



THIRD
QUARTER
EDITION

2024 NORTH AMERICAN ENGINEERING AND CONSTRUCTION

OUTLOOK



JULY 2024

Executive Summary

Despite the assumed recession for the broader U.S. economy in 2024, FMI projects the industry overall will continue to grow over our forecast period. Single-family residential, the largest industry segment and one that creates demand for other types of construction, is projected to benefit from what is perceived to be the conclusion of anti-inflation interest rate hikes. Multifamily residential is projected to suffer for the next couple of years from the conclusion of a rapid building cycle, while residential improvements will grow slowly over the same time.

Other building construction sectors are generally positive in the near term, driven largely by legislation such as the Infrastructure Investment and Jobs Act (IIJA), Inflation Reduction Act (IRA), and CHIPS and Science Act. In the latter years of our forecast period, many of these sectors will experience challenges, but overall nonresidential building construction is expected to grow 1% to 3% per year.

Not unexpectedly infrastructure construction remains the brightest spot in our forecast. Both the current administration and its electoral opposition have shown a bias towards policy to support the built environment, although in different ways. FMI sees it as possible that 2025 policy may continue to support infrastructure investment, although likely in a much more limited fashion. Nonetheless, the current clear funding picture provides several years of momentum for nonbuilding structures.

In short, after expanding nearly 40% cumulatively since 2020, FMI projects that growth will slow for the industry overall during our forecast period, with several segments and geographies performing above average. The expected return of single-family residential construction will both drive demand for other construction segments and will support industry expansion. Despite broader U.S. economic challenges, this slower pace of industry increases should provide many companies an opportunity to address some of the longer-term challenges the built environment faces.

U.S. KEY TAKEAWAYS

- Total engineering and construction spending for the U.S. is forecast to end 2024 up 6%, or in line with 2023 growth of approximately 6%. Anticipated growth in 2024 will remain strong across most nonresidential segments, led by nonbuilding structures.
- High-performing segments in 2024 point to strong investment growth across manufacturing and public safety, each with anticipated year-end growth of more than 20% above 2023 levels.
- Declines in 2024 in several of the segments sensitive to high interest rates will likely include multifamily, lodging and commercial. Conversely, single-family residential, the largest segment in the industry, is expected to rebound from the large 12% drop in 2023.
- The third quarter 2024 Nonresidential Construction Index (NRCI) score of 47.2 is down from the previous quarter and again fell below the neutral base of 50. Eight of the past nine index scores have been under 50, suggesting participants anticipate contracting industry opportunities in the quarter and year ahead. Sentiment across all economic measures receded from last quarter. Participants expect short- and long-term strength in education, health care and manufacturing to continue to drive opportunities over the next three years.

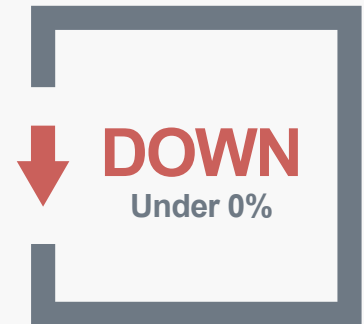
U.S. 2024 SEGMENT PERFORMANCE 2024/2023 COMPARISON



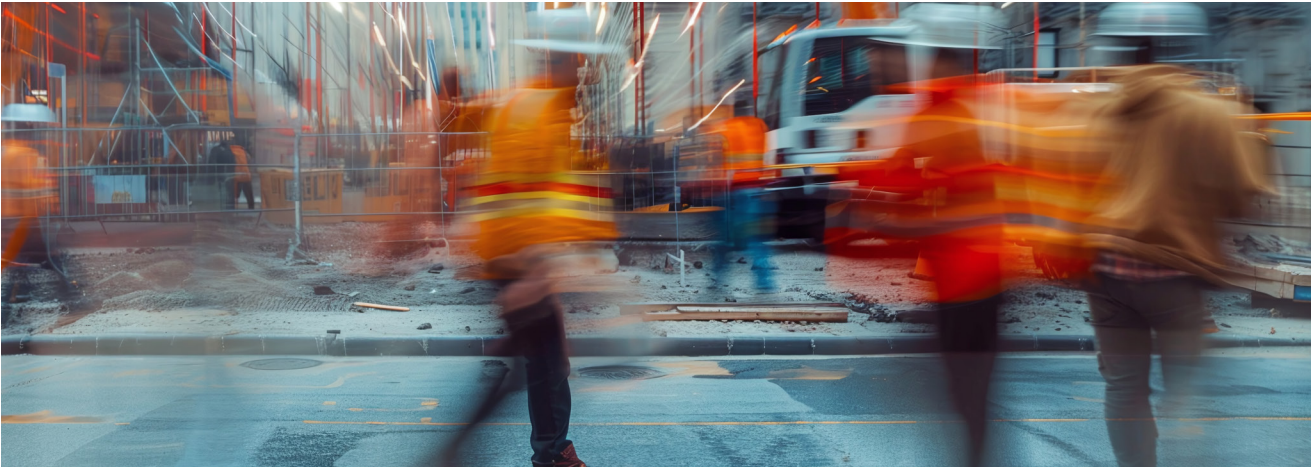
- Single-family
- Educational
- Religious
- Public Safety
- Manufacturing
- Power
- Highway and Street
- Sewage and Waste Disposal
- Water Supply



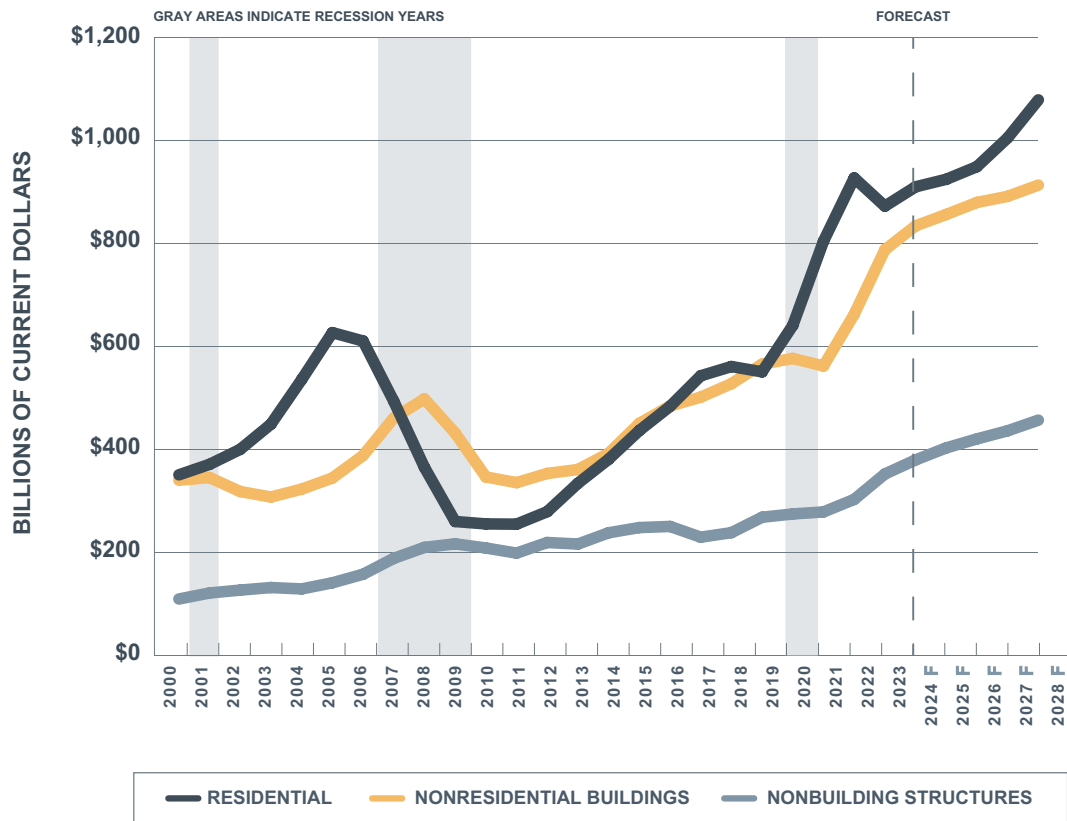
- Residential Improvements
- Office
- Health Care
- Amusement and Recreation
- Transportation
- Communication



- Multifamily
- Lodging
- Commercial
- Conservation and Development



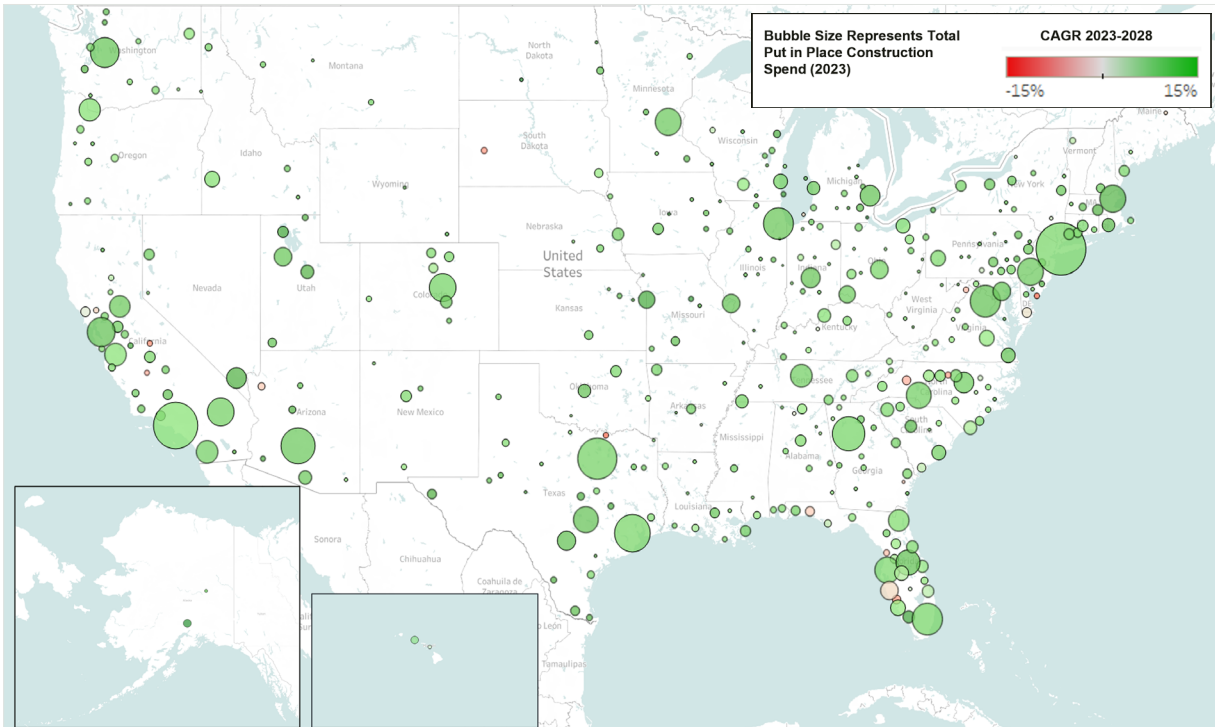
CONSTRUCTION SPENDING PUT IN PLACE ESTIMATED FOR THE UNITED STATES



SOURCE: FMI FORECAST Q3 2024



HISTORICAL CONSTRUCTION SPENDING PUT IN PLACE FORECAST GROWTH ACROSS METROPOLITAN STATISTICAL AREAS



SOURCE: FMI FORECAST Q3 2024



RESIDENTIAL CONSTRUCTION PUT IN PLACE

SINGLE-FAMILY RESIDENTIAL

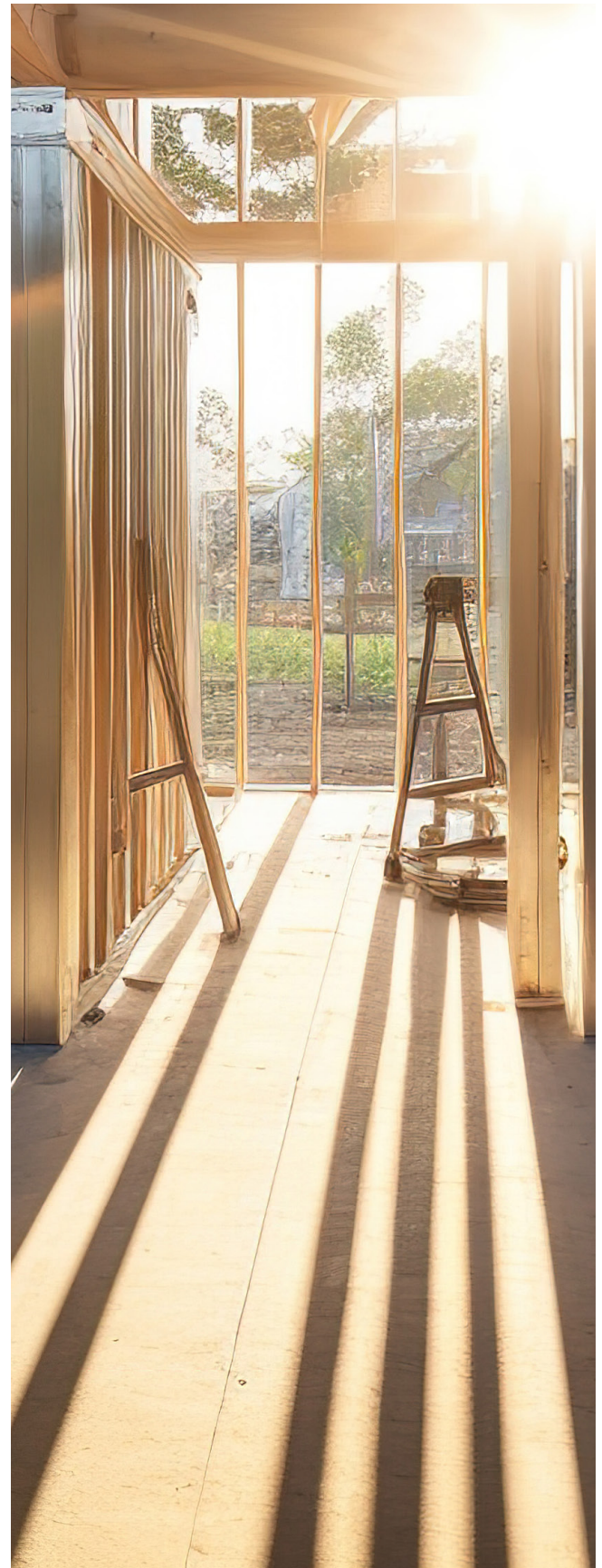


- DRIVERS:**
- Unemployment rates
 - Core CPI
 - Income
 - Mortgage rates
 - Home prices
 - Housing starts
 - Housing permits

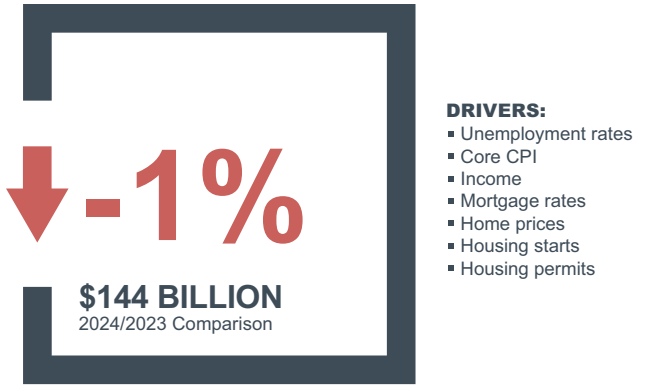


2025	UP	7%	\$458 B
2026	UP	5%	\$483 B
2027	UP	7%	\$517 B
2028	UP	8%	\$558 B

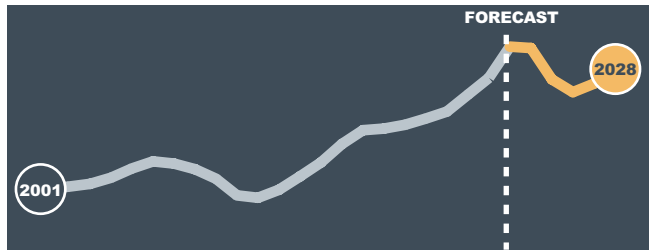
- Homebuilders are aggressively and increasingly competing with existing homeowners' listings this year. Current demand suggests ongoing incentives for more affordable and smaller homes with fewer upgrades but larger lots. Thirty-year mortgage rates are expected to stay between 6% and 7% through the remainder of the year.
- In the wake of a 1.5 million home shortage, homebuilder sentiment once again fell below 50, with all major components (sales conditions, expected sales and prospective buyer traffic) now signaling contraction for the first time since December 2023.
- The home price to median household income ratio continues to reach new highs. Home prices measured by the Case-Shiller index are approximately 7.7 times the median annual household income.
- The NAHB/Wells Fargo Cost of Housing Index (CHI) reports that 38% of an average family's income is needed to make a mortgage payment on a median-priced new single-family home, or 36% of income on a median-priced existing home. The index accounts for taxes, insurance and private mortgage insurance in the payment.



MULTIFAMILY RESIDENTIAL



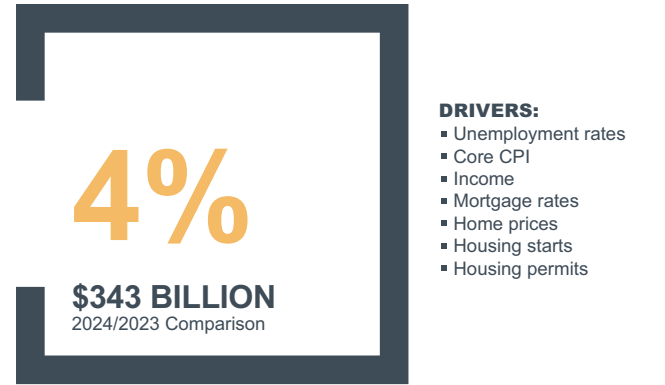
- DRIVERS:**
- Unemployment rates
 - Core CPI
 - Income
 - Mortgage rates
 - Home prices
 - Housing starts
 - Housing permits



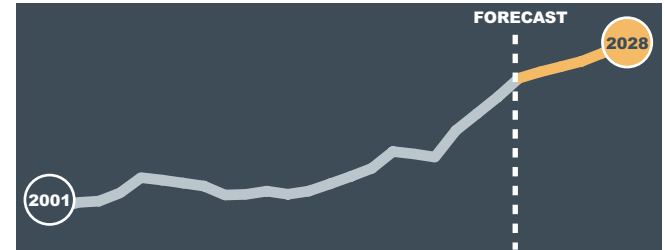
2025	DWN	-17%	\$120 B
2026	DWN	-8%	\$109 B
2027	UP	6%	\$116 B
2028	UP	11%	\$128 B

- Residential affordability constraints are making homeownership increasingly out of reach for many and have helped support a large wave of multifamily units in development, which reached more than 1 million units mid-2023.
- Coming off the peak, multifamily units in development have begun contracting at a rapid rate through early 2024, and about 9% year over year in May.
- Multifamily development is expected to remain challenged over the next several years as the rate of new supply completions is outpacing rental demand. Additionally, high construction costs, moderating rent growth and ongoing tightened lending conditions are disrupting planned investments.

IMPROVEMENTS



- DRIVERS:**
- Unemployment rates
 - Core CPI
 - Income
 - Mortgage rates
 - Home prices
 - Housing starts
 - Housing permits



2025	STA	3%	\$353 B
2026	STA	3%	\$363 B
2027	STA	4%	\$378 B
2028	UP	6%	\$399 B

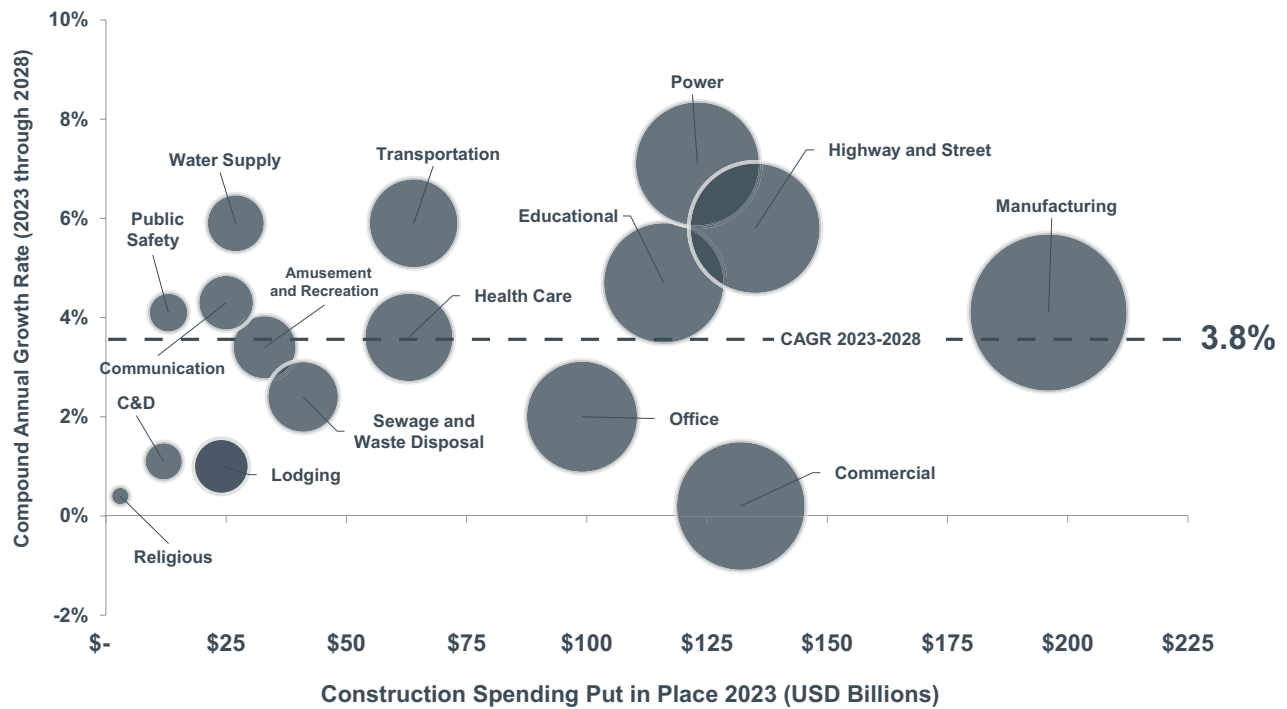
- Homeowners will likely curtail spending outside of general repair and maintenance due to moderating home prices and continuing high material, labor and financing costs. The median age of an owner-occupied home is more than 40 years old (and increasing).
- There will likely be increased financing and promotional offers to help incentivize buyer commitments over the next several quarters.
- New-home builders have been limiting custom and luxury options in recent years, which will encourage some to invest in upgrades to their new homes.

NONRESIDENTIAL CONSTRUCTION PUT IN PLACE





NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE FORECAST GROWTH BY CONSTRUCTION SEGMENT



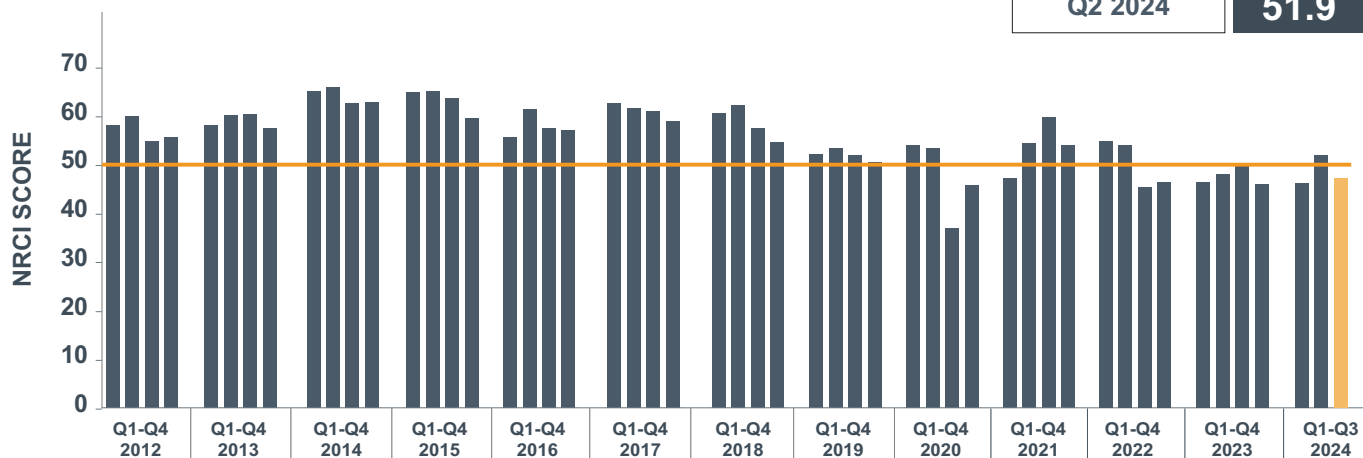
SOURCE: FMI FORECAST Q3 2024

TOTAL NONRESIDENTIAL CONSTRUCTION INDEX (NRCI)

Q1 2012 TO Q3 2024

Scores above 50 indicate expansion; scores below 50 indicate contraction.

Q3 2024 <i>Survey Dates June 4-19</i>	47.2
Q2 2024	51.9

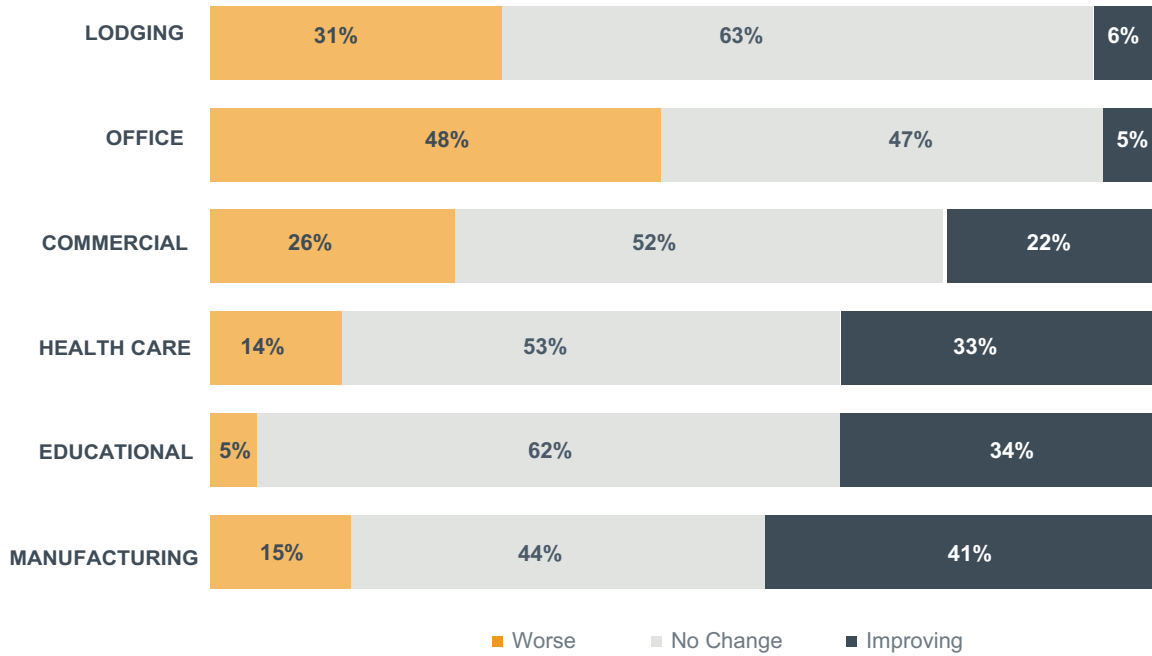


NRCI INDEX MOVEMENT		Q3 2024	Q2 2024
Overall U.S. Economy	↓	42.8	54.9
Economy Where We Do Business	↓	45.2	51.1
Our Engineering and Construction Business	↓	56.6	64.1
Engineering and Construction Where We Do Business	↓	45.0	54.3
Backlog	↓	54.2	57.8
Cost of Materials	↓	29.5	41.3
Cost of Labor	↓	22.9	27.7
Productivity	↓	48.2	54.9

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

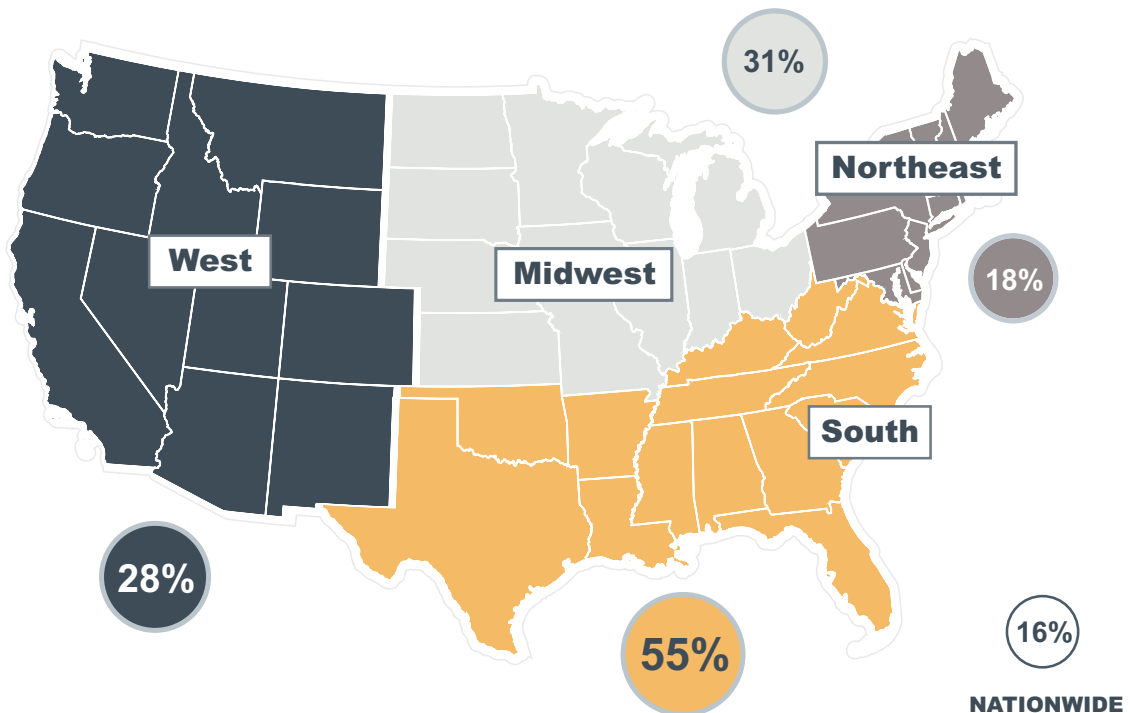
If you are interested in participating in this important industry index, please submit a request via our [NRCI Participation Request form](#).

PERCEPTION OF CHANGE BY SEGMENT FOR NEXT QUARTER*



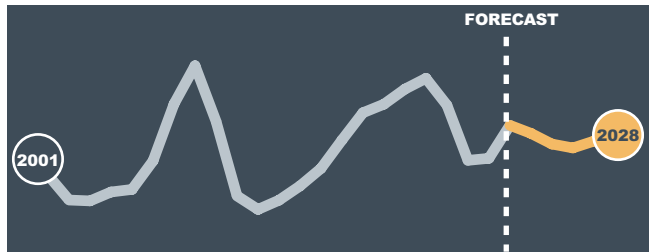
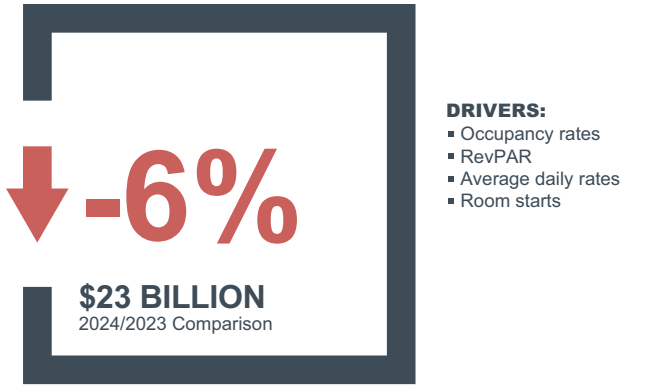
*SEGMENTS CAPTURED IN NRCI SURVEY.

WHERE SURVEY PARTICIPANTS WORK BY GEOGRAPHY*



*RESPONDENTS ARE ABLE TO SELECT MORE THAN ONE OPTION.

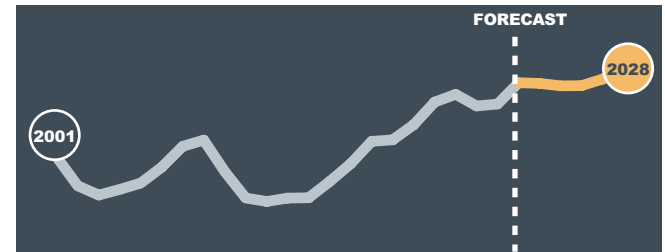
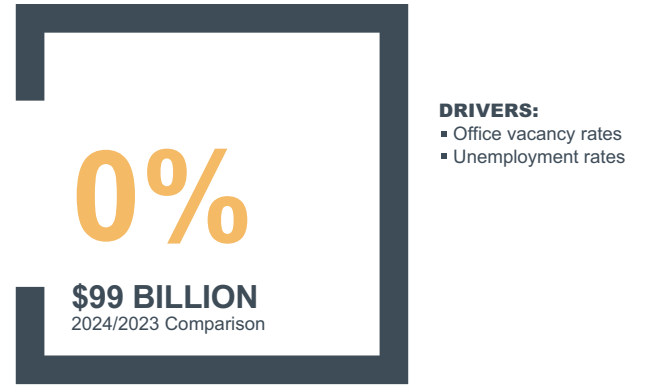
LODGING



2025	DWN	-9%	\$21 B
2026	DWN	-3%	\$21 B
2027	UP	6%	\$22 B
2028	UP	12%	\$24 B

- There will be fewer projects in design as both businesses and consumers cut back on travel to help manage spending over the next several years. Large owners and chains will account for most of the construction activity through 2025.
- Destination cities continue to see increased demand tied to recovery in group business travel alongside improved competitiveness with aggregator business models such as Airbnb and Vrbo.
- Last month STR, Inc., and Tourism Economics significantly lowered their expectations for 2024 hotel occupancy, rates and revenue based on persistent inflation imposing weakness across lower-tier segments. Conversely, business travel will likely increase through the year based on recent demand metrics improving during the work week and strong corporate profits leading to more spending.

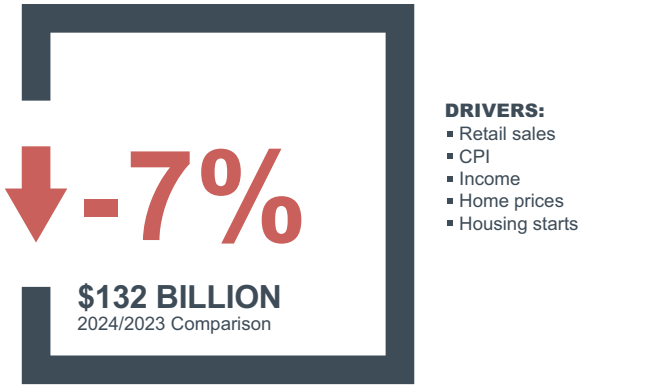
OFFICE



2025	DWN	-1%	\$97 B
2026	STA	0%	\$97 B
2027	STA	4%	\$101 B
2028	UP	5%	\$106 B

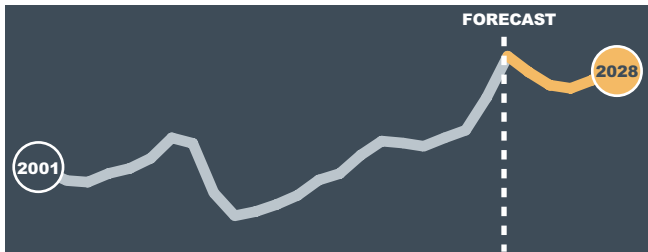
- This quarter the U.S. Census Bureau released and began publishing monthly private data center construction spending as a subset of office construction spending numbers. The data shows that private data center construction doubled between 2020 and 2023 to reach \$18.2 billion, accounting for approximately 22% of private office or more than 18% of total office in 2023.
- Monthly data center spending through the first five months of 2024 shows a 61% increase in investment over 2023 levels. Conversely, non-data center private office spending is down 15%.
- Expect 2024 and 2025 to be a continuation of 2023 as vacancies across traditional U.S. offices remain at nearly 20%, the highest level since the late 1970s. Office tenants have generally been relocating to higher-quality spaces.

COMMERCIAL



DRIVERS:

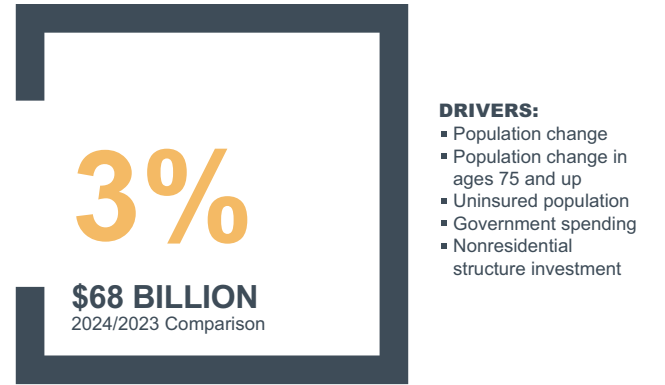
- Retail sales
- CPI
- Income
- Home prices
- Housing starts



2025	DWN	-6%	\$123 B
2026	DWN	-2%	\$121 B
2027	STA	4%	\$126 B
2028	UP	8%	\$136 B

- The commercial sector is expected to contract in 2024 for the first time since 2019, largely driven by warehouses, which now represent more than half of annual commercial construction put in place.
- Consumer retail spending remains strong, up 2% from this time last year.
- Commercial property valuations have stabilized through 2024, albeit at depressed levels after significant declines that started mid-2022 alongside rising interest rates, limited access to capital, store closures and bankruptcies.
- There will likely be ongoing challenges for new starts tied to increased financial stress on consumers and reduced multifamily and mixed-use development investment over the next several years.

HEALTH CARE



DRIVERS:

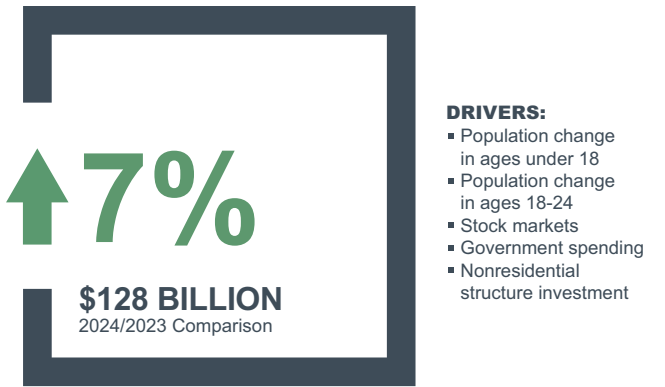
- Population change
- Population change in ages 75 and up
- Uninsured population
- Government spending
- Nonresidential structure investment



2025	UP	5%	\$71 B
2026	UP	6%	\$75 B
2027	STA	2%	\$76 B
2028	STA	0%	\$76 B

- The health care sector will see strong investment levels in 2024 and 2025, led by hospital construction with many new large facilities and expansion projects underway and/or in planning and development phases. Most of these large projects face resource constraints and delays.
- Medical office investment has decreased somewhat in recent months, while specialty care investment has started to rebound.
- Mergers and acquisitions activity over the next several years will remain strong as the mix of traditional and digital health care becomes more common and desirable, blending interest across the technology, telecom and retail industries.

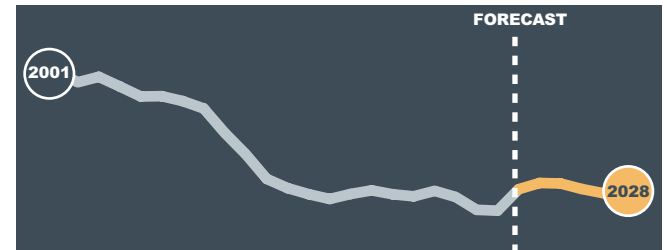
EDUCATIONAL



2025	UP	5%	\$135 B
2026	STA	3%	\$140 B
2027	STA	2%	\$143 B
2028	STA	3%	\$146 B

- Higher-education construction spending is increasing into mid-2024, outpacing K-12 construction spending, led by dormitory and instructional facility investments.
- Inflation Reduction Act (IRA) funds will be used to begin projects into 2025, largely focused on HVAC, lighting, building envelope, clean/renewable energy solutions and car charging stations.
- Local bond measures will be the primary driver for increasing K-12 construction activities over the forecast period, and this year's election cycle will create opportunities for additional planning activity.

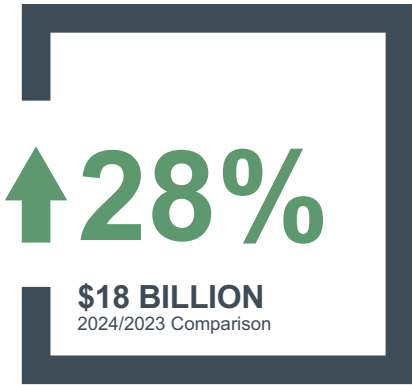
RELIGIOUS



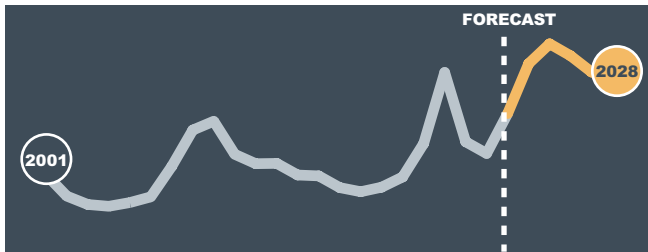
2025	DWN	-1%	\$4 B
2026	DWN	-6%	\$4 B
2027	DWN	-5%	\$4 B
2028	STA	2%	\$4 B

- Houses of worship, such as temples, churches, mosques and synagogues, and auxiliary religious buildings, such as life centers, camp and retreat spaces, and Sunday school venues, are leading strong growth in the segment through mid-2024.
- Strain on members' disposable incomes into 2025 will likely reduce donations, a primary source of revenue for religious institutions.
- In-person church attendance has been in decline for the past several decades and is expected to continue to fall in the forecast period.

PUBLIC SAFETY



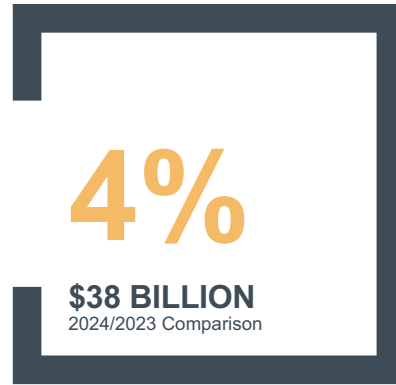
- DRIVERS:**
- Population
 - Government spending
 - Incarceration rates
 - Nonresidential structure investment



2025	UP	9%	\$20 B
2026	DWN	-5%	\$19 B
2027	DWN	-7%	\$18 B
2028	STA	2%	\$18 B

- Federal Bureau of Investigation crime data released through early 2024 shows a 15% decline in violent crime and a 15% drop in property crime year over year.
- Public safety construction investment has risen rapidly over the past year, led by police, fire and other public safety facilities, including armory and military structures.
- The latest buildings and facilities submission by the Federal Bureau of Prisons for fiscal year 2025 includes a significant reduction in future spending on new facilities due to construction delays and cost challenges, needs for modernization, repair and renovation spending, and declining population projections.

AMUSEMENT AND RECREATION



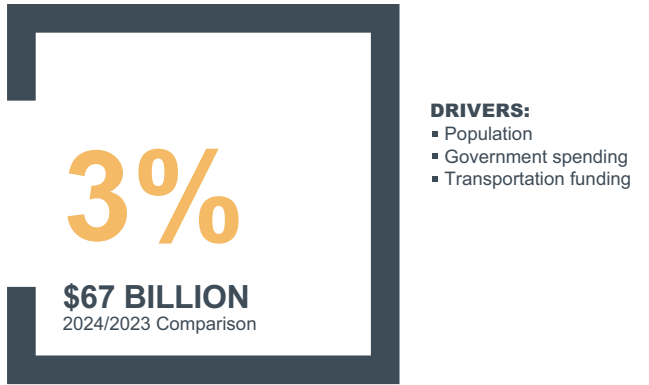
- DRIVERS:**
- Income
 - Personal savings rates
 - Unemployment rates
 - Employment



2025	UP	7%	\$40 B
2026	STA	1%	\$40 B
2027	DWN	-4%	\$39 B
2028	STA	3%	\$40 B

- Spending through early 2024 was led by investments in social centers (community centers, golf and country clubs, etc.), neighborhood centers, convention centers and parks. Year-to-date investment is contracting across meeting centers, fitness, and theme and amusement park facilities.
- Ongoing elevated interest rates, an expected reduction in discretionary spending, tightening lending standards and recessionary pressures (i.e., rising unemployment) are all likely to challenge planned projects in the years ahead.
- The most viable large projects in planning (e.g., convention centers, stadiums and arenas) are those benefiting from public-private coordination and support from new or expanding infrastructure.

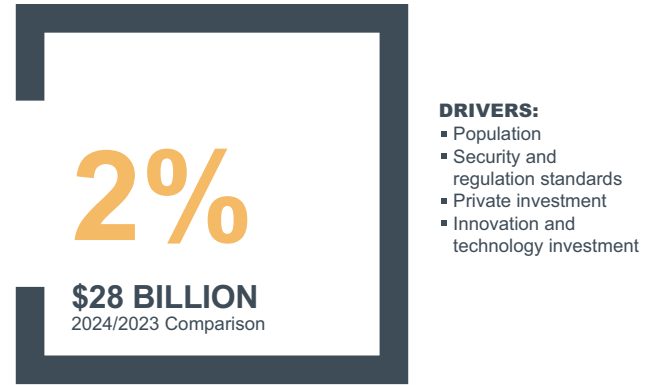
TRANSPORTATION



2025	UP	7%	\$72 B
2026	UP	9%	\$78 B
2027	UP	5%	\$82 B
2028	STA	3%	\$85 B

- Air investments are leading transportation construction through early 2024, outpacing rail and port spending. Airport infrastructure needs are expanding rapidly, with passenger and cargo volumes expected to double before 2040.
- The manufacturing construction boom in the U.S. will support expanding transportation needs, especially for freight rail and port activity over the forecast period.
- Global trade and petroleum production shifts have recently favored East Coast infrastructure, resulting in shorter inland hauls and slowing trucking activity nationwide.

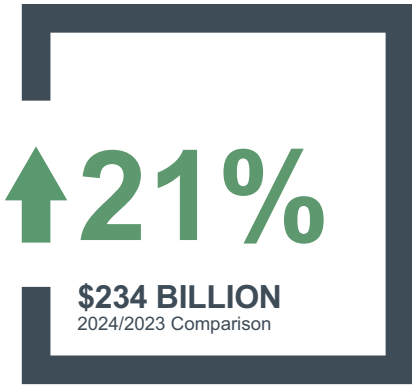
COMMUNICATION



2025	STA	4%	\$30 B
2026	UP	5%	\$31 B
2027	UP	5%	\$33 B
2028	UP	5%	\$34 B

- Faster and more reliable networks will be needed to accommodate the growing use of artificial intelligence and other cloud service offerings, the internet of things, and virtual offices, learning and entertainment.
- Industry demands overlap with investment across data centers, manufacturing, transportation, power, and logistics and distribution.
- Owners are likely to remain increasingly concerned about pollution obstacles in urban markets while Infrastructure Investment and Jobs Act (IIJA) funds will fuel increased fiber investment across suburban and rural markets. Growth for global satellite services will continue to accelerate.

MANUFACTURING



DRIVERS:

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



2025	UP	6%	\$248 B
2026	STA	4%	\$258 B
2027	DWN	-1%	\$254 B
2028	DWN	-2%	\$248 B

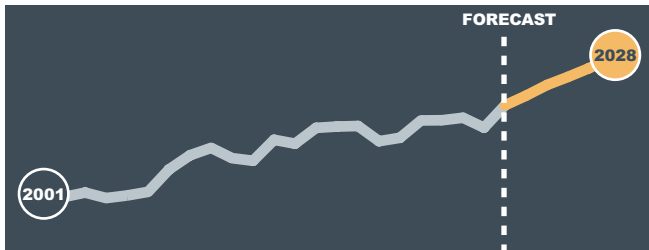
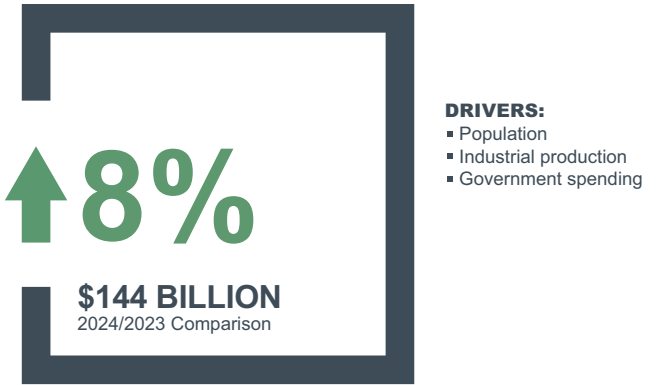
- The IIJA, CHIPS and Science Act and IRA have combined to spur record private sector investment in manufacturing, nearing \$235 billion in forecast construction in 2024, or more than triple the average annual spending levels recorded through the 2010s.
- The manufacturing construction investment boom continues, with a focus on large-scale investments in semiconductors, electric vehicles and batteries, clean energy and biomanufacturing. Growth through early 2024, however, has been led by investments in plastics and rubber.
- The Manufacturing ISM PMI for June remains just below the 50% threshold, at 48.5%, indicating sector contraction for the third consecutive month and for 19 of the past 20 months. New orders, production, employment and backlogs are all signaling contraction.
- Talent shortages and supply chain complexities will continue to cause strain on available resources and across planned investments in infrastructure and power.



NONBUILDING STRUCTURES CONSTRUCTION PUT IN PLACE



POWER



2025	UP	8%	\$156 B
2026	UP	6%	\$164 B
2027	UP	6%	\$173 B
2028	UP	6%	\$184 B

- Political support will continue for renewable energy investments, batteries and the shift toward electric transportation and building systems. Investment and research and development will continue across all power generation platforms.
- Grid planners significantly raised their five-year load growth outlooks to nearly a 5% compound annual growth rate (CAGR) through 2028 due to combined aggressive investments in new manufacturing and industrial facilities, data centers, transportation and building electrification. Data center power needs are expected to triple by 2030.
- Domestic oil and gas producers will continue to consolidate across competitive oil shale resources while leveraging expanding industrial and international trade infrastructure.

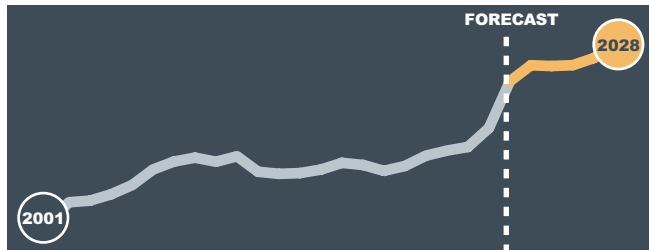
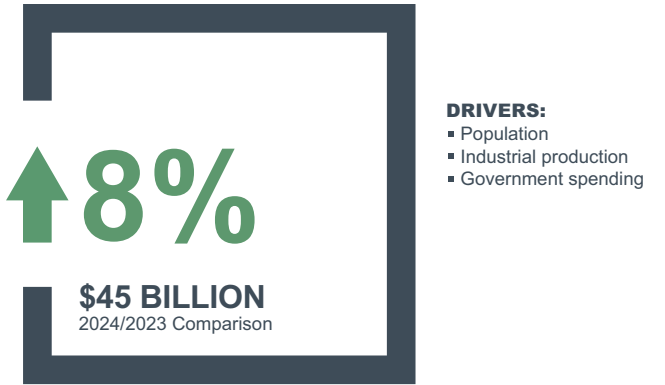
HIGHWAY AND STREET



2025	UP	7%	\$160 B
2026	UP	5%	\$168 B
2027	STA	2%	\$172 B
2028	STA	3%	\$177 B

- Spending growth in 2024 will remain well over historical levels but begin to slow in the years ahead as annual IIJA funds level off.
- Bridge investment is leading highway and street construction through early 2024.
- Programmed IIJA funds are set to expire in 2026, at which time we expect some political posturing but ultimately we anticipate another funding increase as temporary and grant programs are either expanded or deemed permanent.

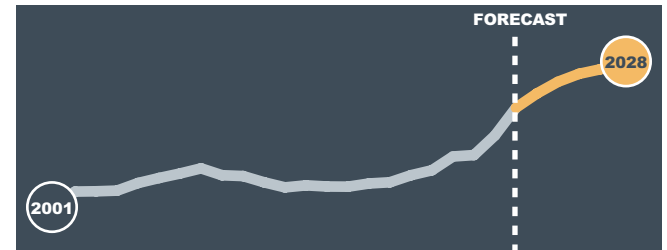
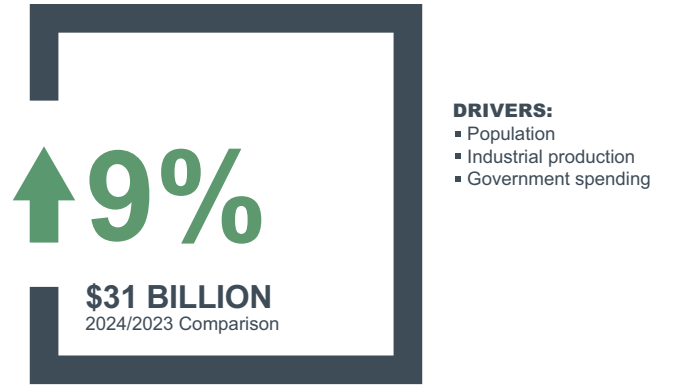
SEWAGE AND WASTE DISPOSAL



2025	STA	0%	\$45 B
2026	STA	0%	\$45 B
2027	STA	3%	\$47 B
2028	UP	6%	\$50 B

- Spending in 2024 ties to the recent wave of residential and manufacturing investment, domestic migration, aging infrastructure, storm hardening and resiliency, and the changing regulatory environment.
- The Environmental Protection Agency's (EPA) Clean Watersheds Needs Survey (CWNS) identified a \$630 billion gap between available funds and needed infrastructure investments, a 73% increase over what the prior report found.
- The CWNS report highlights that more than half of funding gap needs are in wastewater infrastructure, including plants, conveyance systems, combined sewer overflows correction, recycled water distribution and desalinization. New York and California are the states with the biggest needs.

WATER SUPPLY



2025	UP	7%	\$33 B
2026	STA	4%	\$34 B
2027	STA	2%	\$35 B
2028	STA	3%	\$36 B

- The EPA estimates the U.S. needs \$650 billion over the next 20 years to improve infrastructure for safe drinking water.
- Two-thirds of water supply infrastructure spending will be needed for the repair of transmission and distribution networks, followed by water treatment and water storage.
- IIJA funds provide supplemental federal appropriations through 2026 and are supported by recently expanded Safe Drinking Water Act (SDWA) programs.

CONSERVATION AND DEVELOPMENT



- DRIVERS:**
- Population
 - Government spending



2025	DWN	-2%	\$11 B
2026	DWN	-2%	\$11 B
2027	STA	3%	\$11 B
2028	UP	5%	\$12 B

- Growth leveled off through early 2024 due to approximately \$48 billion in combined IJA and IRA projects awarded between 2022 and 2023.
- Dam and levee and dredging investment continues to expand and represents a growing share of conservation and development spend.
- Newly expanded manufacturing and trade infrastructure investments emphasize conservation needs of coastal and intercoastal waterways.



Construction Put in Place Estimated for the United States

Millions of Current Dollars

3rd Quarter 2024 Forecast, Based on 1st Quarter 2024 Actuals and 2nd Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	280,385	310,060	424,491	453,752	400,909	428,147	458,098	482,878	517,106	558,248
Multifamily	88,401	100,089	114,926	123,801	145,587	144,475	119,534	109,380	116,108	128,409
Improvements*	184,656	234,108	269,551	355,215	331,100	342,769	352,518	362,611	377,934	398,855
Total Residential	553,442	644,257	808,968	932,768	877,596	915,391	930,150	954,869	1,011,147	1,085,513
NONRESIDENTIAL BUILDINGS										
Lodging	33,461	28,483	19,082	20,236	24,740	23,251	21,266	20,539	21,806	24,395
Office	88,724	92,831	89,902	95,382	98,989	98,636	97,327	97,447	100,906	106,421
Commercial	84,345	89,714	97,394	131,503	141,702	131,573	123,257	121,210	126,236	135,956
Health Care	46,263	48,599	50,327	58,098	65,429	67,513	70,735	74,691	75,876	76,069
Educational	108,952	110,692	100,988	104,035	120,226	128,460	135,351	140,048	142,533	146,468
Religious	3,730	3,472	3,096	3,187	3,801	4,065	4,044	3,812	3,638	3,718
Public Safety	12,012	17,667	12,826	11,715	14,395	18,365	19,943	18,987	17,691	17,964
Amusement and Recreation	30,416	28,288	27,102	31,527	36,203	37,554	40,021	40,386	38,572	39,899
Transportation	57,448	60,734	59,075	60,908	65,246	67,079	71,876	78,323	82,238	84,959
Communication	22,184	23,876	23,091	24,366	28,004	28,470	29,692	31,200	32,830	34,425
Manufacturing	80,978	75,425	82,030	125,025	193,630	234,056	247,824	258,182	254,440	248,435
Total Nonresidential Buildings	568,513	579,781	564,913	665,982	792,365	839,022	861,335	884,825	896,766	918,709
NONBUILDING STRUCTURES										
Power	117,960	118,168	119,108	121,605	134,010	144,203	155,560	164,133	173,347	184,199
Highway and Street	99,402	102,321	103,381	115,655	138,060	149,613	159,992	167,530	171,561	177,211
Sewage and Waste Disposal	26,119	27,189	28,811	33,246	41,912	45,295	45,136	45,313	46,831	49,549
Water Supply	16,397	18,952	20,284	24,056	27,999	30,648	32,812	34,287	35,125	36,150
Conservation and Development	9,207	8,903	7,911	9,392	11,719	11,465	11,287	11,067	11,350	11,895
Total Nonbuilding Structures	269,085	275,533	279,495	303,954	353,700	381,224	404,788	422,330	438,213	459,004
Total Put in Place	\$1,391,040	\$1,499,571	\$1,653,376	\$1,902,704	\$2,023,661	\$2,135,638	\$2,196,273	\$2,262,025	\$2,346,127	\$2,463,226

Construction Put in Place Estimated for the United States

Change From Prior Year — Current Dollar Basis

3rd Quarter 2024 Forecast, Based on 1st Quarter 2024 Actuals and 2nd Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	-3%	11%	37%	7%	-12%	7%	7%	5%	7%	8%
Multifamily	6%	13%	15%	8%	18%	-1%	-17%	-8%	6%	11%
Improvements*	-3%	27%	15%	32%	-7%	4%	3%	3%	4%	6%
Total Residential	-2%	16%	26%	15%	-6%	4%	2%	3%	6%	7%
NONRESIDENTIAL BUILDINGS										
Lodging	6%	-15%	-33%	6%	22%	-6%	-9%	-3%	6%	12%
Office	16%	5%	-3%	6%	4%	0%	-1%	0%	4%	5%
Commercial	-2%	6%	9%	35%	8%	-7%	-6%	-2%	4%	8%
Health Care	6%	5%	4%	15%	13%	3%	5%	6%	2%	0%
Educational	8%	2%	-9%	3%	16%	7%	5%	3%	2%	3%
Religious	7%	-7%	-11%	3%	19%	7%	-1%	-6%	-5%	2%
Public Safety	28%	47%	-27%	-9%	23%	28%	9%	-5%	-7%	2%
Amusement and Recreation	8%	-7%	-4%	16%	15%	4%	7%	1%	-4%	3%
Transportation	8%	6%	-3%	3%	7%	3%	7%	9%	5%	3%
Communication	-9%	8%	-3%	6%	15%	2%	4%	5%	5%	5%
Manufacturing	12%	-7%	9%	52%	55%	21%	6%	4%	-1%	-2%
Total Nonresidential Buildings	7%	2%	-3%	18%	19%	6%	3%	3%	1%	2%
NONBUILDING STRUCTURES										
Power	18%	0%	1%	2%	10%	8%	8%	6%	6%	6%
Highway and Street	8%	3%	1%	12%	19%	8%	7%	5%	2%	3%
Sewage and Waste Disposal	9%	4%	6%	15%	26%	8%	0%	0%	3%	6%
Water Supply	6%	16%	7%	19%	16%	9%	7%	4%	2%	3%
Conservation and Development	12%	-3%	-11%	19%	25%	-2%	-2%	-2%	3%	5%
Total Nonbuilding Structures	13%	2%	1%	9%	16%	8%	6%	4%	4%	5%
Total Put in Place	4%	8%	10%	15%	6%	6%	3%	3%	4%	5%

*Includes additions, alterations and major replacements. Does not include maintenance and repairs.



CANADIAN ENGINEERING AND CONSTRUCTION OUTLOOK

CANADIAN KEY TAKEAWAYS

- Total engineering and construction spending for Canada is forecast to end 2024 up 2% after climbing 2% in 2023. The slight growth in construction spending is fueled by government investments in infrastructure, as well as a stronger-than-expected residential market?
- Growth in 2024 will be tempered by a sluggish residential market and private investments. Segments expected to be down include single-family, residential improvements, lodging, office, commercial, and amusement and recreation. Stable segments (growth between 0% and 4%) include religious, public safety, transportation, communication, power and water supply.
- Health care, educational, manufacturing, highway and street, sewage and waste disposal, and conservation and development are strong growth segments, with each anticipated to experience 2024 year-end growth rates of greater than 5%.

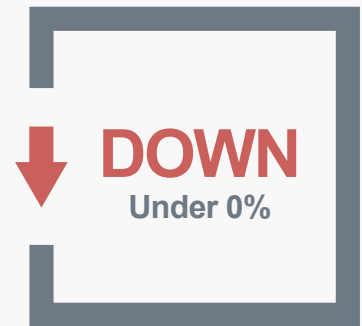
CANADA 2024 SEGMENT PERFORMANCE 2024/2023 COMPARISON



Health Care
Educational
Manufacturing
Highway and Street
Sewage and Waste Disposal
Conservation and Development



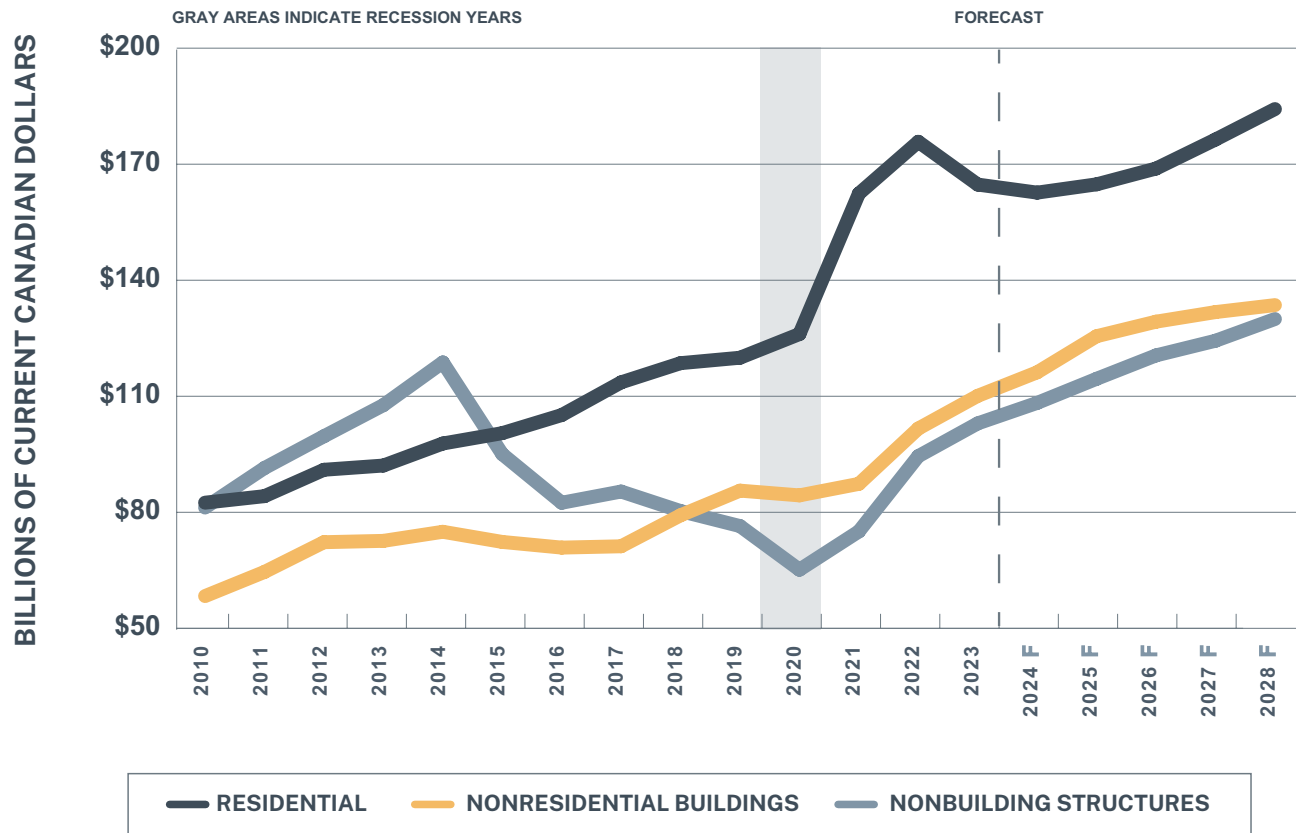
Multifamily
Religious
Public Safety
Transportation
Communication
Power
Water Supply



Single-family
Residential Improvements
Lodging
Office
Commercial
Amusement and Recreation



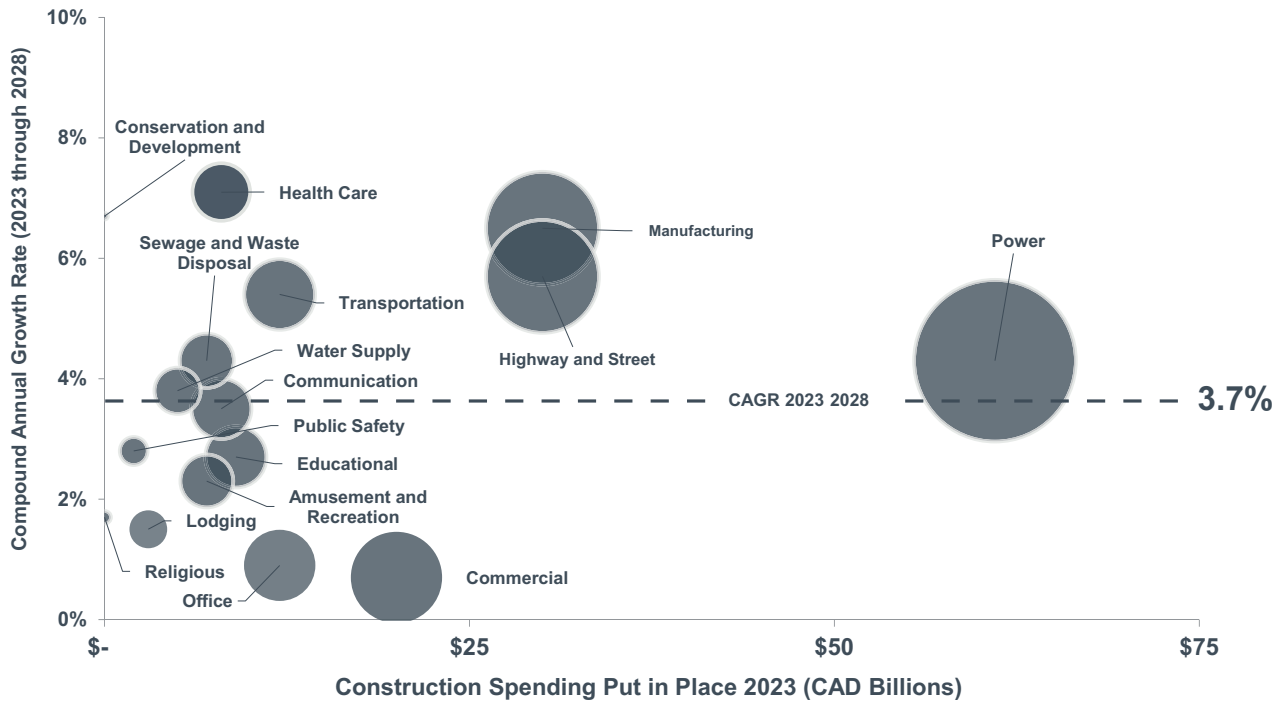
TOTAL CONSTRUCTION SPENDING PUT IN PLACE ESTIMATED FOR CANADA



SOURCE: FMI FORECAST Q3 2024



NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE FORECAST GROWTH BY CONSTRUCTION SEGMENT



SOURCE: FMI FORECAST Q3 2024

Construction Put in Place Estimated for Canada

Millions of Current Canadian Dollars

3rd Quarter 2024 Forecast, Based on 1st Quarter 2024 Actuals and 2nd Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	22,839	24,095	34,694	36,701	29,496	28,599	29,056	29,295	30,588	31,378
Multifamily	35,998	38,818	46,444	50,416	52,598	52,541	52,335	53,903	56,083	57,972
Improvements*	61,204	63,152	80,669	87,880	82,014	80,916	82,779	84,993	88,903	93,972
Total Residential	120,041	126,065	161,807	174,997	164,107	162,056	164,170	168,191	175,574	183,322
NONRESIDENTIAL BUILDINGS										
Lodging	2,750	2,569	2,634	3,405	3,375	3,275	3,294	3,373	3,562	3,632
Office	11,311	11,674	10,692	11,302	12,002	11,765	11,640	11,694	12,145	12,564
Commercial	16,072	15,013	15,393	19,897	19,719	19,198	18,725	19,035	19,811	20,423
Health Care	5,319	5,756	6,311	7,153	7,733	8,248	9,030	9,717	10,554	10,876
Educational	6,744	6,938	7,915	8,279	8,744	9,202	9,703	10,031	10,326	9,981
Religious	444	415	318	312	361	371	371	381	388	392
Public Safety	1,698	1,753	1,605	1,697	1,802	1,865	1,998	2,113	2,191	2,072
Amusement and Recreation	4,116	4,352	3,825	4,957	6,517	6,434	6,559	6,878	7,251	7,299
Transportation	8,698	8,875	10,328	11,006	11,704	12,079	13,283	14,702	14,801	15,225
Communication	5,878	6,784	6,900	7,874	8,449	8,741	9,225	9,615	9,965	10,023
Manufacturing	23,189	20,883	22,021	26,142	29,940	35,156	41,692	41,680	40,665	40,945
Total Nonresidential Buildings	86,221	85,012	87,943	102,026	110,346	116,334	125,521	129,217	131,658	133,433
NONBUILDING STRUCTURES										
Power	50,443	38,925	47,380	58,566	61,469	63,328	66,848	70,514	72,483	75,877
Highway and Street	18,557	19,027	19,935	26,043	29,918	32,722	34,716	36,447	37,849	39,415
Sewage and Waste Disposal	4,598	4,846	5,057	5,997	6,886	7,316	7,611	7,896	8,074	8,493
Water Supply	3,457	3,214	3,427	4,307	4,968	5,087	5,401	5,662	5,835	5,978
Conservation and Development	147	81	48	82	93	98	110	119	124	129
Total Nonbuilding Structures	77,202	66,093	75,847	94,995	103,334	108,551	114,686	120,639	124,365	129,892
Total Put in Place	\$283,464	\$277,170	\$325,598	\$372,018	\$377,788	\$386,942	\$404,378	\$418,046	\$431,596	\$446,647

Construction Put in Place Estimated for Canada

Change From Prior Year — Current Canadian Dollars

3rd Quarter 2024 Forecast, Based on 1st Quarter 2024 Actuals and 2nd Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	-13%	5%	44%	6%	-20%	-3%	2%	1%	4%	3%
Multifamily	13%	8%	20%	9%	4%	0%	0%	3%	4%	3%
Improvements*	1%	3%	28%	9%	-7%	-1%	2%	3%	5%	6%
Total Residential	1%	5%	28%	8%	-6%	-1%	1%	2%	4%	4%
NONRESIDENTIAL BUILDINGS										
Lodging	-1%	-7%	3%	29%	-1%	-3%	1%	2%	6%	2%
Office	12%	3%	-8%	6%	6%	-2%	-1%	0%	4%	3%
Commercial	15%	-7%	3%	29%	-1%	-3%	-2%	2%	4%	3%
Health Care	1%	8%	10%	13%	8%	7%	9%	8%	9%	3%
Educational	-12%	3%	14%	5%	6%	5%	5%	3%	3%	-3%
Religious	16%	-7%	-24%	-2%	15%	3%	0%	3%	2%	1%
Public Safety	36%	3%	-8%	6%	6%	3%	7%	6%	4%	-5%
Amusement and Recreation	-6%	6%	-12%	30%	31%	-1%	2%	5%	5%	1%
Transportation	7%	2%	16%	7%	6%	3%	10%	11%	1%	3%
Communication	0%	15%	2%	14%	7%	3%	6%	4%	4%	1%
Manufacturing	15%	-10%	5%	19%	15%	17%	19%	0%	-2%	1%
Total Nonresidential Buildings	8%	-1%	3%	16%	8%	5%	8%	3%	2%	1%
NONBUILDING STRUCTURES										
Power	-5%	-23%	22%	24%	5%	3%	6%	5%	3%	5%
Highway and Street	-7%	3%	5%	31%	15%	9%	6%	5%	4%	4%
Sewage and Waste Disposal	21%	5%	4%	19%	15%	6%	4%	4%	2%	5%
Water Supply	-5%	-7%	7%	26%	15%	2%	6%	5%	3%	2%
Conservation and Development	-28%	-45%	-41%	71%	13%	6%	12%	9%	4%	4%
Total Nonbuilding Structures	-5%	-14%	15%	25%	9%	5%	6%	5%	3%	4%
Total Put in Place	1%	-2%	17%	14%	2%	2%	5%	3%	3%	3%

*Includes additions, alterations and major replacements. Does not include maintenance and repairs.



U.S. Economic and Policy Considerations Assumed in Our Forecast

Our forecast's base-case assumption is a U.S. economic recession in 2024. These expectations are based on a range of predictive economic indicators, but especially the inverted yield curve. The duration of the economic contraction will depend greatly on the U.S. policy response. As we have seen in recent policy directives, the engineering and construction industry will remain an important sector for influencing economic vitality and recovery.

Recent economic factors influencing this forecast include the resumption of student loan payments, weakness in labor data, movement in short- and longer-term Treasury bond yields, commodity and energy prices, and the value of the U.S. dollar. These factors are met with ongoing tightness of private credit, shortages of labor and materials in key industries, constraints on global logistics infrastructure, and volatility in real estate valuations.

Inflationary pressures significantly eased through 2023 and appear to have stabilized above target levels, primarily due to housing costs. Further, labor force participation and unemployment rates have slowly climbed, while the Federal Reserve appears to be finished with interest rate increases through this cycle. Interest rate cuts are anticipated in late 2024 through 2025. We also considered volatility in the current election cycle as well as wartime and economic turmoil in various countries (e.g., Russia, Ukraine, Israel/Middle East, China) adding to strain and uncertainty with regard to each of the factors listed above.

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