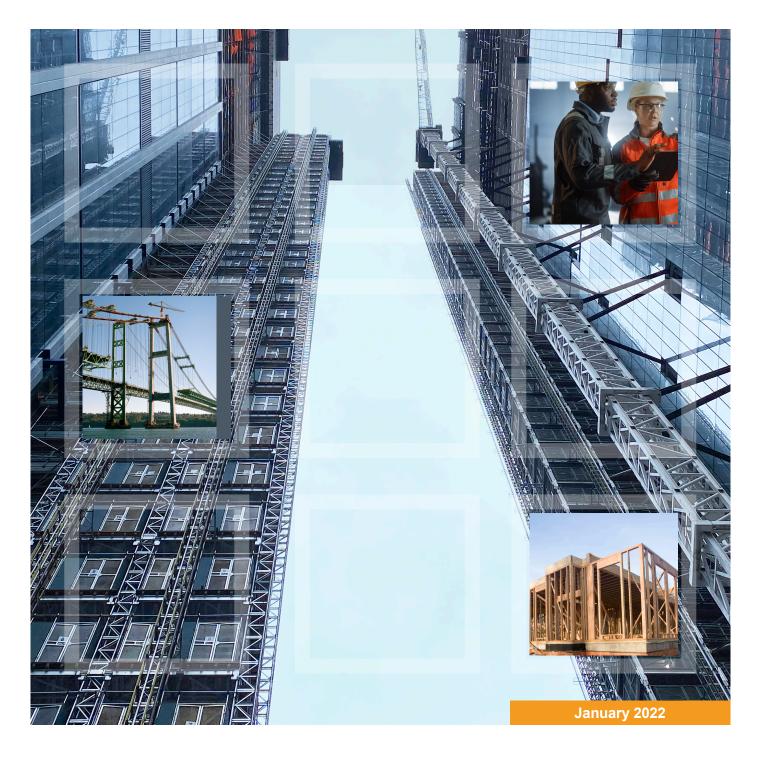


# 2022

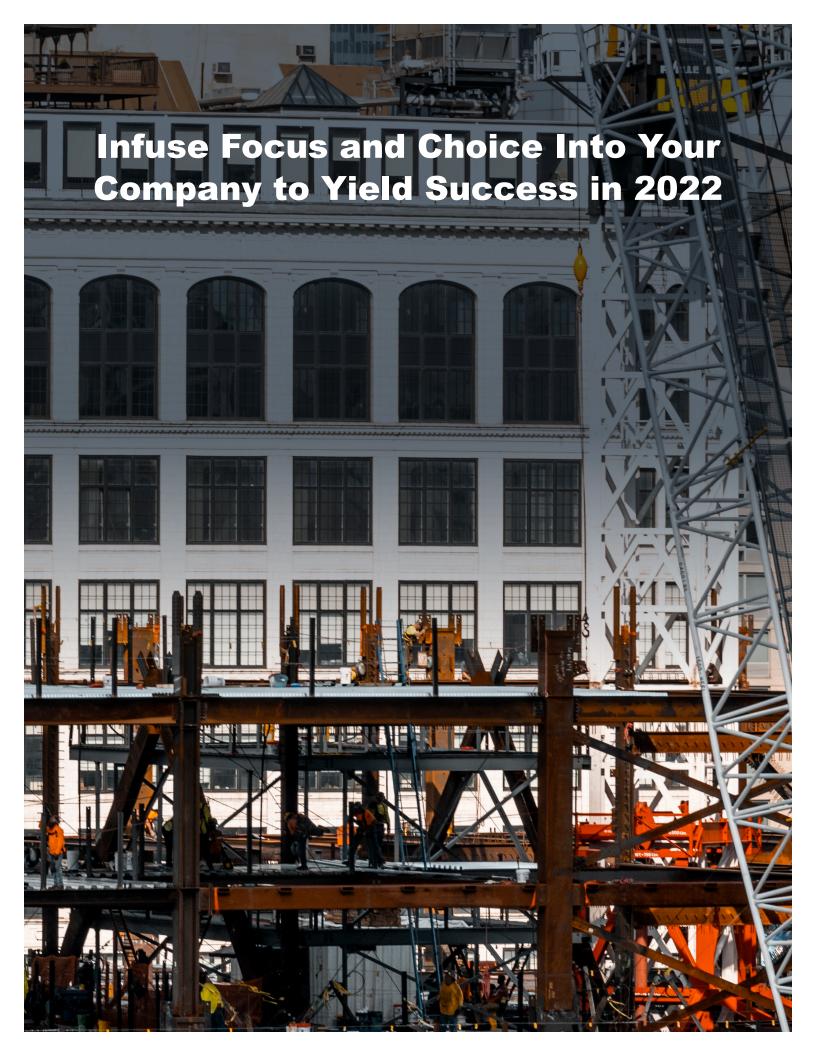
# **Engineering and Construction Industry Overview**

First Quarter Outlook/North America



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Infuse Focus and Choice Into Your Company to Yield Success in 2	.022
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### Message from Chris Daum, CEO of FMI

or most of us, if you predicted six months ago that we would see the largest surge in COVID-19 cases nearly two years into the pandemic, we wouldn't have believed it. Yet, as we enter 2022, there's no doubt the built environment continues to grapple with pandemic-related issues such as 40-year-high inflation rates, supply chain snarls, a shortage of workers and project delays.

Given these pressures, many would predict that it's going to be a difficult year. But as we have seen throughout the pandemic, the engineering and construction (E&C) space is resilient and continues to persevere despite challenging times.

It may seem counterintuitive, but the E&C industry is still expanding, with FMI expecting 5% growth in construction spending for 2022. For the past several years, the E&C industry growth was primarily driven by residential investments. This year spending is expected to increase across residential. nonresidential and nonbuilding construction, marking the first time in two years that nonresidential sectors will see growth. But the gains will likely be uneven and dependent on the segments and geographies in which you operate.

Now, more than ever, it's important for companies to think critically about the criteria used to bid and execute projects to maintain appropriate risk levels. It's easy to chase jobs, but the wrong projects

could cut into margins or the ability to deliver projects. In fact, we've found that firms adhering to strict project selection discipline and processes are more likely to succeed in this kind of volatile and competitive environment.

These pressures are forcing many of us to confront what I'm calling a "less for more" operating environment. Rapidly rising inflation will hit all our bottom lines in 2022. The Producer Price Index (PPI) for construction was 12%, and the Consumer Price Index (CPI) was 7% for 2021, meaning construction costs are rising faster than inflation. Given these numbers, much of the growth in construction spending will be driven by higher input costs, not just increased demand.



Here are some of the trends we're watching for 2022:

# BIGGER, FASTER, BETTER

For most everyone, inflation is top of mind. In a <u>survey of more than</u> 900 chief executive officers by The Conference Board, more than half of the respondents expected pressure on prices until at least mid-2023, a stark contrast to just a year ago.

Today demand is still strong.

Construction and design sentiment indices are near record highs, signaling that many are still optimistic about project opportunities as the year begins. We'll delve into our forecasts in much greater detail in this report, but it's important to remember there are many competing factors going into the analysis of each sector.

When we look at big-picture industry trends, we're seeing a shift to a "bigger, faster, better and more concentrated market,"

according to FMI Consulting
President Scott Winstead. Just
before the pandemic, we expected
annual megaproject construction
spending to increase from \$50
billion in 2019 to nearly \$330
billion over a five-year period.
Later in 2022 we plan to update
these estimates and anticipate this
trend will be upheld and strengthened with the large wave of
forthcoming infrastructure
funding.

Alternative delivery methods will grow to represent more than 60% of nonresidential spending through 2025 and will become more of the norm as legislation drives greater adoption.

A significant amount of construction spending is concentrating around just a few key markets, with roughly half of all construction dollars projected to be spent in 22 of the 380 Metropolitan Statistical Areas (MSAs). In other words, it's more important now than ever to have discussions on where to play and how to win.

# SUPPLY CHAIN DISRUPTIONS

Another hot topic is pandemic-driven supply chain disruptions, which are being felt across the E&C industry. It doesn't matter if you're trying to source asphalt for a road project or doors for multifamily units, you've likely experienced shortages, delays or the inability to get the materials you need to complete a project.

Mike Choutka, president and CEO of Hensel Phelps, confirms, "The predictability of materials and equipment deliveries is so much different than it has been in the past. It takes a lot of extra effort to just manage that part of a project. And it's harder to employ lean principles of just-intime deliveries."

To mitigate this, Choutka says the company is sourcing what it can when it's available and then storing those items, which, combined with inflation, is making it hard to predict job costs. This strategy ensures that materials are

available when needed but does come with added overhead to carry and store inventory, as well as the opportunity costs of having cash tied up in materials.

Material price volatility makes it hard to accurately bid on projects when prices are locked in for at least 120 days. Tackling these challenges means having conversations with owners and others about volatile market conditions and ways to work together to share the associated risks.

While there isn't a universal solution, evaluating the tradeoffs among materials costs, risk and opportunity costs in managing your supply chain will better equip you for conversations with owners and designers, and for working with your subcontractors to come up with creative solutions that can help manage project delays and other supply chain issues.

#### LABOR FORCE CHALLENGES

When talking with our clients, the current labor shortage always seems to be top of mind. While we've been talking about the lack of skilled workers for decades, this time feels even more acute.

Anita Nelson, chief strategy officer for Skanska USA Building, says the industry is "really running into a labor crunch at all levels, in the trades, in project-level jobs, all the way to leadership roles." The key to attracting people to the industry will be clearly articulating the importance of careers in construction and the tangible impacts of the work, she says.

Many are rethinking their career choices and working environments due to the pandemic, and that perceived lack of flexibility is also hurting recruiting in the E&C industry.

"One of the things that Hensel Phelps is focused on is how we continue to attract the best talent and fulfill our resource needs when it's more difficult to provide some of the alternate work environments that other industries can provide," says Hensel Phelps' Choutka.



There is an abundance of market opportunities out there for firms that stay focused on where to do business and how to make sure they're in the right markets and sectors, working with the right clients and project partners.

At FMI we talk about having a two-sided recruiting strategy. You need to not only attract new talent, but also perpetually recruit those who are already on the team.

Engage and retain your employees by actively listening, crafting clear career paths, providing effective learning and development programs, and offering competitive compensation packages.

Nelson agrees, saying that a pillar of Skanska's business plan revolves around people and enabling high-performing teams. They're working to improve flexibility and career paths, making a cultural shift to create more work-life balance for all employees, and taking into consideration the total

health and well-being of people, including a renewed focus on inclusion and mental health.

#### **OPPORTUNITIES AHEAD**

All this is to say, there is an abundance of market opportunities out there for firms that stay focused on where to do business and how to make sure they're in the right markets and sectors, working with the right clients and project partners. Now, more than ever, you can't be all things to all clients. Making these choices is as much about deciding where not to do business as where to operate.

As we move into 2022, make sure you have a strategy around change.

Evaluate what is likely to remain stable in the short term and long term as well as what's likely to be temporary. For example, we're several decades into the labor shortage. Since that's unlikely to change quickly, how are you setting a people-first strategy?

While we're all ready to see the end of the pandemic, it's unlikely to be the last major disruptor of global society and commerce. We can't predict what may come, but we can prepare for the future by focusing on what we can control and managing our businesses prudently. As always, if there is anything we can help with, please don't hesitate to reach out. Here's to a prosperous 2022.

# THE CURRENT M&A MARKET

Certain fundamental trends that contributed to record activity for mergers and acquisitions (M&A) in 2021 for those in the built environment remain robust as we enter 2022. For example, we are in the early stages of a massive energy transition (decarbonization, decentralization and digitalization). Yet, oil and gas will remain critical during this decades-long reconfiguration.

There is a fundamental reshuffling of economic players and activities, catalyzed and accelerated by the COVID crisis. With respect to business activity for companies in the built environment, industries are reshoring; talent seems to be endlessly in short supply; people are changing behavior patterns, resulting in facilities and infrastructure use changes; supply chain activities are being reconfigured; technologies are rapidly advancing; and new infrastructure and infrastructure upgrades are in the works.

On the capital side, balance sheets appear strong and cash is abundant for strategic buyers. Private equity investors have record levels of capital to put to work, and companies in the built environment are increasingly attractive targets.

The M&A market is unpredictable. Disruptive events will occur, and the M&A market will be affected for some period of time. Nonetheless, the trends discussed above appear to be fundamental and long term. Even if the M&A market is impacted by unforeseen events in 2022, some combination of these trends should continue to drive robust M&A activity for years to come.

— TIM HUCKABY PRESIDENT FMI CAPITAL ADVISORS



### **U.S. Key Takeaways**

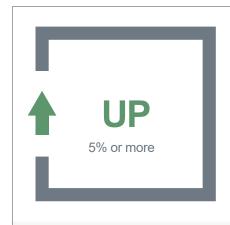
- Total engineering and construction spending for the U.S. is forecast to end 2021 up 8% compared to up 6% in 2020, led primarily by residential. Year end actuals for 2021 will be reported spring of 2022.
- Looking at 2022, FMI forecasts 5% growth in engineering and construction spending levels compared to 2021.
- Growth segments in 2021 are expected to include all residential segments (single-family, multifamily and improvements) as well as commercial, manufacturing,

- and sewage and waste disposal construction, each with annual growth rates of 5% or higher.
- A limited number of segments are expected to end 2021 with low growth rates between 0% and 4%, or roughly in line with historical inflation. These stable segments include water supply, health care, and highway and street.
- The majority, or 10 of the 16, nonresidential segments will end the year down. Declines through 2021 will be realized across the lodging, office, educational, public safety, religious, amusement and

- recreation, transportation, communication, power, and conservation and development segments.
- The latest Nonresidential Construction Index (NRCI) feedback suggests continued optimism heading into the first quarter of 2022, at 54.8, up slightly from 53.8 in the prior quarter. The index has dropped from highs nearing 60 in the third quarter of 2021, but remains expansionary and suggests increased opportunities for engineering and construction ahead.

### **U.S. 2021 Segment Performance**

2021/2020 Comparison



Single-family
Multifamily
Improvements
Commercial
Manufacturing
Sewage and Waste Disposal



Health Care Highway and Street Water Supply



Office
Educational
Religious
Public Safety
Amusement and Recreation
Transportation
Communication

Power

Lodging

Conservation and Development



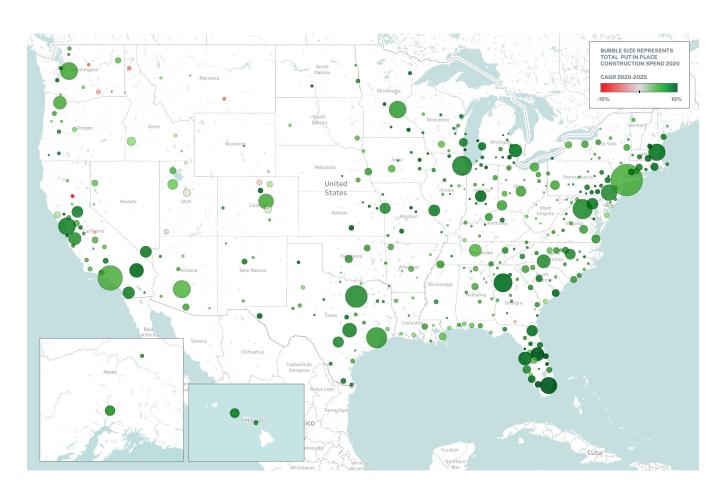
# **Total Construction Spending Put in Place Estimated for the United States**



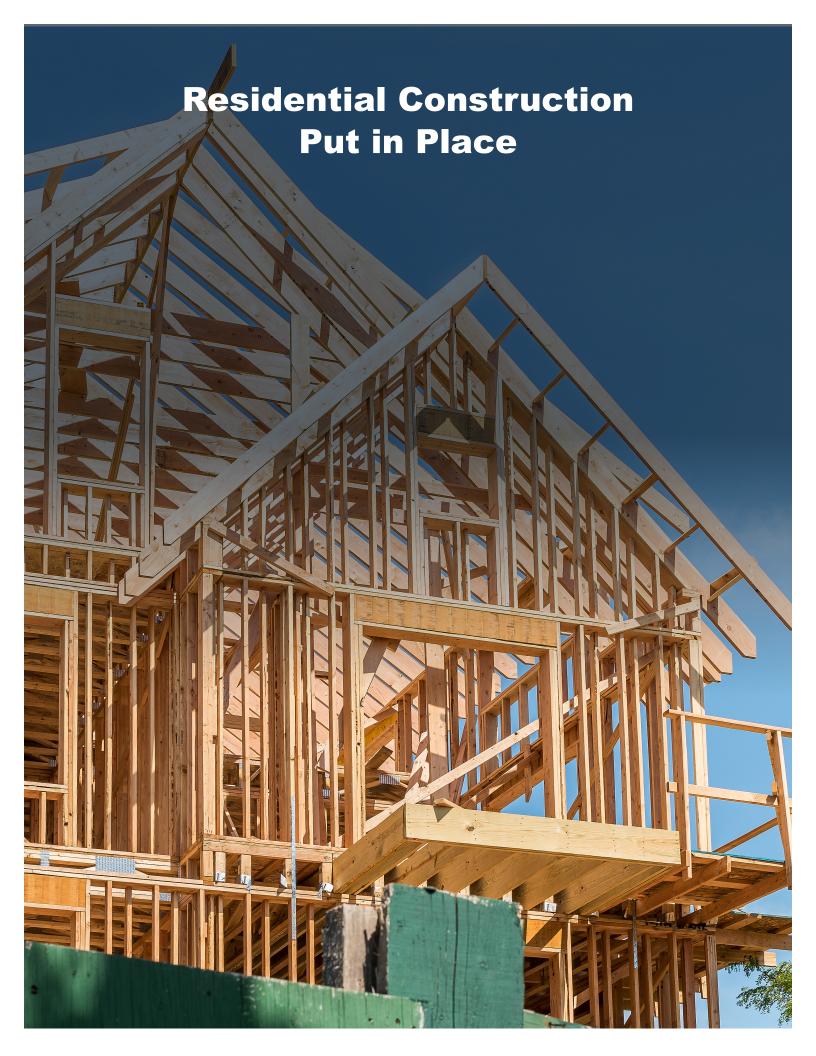
**SOURCE: FMI FORECAST Q1 2022** 



# Total Construction Spending Put in Place 2020 and Forecast Growth (2020 through 2025) by Metropolitan Statistical Area



**SOURCE: FMI FORECAST Q1 2022** 



#### SINGLE-FAMILY RESIDENTIAL



#### **DRIVERS:**

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



2022	UP	6%	\$404 B
2023	STA	3%	\$415 B
2024	STA	3%	\$429 B
2025	UP	5%	\$449 B

- Though single-family residential construction spending continues to increase rapidly, demand has been challenged on multiple fronts through the second half of 2021. Issues impacting the market include increasing inventories in several geographies, climbing home prices and construction costs (i.e., land, materials and labor), more constraints on key goods and materials, and ongoing adjustments to the expiration of pandemic forbearance and eviction moratorium programs. Additionally, going into 2022, stakeholders now face increased risk coinciding with the Federal Reserve raising interest rates as early as the second quarter.
- Homeownership rates through 2021 have come down from 2020 highs, nearing 68%, and are now consistent with pre-pandemic levels at approximately 65%. Likewise, the monthly supply of homes has been stable within the range of six to seven months through the second half of 2021, suggesting that the market is balanced. If inventories surpass seven months, it will suggest that U.S. housing is transitioning from a seller's market into a buyer's market. Builders are expected to become generally more cautious through the second half of the year, slowing the rapid rate of investment seen in 2020 and 2021.



Regional data suggests demand will be upheld through much of the Southeast, but challenges are expected in the western coastal markets and in some areas of the Northeast (e.g., New York). Additionally, many of the smaller secondary and tertiary markets across the Midwest and Mountain regions that experienced strong demand and significant price appreciation over the past 24 months are at risk of short-term corrections due to changing market conditions.

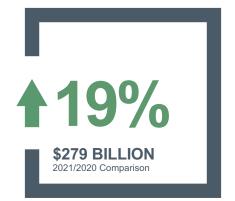
- Unemployment rate
- Core CPI
- Income
- Mortgage rates
- Home prices
- Housing starts
- Housing permits



2022	UP	7%	\$119 B
2023	STA	4%	\$123 B
2024	STA	4%	\$129 B
2025	UP	6%	\$136 B

- Rental rates have risen on a year-over-year basis through the second half of 2021, largely due to the expiration of the federal eviction moratorium. At the same time, rental vacancies have fallen alongside declining homeownership rates.
- Elevated costs and low availability of inputs (e.g., materials, labor, appliances) will continue to impose upward pressure on unit pricing and rental rates through the forecast period. Increasing rental rates are expected to be one of the largest contributing factors to inflationary pressures in the years ahead. Through the third quarter of 2021, rental vacancy rates were highest across the South and Midwest and lowest across the Northeast and West.
- Expect ongoing investment in high-growth destination cities (e.g., Dallas and Austin) and in horizontal/garden projects in secondary and tertiary metropolitans. Additionally, markets that do not support sustained heightened demand and/or price appreciation in single-family homes will experience increased multifamily investment to counterbalance affordability.
- Mixed-use development projects will return, driven by residential-led financing. The addition of low-income units across these developments will continue to help fulfill local housing initiatives.

#### **IMPROVEMENTS**

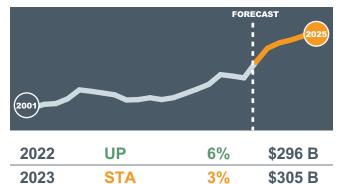


2024

refinancing activity.

#### **DRIVERS:**

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



	2025	UP	5%	\$333 B
_				
	The large	aging inventory	of homes and ar	nticipated rising
	rental rate	es continue to sug	ggest strong pen	t-up demand for
	home imp	rovement spendir	ng going into 2022	2. Demand, how-
	ever, is ex	pected to moderat	te under the cond	ditions of chang-

ing consumer needs in a slowly reopening economy, lower

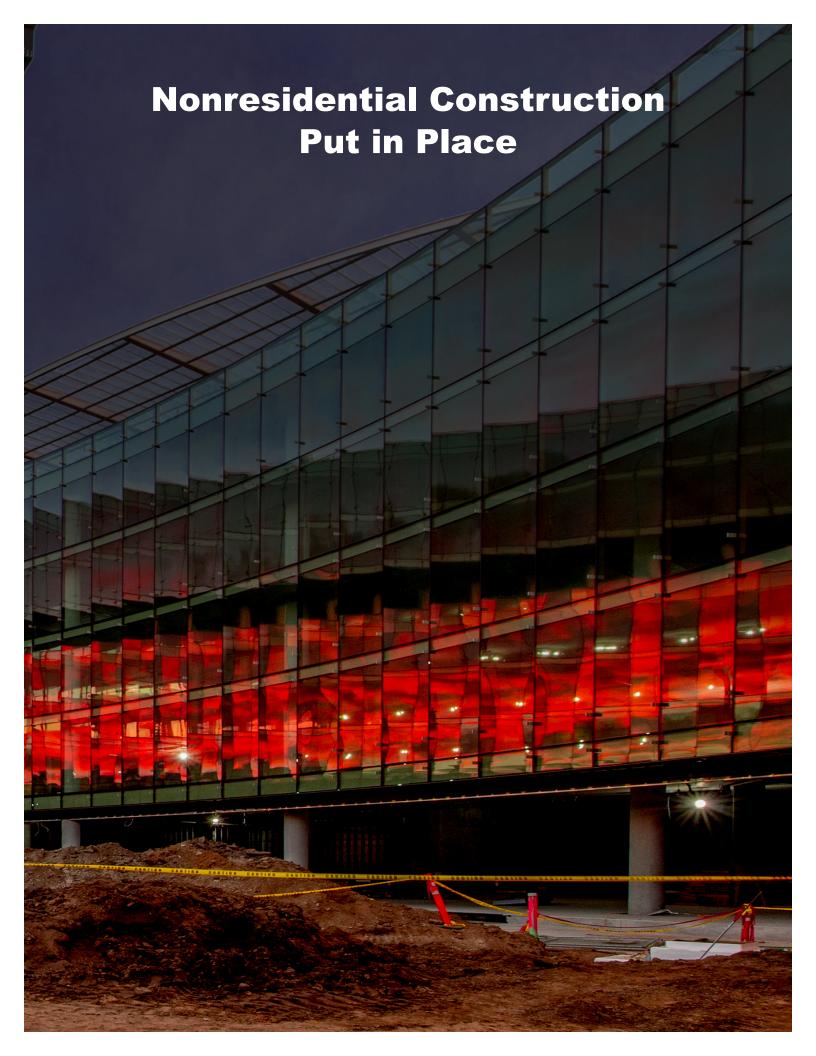
home price appreciation, fewer housing sales and declining

4%

\$318 B

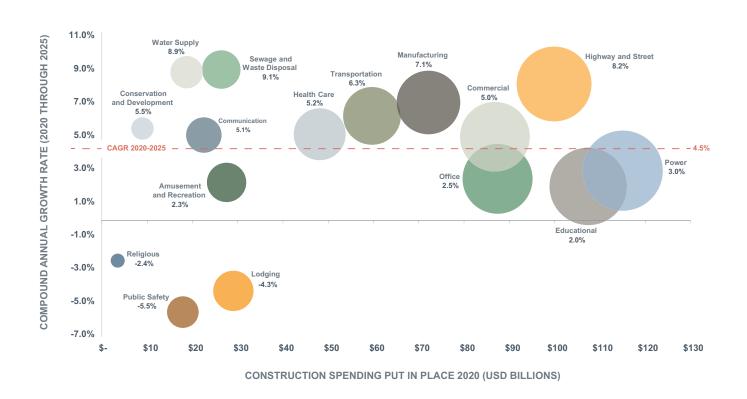
**STA** 

Improvements spending will remain aligned with single-family construction through most of the forecast period, upheld generally by investor interest in renovations tied to flips and/or rentals, given the changed pricing climate. Multifamily developments that repurpose lodging, retail and office structures will also become more common as the market continues to adjust for needs across those segments.





# Total Nonresidential Construction Spending Put in Place 2020 and Forecast Growth (2020 through 2025) by Construction Segment



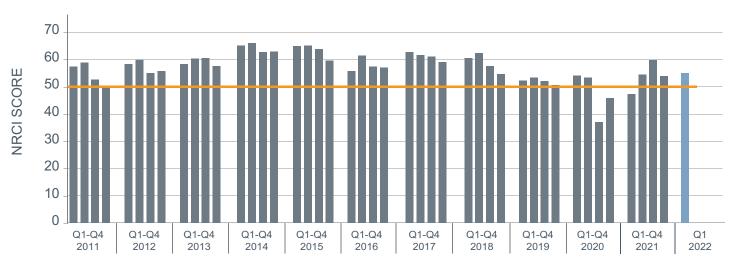
**SOURCE: FMI FORECAST Q1 2022** 



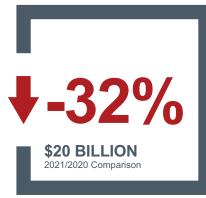
## Nonresidential Construction Index (NRCI) Q1 2011 to Q1 2022

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





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.

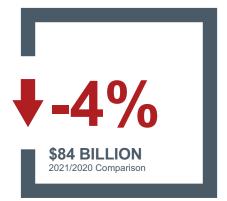


- Occupancy rate
- RevPAR
- Average daily rate
- Room starts



2022	DWN	-10%	\$18 B
2023	UP	7%	\$19 B
2024	UP	10%	\$21 B
2025	UP	11%	\$23 B

- Recent industry forecasts from STR Global and Tourism Economics suggest a near full recovery in 2022 of average daily rates (ADR) to 2019 levels with revenue per available room (RevPAR) anticipated to be fully recovered by 2023. Labor costs and overhead will continue to push ADRs higher into 2022 under constrained supply conditions while demand for leisure travel remains strong and business travel resumes a slow but steady rebound. Occupancy, however, will remain below pre-pandemic levels beyond 2023.
- Construction expenditures in lodging are expected to bottom through the first half of 2022 due to hotel owners and managers pausing or canceling projects over the past two years. Though travel demand started to recover mid-2021, spending was further challenged by high prices and a lack of available materials and/or equipment. As supply chain bottlenecks stabilize over the coming quarters, owners will be well positioned to resume spending in late 2022 and early 2023.
- Short-term spending in 2022 and 2023 will be largely directed into deferred maintenance and room renovations (e.g., flooring, bathrooms, high-speed internet), while a return to increased new construction and capacity expansion projects is expected beginning late 2023. Concurrently, competitive pressures from aggregator businesses such as Airbnb will continue to shape the industry.

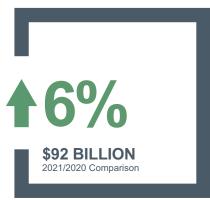


- Office vacancy rate
- Unemployment rate



2022	STA	0%	\$84 B
2023	UP	5%	\$88 B
2024	UP	6%	\$93 B
2025	UP	6%	\$99 B

- Corporate relocations are expected to accelerate in 2022. Texas was the top relocation market in 2021, with other southern states such as Tennessee, Georgia and Florida faring well due to attractive tax policy, the regulatory climate and talent availability. Relocations will continue as leases expire and companies increasingly adopt full-time remote working positions. Companies continue to rapidly exit California, given the state's high taxes and regulation.
- Remodeled and/or new office space is expected to include design elements maximizing flexibility and safety. Modular workstations, traffic flow studies and improved air filtration will be utilized across open workspaces and/or meeting rooms. However, offices will also become generally smaller due to higher construction costs and a shift to hybrid and remote working. Subscription aggregator business models offering shared luxury workspaces will win clients by offering flexibility.
- Demand for data centers will continue to uphold office investment, though spending will be challenged due to a lack of available equipment and other supply chain issues. Demand will remain elevated due to edge computing needs (i.e., the metaverse) and increased online security. High-growth data center markets include northern Virginia, Texas and Arizona. Additionally, access to clean energy will become increasingly important for these facilities over the years ahead.



- Retail sales
- CPI
- Income
- Home prices
- Housing starts



2022	UP	5%	\$97 B
2023	STA	3%	\$100 B
2024	STA	4%	\$104 B
2025	UP	6%	\$111 B

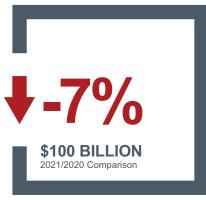
- A demand imbalance between consumer spending on goods and services due to pandemic-related shutdowns continues into 2022. This spike in strong demand for goods has imposed considerable needs on logistics infrastructure and transportation networks. However, e-commerce as a share of all retail sales continues to fall from its seasonally adjusted peak of 13.8% in the third quarter of 2020 to 13.0% in the third quarter of 2021.
- The data suggests that bricks-and-mortar retailers are winning consumers back. As a result, store openings in 2021 for the first time in five years exceeded store closings, according to Coresight Research. Dollar General, Dollar Tree, Five Below, Tractor Supply and Burlington all maintain substantial openings goals. Additionally, successful e-commerce retailers of all sizes have been drawn to low rents and opportunistic vacancies in high-traffic areas. Automation, robotics and hybrid sales platforms are anticipated to help solve labor needs.
- Commercial construction investment has largely been mixed through 2021 with high growth across warehouse and distribution, shopping centers, drug stores and building supply stores. Significant contraction has been realized across malls, food retailers and mini storage facilities

# \$50 BILLION 2021/2020 Comparison

- Population change
- Population change in ages 75 and up
- Uninsured population
- Government spending
- Nonresidential structure investment



- Heath care is the only institutional building segment to experience an increase in construction spending through 2021, driven by strong investment across hospital facilities. In many ways the pandemic has highlighted hospital capacity limitations across systems of all sizes, accelerating investment to address emergency scenarios.
- A shift in spending into hospitals and away from medial office, outpatient surgery centers and specialty care facilities will continue over the next 18 to 24 months. However, expect challenges and disruptions on current and forthcoming projects, based on supply chain uncertainty and staffing constraints. The absence of proposed Build Back Better funding in 2022 will further stall construction investment growth.
- Expect continued advancement and availability of technologies and services (e.g., wearable health tracking and telehealth) in the years ahead. Forthcoming internet of things (IoT) and 5G infrastructure are expected to drive disruption across facility needs, allowing for improved and increased in-home or remote care. The aging U.S. population will cause longer-term increases in health care construction across most markets.



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



2022	STA	1%	\$101 B
2023	UP	5%	\$106 B
2024	UP	6%	\$112 B
2025	UP	6%	\$119 B

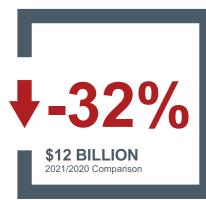
- Educational construction experienced a broad decline in investment through 2021 for both public and private owners and across K-12 and higher education facilities. Dormitory construction realized the largest declines in the segment, falling more than 20% on a year-over-year basis through the third quarter. The outlook for K-12 investment continues to be upheld by tax revenue and bond elections, but demographics will ultimately drive demand at the local and state levels. Birth rates through the pandemic have fallen, suggesting generally lower longer-term expansionary needs.
- Elementary and Secondary School Emergency Relief (ESSER) funds from the year prior have addressed many mechanical and building maintenance needs, but larger-scale renovations and reconstruction efforts have been commonly deferred. The absence of proposed Build Back Better funding in 2022 will further stall investment growth in the coming years.
- Higher education enrollments continue to disappoint and highlight a concerning trend in the wake of wide-scale labor shortages and higher living expenses. In 2021 undergraduate enrollments fell 3.5%, and since 2019, enrollments are down nearly 8%. The steepest declines were realized in the private, for-profit, four-year and public, two-year institutions. Over the past two years, community colleges have lost approximately 15% of students. Conversely, highly selective schools saw slight gains over 2019 enrollment levels.

# **↓** -14% \$3 BILLION 2021/2020 Comparison

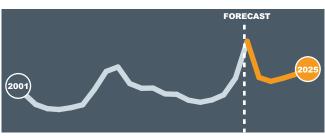
- GDP
- Population
- Income
- Personal savings

2001	FORECAS		2025
2022	DWN	-8%	\$3 B
2023	STA	2%	\$3 B
2024	STA	4%	\$3 B
2025	UP	5%	\$3 B

- The latest 2021 Gallup research shows that 47% of adult Americans consider themselves members of a church, the lowest level in the history of the poll spanning more than eight decades. Gallup's findings correlate with the long-running decline in religious construction investment since 2003. Additionally, recent in-person church attendance is roughly 30% to 50% lower than it was before the pandemic, according to Barna Group, a research firm that studies faith in the U.S.
- Construction investment is expected to continue to decline through most of the forecast period as donations and available funds are used in repurposing buildings for social use, housing and a reinvestment in community leaders. The trend over the past several decades highlights a shift from physical infrastructure to an emphasis on attracting and keeping members.
- Opportunities for renovations and/or acquisitions of vacant worship, lodging, office and retail space will become more practical and attractive over the coming years when compared to new construction or expansion projects.



- Population
- Government spending
- Incarceration rate
- Nonresidential structure investment



2022	DWN	-5%	\$12 B
2023	STA	4%	\$12 B
2024	UP	5%	\$13 B
2025	UP	7%	\$13 B

- State and local governments decreased construction investment across police and prisons in 2021. Concurrently, at least a dozen major cities passed historic homicide records (five of which were higher than records set in 2020). A rise in violent crime remains a concern for the coming years and supports expected reinvestment in new and/or expanded police facilities and prisons over the five-year forecast period.
- Recent demographic shifts, in addition to overcrowding and aging infrastructure, will continue to weigh on federal and state resources. The absence of proposed Build Back Better funding and ongoing supply chain issues will lead to various challenges and delays for near-term projects in planning.



- Income
- Personal savings rate
- Unemployment rate
- Employment



- COVID-19 activity through 2021 has kept consumers generally weary of large gatherings, such as conventions, sporting events and concerts, no matter their stance on vaccine mandates. Further, the casino industry saw strong domestic demand but was largely disrupted by a rise in online gaming and restricted access to important international customers (e.g., China) due to shutdowns.
- Sporting event attendance is down for many teams, but the average selling price per ticket is up. These conditions are expected to continue to challenge construction spending through the forecast period as there is a need for higher attendance to move forward with expansionary capital invest-
- Construction spending in theme parks, sports venues, fitness centers, and movie studios and theaters was down considerably through 2021. Conversely, investment has strengthened across public parks, neighborhood and social centers, and performing arts centers.

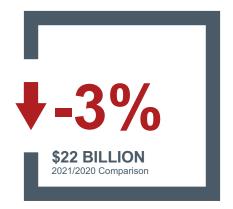
- Population
- Government spending
- Transportation funding

	FORECAST
	2025
(2001)	
	•

2022	STA	2%	\$58 B
2023	UP	9%	\$64 B
2024	UP	13%	\$72 B
2025	UP	13%	\$81 B

- Infrastructure Investment and Jobs Act (IIJA) funding allocates nearly \$78 billion over the next five years into the Surface Transportation Investment Act of 2021 (STIA-21), which is now a stand-alone federal multimodal transportation bill with nearly a 32% increase over prior funding levels. Significant programs include \$36 billion for rail infrastructure and more than \$28 billion toward multimodal and freight transportation. An additional \$25 billion of the IIJA will fund airport construction.
- The outlook for transportation remains mixed for 2022 as logistics and distribution channels continue to be strained, and consumer and business travel are hard to predict. The pandemic continues to dampen domestic and international travel and has created permanent losses in business travel over the forecast period. Travel providers are continually looking for ways to improve margins while meeting demand for domestic travel, which typically yields lower profits.
- Given a dramatic increase in funding levels from the IIJA, existing passenger rail and airport infrastructure will see significant near-term investment in renovations featuring automation, safety and sanitation. Expect to see a wave of larger strategic system expansions and megaprojects over the next 18 to 24 months.

#### COMMUNICATION



UP

UP

2024

2025

#### **DRIVERS:**

- Population
- Security and regulation standards
- Private investment
- Innovation and technology investment

\$27 B

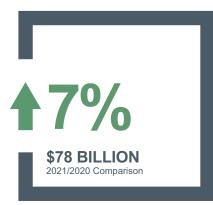
\$29 B

2001	<b>/</b>	FORE	2025
2022	STA	4%	\$23 B
2023	UP	7%	\$24 B

9%

9%

- The IIJA delivers \$65 billion in funding across various programs to help ensure broadband access and affordability is easily available across the U.S. to improve the ability to work, participate in school, access health care and remain connected. Similarly, most states have enacted legislation that will streamline regulations for the deployment of 5G small cells. The legislation primarily addresses applications, right of way access and caps on fees.
- The largest allocation of funds, or \$42 billion, is directed into the Department of Commerce's National Telecommunications and Information Administration (NTIA) for the deployment of state grants. Additionally, private activity bonds will now be eligible for future qualified deployment projects.
- Other IIJA broadband construction programs include nearly \$3 billion toward improved connectivity across low-income households, \$2 billion for loans and grants within the ReConnect Program at the Department of Agriculture, \$2 billion for the Tribal Broadband Connectivity Program, and \$1 billion for middle-mile infrastructure.

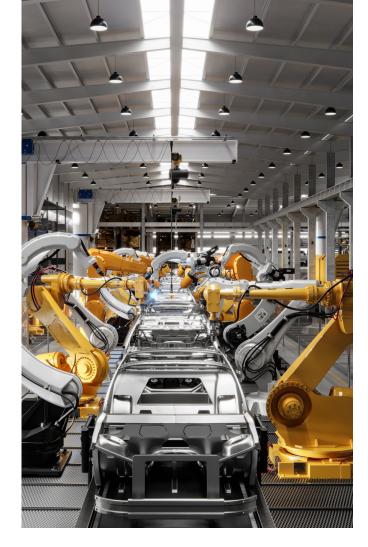


- PMI
- Industrial production
- Capacity utilization
- Durable goods orders
- Manufacturing inventories

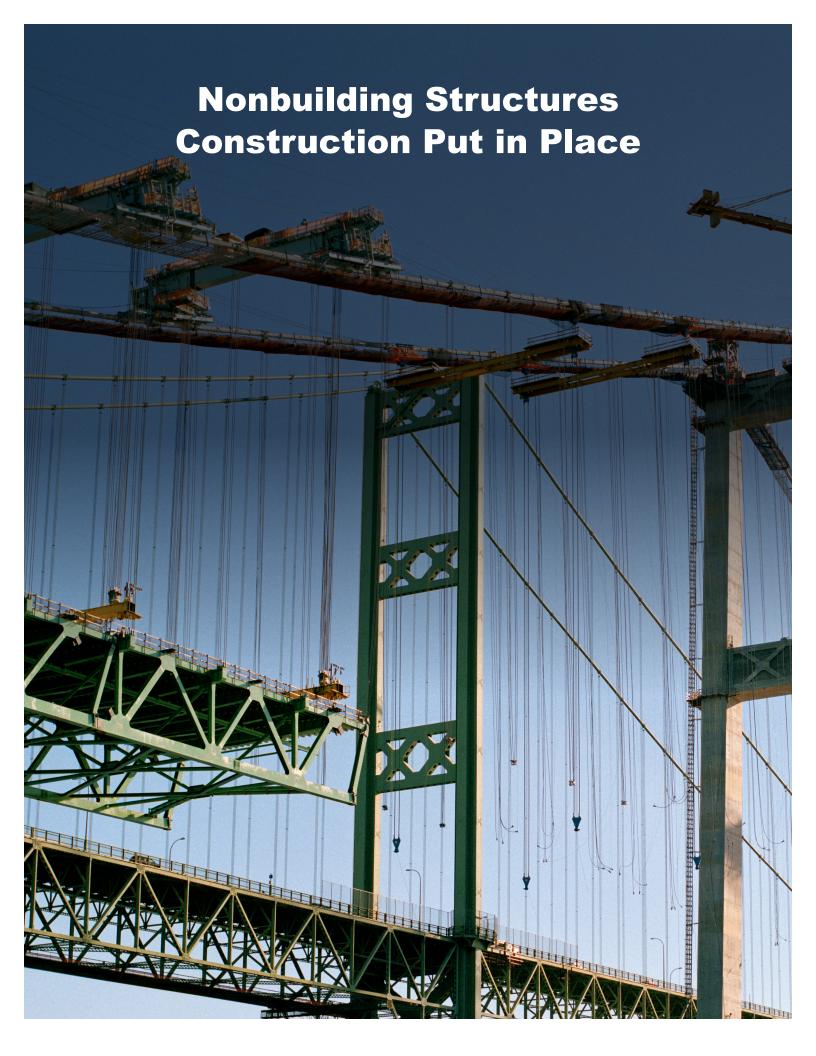
2001	2025

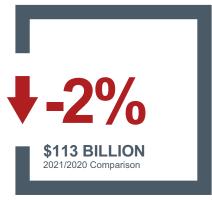
2022	UP	12%	\$87 B
2023	UP	9%	\$95 B
2024	UP	6%	\$101 B
2025	STA	1%	\$102 B

- Demand for goods has far outpaced demand for services through 2021, resulting in increased construction investment across food and beverage, semiconductors and electronics, nonmetallic minerals and fabricated metals. FMI's outlook on many components of manufacturing construction remains positive over the next five years. We anticipate an increased focus on building infrastructure to produce products and goods in the U.S. as well as tech-driven structural shifts across several industries (e.g., electrification of transportation equipment, energy storage, communications, etc.).
- U.S. dependence on international goods is at all-time highs, and supply chain challenges are expected to remain in place well into 2022. The result will lead to increased vertical integration across producers in efforts to control inputs. Also, continued investment into robotics and automation remains a difficult solution for broad-based industry labor constraints. International trade negotiations are expected to resurface as an important issue through midterm elections.



Significant forthcoming infrastructure investment tied to the IIJA and other environmental initiatives will drive demand for the manufacturing of domestic inputs and clean energy infrastructure (e.g., renewable generation components, electric vehicles, battery production, semiconductors, etc.). Concurrently, though chemical and petrochemicals will continue to be challenged through regulation and policy, anticipated high oil and gas prices will ultimately drive increased investment over the coming years.





- Population
- Industrial production
- Government spending

	FORECAST 2025
2001	

2022	UP	6%	\$119 B
2023	STA	3%	\$123 B
2024	STA	4%	\$127 B
2025	UP	5%	\$133 B

- After taking office, President Biden announced several aggressive policies reshaping the power industry under an executive order for the electric generation business to become carbonfree by 2035 and reach net-zero by 2050. Over the past year, the result has been a strengthened pipeline of renewable generation projects, increasing from 80% of planned capacity to nearly 90% of planned capacity over the next five years.
- Renewable generation continues to gain ground against other sources due to cost-competitive efficiency gains and growing regulatory pressures. Solar generation outpaces other renewables, with Texas, Ohio, Indiana and mountain region states representing a strong pipeline for future investment.
- The IIJA allocates \$65 billion into power investments and another \$7.5 billion into electric vehicle charging infrastructure. Electric grid investment will see the biggest gains with nearly \$28 billion for improving grid resilience and reliability.
- FMI's long-term outlook on microgrids and distributed generation is positive but faces near-term challenges from supply chain constraints, elevated costs and project delays. Similarly, energy storage remains an important investment needed to maximize value from renewables; but the industry faces significant competition, continued supply chain issues and limited lithium resources.

# 2% \$102 BILLION

- Population
- Government spending
- Nonresidential structure investment



2022	UP	7%	\$109 B
2023	UP	12%	\$122 B
2024	UP	12%	\$136 B
2025	UP	9%	\$148 B

- In total the IIJA allocates more than \$365 billion over the next five years toward various road and bridge programs. IIJA funding includes \$303 billion within the STRA-21 and an additional \$62 billion across general fund apportionments, heavily directed into bridge programs. Cumulative annual federal investment into road and bridges is expected to increase more than 50%, from \$46.4 billion in fiscal year 2021 to about \$70.2 billion in fiscal year 2022.
- Federal highway funding represented approximately 45% of road and bridge construction in 2021 and is expected to near 70% of construction put in place in 2022 and 2023. This significant jump in funding will reinforce and provide long-running stability to state and local capital programs.
- The federal government has provided context for the IIJA funds with a strong emphasis on highway maintenance and rehabilitation. Early funding is expected to favor smaller or shovel-ready projects over the next two years as states adjust to expanded budgets. Larger strategic projects, system expansions and bridge projects are expected beginning in 2023 and 2024. State preparedness for the rollout of new funding levels and grant programs will be mixed.

# **470/0 \$28 BILLION**2021/2020 Comparison

#### **DRIVERS:**

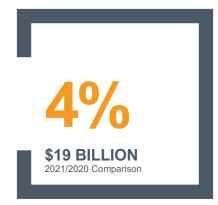
- Population
- Industrial production
- Government spending

	FORECAST
	2025
(2001)	

2022	UP	8%	\$31 B
2023	UP	10%	\$34 B
2024	UP	10%	\$37 B
2025	UP	10%	\$41 B

- Sewage and waste disposal and water supply experienced increased investment through 2021, primarily due to system expansion needs alongside growing communities and residential development. Much of this growth in construction investment is attributable to the lines, drains and pump stations needed for system renovations and expansions. Conversely, spending toward sewage and wastewater treatment plants has been down on a year-over-year basis.
- Increased funding tied to the IIJA represents the single largest investment in U.S. water infrastructure. More than \$50 billion will be allocated across safe drinking water (\$36 billion), clean water for communities (\$13 billion), and the protection of regional water and other related investments. The largest allocation of funds will be \$15 billion toward addressing and replacing an estimated 6 to 10 million lead water lines across the country.

#### **WATER SUPPLY**

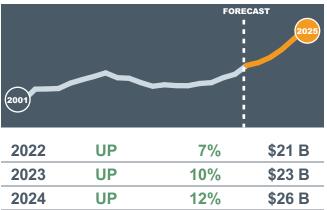


**UP** 

2025

#### DRIVERS:

- Population
- Industrial production
- Government spending



• Increased funding levels will be a welcomed transition as residential investment slows through the forecast period. New infrastructure funding will bolster long-term capital spending and continue to direct funds into lines versus pump stations or plant work. Most of the forthcoming \$50 billion in IIJA funds will be made available through the Drinking Water State Revolving Funds (DWSRFs).

11%

\$29 B

- Nearly half of the forthcoming funds for the clean water and drinking water programs (including the lead service line replacements) will be distributed in forgivable loans or grants. Additionally, through 2023, state match requirements have been dropped from 20% to 10%, and all match requirements have been eliminated for lead service replacements.
- The IIJA set aside \$8.3 billion for the Bureau of Reclamation to address western water infrastructure needs, including aged infrastructure, water storage, recycling and reuse, waterS-MART watershed programs and drought contingency plans.

#### **CONSERVATION AND DEVELOPMENT**



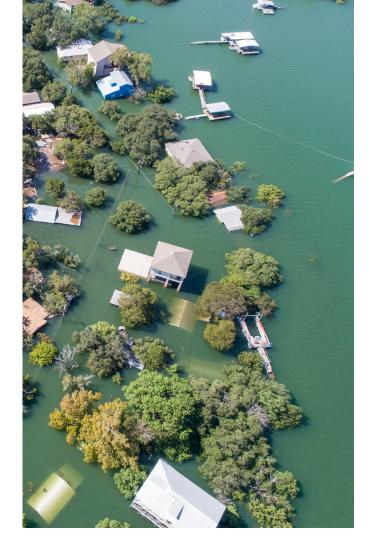
#### **DRIVERS:**

- Population
- Government spending



2022	UP	7%	\$9 B
2023	UP	11%	\$10 B
2024	UP	11%	\$11 B
2025	UP	10%	\$12 B

- Unites States Army Corps of Engineers (USACE) will have its highest annual budget of \$6.8 billion for its 2022 Civil Works program. Significant funding includes \$3.4 billion toward coastal navigation projects and \$1.7 billion for the Flood Risk Management program.
- IIJA funds targeting USACE resiliency add more than \$16 billion across harbors, navigation channels and coastal storm and flood mitigation, of which nearly \$12 billion will be directed toward construction. An additional \$5 billion is set aside for the Environmental Protection Agency (EPA) to help address brownfield and superfund sites.



■ Recent EPA regulatory efforts have focused on revising fuel efficiency standards for the reduction of greenhouse gas emissions. New EPA rules aim for a fleetwide 40 miles per gallon (mpg) average by 2026, up considerably from 32 mpg. This target coincides with Biden's request to have 50% of all new vehicles sold to be electric or plug-in hybrid models by 2030.

#### **Construction Put in Place Estimated for the United States**

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

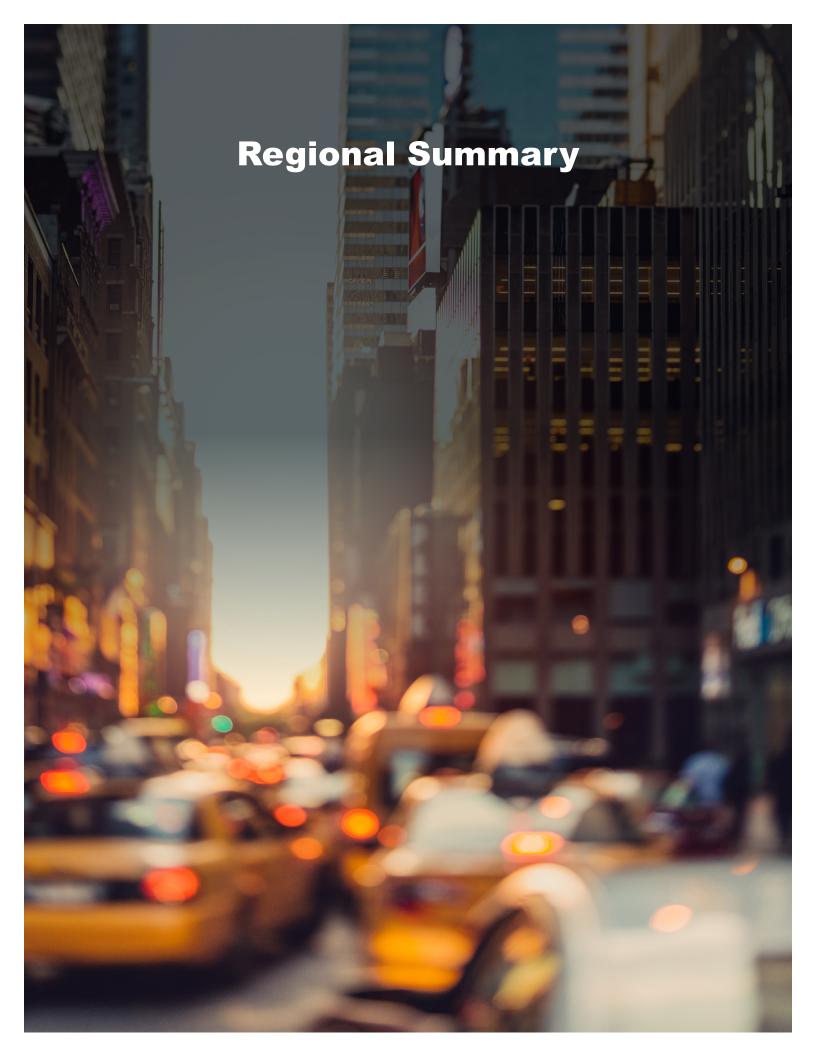
	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS	20.0									
Single-family	242,939	270,365	289,855	280,385	310,051	379,604	403,896	414,601	428,837	449,276
Multifamily	79,112	80,403	83,411	88,401	93,935	111,180	118,636	123,457	128,667	135,842
Improvements*	163,913	194,986	190,611	184,656	234,102	278,980	296,194	305,392	317,552	332,842
Total Residential	485,964	545,754	563,877	553,442	638,088	769,763	818,727	843,450	875,056	917,960
NONRESIDENTIAL BUILDINGS	403,304	343,734	303,077	333,442	030,000	703,703	010,727	043,430	073,030	317,300
Lodging	27,077	28,660	31,464	33,461	29,053	19,806	17,907	19,108	21,090	23,374
Office	67,907	68,685	76,662	88,724	87,399	84,248	84,446	88,324	93,261	98,836
Commercial	78,696	87,626	86,422		86,816	92,399	96,883	99,928		110,936
Health Care	40,574	43,120	43,450	84,345 46,263	48,113	50,027	52,930	57,436	104,338 60,038	61,911
Educational	91,629	96,685	101,210	108,952	107,435	99,899	101,060	105,899	112,032	118,826
						·				
Religious	3,752	3,586	3,499	3,730	3,500	3,008	2,764	2,814	2,936	3,094
Public Safety	8,177	8,539	9,353	12,012	17,878	12,118	11,505	11,971	12,554	13,447
Amusement and Recreation	23,652	26,569	28,068	30,416	27,550	25,730	25,611	27,193	29,227	30,827
Transportation	43,339	46,137	53,219	57,448	59,661	57,068	58,289	63,603	71,861	80,897
Communication	22,179	23,696	24,502	22,184	22,521	21,865	22,747	24,412	26,575	28,912
Manufacturing	79,633	70,682	72,508	80,978	72,143	77,517	86,986	94,860	100,747	101,590
Total Nonresidential Buildings	486,615	503,985	530,357	568,513	562,069	543,686	561,129	595,549	634,660	672,650
NONBUILDING STRUCTURES										
Power	112,067	95,951	99,569	117,960	115,048	113,159	119,467	122,888	127,337	133,252
Highway and Street	93,187	89,620	91,745	99,402	99,888	101,563	108,741	122,116	136,236	148,115
Sewage and Waste Disposal	24,151	22,901	23,931	26,119	26,379	28,237	30,507	33,557	36,981	40,713
Water Supply	13,940	14,168	15,477	16,397	18,727	19,476	20,861	22,998	25,752	28,695
Conservation and Development	7,745	7,464	8,229	9,207	8,955	8,062	8,615	9,592	10,633	11,713
Total Nonbuilding Structures	251,090	230,104	238,951	269,085	268,997	270,496	288,190	311,151	336,939	362,487
Total Put in Place	\$1,223,669	\$1,279,843	\$1,333,185	\$1,391,040	\$1,469,154	\$1,583,945	\$1,668,046	\$1,750,149	\$1,846,655	\$1,953,098

#### **Construction Put in Place Estimated for the United States**

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	10%	11%	7%	-3%	11%	22%	6%	3%	3%	5%
Multifamily	16%	2%	4%	6%	6%	18%	7%	4%	4%	6%
Improvements*	10%	19%	-2%	-3%	27%	19%	6%	3%	4%	5%
Total Residential	11%	12%	3%	-2%	15%	21%	6%	3%	4%	5%
NONRESIDENTIAL BUILDINGS										
Lodging	23%	6%	10%	6%	-13%	-32%	-10%	7%	10%	11%
Office	21%	1%	12%	16%	-1%	-4%	0%	5%	6%	6%
Commercial	17%	11%	-1%	-2%	3%	6%	5%	3%	4%	6%
Health Care	2%	6%	1%	6%	4%	4%	6%	9%	5%	3%
Educational	7%	6%	5%	8%	-1%	-7%	1%	5%	6%	6%
Religious	4%	-4%	-2%	7%	-6%	-14%	-8%	2%	4%	5%
Public Safety	-4%	4%	10%	28%	49%	-32%	-5%	4%	5%	7%
Amusement and Recreation	15%	12%	6%	8%	-9%	-7%	0%	6%	7%	5%
Transportation	-4%	6%	15%	8%	4%	-4%	2%	9%	13%	13%
Communication	2%	7%	3%	-9%	2%	-3%	4%	7%	9%	9%
Manufacturing	-4%	-11%	3%	12%	-11%	7%	12%	9%	6%	1%
Total Nonresidential Buildings	8%	4%	5%	7%	-1%	-3%	3%	6%	7%	6%
NONBUILDING STRUCTURES										
Power	1%	-14%	4%	18%	-2%	-2%	6%	3%	4%	5%
Highway and Street	2%	-4%	2%	8%	0%	2%	7%	12%	12%	9%
Sewage and Waste Disposal	-2%	-5%	4%	9%	1%	7%	8%	10%	10%	10%
Water Supply	4%	2%	9%	6%	14%	4%	7%	10%	12%	11%
Conservation and Development	0%	-4%	10%	12%	-3%	-10%	7%	11%	11%	10%
Total Nonbuilding Structures	1%	-8%	4%	13%	0%	1%	7%	8%	8%	8%
Total Put in Place	7%	5%	4%	4%	6%	8%	5%	5%	6%	6%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

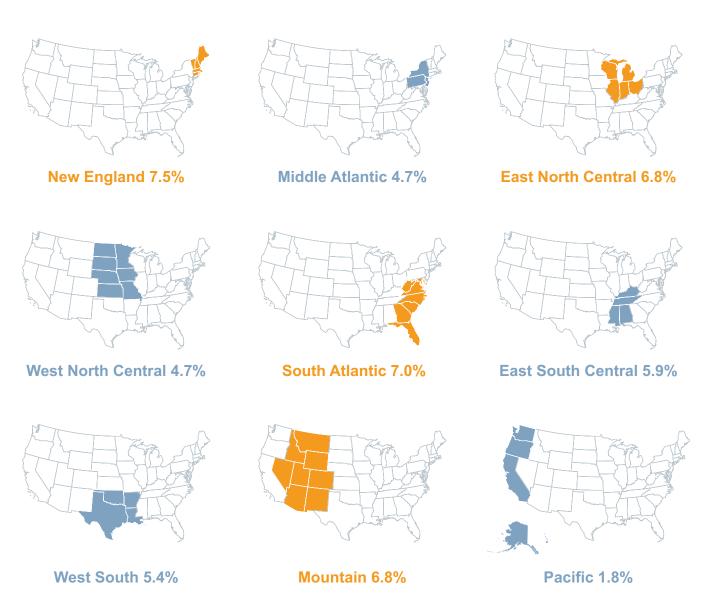


### **Regional Key Takeaways**

FMI expects the top four performing Census Divisions through the end of 2022 to include **New England** (7.5%), **South Atlantic** (7.0%), **East North Central** (6.8%) and **Mountain** (6.8%) states.

- The top areas for residential spending in 2022 are likely to include the South Atlantic, New England, West South Central and Mountain states.
- Nonresidential spending for 2022 is likely to be greatest in the East South Central, East North Central, New England and Mountain regions.
- The New England, East North Central, East South Central and South Atlantic states are likely to have the most spending on nonbuilding structures in 2022.

#### **Total Construction Projected Growth 2021-2022**



## **Regional Summary**

	Year	Total Residential	Total Nonresidential Buildings	Total Nonbuilding Structures	Total Construction Put in Place	Projected Growth 2021-2022
			New E	ngland		
st	2021	25,322	26,758	8,147	60,227	7.5%
ЭС	2022	27,424	27,969	9,331	64,723	7.5%
Northeast			Mid-A	tlantic		
	2021	71,078	74,047	24,195	169,320	4.7%
	2022	74,853	76,507	25,866	177,226	4.176
			East Nor	th Central		
+	2021	41,516	70,476	28,892	140,884	6.8%
Ne S	2022	44,137	75,073	31,218	150,428	0.0%
Midwest			West Nor	th Central		
	2021	89,603	47,741	22,795	160,139	4.7%
	2022	94,299	49,039	24,365	167,703	4.7%
			South A	Atlantic		
	2021	194,376	84,789	52,773	331,939	7.0%
	2022	211,691	86,665	56,660	355,016	7.0%
£			East Sou	th Central		
South	2021	25,320	24,146	12,781	62,247	5.9%
0)	2022	26,386	25,793	13,752	65,932	5.9%
			West Sou	th Central		
	2021	86,163	99,335	61,661	247,158	F 40/
	2022	92,984	102,569	64,968	260,521	5.4%
			Mou	ntain		
	2021	82,275	34,102	24,332	140,709	0.00/
st	2022	88,748	35,495	26,100	150,343	6.8%
West			Pad	cific		
	2021	154,110	82,293	34,919	271,322	4.00/
	2022	158,205	82,020	35,930	276,155	1.8%
			Total Uni	ted States		
U.S.	2021	\$769,763	\$543,687	\$270,495	\$1,583,945	5.3%
	2022	\$818,727	\$561,130	\$288,190	\$1,668,047	5.5%



#### Construction Put in Place Estimated for the New England Census Division

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	8,483	9,448	10,130	9,063	9,812	12,067	12,950	13,458	13,758	14,234
Multifamily	2,660	2,913	3,055	3,097	3,041	3,646	4,071	4,372	4,566	4,825
Improvements*	5,146	6,933	6,972	6,837	8,144	9,610	10,402	10,580	10,947	11,468
Total Residential	16,289	19,294	20,157	18,997	20,998	25,322	27,424	28,411	29,270	30,527
NONRESIDENTIAL BUILDINGS										
Lodging	1,305	1,670	1,965	2,082	1,838	1,338	1,139	1,211	1,353	1,537
Office	3,282	3,265	3,790	4,367	4,227	3,991	4,036	4,218	4,522	4,934
Commercial	3,849	4,669	4,507	4,124	4,336	4,594	4,751	5,065	5,465	5,781
Health Care	2,010	2,286	2,209	2,349	2,322	2,412	2,754	3,337	3,434	3,161
Educational	4,448	4,919	4,888	5,024	4,824	4,597	4,869	5,391	5,292	5,435
Religious	189	191	177	192	166	148	138	131	133	139
Public Safety	395	431	446	558	665	463	429	449	485	529
Amusement and Recreation	1,166	1,381	1,508	1,526	1,356	1,259	1,384	1,622	1,673	1,556
Transportation	2,085	2,334	2,848	3,103	3,139	3,088	3,227	3,487	3,877	4,384
Communication	1,073	1,260	1,252	1,129	1,151	1,126	1,185	1,321	1,507	1,748
Manufacturing	3,875	3,503	3,467	3,813	3,493	3,742	4,057	4,215	4,427	4,777
Total Nonresidential Buildings	23,677	25,908	27,056	28,267	27,516	26,758	27,969	30,448	32,168	33,981
NONBUILDING STRUCTURES										
Power	3,215	2,758	2,633	3,012	3,026	3,443	4,291	4,398	4,224	4,392
Highway and Street	2,872	2,823	2,714	2,965	3,115	3,057	3,282	3,785	4,249	4,635
Sewage and Waste Disposal	727	710	725	753	799	863	941	1,035	1,131	1,208
Water Supply	417	442	466	495	529	541	562	605	663	733
Conservation and Development	221	224	227	243	269	245	256	286	313	339
Total Nonbuilding Structures	7,452	6,958	6,765	7,467	7,738	8,147	9,331	10,108	10,580	11,306
Total Put in Place	\$47,417	\$52,160	\$53,979	\$54,731	\$56,252	\$60,227	\$64,723	\$68,966	\$72,018	\$75,815

#### Construction Put in Place Estimated for the New England Census Division

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	16%	11%	7%	-11%	8%	23%	7%	4%	2%	3%
Multifamily	7%	10%	5%	1%	-2%	20%	12%	7%	4%	6%
Improvements*	4%	35%	1%	-2%	19%	18%	8%	2%	3%	5%
Total Residential	10%	18%	4%	-6%	11%	21%	8%	4%	3%	4%
NONRESIDENTIAL BUILDINGS										
Lodging	13%	28%	18%	6%	-12%	-27%	-15%	6%	12%	14%
Office	11%	-1%	16%	15%	-3%	-6%	1%	5%	7%	9%
Commercial	9%	21%	-3%	-8%	5%	6%	3%	7%	8%	6%
Health Care	-4%	14%	-3%	6%	-1%	4%	14%	21%	3%	-8%
Educational	-1%	11%	-1%	3%	-4%	-5%	6%	11%	-2%	3%
Religious	0%	1%	-7%	8%	-14%	-11%	-7%	-5%	2%	4%
Public Safety	-12%	9%	4%	25%	19%	-30%	-8%	5%	8%	9%
Amusement and Recreation	8%	18%	9%	1%	-11%	-7%	10%	17%	3%	-7%
Transportation	-12%	12%	22%	9%	1%	-2%	5%	8%	11%	13%
Communication	-6%	17%	-1%	-10%	2%	-2%	5%	11%	14%	16%
Manufacturing	-11%	-10%	-1%	10%	-8%	7%	8%	4%	5%	8%
Total Nonresidential Buildings	-1%	9%	4%	4%	-3%	-3%	5%	9%	6%	6%
NONBUILDING STRUCTURES										
Power	-5%	-14%	-5%	14%	0%	14%	25%	3%	-4%	4%
Highway and Street	-3%	-2%	-4%	9%	5%	-2%	7%	15%	12%	9%
Sewage and Waste Disposal	-5%	-2%	2%	4%	6%	8%	9%	10%	9%	7%
Water Supply	3%	6%	5%	6%	7%	2%	4%	8%	10%	11%
Conservation and Development	-6%	2%	1%	7%	11%	-9%	4%	12%	10%	8%
Total Nonbuilding Structures	-4%	-7%	-3%	10%	4%	5%	15%	8%	5%	7%
Total Put in Place	2%	10%	3%	1%	3%	7%	7%	7%	4%	5%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



#### Construction Put in Place Estimated for the Middle Atlantic Census Division

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
	2010	2017	2010	2019	2020		2022	20231	20241	20231
RESIDENTIAL BUILDINGS										
Single-family	25,766	27,391	28,833	27,542	29,331	36,869	38,844	40,368	41,075	42,480
Multifamily	7,526	8,023	7,641	8,198	8,034	9,501	10,199	10,663	11,095	11,570
Improvements*	16,183	19,863	17,980	17,872	21,204	24,708	25,810	26,417	27,221	28,007
Total Residential	49,475	55,278	54,454	53,612	58,568	71,078	74,853	77,448	79,391	82,056
NONRESIDENTIAL BUILDINGS										
Lodging	3,814	3,822	4,468	4,708	3,722	2,435	2,226	2,393	2,692	3,182
Office	9,593	9,228	11,566	13,633	12,645	11,572	12,151	12,519	13,295	14,359
Commercial	11,251	12,752	12,702	12,083	12,448	13,484	14,465	14,855	15,316	16,433
Health Care	5,875	6,185	6,469	6,966	7,233	7,577	8,221	9,065	9,261	9,534
Educational	13,000	13,682	14,854	15,730	15,701	13,510	12,957	13,726	14,942	16,082
Religious	553	521	502	538	477	386	338	321	328	346
Public Safety	1,155	1,174	1,276	1,620	2,270	1,504	1,683	1,763	1,662	1,714
Amusement and Recreation	3,409	3,772	3,904	3,957	3,292	2,897	2,745	2,880	3,061	3,302
Transportation	6,941	7,258	8,654	9,335	9,370	8,412	8,792	10,029	11,899	13,773
Communication	3,136	3,412	3,530	3,333	3,175	3,023	3,249	3,561	3,932	4,297
Manufacturing	11,327	10,652	10,674	11,197	9,455	9,247	9,680	10,855	12,239	13,320
Total Nonresidential Buildings	70,053	72,458	78,600	83,102	79,789	74,047	76,507	81,966	88,627	96,342
NONBUILDING STRUCTURES										
Power	11,592	8,359	8,553	9,701	8,803	8,639	9,126	9,951	10,702	11,449
Highway and Street	10,353	8,809	9,230	9,981	9,854	10,125	10,847	12,164	13,890	15,148
Sewage and Waste Disposal	2,620	2,237	2,302	2,453	2,424	2,589	2,867	3,210	3,557	4,035
Water Supply	1,504	1,412	1,572	1,714	1,903	1,989	2,116	2,331	2,640	3,027
Conservation and Development	796	714	781	857	934	853	910	1,011	1,136	1,272
Total Nonbuilding Structures	26,865	21,532	22,437	24,705	23,918	24,195	25,866	28,666	31,925	34,931
Total Put in Place	\$146,392	\$149,268	\$155,491	\$161,418	\$162,274	\$169,320	\$177,226	\$188,080	\$199,943	\$213,329

#### Construction Put in Place Estimated for the Middle Atlantic Census Division

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	6%	6%	5%	-4%	6%	26%	5%	4%	2%	3%
Multifamily	-9%	7%	-5%	7%	-2%	18%	7%	5%	4%	4%
Improvements*	-10%	23%	-9%	-1%	19%	17%	4%	2%	3%	3%
Total Residential	-2%	12%	-1%	-2%	9%	21%	5%	3%	3%	3%
NONRESIDENTIAL BUILDINGS										
Lodging	21%	0%	17%	5%	-21%	-35%	-9%	7%	13%	18%
Office	20%	-4%	25%	18%	-7%	-8%	5%	3%	6%	8%
Commercial	18%	13%	0%	-5%	3%	8%	7%	3%	3%	7%
Health Care	4%	5%	5%	8%	4%	5%	9%	10%	2%	3%
Educational	7%	5%	9%	6%	0%	-14%	-4%	6%	9%	8%
Religious	8%	-6%	-4%	7%	-11%	-19%	-13%	-5%	2%	5%
Public Safety	-5%	2%	9%	27%	40%	-34%	12%	5%	-6%	3%
Amusement and Recreation	16%	11%	4%	1%	-17%	-12%	-5%	5%	6%	8%
Transportation	8%	5%	19%	8%	0%	-10%	5%	14%	19%	16%
Communication	1%	9%	3%	-6%	-5%	-5%	7%	10%	10%	9%
Manufacturing	-5%	-6%	0%	5%	-16%	-2%	5%	12%	13%	9%
Total Nonresidential Buildings	8%	3%	8%	6%	-4%	-7%	3%	7%	8%	9%
NONBUILDING STRUCTURES										
Power	-5%	-28%	2%	13%	-9%	-2%	6%	9%	8%	7%
Highway and Street	-2%	-15%	5%	8%	-1%	3%	7%	12%	14%	9%
Sewage and Waste Disposal	-5%	-15%	3%	7%	-1%	7%	11%	12%	11%	13%
Water Supply	3%	-6%	11%	9%	11%	5%	6%	10%	13%	15%
Conservation and Development	-6%	-10%	9%	10%	9%	-9%	7%	11%	12%	12%
Total Nonbuilding Structures	-3%	-20%	4%	10%	-3%	1%	7%	11%	11%	9%
Total Put in Place	3%	2%	4%	4%	1%	4%	5%	6%	6%	7%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



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

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
	2016	2017	2018	2019	2020	2021E		2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	12,449	13,751	14,458	13,763	15,051	18,628	19,985	20,832	22,156	23,394
Multifamily	5,198	4,833	4,916	5,243	5,682	6,935	7,534	7,962	8,248	8,484
Improvements*	9,375	10,729	10,256	10,247	12,895	15,953	16,618	15,986	16,439	17,443
Total Residential	27,022	29,313	29,630	29,253	33,627	41,516	44,137	44,780	46,843	49,321
NONRESIDENTIAL BUILDINGS										
Lodging	3,500	3,509	4,072	4,216	3,689	2,571	2,268	2,381	2,625	2,971
Office	8,771	8,362	9,653	10,512	10,622	10,762	11,189	11,919	12,484	13,191
Commercial	10,135	11,153	11,238	11,206	11,873	12,693	13,294	13,811	14,767	15,630
Health Care	5,209	5,535	5,667	6,031	6,193	6,531	6,895	7,825	8,298	8,544
Educational	11,823	12,110	12,806	13,233	13,073	11,882	12,055	12,816	13,792	14,556
Religious	479	446	427	465	462	403	375	388	409	431
Public Safety	1,056	1,069	1,078	1,352	1,856	1,203	1,146	1,191	1,327	1,505
Amusement and Recreation	3,040	3,325	3,415	3,625	3,153	2,863	2,911	3,078	3,284	3,566
Transportation	5,464	5,768	6,593	7,122	6,928	6,731	7,056	7,868	9,080	10,743
Communication	2,864	2,990	3,147	2,798	2,841	2,784	2,859	3,109	3,456	3,874
Manufacturing	10,268	8,733	9,588	10,626	10,205	12,053	15,026	17,151	17,854	15,661
Total Nonresidential Buildings	62,609	62,999	67,683	71,186	70,896	70,476	75,073	81,537	87,377	90,671
NONBUILDING STRUCTURES										
Power	11,637	10,503	10,639	12,052	11,508	11,879	13,048	13,663	14,609	15,663
Highway and Street	9,895	9,775	9,954	10,766	10,948	11,086	11,732	13,106	14,549	15,644
Sewage and Waste Disposal	2,493	2,377	2,653	2,878	2,796	2,972	3,234	3,629	3,974	4,306
Water Supply	1,399	1,438	1,545	1,654	1,987	2,106	2,281	2,574	2,958	3,235
Conservation and Development	783	767	830	924	905	850	923	1,066	1,235	1,380
Total Nonbuilding Structures	26,206	24,861	25,621	28,275	28,145	28,892	31,218	34,038	37,325	40,228
Total Put in Place	\$115,837	\$117,173	\$122,935	\$128,714	\$132,667	\$140,884	\$150,428	\$160,354	\$171,544	\$180,219

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

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	18%	10%	5%	-5%	9%	24%	7%	4%	6%	6%
Multifamily	59%	-7%	2%	7%	8%	22%	9%	6%	4%	3%
Improvements*	32%	14%	-4%	0%	26%	24%	4%	-4%	3%	6%
Total Residential	29%	8%	1%	-1%	15%	23%	6%	1%	5%	5%
NONRESIDENTIAL BUILDINGS										
Lodging	16%	0%	16%	4%	-13%	-30%	-12%	5%	10%	13%
Office	14%	-5%	15%	9%	1%	1%	4%	7%	5%	6%
Commercial	10%	10%	1%	0%	6%	7%	5%	4%	7%	6%
Health Care	-4%	6%	2%	6%	3%	5%	6%	13%	6%	3%
Educational	1%	2%	6%	3%	-1%	-9%	1%	6%	8%	6%
Religious	-3%	-7%	-4%	9%	-1%	-13%	-7%	4%	5%	5%
Public Safety	-9%	1%	1%	25%	37%	-35%	-5%	4%	11%	13%
Amusement and Recreation	8%	9%	3%	6%	-13%	-9%	2%	6%	7%	9%
Transportation	-12%	6%	14%	8%	-3%	-3%	5%	12%	15%	18%
Communication	-4%	4%	5%	-11%	2%	-2%	3%	9%	11%	12%
Manufacturing	-10%	-15%	10%	11%	-4%	18%	25%	14%	4%	-12%
Total Nonresidential Buildings	1%	1%	7%	5%	0%	-1%	7%	9%	7%	4%
NONBUILDING STRUCTURES										
Power	1%	-10%	1%	13%	-5%	3%	10%	5%	7%	7%
Highway and Street	-1%	-1%	2%	8%	2%	1%	6%	12%	11%	8%
Sewage and Waste Disposal	-4%	-5%	12%	8%	-3%	6%	9%	12%	10%	8%
Water Supply	2%	3%	7%	7%	20%	6%	8%	13%	15%	9%
Conservation and Development	-2%	-2%	8%	11%	-2%	-6%	9%	15%	16%	12%
Total Nonbuilding Structures	0%	-5%	3%	10%	0%	3%	8%	9%	10%	8%
Total Put in Place	6%	1%	5%	5%	3%	6%	7%	7%	7%	5%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



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

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2212	2015	2010	2012	2000	2024		2222	22245	
	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	30,672	33,151	32,289	30,770	34,822	41,552	43,756	43,066	45,219	47,773
Multifamily	10,545	9,356	9,165	9,993	10,294	12,960	14,018	14,622	15,840	16,943
Improvements*	21,188	24,104	22,430	22,032	28,898	35,091	36,525	37,677	39,708	41,713
Total Residential	62,406	66,611	63,883	62,796	74,014	89,603	94,299	95,366	100,767	106,429
NONRESIDENTIAL BUILDINGS										
Lodging	2,312	2,357	2,423	2,549	2,234	1,616	1,490	1,562	1,719	1,875
Office	5,795	5,562	6,557	7,984	8,020	7,979	8,109	8,407	8,536	8,754
Commercial	6,696	7,419	7,219	6,865	7,056	7,610	8,107	8,356	8,708	9,164
Health Care	3,441	3,611	3,611	3,803	3,912	4,106	4,405	4,898	5,024	4,793
Educational	7,811	8,055	8,470	8,786	8,822	8,170	8,253	8,586	9,097	9,731
Religious	317	297	285	308	299	269	252	259	271	283
Public Safety	698	718	827	1,020	1,223	926	857	896	971	1,043
Amusement and Recreation	2,009	2,212	2,259	2,442	2,206	2,105	2,144	2,294	2,590	2,541
Transportation	3,610	3,763	4,357	5,195	6,006	6,409	6,189	6,563	7,160	7,887
Communication	1,892	1,952	2,047	1,826	1,875	1,817	1,877	1,986	2,134	2,315
Manufacturing	6,784	6,147	6,534	7,255	6,354	6,735	7,357	8,184	8,782	8,987
Total Nonresidential Buildings	41,365	42,093	44,587	48,033	48,008	47,741	49,039	51,991	54,992	57,372
NONBUILDING STRUCTURES										
Power	9,911	8,597	8,886	10,493	10,626	10,067	10,611	11,409	12,334	13,148
Highway and Street	8,427	7,973	7,915	8,429	8,365	8,509	9,206	10,432	11,634	12,680
Sewage and Waste Disposal	2,123	1,987	1,988	2,055	1,999	2,173	2,395	2,728	3,000	3,253
Water Supply	1,191	1,202	1,233	1,277	1,506	1,424	1,505	1,743	1,971	2,200
Conservation and Development	667	641	674	723	721	621	649	739	838	929
Total Nonbuilding Structures	22,320	20,400	20,696	22,977	23,217	22,795	24,365	27,050	29,777	32,210
Total Put in Place	\$126,091	\$129,104	\$129,166	\$133,805	\$145,239	\$160,139	\$167,703	\$174,407	\$185,536	\$196,012

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

Change From Prior Year - Current Dollar Basis

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	14%	8%	-3%	-5%	13%	19%	5%	-2%	5%	6%
Multifamily	45%	-11%	-2%	9%	3%	26%	8%	4%	8%	7%
Improvements*	9%	14%	-7%	-2%	31%	21%	4%	3%	5%	5%
Total Residential	16%	7%	-4%	-2%	18%	21%	5%	1%	6%	6%
NONRESIDENTIAL BUILDINGS										
Lodging	22%	2%	3%	5%	-12%	-28%	-8%	5%	10%	9%
Office	21%	-4%	18%	22%	0%	-1%	2%	4%	2%	3%
Commercial	16%	11%	-3%	-5%	3%	8%	7%	3%	4%	5%
Health Care	1%	5%	0%	5%	3%	5%	7%	11%	3%	-5%
Educational	7%	3%	5%	4%	0%	-7%	1%	4%	6%	7%
Religious	3%	-6%	-4%	8%	-3%	-10%	-6%	3%	5%	5%
Public Safety	-4%	3%	15%	23%	20%	-24%	-7%	5%	8%	7%
Amusement and Recreation	14%	10%	2%	8%	-10%	-5%	2%	7%	13%	-2%
Transportation	-7%	4%	16%	19%	16%	7%	-3%	6%	9%	10%
Communication	2%	3%	5%	-11%	3%	-3%	3%	6%	7%	8%
Manufacturing	-5%	-9%	6%	11%	-12%	6%	9%	11%	7%	2%
Total Nonresidential Buildings	6%	2%	6%	8%	0%	-1%	3%	6%	6%	4%
NONBUILDING STRUCTURES										
Power	3%	-13%	3%	18%	1%	-5%	5%	8%	8%	7%
Highway and Street	0%	-5%	-1%	7%	-1%	2%	8%	13%	12%	9%
Sewage and Waste Disposal	-3%	-6%	0%	3%	-3%	9%	10%	14%	10%	8%
Water Supply	3%	1%	3%	4%	18%	-5%	6%	16%	13%	12%
Conservation and Development	0%	-4%	5%	7%	0%	-14%	4%	14%	13%	11%
Total Nonbuilding Structures	1%	-9%	1%	11%	1%	-2%	7%	11%	10%	8%
Total Put in Place	10%	2%	0%	4%	9%	10%	5%	4%	6%	6%

 $<sup>{}^*\</sup>text{Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.}$ 

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 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	53,226	59,880	65,256	65,853	75,395	95,964	103,356	105,322	108,663	112,839
Multifamily	15,872	16,723	19,769	21,866	24,258	29,688	33,368	35,008	35,930	37,115
·						-				
Improvements*	36,529	43,981	44,726	44,283	56,042	68,724	74,967	78,435	81,942	85,305
Total Residential	105,628	120,585	129,751	132,002	155,694	194,376	211,691	218,764	226,536	235,260
NONRESIDENTIAL BUILDINGS										
Lodging	4,120	4,787	5,101	5,428	4,565	2,948	2,605	2,739	2,946	3,195
Office	10,325	12,410	13,105	15,014	14,665	13,859	13,778	14,787	15,645	16,226
Commercial	11,927	13,756	13,464	13,522	14,108	15,208	16,100	16,512	17,215	18,105
Health Care	6,127	6,630	6,461	6,946	7,166	7,325	7,654	8,024	8,402	9,027
Educational	13,916	14,953	15,367	16,769	16,427	15,459	15,692	16,299	17,109	18,115
Religious	564	550	542	583	550	502	483	496	514	537
Public Safety	1,243	1,320	1,348	1,770	2,721	1,801	1,676	1,780	1,918	2,084
Amusement and Recreation	3,577	4,103	4,339	4,812	4,510	4,290	4,188	4,435	4,728	5,178
Transportation	6,429	6,982	7,444	8,103	8,711	8,179	8,443	9,205	10,427	11,699
Communication	3,372	3,689	3,828	3,595	3,730	3,607	3,708	3,959	4,286	4,722
Manufacturing	12,086	10,789	11,047	12,021	10,634	11,611	12,337	12,033	11,687	11,363
Total Nonresidential Buildings	73,686	79,967	82,046	88,563	87,786	84,789	86,665	90,269	94,877	100,252
NONBUILDING STRUCTURES										
Power	20,298	19,373	19,567	23,407	22,653	23,745	25,340	23,360	21,909	22,350
Highway and Street	17,869	17,009	17,273	18,687	18,954	19,198	20,709	23,608	26,299	28,458
Sewage and Waste Disposal	4,501	4,321	4,356	4,697	4,733	5,089	5,466	5,903	6,494	7,206
Water Supply	2,524	2,611	2,661	2,752	3,212	3,443	3,749	4,087	4,544	5,095
Conservation and Development	1,415	1,395	1,510	1,684	1,579	1,299	1,395	1,527	1,682	1,883
Total Nonbuilding Structures	46,607	44,709	45,366	51,226	51,131	52,773	56,660	58,484	60,929	64,994
Total Put in Place	\$225,920	\$245,260	\$257,163	\$271,791	\$294,611	\$331,939	\$355,016	\$367,518	\$382,342	\$400,506

#### Construction Put in Place Estimated for the South Atlantic Census Division

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	12%	13%	9%	1%	14%	27%	8%	2%	3%	4%
Multifamily	10%	5%	18%	11%	11%	22%	12%	5%	3%	3%
Improvements*	14%	20%	2%	-1%	27%	23%	9%	5%	4%	4%
Total Residential	12%	14%	8%	2%	18%	25%	9%	3%	4%	4%
NONRESIDENTIAL BUILDINGS										
Lodging	35%	16%	7%	6%	-16%	-35%	-12%	5%	8%	8%
Office	33%	20%	6%	15%	-2%	-5%	-1%	7%	6%	4%
Commercial	28%	15%	-2%	0%	4%	8%	6%	3%	4%	5%
Health Care	11%	8%	-3%	7%	3%	2%	4%	5%	5%	7%
Educational	17%	7%	3%	9%	-2%	-6%	2%	4%	5%	6%
Religious	13%	-2%	-2%	8%	-6%	-9%	-4%	3%	4%	5%
Public Safety	5%	6%	2%	31%	54%	-34%	-7%	6%	8%	9%
Amusement and Recreation	25%	15%	6%	11%	-6%	-5%	-2%	6%	7%	10%
Transportation	3%	9%	7%	9%	8%	-6%	3%	9%	13%	12%
Communication	12%	9%	4%	-6%	4%	-3%	3%	7%	8%	10%
Manufacturing	5%	-11%	2%	9%	-12%	9%	6%	-2%	-3%	-3%
Total Nonresidential Buildings	17%	9%	3%	8%	-1%	-3%	2%	4%	5%	6%
NONBUILDING STRUCTURES										
Power	11%	-5%	1%	20%	-3%	5%	7%	-8%	-6%	2%
Highway and Street	12%	-5%	2%	8%	1%	1%	8%	14%	11%	8%
Sewage and Waste Disposal	9%	-4%	1%	8%	1%	8%	7%	8%	10%	11%
Water Supply	15%	3%	2%	3%	17%	7%	9%	9%	11%	12%
Conservation and Development	12%	-1%	8%	12%	-6%	-18%	7%	9%	10%	12%
Total Nonbuilding Structures	11%	-4%	1%	13%	0%	3%	7%	3%	4%	7%
Total Put in Place	14%	9%	5%	6%	8%	13%	7%	4%	4%	5%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



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

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

		2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDE	ENTIAL BUILDINGS										
Si	ingle-family	7,776	8,472	9,060	8,895	10,485	12,827	13,325	13,597	14,020	14,703
М	lultifamily	2,415	2,259	2,234	2,327	2,486	3,075	3,344	3,469	3,667	3,942
In	nprovements*	5,469	6,293	6,158	5,984	7,926	9,418	9,718	10,073	10,484	10,992
Total R	esidential	15,660	17,024	17,452	17,206	20,897	25,320	26,386	27,139	28,171	29,637
NONRE	SIDENTIAL BUILDINGS										
Lo	odging	1,126	1,143	1,262	1,311	1,163	732	754	896	1,050	1,103
0	ffice	2,823	2,697	3,199	3,802	3,871	4,558	4,768	4,564	4,689	4,912
C	ommercial	3,262	3,597	3,456	3,590	3,748	4,191	4,512	4,393	4,115	4,296
Н	ealth Care	1,676	1,751	1,773	1,934	1,893	2,009	2,318	2,417	2,257	2,202
E	ducational	3,805	3,905	4,174	4,498	4,261	3,898	3,868	4,146	4,500	4,787
R	eligious	154	144	139	150	146	129	119	113	117	121
P	ublic Safety	340	345	359	446	715	441	383	393	426	483
A	musement and Recreation	978	1,072	1,114	1,251	1,166	1,132	1,212	1,379	1,646	1,511
Tr	ransportation	1,759	1,825	1,925	2,019	2,129	2,029	1,997	2,159	2,376	2,683
C	ommunication	922	955	985	845	856	831	868	917	970	1,035
M	anufacturing	3,305	2,816	3,353	4,059	3,458	4,196	4,996	5,500	5,728	5,438
Total N	onresidential Buildings	20,151	20,250	21,738	23,904	23,406	24,146	25,793	26,877	27,874	28,572
NONBL	JILDING STRUCTURES										
P	ower	5,222	4,304	4,291	5,122	5,279	5,431	5,906	6,208	6,048	5,793
Н	ighway and Street	4,676	4,381	4,498	4,768	4,734	4,811	5,095	5,596	6,283	6,759
S	ewage and Waste Disposal	1,119	1,036	1,056	1,173	1,195	1,292	1,418	1,544	1,669	1,777
W	ater Supply	628	627	650	716	840	896	964	1,060	1,175	1,292
С	onservation and Development	351	334	368	418	392	352	369	389	415	451
Total N	onbuilding Structures	11,997	10,683	10,864	12,196	12,440	12,781	13,752	14,796	15,589	16,073
Total P	ut in Place	\$47,808	\$47,956	\$50,054	\$53,306	\$56,743	\$62,247	\$65,932	\$68,812	\$71,634	\$74,282

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

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	12%	9%	7%	-2%	18%	22%	4%	2%	3%	5%
Multifamily	25%	-6%	-1%	4%	7%	24%	9%	4%	6%	8%
Improvements*	16%	15%	-2%	-3%	32%	19%	3%	4%	4%	5%
Total Residential	15%	9%	3%	-1%	21%	21%	4%	3%	4%	5%
NONRESIDENTIAL BUILDINGS										
Lodging	11%	1%	10%	4%	-11%	-37%	3%	19%	17%	5%
Office	9%	-4%	19%	19%	2%	18%	5%	-4%	3%	5%
Commercial	5%	10%	-4%	4%	4%	12%	8%	-3%	-6%	4%
Health Care	-9%	4%	1%	9%	-2%	6%	15%	4%	-7%	-2%
Educational	-4%	3%	7%	8%	-5%	-9%	-1%	7%	9%	6%
Religious	-7%	-7%	-3%	7%	-3%	-11%	-8%	-5%	3%	4%
Public Safety	-14%	1%	4%	24%	60%	-38%	-13%	3%	9%	13%
Amusement and Recreation	3%	10%	4%	12%	-7%	-3%	7%	14%	19%	-8%
Transportation	-16%	4%	6%	5%	5%	-5%	-2%	8%	10%	13%
Communication	-8%	4%	3%	-14%	1%	-3%	4%	6%	6%	7%
Manufacturing	-14%	-15%	19%	21%	-15%	21%	19%	10%	4%	-5%
Total Nonresidential Buildings	-4%	0%	7%	10%	-2%	3%	7%	4%	4%	3%
NONBUILDING STRUCTURES										
Power	-4%	-18%	0%	19%	3%	3%	9%	5%	-3%	-4%
Highway and Street	-1%	-6%	3%	6%	-1%	2%	6%	10%	12%	8%
Sewage and Waste Disposal	-9%	-7%	2%	11%	2%	8%	10%	9%	8%	6%
Water Supply	-3%	0%	4%	10%	17%	7%	8%	10%	11%	10%
Conservation and Development	-6%	-5%	10%	14%	-6%	-10%	5%	5%	7%	9%
Total Nonbuilding Structures	-3%	-11%	2%	12%	2%	3%	8%	8%	5%	3%
Total Put in Place	2%	0%	4%	6%	6%	10%	6%	4%	4%	4%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



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

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	25,779	28,462	30,224	30,970	36,455	47,900	51,292	54,207	57,041	62,233
Multifamily	7,912	7,928	7,629	8,131	8,824	11,009	12,033	12,788	13,620	15,034
Improvements*	14,271	16,676	15,627	15,379	20,333	27,254	29,659	31,165	32,896	35,380
Total Residential	47,962	53,066	53,479	54,479	65,612	86,163	92,984	98,161	103,558	112,647
NONRESIDENTIAL BUILDINGS										
Lodging	4,871	5,041	5,131	5,628	5,368	4,016	3,722	3,982	4,398	4,763
Office	12,207	11,897	12,935	14,987	15,837	15,041	14,812	15,683	16,768	18,075
Commercial	14,105	15,163	14,711	14,009	14,361	15,075	15,761	16,430	17,340	18,625
Health Care	7,249	7,650	7,734	8,243	8,638	8,971	9,279	9,770	10,383	11,021
Educational	16,454	17,400	17,900	19,837	19,559	18,962	19,424	20,193	21,298	22,437
Religious	667	635	633	704	645	558	526	559	597	644
Public Safety	1,470	1,520	1,690	2,224	3,603	2,496	2,400	2,496	2,623	2,755
Amusement and Recreation	4,231	4,731	5,009	5,610	5,364	5,201	5,306	5,562	5,889	6,287
Transportation	7,604	8,050	9,483	10,091	10,796	10,510	10,706	11,494	12,740	13,978
Communication	3,986	4,218	4,552	4,076	4,284	4,180	4,337	4,638	4,998	5,230
Manufacturing	14,291	12,425	12,606	14,955	13,643	14,324	16,296	17,818	19,185	20,038
Total Nonresidential Buildings	87,135	88,730	92,384	100,363	102,099	99,335	102,569	108,624	116,220	123,852
NONBUILDING STRUCTURES										
Power	28,773	23,406	25,197	30,640	29,668	27,471	28,210	29,451	31,265	32,895
Highway and Street	17,536	17,667	17,875	19,264	19,423	19,903	21,425	24,005	26,703	29,451
Sewage and Waste Disposal	5,350	4,892	5,101	5,795	6,356	7,026	7,559	8,118	9,007	10,089
Water Supply	3,567	3,517	3,932	4,205	4,722	4,890	5,248	5,763	6,327	6,948
Conservation and Development	1,997	1,875	2,076	2,391	2,495	2,372	2,527	2,813	3,086	3,325
Total Nonbuilding Structures	57,223	51,357	54,181	62,295	62,664	61,661	64,968	70,151	76,387	82,707
Total Put in Place	\$192,320	\$193,153	\$200,044	\$217,137	\$230,375	\$247,158	\$260,521	\$276,936	\$296,164	\$319,206

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

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	1%	10%	6%	2%	18%	31%	7%	6%	5%	9%
Multifamily	-3%	0%	-4%	7%	9%	25%	9%	6%	7%	10%
Improvements*	2%	17%	-6%	-2%	32%	34%	9%	5%	6%	8%
Total Residential	1%	11%	1%	2%	20%	31%	8%	6%	5%	9%
NONRESIDENTIAL BUILDINGS										
Lodging	26%	3%	2%	10%	-5%	-25%	-7%	7%	10%	8%
Office	24%	-3%	9%	16%	6%	-5%	-2%	6%	7%	8%
Commercial	20%	8%	-3%	-5%	3%	5%	5%	4%	6%	7%
Health Care	4%	6%	1%	7%	5%	4%	3%	5%	6%	6%
Educational	9%	6%	3%	11%	-1%	-3%	2%	4%	5%	5%
Religious	5%	-5%	0%	11%	-8%	-13%	-6%	6%	7%	8%
Public Safety	-2%	3%	11%	32%	62%	-31%	-4%	4%	5%	5%
Amusement and Recreation	17%	12%	6%	12%	-4%	-3%	2%	5%	6%	7%
Transportation	-4%	6%	18%	6%	7%	-3%	2%	7%	11%	10%
Communication	4%	6%	8%	-10%	5%	-2%	4%	7%	8%	5%
Manufacturing	-2%	-13%	1%	19%	-9%	5%	14%	9%	8%	4%
Total Nonresidential Buildings	9%	2%	4%	9%	2%	-3%	3%	6%	7%	7%
NONBUILDING STRUCTURES										
Power	0%	-19%	8%	22%	-3%	-7%	3%	4%	6%	5%
Highway and Street	0%	1%	1%	8%	1%	2%	8%	12%	11%	10%
Sewage and Waste Disposal	-3%	-9%	4%	14%	10%	11%	8%	7%	11%	12%
Water Supply	3%	-1%	12%	7%	12%	4%	7%	10%	10%	10%
Conservation and Development	0%	-6%	11%	15%	4%	-5%	7%	11%	10%	8%
Total Nonbuilding Structures	0%	-10%	5%	15%	1%	-2%	5%	8%	9%	8%
Total Put in Place	4%	0%	4%	9%	6%	7%	5%	6%	7%	8%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



#### **Construction Put in Place Estimated for the Mountain Census Division**

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	22,035	25,932	29,201	28,008	31,405	39,956	43,302	45,476	47,144	49,556
Multifamily	8,634	9,691	10,204	10,306	10,822	12,974	13,699	13,925	14,193	15,099
Improvements*	16,435	20,076	20,290	19,333	24,571	29,345	31,747	32,544	33,321	34,509
Total Residential	47,104	55,700	59,695	57,648	66,798	82,275	88,748	91,946	94,658	99,164
NONRESIDENTIAL BUILDINGS										
Lodging	1,734	1,848	2,135	2,252	1,923	1,273	1,142	1,220	1,340	1,512
Office	4,346	4,363	4,787	5,244	5,139	4,826	4,894	5,357	5,968	6,292
Commercial	5,021	5,819	5,862	5,346	5,193	5,379	5,493	5,548	5,753	6,023
Health Care	2,581	2,832	2,887	2,986	3,302	3,556	3,657	3,958	4,413	4,524
Educational	5,858	6,318	6,683	7,361	7,198	6,734	6,947	7,275	7,783	8,485
Religious	238	233	234	257	242	213	196	192	195	200
Public Safety	523	558	631	789	1,115	765	704	738	794	854
Amusement and Recreation	1,506	1,751	2,059	2,323	1,984	1,812	1,740	1,838	1,992	2,200
Transportation	2,707	2,952	3,510	3,688	4,017	3,809	3,879	4,229	4,878	5,288
Communication	1,419	1,479	1,484	1,325	1,345	1,311	1,358	1,433	1,537	1,649
Manufacturing	5,088	4,556	4,494	4,928	4,042	4,425	5,484	6,296	6,697	6,930
Total Nonresidential Buildings	31,020	32,709	34,766	36,498	35,501	34,102	35,495	38,084	41,351	43,959
NONBUILDING STRUCTURES										
Power	9,094	8,108	8,465	10,016	10,008	10,098	10,968	12,176	13,371	13,928
Highway and Street	8,363	8,301	8,381	8,850	8,846	8,979	9,519	10,747	11,893	12,727
Sewage and Waste Disposal	2,107	2,111	2,222	2,408	2,563	2,796	3,023	3,366	3,690	3,947
Water Supply	1,182	1,277	1,482	1,550	1,711	1,781	1,834	1,922	2,180	2,481
Conservation and Development	662	681	796	848	736	678	757	867	951	1,052
Total Nonbuilding Structures	21,408	20,478	21,347	23,671	23,864	24,332	26,100	29,078	32,086	34,136
Total Put in Place	\$99,531	\$108,888	\$115,808	\$117,818	\$126,164	\$140,709	\$150,343	\$159,108	\$168,095	\$177,259

#### Construction Put in Place Estimated for the Mountain Census Division

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	12%	18%	13%	-4%	12%	27%	8%	5%	4%	5%
Multifamily	50%	12%	5%	1%	5%	20%	6%	2%	2%	6%
Improvements*	26%	22%	1%	-5%	27%	19%	8%	3%	2%	4%
Total Residential	22%	18%	7%	-3%	16%	23%	8%	4%	3%	5%
NONRESIDENTIAL BUILDINGS										
Lodging	24%	7%	15%	5%	-15%	-34%	-10%	7%	10%	13%
Office	23%	0%	10%	10%	-2%	-6%	1%	9%	11%	5%
Commercial	18%	16%	1%	-9%	-3%	4%	2%	1%	4%	5%
Health Care	3%	10%	2%	3%	11%	8%	3%	8%	12%	3%
Educational	8%	8%	6%	10%	-2%	-6%	3%	5%	7%	9%
Religious	4%	-2%	0%	10%	-6%	-12%	-8%	-2%	1%	2%
Public Safety	-3%	7%	13%	25%	41%	-31%	-8%	5%	8%	8%
Amusement and Recreation	16%	16%	18%	13%	-15%	-9%	-4%	6%	8%	10%
Transportation	-5%	9%	19%	5%	9%	-5%	2%	9%	15%	8%
Communication	3%	4%	0%	-11%	1%	-2%	4%	5%	7%	7%
Manufacturing	-3%	-10%	-1%	10%	-18%	9%	24%	15%	6%	3%
Total Nonresidential Buildings	8%	5%	6%	5%	-3%	-4%	4%	7%	9%	6%
NONBUILDING STRUCTURES										
Power	-4%	-11%	4%	18%	0%	1%	9%	11%	10%	4%
Highway and Street	2%	-1%	1%	6%	0%	2%	6%	13%	11%	7%
Sewage and Waste Disposal	-2%	0%	5%	8%	6%	9%	8%	11%	10%	7%
Water Supply	4%	8%	16%	5%	10%	4%	3%	5%	13%	14%
Conservation and Development	1%	3%	17%	7%	-13%	-8%	12%	15%	10%	11%
Total Nonbuilding Structures	-1%	-4%	4%	11%	1%	2%	7%	11%	10%	6%
Total Put in Place	12%	9%	6%	2%	7%	12%	7%	6%	6%	5%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



#### Construction Put in Place Estimated for the Pacific Census Division

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

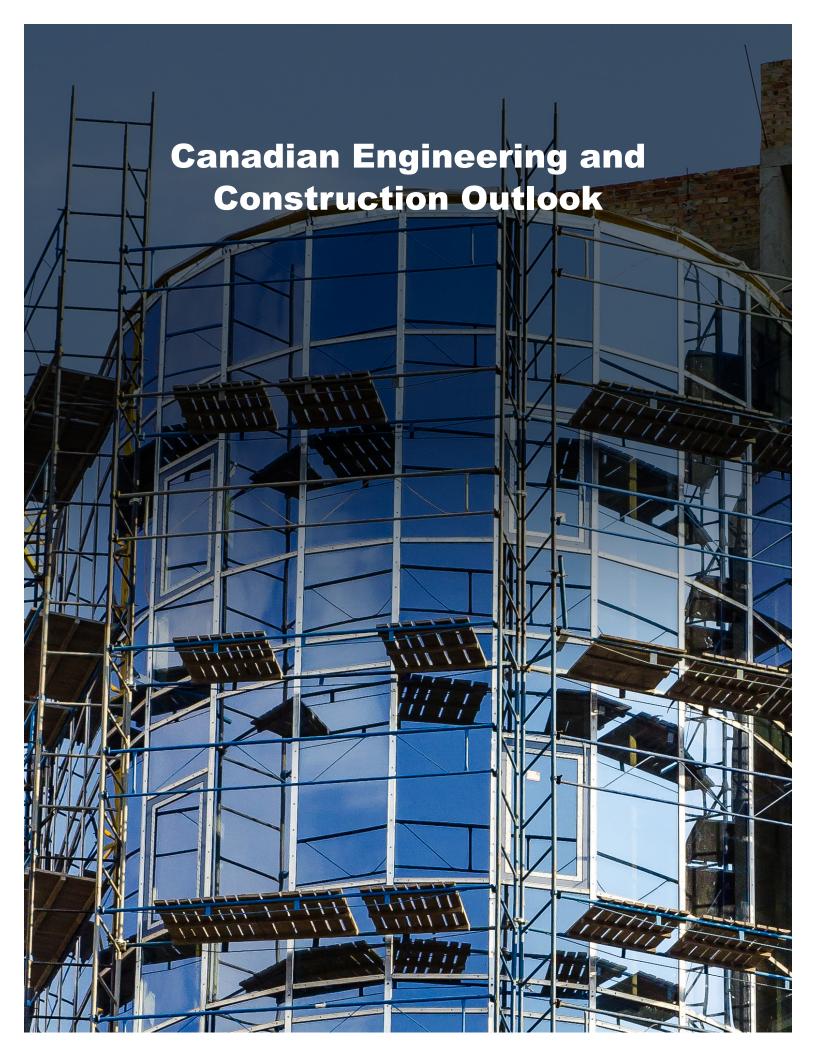
	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	56,755	63,877	70,403	65,520	67,296	73,840	77,086	78,275	79,761	82,063
Multifamily	18,350	18,676	18,799	19,239	20,494	21,392	20,371	20,647	21,507	22,830
Improvements*	39,315	46,330	46,174	42,690	54,090	58,879	60,749	62,514	64,594	68,026
Total Residential	114,419	128,884	135,376	127,449	141,880	154,110	158,205	161,436	165,863	172,920
NONRESIDENTIAL BUILDINGS										
Lodging	4,295	4,485	4,908	5,286	4,551	2,878	2,563	2,723	2,967	3,235
Office	10,766	10,902	11,069	13,181	12,373	11,661	10,709	10,870	11,353	12,093
Commercial	12,449	13,298	13,264	13,600	13,694	14,165	14,400	14,957	15,660	16,878
Health Care	6,406	6,641	6,638	7,006	7,452	7,540	7,748	8,143	8,567	9,105
Educational	14,515	15,343	16,068	17,715	17,569	16,687	16,994	17,468	18,219	19,197
Religious	591	569	560	534	514	400	337	355	372	393
Public Safety	1,296	1,405	1,698	2,233	3,710	2,518	2,229	2,266	2,347	2,480
Amusement and Recreation	3,737	4,221	4,462	4,870	4,518	4,173	3,982	4,104	4,363	4,686
Transportation	6,740	7,205	8,404	8,793	8,565	7,899	8,000	8,570	9,424	10,463
Communication	3,516	3,742	3,678	3,257	3,265	3,186	3,305	3,489	3,753	4,041
Manufacturing	12,608	11,060	10,746	12,124	10,857	11,186	11,753	12,807	14,149	15,075
Total Nonresidential Buildings	76,919	78,871	81,496	88,598	87,069	82,293	82,020	85,753	91,174	97,648
NONBUILDING STRUCTURES										
Power	12,325	10,541	11,338	13,519	13,476	12,385	11,966	12,272	12,874	13,635
Highway and Street	13,196	12,882	13,905	15,692	15,649	15,896	16,926	18,674	20,737	22,612
Sewage and Waste Disposal	3,111	3,229	3,527	3,907	3,514	3,438	3,605	4,026	4,458	4,891
Water Supply	1,529	1,641	1,936	2,035	2,317	2,406	2,603	2,914	3,295	3,685
Conservation and Development	853	834	967	1,119	925	793	829	894	978	1,080
Total Nonbuilding Structures	31,013	29,127	31,674	36,273	35,881	34,919	35,930	38,780	42,342	45,903
Total Put in Place	\$222,352	\$236,881	\$248,545	\$252,320	\$264,829	\$271,322	\$276,155	\$285,969	\$299,378	\$316,470

#### Construction Put in Place Estimated for the Pacific Census Division

Change From Prior Year - Current Dollar Basis

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	7%	13%	10%	-7%	3%	10%	4%	2%	2%	3%
Multifamily	10%	2%	1%	2%	7%	4%	-5%	1%	4%	6%
Improvements*	11%	18%	0%	-8%	27%	9%	3%	3%	3%	5%
Total Residential	9%	13%	5%	-6%	11%	9%	3%	2%	3%	4%
NONRESIDENTIAL BUILDINGS										
Lodging	24%	4%	9%	8%	-14%	-37%	-11%	6%	9%	9%
Office	22%	1%	2%	19%	-6%	-6%	-8%	2%	4%	7%
Commercial	18%	7%	0%	3%	1%	3%	2%	4%	5%	8%
Health Care	3%	4%	0%	6%	6%	1%	3%	5%	5%	6%
Educational	8%	6%	5%	10%	-1%	-5%	2%	3%	4%	5%
Religious	5%	-4%	-2%	-5%	-4%	-22%	-16%	5%	5%	6%
Public Safety	-3%	8%	21%	31%	66%	-32%	-11%	2%	4%	6%
Amusement and Recreation	16%	13%	6%	9%	-7%	-8%	-5%	3%	6%	7%
Transportation	-5%	7%	17%	5%	-3%	-8%	1%	7%	10%	11%
Communication	3%	6%	-2%	-11%	0%	-2%	4%	6%	8%	8%
Manufacturing	-3%	-12%	-3%	13%	-10%	3%	5%	9%	10%	7%
Total Nonresidential Buildings	8%	3%	3%	9%	-2%	-5%	0%	5%	6%	7%
NONBUILDING STRUCTURES										
Power	-3%	-14%	8%	19%	0%	-8%	-3%	3%	5%	6%
Highway and Street	-1%	-2%	8%	13%	0%	2%	6%	10%	11%	9%
Sewage and Waste Disposal	-5%	4%	9%	11%	-10%	-2%	5%	12%	11%	10%
Water Supply	0%	7%	18%	5%	14%	4%	8%	12%	13%	12%
Conservation and Development	-4%	-2%	16%	16%	-17%	-14%	5%	8%	9%	10%
Total Nonbuilding Structures	-2%	-6%	9%	15%	-1%	-3%	3%	8%	9%	8%
Total Put in Place	7%	7%	5%	2%	5%	2%	2%	4%	5%	6%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



### **Canadian Key Takeaways**

- In 2021, total engineering and construction spending in Canada is expected to be \$291 billion. This represents a robust 10% rebound compared to 2020, or about \$27.5 billion in new investment. Looking ahead to 2022, FMI forecasts total spending to stabilize, growing just 1% to \$294 billion. Year end actuals for 2021 will be reported spring of 2022.
- overall, we expect total construction spending across
  Canada to remain relatively
  stable through the forecast
  period. Recovery in nonresidential segments is anticipated to
  begin in 2022, and construction
  activity is expected to reach
  \$314 billion by 2025. A 3.6%
  compound annual growth rate
  (CAGR) feels almost normal
  after the unpredictable last two

years. Provincial and federal investments in infrastructure and strong housing demand provide boosts to construction activity.

## **Canada 2021 Segment Performance**

2021/2020 Comparison







Multifamily

Residential Improvements

Health care

Education

Transportation

Communication

Power

Highway and Street

Sewage and Waste Disposal

Conservation and Development

Manufacturing Water Supply

Lodging Office

Commercial

Religious

**Public Safety** 

Amusement and Recreation



#### **Province by Province**

Alberta's growth in construction activity in 2021 and heading into 2022 stems from strong residential and infrastructure investment. While total construction growth lags other provinces through the forecast period, a CAGR of 3.4% is a welcome expectation. The provincial government will push heavily toward diversification in the energy sector as renewable energy projects begin to break ground. Provincial investments in transportation systems and roads will be bright spots in the region, with growth projected at 6.6% and 5.9% CAGRs, respectively.

British Columbia is recovering from the dual challenges of the pandemic and the devastating floods in the Fraser Valley region. Still, construction activity is anticipated to remain positive. Record investment in infrastructure from the provincial government and continuing work on major industrial projects will keep nonresidential construction growing in 2022 and beyond.

The communication, transportation, and sewage and waste disposal segments are projected to see the most growth through the forecast period, each maintaining a CAGR of 6.5% or greater. Residential construction, particularly single-family homes, is forecast to maintain its growth in 2022, even after a record-breaking year in 2021, with year-over-year growth topping 20%. In total, construction spending is forecast to grow 4.6% in 2021.

Ontario's impact on construction activity remains outsized, representing nearly 40% of construction spending nationally. The residential market spiked 20% this year though this is unlikely to be sustainable due to rising interest rates and negative interprovincial migration.

Through the forecast period, investments in transportation, multifamily, and highway and street will lead the province. Our forecast expects a staggering 14% rise in 2021, almost entirely due to

the residential market. The long-term outlook for the province tracks at a 4.2% CAGR. The province's economy is anticipated to rebound better than other provinces due to healthy labor market conditions and demand for manufacturing and technical jobs.

Quebec's recovery has been among the strongest of the provinces, especially when considering the strict lockdown measures. Total construction in the province is expected to be up 16% in 2021 due entirely to a strong housing market. Another bright spot in Quebec is its infrastructure spending with the government investment in health care, education, transportation, and highway and street driving construction activity past 4% CAGR for each segment. Office, commercial and lodging are the hardest-hit sectors of private nonresidential spending and won't recover until 2022 or 2023.



#### **Provincial Investments Promote Growth**

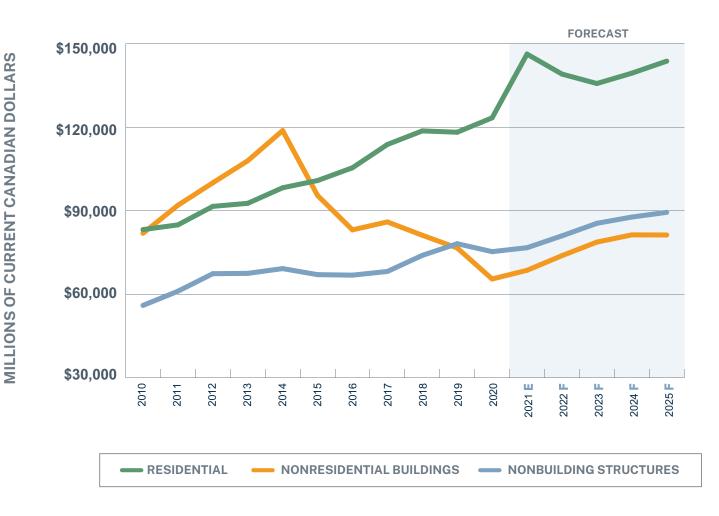
From a segment perspective, amusement and recreation, commercial and religious construction are anticipated to experience the largest contractions in 2021. On a positive note, all residential construction segments showed record growth in 2021, with single-family bringing in year-over-year growth of more than 30% from 2020.

The sewage and waste disposal segment represents a smaller share of overall spending but is forecast to expand at a rate of more than 10% CAGR over the next five years, with several large projects planned across the nation. Highway and street activity will also be strong with planned infrastructure improvements boosting the CAGR to greater than 4.9%.

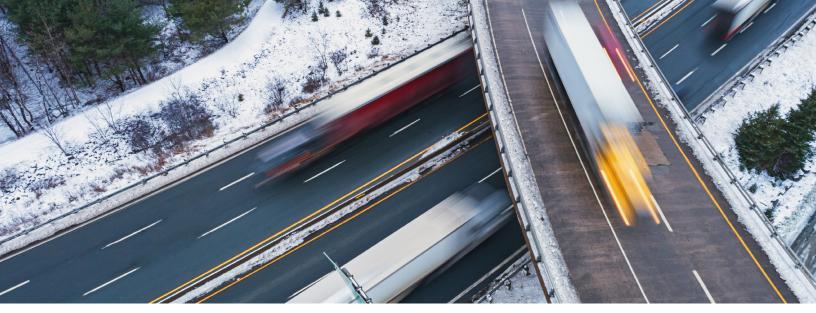
Overall, Canada's construction activity has risen to spending levels higher than anticipated in 2021. Across the country, provincial investment, a positive consumer spending environment and the successful rollout of vaccines point to a positive year in 2022.



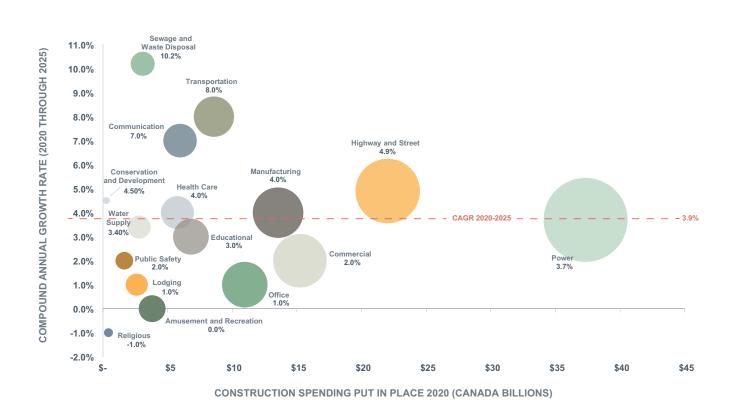
# **Total Construction Spending Put in Place Estimated for Canada**



**SOURCE: FMI FORECAST Q1 2022** 



# Total Canadian Nonresidential Construction Spending Put in Place 2020 and Forecast Growth (2020 through 2025) by Construction Segment



**SOURCE: FMI FORECAST Q1 2022** 

#### **Construction Put in Place Estimated for Canada**

Millions of Current Dollars

1st Quarter 2022 Forecast (Based on 3rd Quarter 2021 Actuals and 4th Quarter 2021 Assumptions)

	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	26,984	28,123	26,415	22,888	24,116	31,668	29,713	28,511	29,717	30,521
Multifamily	25,267	28,428	31,860	34,243	37,367	44,020	43,338	42,158	43,479	44,823
Improvements*	53,223	57,287	60,460	61,121	61,954	70,673	66,123	65,106	66,289	68,474
Total Residential	105,474	113,839	118,735	118,252	123,437	146,361	139,174	135,775	139,485	143,818
NONRESIDENTIAL BUILDINGS										
Lodging	2,569	2,557	2,766	2,695	2,606	2,507	2,499	2,586	2,692	2,790
Office	8,977	9,011	10,138	11,302	10,972	10,485	10,342	10,481	11,093	11,504
Commercial	13,357	13,472	14,002	15,748	15,228	14,261	14,622	15,449	16,281	16,861
Health Care	4,823	5,168	5,252	5,319	5,756	6,241	6,688	6,720	6,832	6,916
Educational	6,645	7,729	7,678	6,744	6,799	7,211	7,498	7,577	7,811	7,971
Religious	413	386	382	444	415	361	355	362	377	386
Public Safety	970	1,289	1,250	1,697	1,647	1,595	1,661	1,729	1,784	1,817
Amusement and Recreation	3,913	4,546	4,569	3,718	3,801	3,312	3,269	3,398	3,557	3,725
Transportation	6,399	6,050	7,761	8,894	8,576	9,829	10,548	11,537	12,405	12,892
Communication	5,742	5,785	5,835	5,907	5,962	7,195	8,907	10,031	8,649	8,432
Manufacturing	13,038	12,177	14,324	15,691	13,537	13,714	14,587	15,620	16,258	16,147
Total Nonresidential Buildings	66,847	68,170	73,957	78,159	75,300	76,711	80,977	85,490	87,740	89,442
NONBUILDING STRUCTURES										
Power	56,515	58,446	53,538	50,619	37,329	39,030	40,839	42,180	43,225	44,740
Highway and Street	17,726	19,710	20,029	20,119	22,017	23,185	25,059	26,264	27,130	27,952
Sewage and Waste Disposal	5,639	4,227	3,638	2,982	3,065	3,209	4,643	6,833	7,449	4,974
Water Supply	3,000	3,131	3,657	2,630	2,795	2,898	3,032	3,161	3,220	3,309
Conservation and Development	256	480	335	279	253	266	279	294	304	316
Total Nonbuilding Structures	83,136	85,994	81,197	76,629	65,459	68,588	73,852	78,732	81,328	81,291
Total Put in Place	\$255,456	\$268,003	\$273,889	\$273,041	\$264,196	\$291,660	\$294,002	\$299,998	\$308,554	\$314,552

#### **Construction Put in Place Estimated for Canada**

Change From Prior Year - Current Dollar Basis

		****								***
	2016	2017	2018	2019	2020	2021E	2022F	2023F	2024F	2025F
RESIDENTIAL BUILDINGS										
Single-family	5%	4%	-6%	-13%	5%	31%	-6%	-4%	4%	3%
Multifamily	6%	13%	12%	7%	9%	18%	-2%	-3%	3%	3%
Improvements*	3%	8%	6%	1%	1%	14%	-6%	-2%	2%	3%
Total Residential	5%	8%	4%	0%	4%	19%	-5%	-2%	3%	3%
NONRESIDENTIAL BUILDINGS										
Lodging	4%	0%	8%	-3%	-3%	-4%	0%	3%	4%	4%
Office	-2%	0%	13%	11%	-3%	-4%	-1%	1%	6%	4%
Commercial	-6%	1%	4%	12%	-3%	-6%	3%	6%	5%	4%
Health Care	-6%	7%	2%	1%	8%	8%	7%	0%	2%	1%
Educational	12%	16%	-1%	-12%	1%	6%	4%	1%	3%	2%
Religious	-7%	-7%	-1%	16%	-7%	-13%	-2%	2%	4%	2%
Public Safety	-36%	33%	-3%	36%	-3%	-3%	4%	4%	3%	2%
Amusement and Recreation	4%	16%	1%	-19%	2%	-13%	-1%	4%	5%	5%
Transportation	-3%	-5%	28%	15%	-4%	15%	7%	9%	8%	4%
Communication	22%	1%	1%	1%	1%	21%	24%	13%	-14%	-3%
Manufacturing	0%	-7%	18%	10%	-14%	1%	6%	7%	4%	-1%
Total Nonresidential Buildings	0%	2%	8%	6%	-4%	2%	6%	6%	3%	2%
NONBUILDING STRUCTURES										
Power	-16%	3%	-8%	-5%	-26%	5%	5%	3%	2%	4%
Highway and Street	-7%	11%	2%	0%	9%	5%	8%	5%	3%	3%
Sewage and Waste Disposal	8%	-25%	-14%	-18%	3%	5%	45%	47%	9%	-33%
Water Supply	-19%	4%	17%	-28%	6%	4%	5%	4%	2%	3%
Conservation and Development	123%	88%	-30%	-17%	-9%	5%	5%	5%	4%	4%
Total Nonbuilding Structures	-13%	3%	-6%	-6%	-15%	5%	8%	7%	3%	0%
Total Put in Place	-3%	5%	2%	0%	-3%	10%	1%	2%	3%	2%

<sup>\*</sup>Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.



# Construction Unemployment vs. National Unemployment

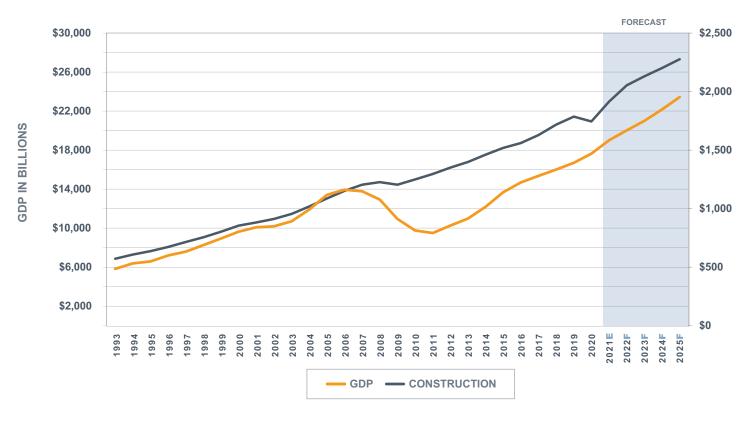


SOURCE: U.S. DEPARTMENT OF LABOR | ANNUAL — END PERIOD

# **Employment and Unemployment Rate Comparison**

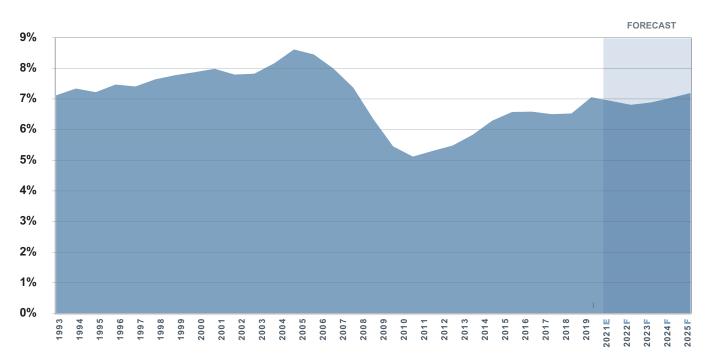


# **Construction Spending and Nominal GDP**



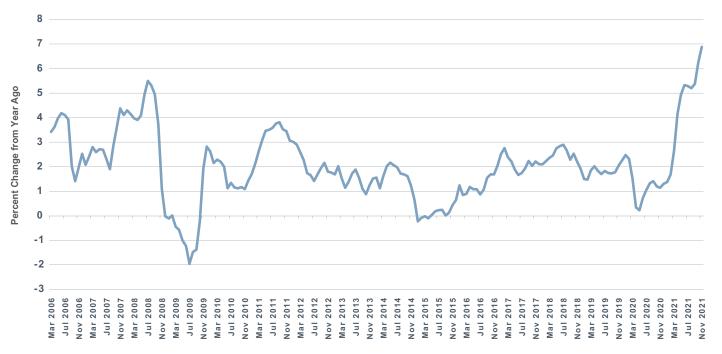
SOURCE: FMI, CONGRESSIONAL BUDGET OFFICE

# **Construction as a Percentage of GDP**



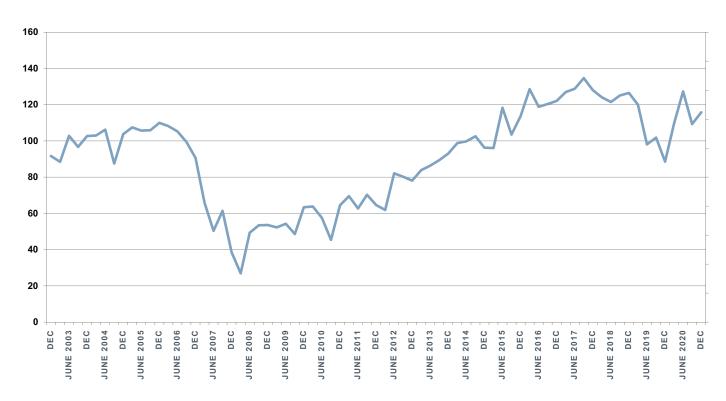
SOURCE: FMI, CONGRESSIONAL BUDGET OFFICE

# 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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