.7%	-8.9%	4.2%
Health Care	9.8%	1.9%	3.4%	11.7%	5.8%	3.7%	3.4%	5.5%	4.6%	2.1%
Educational	7.9%	5.8%	10.1%	0.7%	-13.4%	-3.2%	2.6%	4.0%	5.2%	5.1%
Religious	-1.9%	0.4%	9.8%	-6.3%	-20.3%	-4.3%	-1.6%	1.5%	2.5%	3.0%
Public Safety	6.5%	13.2%	25.0%	39.7%	-31.6%	-2.0%	3.5%	6.7%	4.6%	4.3%
Amusement and Recreation	16.2%	17.6%	12.9%	-12.3%	-7.7%	9.9%	7.6%	-5.5%	-10.5%	3.4%
Transportation	9.0%	18.9%	5.1%	10.9%	-5.8%	-0.9%	13.0%	12.3%	8.4%	3.0%
Communication	4.2%	0.4%	-10.7%	7.6%	3.4%	2.5%	6.7%	8.2%	9.5%	8.4%
Manufacturing	-10.4%	-1.4%	9.7%	-14.2%	5.2%	22.8%	27.7%	15.4%	-12.5%	-9.8%
Total Nonresidential Buildings	5.4%	6.3%	5.0%	0.2%	-5.9%	5.7%	8.5%	2.1%	-3.1%	1.5%
NONBUILDING STRUCTURES										
Power	-10.8%	4.4%	18.3%	2.6%	3.4%	-8.4%	1.6%	4.8%	9.3%	11.9%
Highway and Street	-0.7%	1.0%	5.6%	2.4%	1.1%	7.8%	10.6%	8.8%	6.0%	5.2%
Sewage and Waste Disposal	0.2%	5.2%	8.4%	9.7%	5.7%	14.0%	12.9%	8.6%	6.0%	4.0%
Water Supply	8.1%	16.0%	4.5%	11.7%	2.2%	18.7%	11.3%	10.5%	7.8%	5.5%
Conservation and Development	2.9%	16.9%	6.5%	-13.7%	-11.5%	10.4%	14.4%	8.6%	4.7%	5.2%
Total Nonbuilding Structures	-4.3%	4.2%	10.9%	3.3%	2.3%	2.4%	7.6%	7.5%	7.3%	7.5%
Total Put in Place	9.4%	6.4%	1.7%	9.0%	14.1%	8.6%	-4.9%	-4.9%	-3.5%	2.9%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

MOUNTAIN STATES INCLUDE ARIZONA, COLORADO, IDAHO, MONTANA, NEVADA, NEW MEXICO, UTAH AND WYOMING.



Construction Put in Place Estimated for the Pacific Census Division

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	63,877	70,403	65,520	68,636	84,768	88,632	71,438	64,437	64,953	67,969
Multifamily	18,676	18,799	19,239	20,494	20,872	24,119	26,287	22,342	20,541	20,738
Improvements*	46,330	46,174	42,690	54,089	58,234	65,923	60,915	54,123	52,422	54,292
Total Residential	128,884	135,376	127,449	143,219	163,875	178,674	158,641	140,902	137,917	143,000
NONRESIDENTIAL BUILDINGS										
Lodging	4,485	4,908	5,286	4,462	2,520	2,570	2,938	2,797	2,575	2,771
Office	10,902	11,069	13,181	13,143	12,192	12,458	12,278	11,378	10,064	9,686
Commercial	13,298	13,264	13,600	14,151	15,176	17,082	18,077	14,723	13,284	13,653
Health Care	6,641	6,638	7,006	7,528	7,355	7,559	7,872	8,188	8,454	8,607
Educational	15,343	16,068	17,715	18,102	17,005	17,295	17,760	18,716	19,531	19,875
Religious	569	560	534	510	380	347	329	317	326	335
Public Safety	1,405	1,698	2,233	3,666	2,502	2,340	2,323	2,402	2,558	2,781
Amusement and Recreation	4,221	4,462	4,870	4,639	4,266	4,416	4,544	4,350	3,991	4,081
Transportation	7,205	8,404	8,793	8,719	7,953	8,042	9,085	10,157	11,071	11,413
Communication	3,742	3,678	3,257	3,461	3,600	3,702	3,872	4,128	4,448	4,736
Manufacturing	11,060	10,746	12,124	11,351	11,458	12,386	13,249	12,649	11,960	12,377
Total Nonresidential Buildings	78,871	81,496	88,598	89,731	84,406	88,196	92,328	89,804	88,262	90,315
NONBUILDING STRUCTURES										
Power	10,541	11,338	13,519	13,842	13,449	12,068	11,823	12,384	13,329	14,693
Highway and Street	12,882	13,905	15,692	16,030	16,667	17,760	19,846	21,908	23,412	24,483
Sewage and Waste Disposal	3,229	3,527	3,907	3,622	3,609	3,964	4,367	4,741	5,005	5,245
Water Supply	1,641	1,936	2,035	2,345	2,478	2,808	3,186	3,469	3,600	3,705
Conservation and Development	834	967	1,119	919	864	911	986	1,077	1,156	1,224
Total Nonbuilding Structures	29,127	31,674	36,273	36,758	37,067	37,510	40,208	43,579	46,502	49,350
Total Put in Place	\$236,881	\$248,545	\$252,320	\$269,708	\$285,348	\$304,380	\$291,176	\$274,285	\$272,680	\$282,665

Construction Put in Place Estimated for the Pacific Census Division

Change From Prior Year — Current Dollar Basis

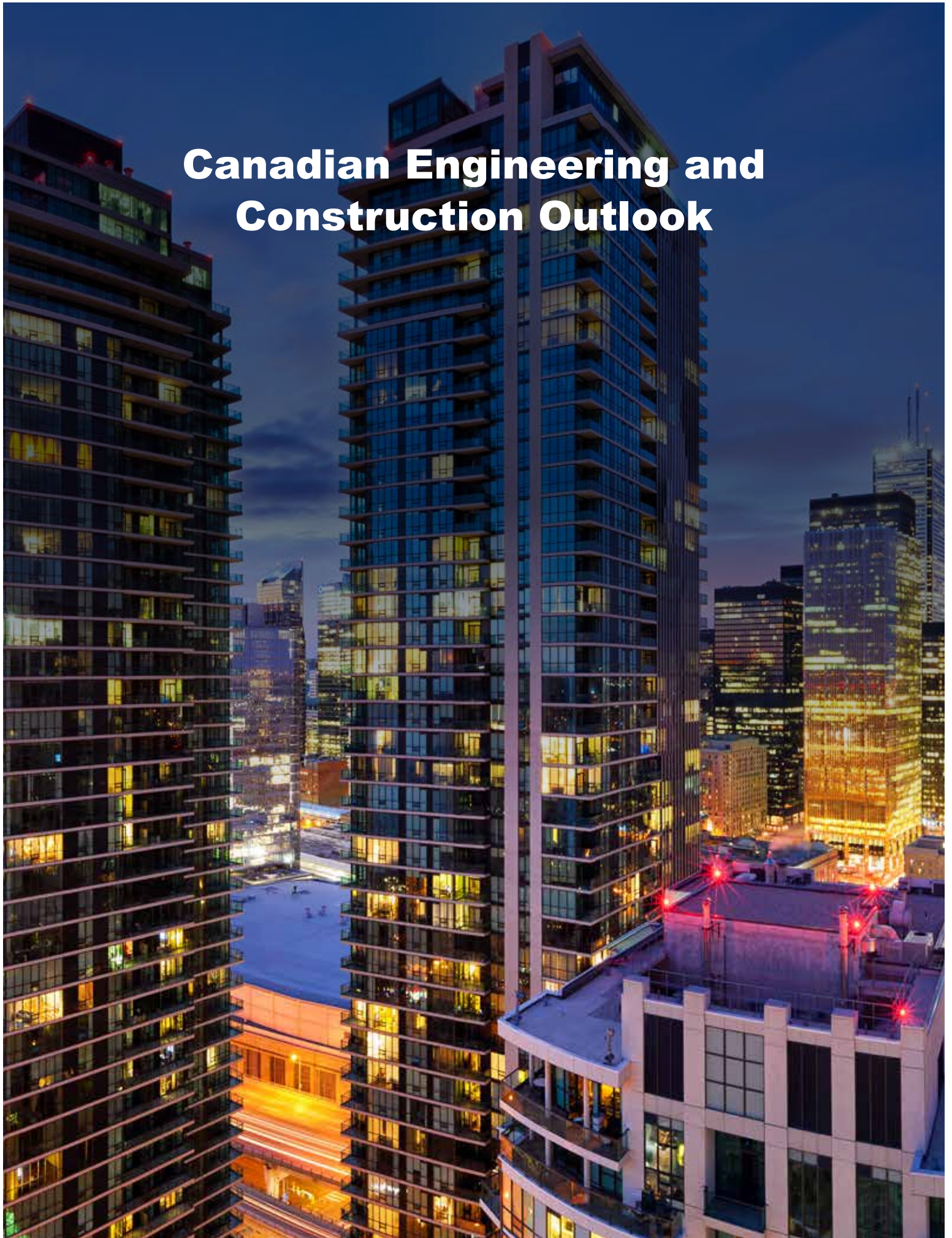
1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	12.5%	10.2%	-6.9%	4.8%	23.5%	4.6%	-19.4%	-9.8%	0.8%	4.6%
Multifamily	1.8%	0.7%	2.3%	6.5%	1.8%	15.6%	9.0%	-15.0%	-8.1%	1.0%
Improvements*	17.8%	-0.3%	-7.5%	26.7%	7.7%	13.2%	-7.6%	-11.1%	-3.1%	3.6%
Total Residential	12.6%	5.0%	-5.9%	12.4%	14.4%	9.0%	-11.2%	-11.2%	-2.1%	3.7%
NONRESIDENTIAL BUILDINGS										
Lodging	4.4%	9.4%	7.7%	-15.6%	-43.5%	2.0%	14.3%	-4.8%	-8.0%	7.6%
Office	1.3%	1.5%	19.1%	-0.3%	-7.2%	2.2%	-1.4%	-7.3%	-11.5%	-3.8%
Commercial	6.8%	-0.3%	2.5%	4.1%	7.2%	12.6%	5.8%	-18.6%	-9.8%	2.8%
Health Care	3.7%	0.0%	5.5%	7.4%	-2.3%	2.8%	4.1%	4.0%	3.2%	1.8%
Educational	5.7%	4.7%	10.2%	2.2%	-6.1%	1.7%	2.7%	5.4%	4.4%	1.8%
Religious	-3.8%	-1.6%	-4.6%	-4.4%	-25.5%	-8.8%	-5.1%	-3.6%	2.8%	2.6%
Public Safety	8.4%	20.9%	31.5%	64.2%	-31.8%	-6.5%	-0.7%	3.4%	6.5%	8.7%
Amusement and Recreation	13.0%	5.7%	9.1%	-4.7%	-8.0%	3.5%	2.9%	-4.3%	-8.2%	2.2%
Transportation	6.9%	16.6%	4.6%	-0.8%	-8.8%	1.1%	13.0%	11.8%	9.0%	3.1%
Communication	6.4%	-1.7%	-11.4%	6.3%	4.0%	2.8%	4.6%	6.6%	7.8%	6.5%
Manufacturing	-12.3%	-2.8%	12.8%	-6.4%	0.9%	8.1%	7.0%	-4.5%	-5.4%	3.5%
Total Nonresidential Buildings	2.5%	3.3%	8.7%	1.3%	-5.9%	4.5%	4.7%	-2.7%	-1.7%	2.3%
NONBUILDING STRUCTURES										
Power	-14.5%	7.6%	19.2%	2.4%	-2.8%	-10.3%	-2.0%	4.7%	7.6%	10.2%
Highway and Street	-2.4%	7.9%	12.8%	2.2%	4.0%	6.6%	11.7%	10.4%	6.9%	4.6%
Sewage and Waste Disposal	3.8%	9.2%	10.8%	-7.3%	-0.4%	9.8%	10.2%	8.6%	5.6%	4.8%
Water Supply	7.3%	18.0%	5.1%	15.2%	5.7%	13.3%	13.5%	8.9%	3.8%	2.9%
Conservation and Development	-2.2%	16.0%	15.7%	-17.9%	-6.1%	5.5%	8.2%	9.2%	7.4%	5.9%
Total Nonbuilding Structures	-6.1%	8.7%	14.5%	1.3%	0.8%	1.2%	7.2%	8.4%	6.7%	6.1%
Total Put in Place	6.5%	4.9%	1.5%	6.9%	5.8%	6.7%	-4.3%	-5.8%	-0.6%	3.7%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

PACIFIC STATES INCLUDE ALASKA, CALIFORNIA, HAWAII, OREGON AND WASHINGTON.



Canadian Engineering and Construction Outlook



Canadian Key Takeaways

- In 2022 total engineering and construction in Canada is expected to be \$354 billion. This represents a 10% increase from 2021, or about \$31 billion in new construction. Looking ahead to 2023, FMI anticipates a drop in spending, down 4% to \$340 billion.
- Total construction spending is expected to decline through the forecast period. Stability across the nonbuilding structures and nonresidential buildings will likely keep national construction from dropping significantly.
- Construction activity in nonresidential buildings is expected to reach more than \$100 billion by 2026, and nonbuilding structures spending is anticipated to top \$96 billion. Strong provincial and federal investment in infrastructure will boost construction activities.

Canada 2022 Segment Performance 2022/2021 Comparison

 <p>UP 5% or more</p>	<p>STABLE 0% to 4%</p>	 <p>DOWN Under 0%</p>
<ul style="list-style-type: none"> Residential Improvements Lodging Commercial Health Care Educational Transportation Communication Manufacturing Power Highway and Street Sewage and Waste Disposal Conservation and Development 	<ul style="list-style-type: none"> Single-Family Multifamily Amusement and Recreation Water Supply 	<ul style="list-style-type: none"> Office Religious Public Safety



Province by Province

Alberta's construction activity in 2022 and heading into 2023 is driven by the residential, power and energy, and transportation segments. The outlook for Alberta is the most positive when compared to other provinces and is expected to grow 3.4%, compounded annually through 2026. The provincial government is under pressure to diversify income streams, but in the interim is taking advantage of sizable tax revenues generated by the energy sector. Like other provinces, residential construction led growth in 2022. However, unlike other provinces, a slowdown in residential construction is anticipated to be relatively mild.

For British Columbia, 2022 was a year of significant growth, particularly in the residential market. Additionally, the power, lodging, health care, communication and commercial segments saw double-digit growth year over year in 2022. Moving forward, the outlook for infrastructure segments

(highway and street, sewage and waste disposal) as well as health care remains positive. Residential construction is anticipated to decline, particularly single-family construction. In total, construction spending is forecast to grow 1.7%, compounded annually through 2026.

Representing more than 35% of national construction spending, Ontario's impact on the national construction market in Canada remains outsized. The residential market had a slower year in 2022 than other provinces and is expected to experience declining construction through 2025. In 2022 bright spots in construction include lodging, water supply and commercial construction. Through the forecast period transportation and highway and street are the fastest-growing segments, each with more than 5% annual growth. Other nonresidential building activity is anticipated to decline with a drop in office spending.

Quebec is expected to finish 2022 construction activity 10% higher than 2021, with growth occurring in residential improvements and nonresidential building construction. Single-family and multifamily construction will likely continue to lead the drop in construction activity, though a program aimed at adding 1.5 million housing units in the next decade will mitigate the slide. Through 2026, power (8%), highway and street (6%), and educational (5.9%) construction activity are expected to experience the fastest-growing annual growth rates. Lodging, office and commercial will likely decline beginning in 2023 and won't recover until 2025.



Segment Overview

Moving into 2023, residential construction will see the largest decline, falling 9% from 2022. Declines in residential construction activity will continue through 2026. Falling construction activity is also expected in office, commercial and lodging.

On a positive note, transportation is the fastest-growing segment through the forecast period (6.8%). Closely

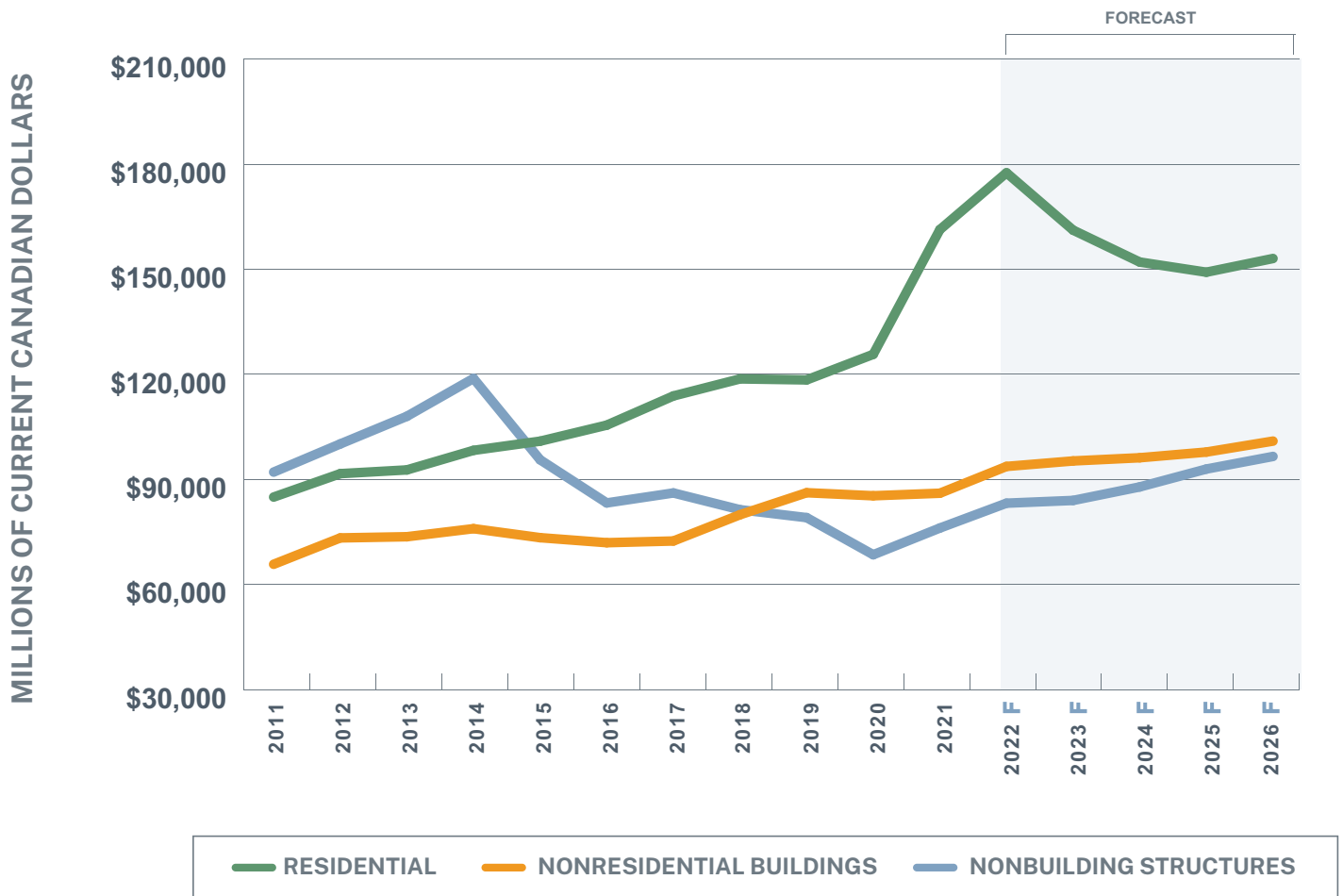
following transportation are sewage and waste disposal (6.3%) and highway and street (6%). Health care is expected to be the fastest-growing nonresidential building segment, growing at 5.5% compounded annually.

Overall, Canada's construction segment had another great year in 2022. While the residential sector is anticipated to cool during the forecast

period, investments in infrastructure will keep construction activity growing at a 1.6% annual rate.



Total Construction Spending Put in Place Estimated for Canada

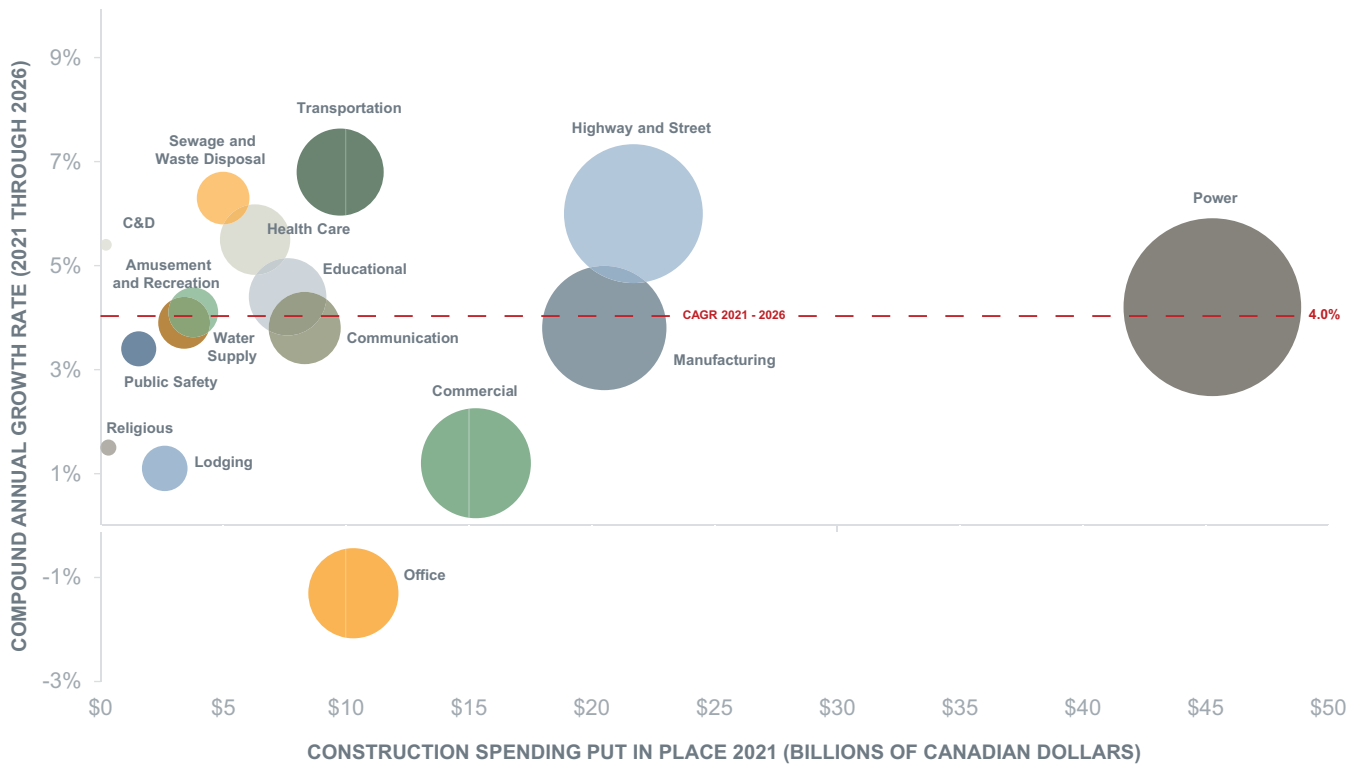


SOURCE: FMI FORECAST Q1 2023

First quarter forecast based on third quarter 2022 actuals and fourth quarter assumptions.



Total Canadian Nonresidential Construction Spending Put in Place 2021 and Forecast Growth (2021 through 2026) by Construction Segment



SOURCE: FMI FORECAST Q1 2023

Construction Put in Place Estimated for Canada

Millions of Current Dollars

1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

	2017	2018	2019	2020	2021	2022F	2023F	2024F	2025F	2026F
RESIDENTIAL BUILDINGS										
Single-family	28,106	26,394	22,839	24,582	34,778	35,731	32,987	31,168	30,044	30,795
Multifamily	28,428	31,860	34,475	38,253	46,166	46,917	43,709	41,825	42,169	44,180
Improvements*	57,287	60,460	61,114	62,927	80,592	95,190	84,694	79,246	77,110	78,280
Total Residential	113,821	118,714	118,428	125,761	161,536	177,838	161,390	152,238	149,323	153,255
NONRESIDENTIAL BUILDINGS										
Lodging	2,557	2,766	2,750	2,567	2,614	3,115	2,953	2,712	2,675	2,766
Office	9,011	10,138	11,311	11,596	10,291	9,801	9,491	9,086	9,197	9,662
Commercial	13,472	14,002	16,072	15,001	15,277	17,826	16,570	15,958	15,710	16,185
Health Care	5,168	5,252	5,319	5,745	6,289	6,756	7,367	8,050	8,090	8,205
Educational	7,729	7,678	6,744	6,829	7,610	8,011	8,400	8,737	9,077	9,424
Religious	386	382	444	419	320	300	313	323	336	345
Public Safety	1,289	1,250	1,698	1,741	1,545	1,476	1,558	1,608	1,733	1,830
Amusement and Recreation	4,546	4,569	3,983	3,896	3,405	3,518	3,625	3,743	3,940	4,128
Transportation	6,050	7,761	8,718	9,383	9,753	10,952	11,842	12,377	12,877	13,577
Communication	5,785	5,835	5,833	6,900	8,306	9,701	9,933	9,587	9,694	10,015
Manufacturing	16,221	20,116	23,189	21,110	20,509	22,148	23,126	23,913	24,397	24,734
Total Nonresidential Buildings	72,214	79,749	86,063	85,187	85,918	93,603	95,178	96,094	97,727	100,871
NONBUILDING STRUCTURES										
Power	58,446	53,538	51,840	39,478	45,269	50,336	48,706	50,344	53,810	55,709
Highway and Street	19,710	20,029	18,557	19,782	21,685	23,097	24,776	26,549	27,846	29,086
Sewage and Waste Disposal	4,227	3,638	4,637	5,047	4,988	5,462	5,950	6,246	6,436	6,773
Water Supply	3,131	3,657	3,456	3,772	3,771	3,925	4,163	4,317	4,488	4,612
Conservation and Development	480	335	430	196	220	242	255	271	275	286
Total Nonbuilding Structures	85,994	81,197	78,920	68,275	75,933	83,062	83,850	87,727	92,855	96,466
Total Put in Place	\$272,030	\$279,660	\$283,411	\$279,224	\$323,388	\$354,503	\$340,418	\$336,060	\$339,905	\$350,592

Construction Put in Place Estimated for Canada

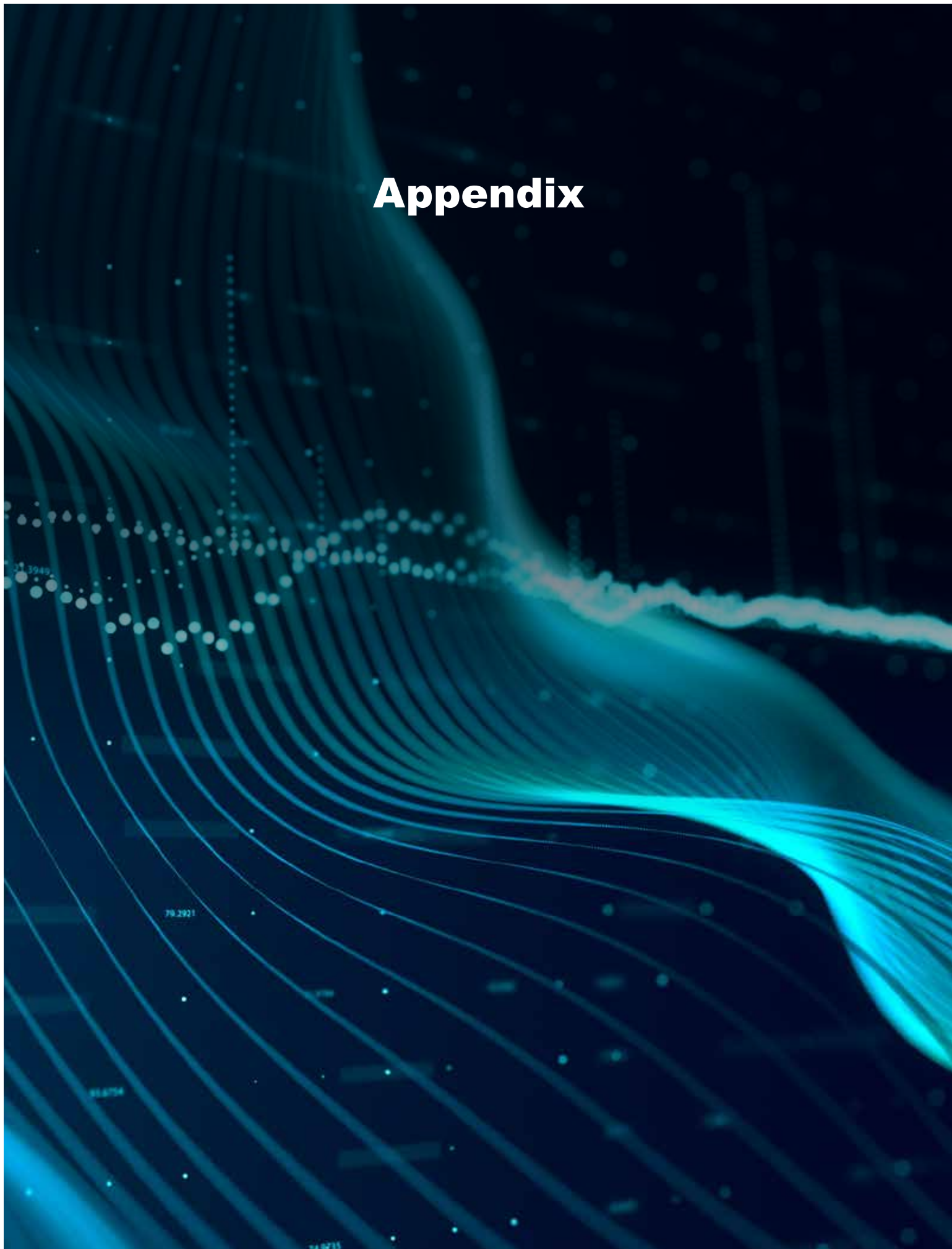
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1st Quarter 2023 Forecast, Based on 3rd Quarter 2022 Actuals and 4th Quarter 2022 Assumptions

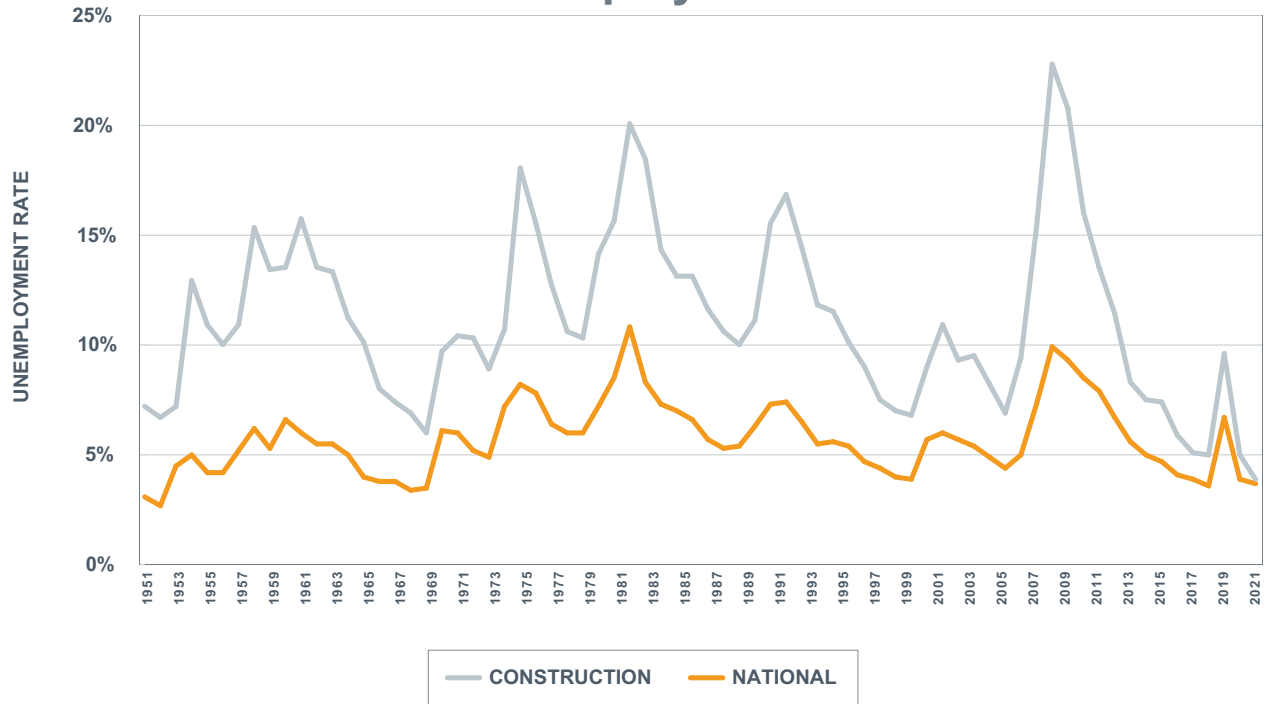
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RESIDENTIAL BUILDINGS										
Single-family	4.2%	-6.1%	-13.5%	7.6%	41.5%	2.7%	-7.7%	-5.5%	-3.6%	2.5%
Multifamily	12.5%	12.1%	8.2%	11.0%	20.7%	1.6%	-6.8%	-4.3%	0.8%	4.8%
Improvements*	7.6%	5.5%	1.1%	3.0%	28.1%	18.1%	-11.0%	-6.4%	-2.7%	1.5%
Total Residential	7.9%	4.3%	-0.2%	6.2%	28.4%	10.1%	-9.2%	-5.7%	-1.9%	2.6%
NONRESIDENTIAL BUILDINGS										
Lodging	-0.5%	8.2%	-0.6%	-6.7%	1.8%	19.2%	-5.2%	-8.2%	-1.4%	3.4%
Office	0.4%	12.5%	11.6%	2.5%	-11.3%	-4.8%	-3.2%	-4.3%	1.2%	5.1%
Commercial	0.9%	3.9%	14.8%	-6.7%	1.8%	16.7%	-7.0%	-3.7%	-1.6%	3.0%
Health Care	7.1%	1.6%	1.3%	8.0%	9.5%	7.4%	9.1%	9.3%	0.5%	1.4%
Educational	16.3%	-0.7%	-12.2%	1.3%	11.4%	5.3%	4.9%	4.0%	3.9%	3.8%
Religious	-6.6%	-1.1%	16.4%	-5.8%	-23.5%	-6.3%	4.3%	3.3%	4.0%	2.5%
Public Safety	32.9%	-3.0%	35.8%	2.5%	-11.3%	-4.5%	5.6%	3.2%	7.8%	5.6%
Amusement and Recreation	16.2%	0.5%	-12.8%	-2.2%	-12.6%	3.3%	3.0%	3.3%	5.3%	4.8%
Transportation	-5.5%	28.3%	12.3%	7.6%	3.9%	12.3%	8.1%	4.5%	4.0%	5.4%
Communication	0.7%	0.9%	0.0%	18.3%	20.4%	16.8%	2.4%	-3.5%	1.1%	3.3%
Manufacturing	-9.5%	24.0%	15.3%	-9.0%	-2.8%	8.0%	4.4%	3.4%	2.0%	1.4%
Total Nonresidential Buildings	0.7%	10.4%	7.9%	-1.0%	0.9%	8.9%	1.7%	1.0%	1.7%	3.2%
NONBUILDING STRUCTURES										
Power	3.4%	-8.4%	-3.2%	-23.8%	14.7%	11.2%	-3.2%	3.4%	6.9%	3.5%
Highway and Street	11.2%	1.6%	-7.3%	6.6%	9.6%	6.5%	7.3%	7.2%	4.9%	4.5%
Sewage and Waste Disposal	-25.0%	-13.9%	27.5%	8.8%	-1.2%	9.5%	8.9%	5.0%	3.0%	5.2%
Water Supply	4.4%	16.8%	-5.5%	9.1%	0.0%	4.1%	6.1%	3.7%	4.0%	2.8%
Conservation and Development	87.5%	-30.2%	28.4%	-54.4%	12.2%	10.0%	5.4%	6.4%	1.3%	4.0%
Total Nonbuilding Structures	3.4%	-5.6%	-2.8%	-13.5%	11.2%	9.4%	0.9%	4.6%	5.8%	3.9%
Total Put in Place	4.5%	2.8%	1.3%	-1.5%	15.8%	9.6%	-4.0%	-1.3%	1.1%	3.1%

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

Appendix

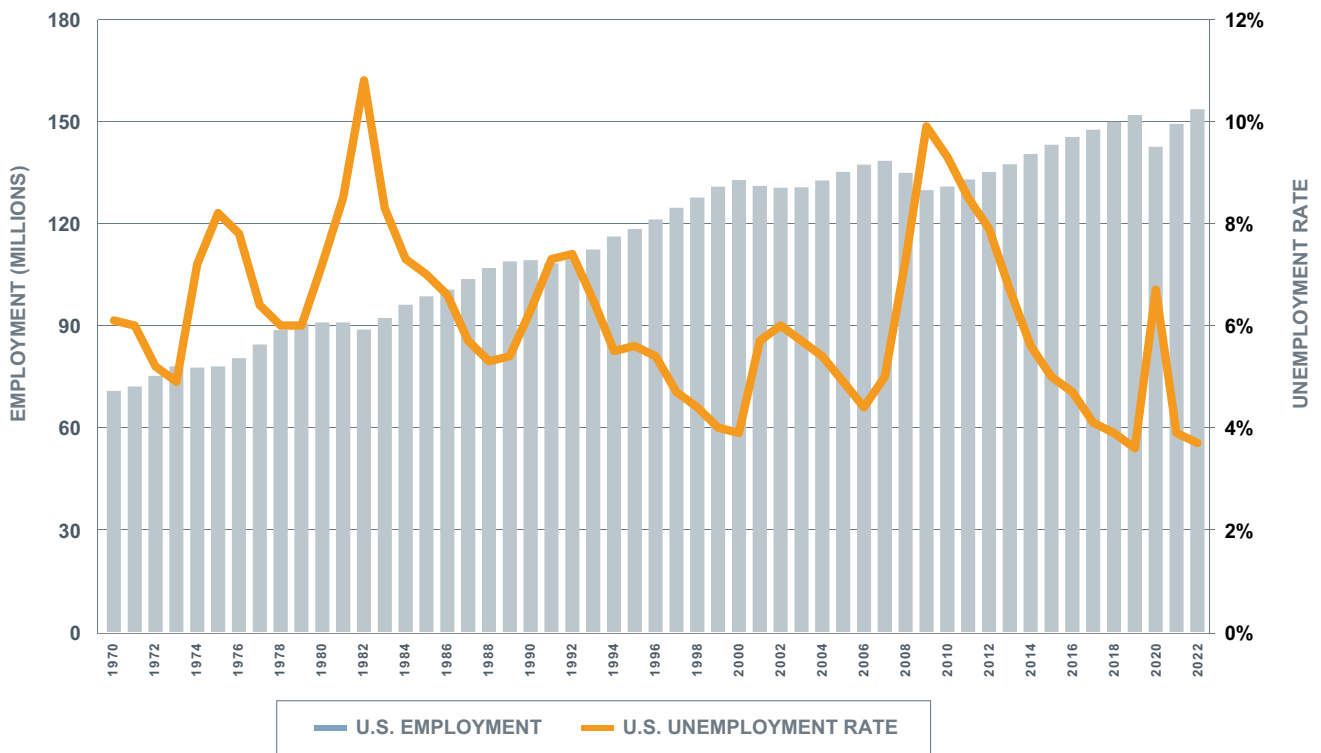


Construction Unemployment vs. National Unemployment



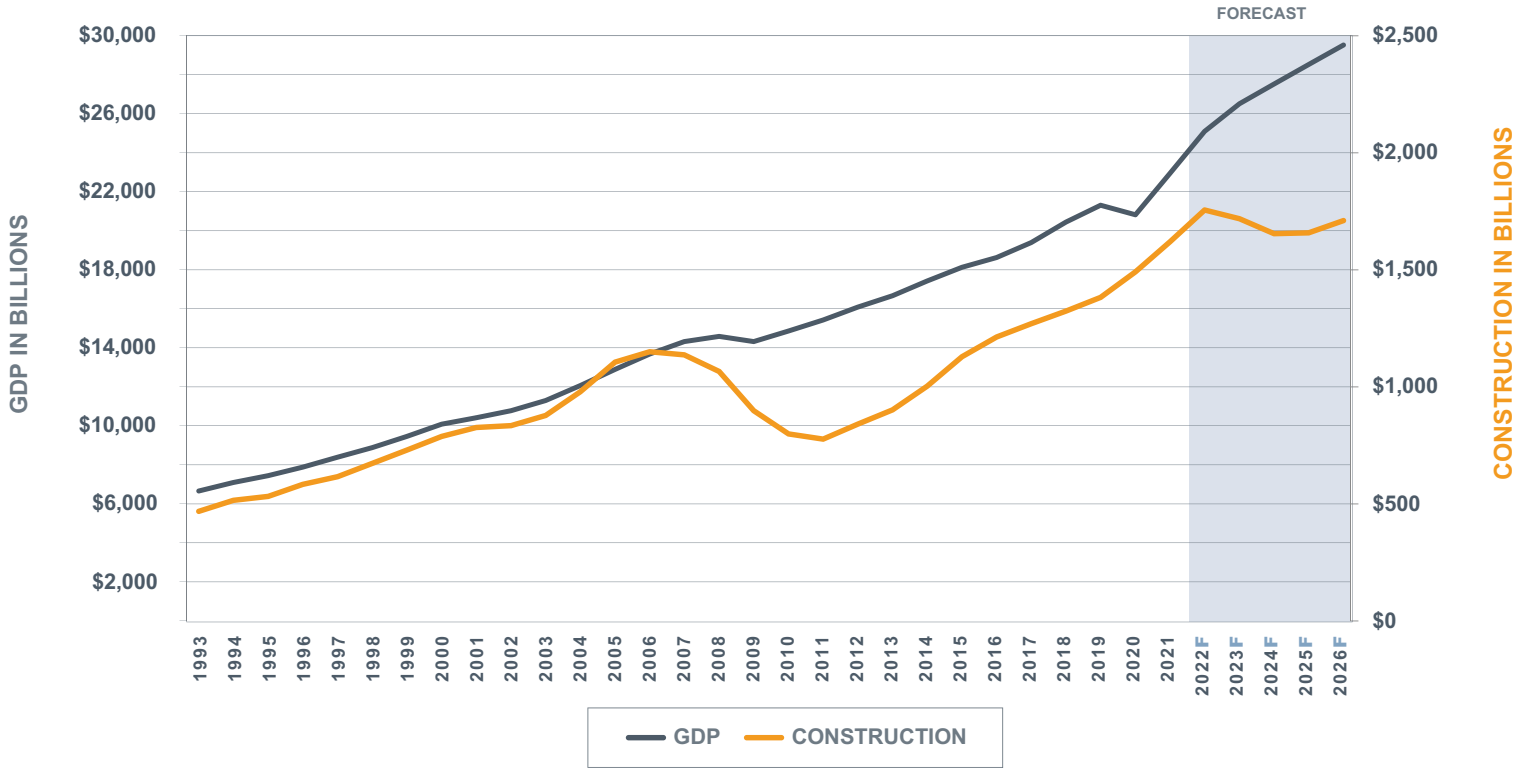
SOURCE: U.S. DEPARTMENT OF LABOR | ANNUAL — END PERIOD

Employment and Unemployment Rate Comparison



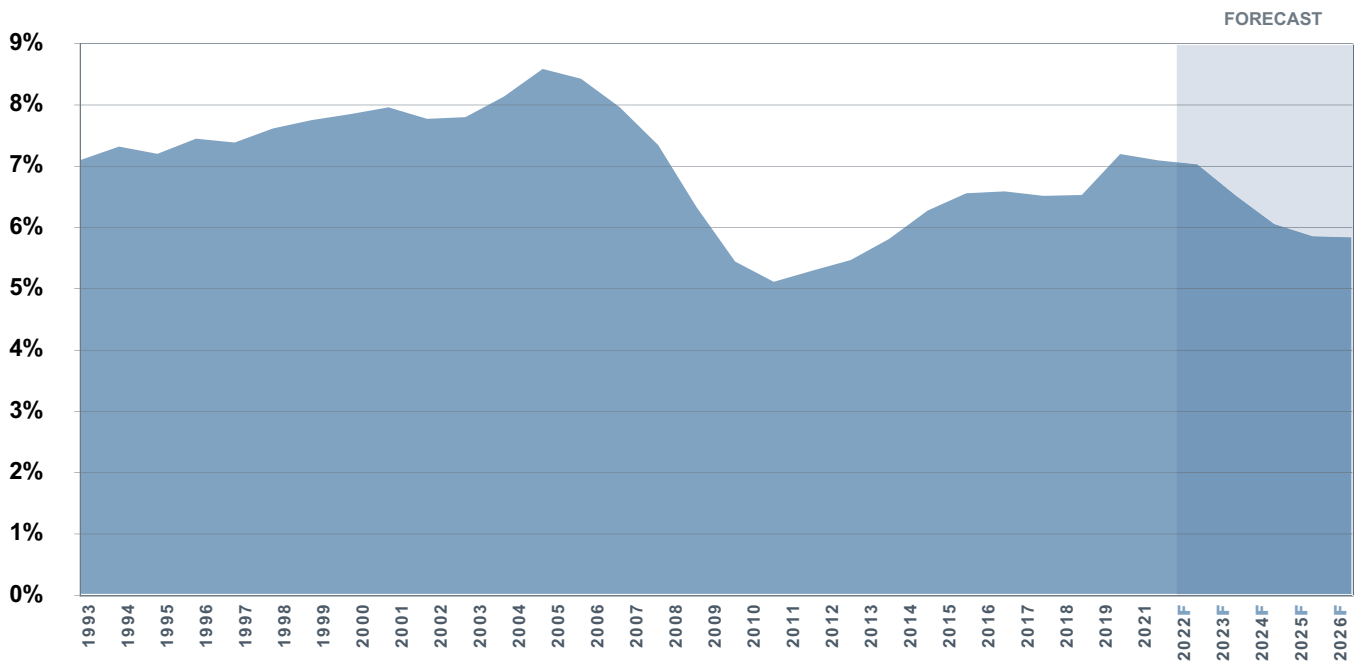
SOURCE: U.S. DEPARTMENT OF LABOR | ANNUAL — END PERIOD

Construction Spending and Nominal Gross Domestic Product (GDP)



SOURCE: FMI, CONGRESSIONAL BUDGET OFFICE

Construction as a Percentage of GDP



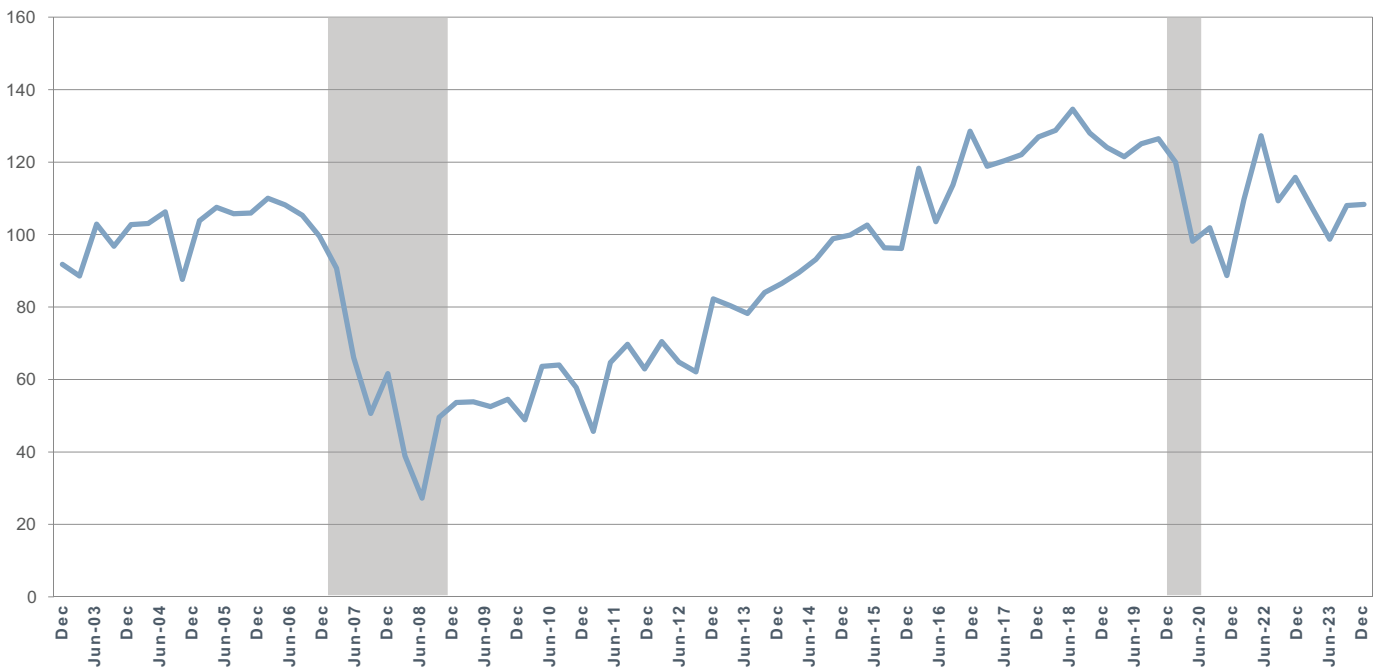
SOURCE: FMI, CONGRESSIONAL BUDGET OFFICE

Consumer Price Index All Urban Consumer, 12-Month Percent Change



SOURCE: BUREAU OF LABOR STATISTICS

Conference Board Consumer Confidence Index



SOURCE: THE CONFERENCE BOARD — CONSUMER CONFIDENCE SURVEY

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