



SECOND
QUARTER
EDITION

2024 NORTH AMERICAN ENGINEERING AND CONSTRUCTION

OUTLOOK



APRIL 2024



The base case assumption for our forecast is a 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 on the U.S. policy response, but as with historical cycles, the effect on the construction industry will likely be longer lasting.

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, commodities and energy prices, and the U.S. dollar. These factors are met with an ongoing tightening of private credit, shortages of labor and materials in key industries, constraints on global logistics infrastructure and volatility in real estate valuations.

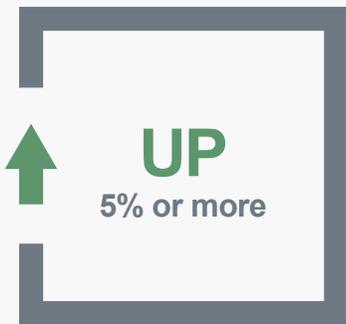
Inflationary pressures significantly eased through 2023 and appear to have stabilized above target levels primarily due to housing. Further, labor force participation and unemployment rates have slowly trended higher, while the Federal Reserve appears to be finished with interest rate increases through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

U.S. KEY TAKEAWAYS

- Total engineering and construction spending for the U.S. is forecast to end 2024 up 5%, a slightly slower pace than 2023's 7%. Anticipated growth in 2024 will remain strong across all nonresidential segments, led by nonbuilding structures.
- High-performing segments in 2024 point to continued strong investment growth across manufacturing, lodging, public safety, highway and street, transportation, and sewage and waste disposal. Each of these segments are forecast to end the year with growth 10% or higher over 2023 levels.
- Many segments are expected to end 2023 with growth rates between 5% and 10%. These segments include health care, educational, religious, amusement and recreation, communication, power, water supply, and conservation and development.
- Single-family residential, the largest segment in the industry, is expected to stabilize from the large 14% drop in 2023 and see more investment in 2025. Conversely, multifamily residential investment is expected to recede somewhat over the next several years.
- The latest Nonresidential Construction Index (NRCI) score of 51.9 is up sharply from the previous quarter and marks the first NRCI score in two years over the neutral base of 50. The Index suggests that participants see expanding industry opportunities in the quarter and year ahead. Sentiment toward all economic measures has improved, while labor costs, material costs and expectations for office construction are likely to remain the largest challenges this year.

U.S. 2024 SEGMENT PERFORMANCE

2024/2023 COMPARISON



- Lodging
- Health Care
- Educational
- Religious
- Public Safety
- Amusement and Recreation
- Sewage and Waste Disposal
- Conservation and Development
- Transportation
- Manufacturing
- Power
- Highway and Street
- Water Supply
- Communication



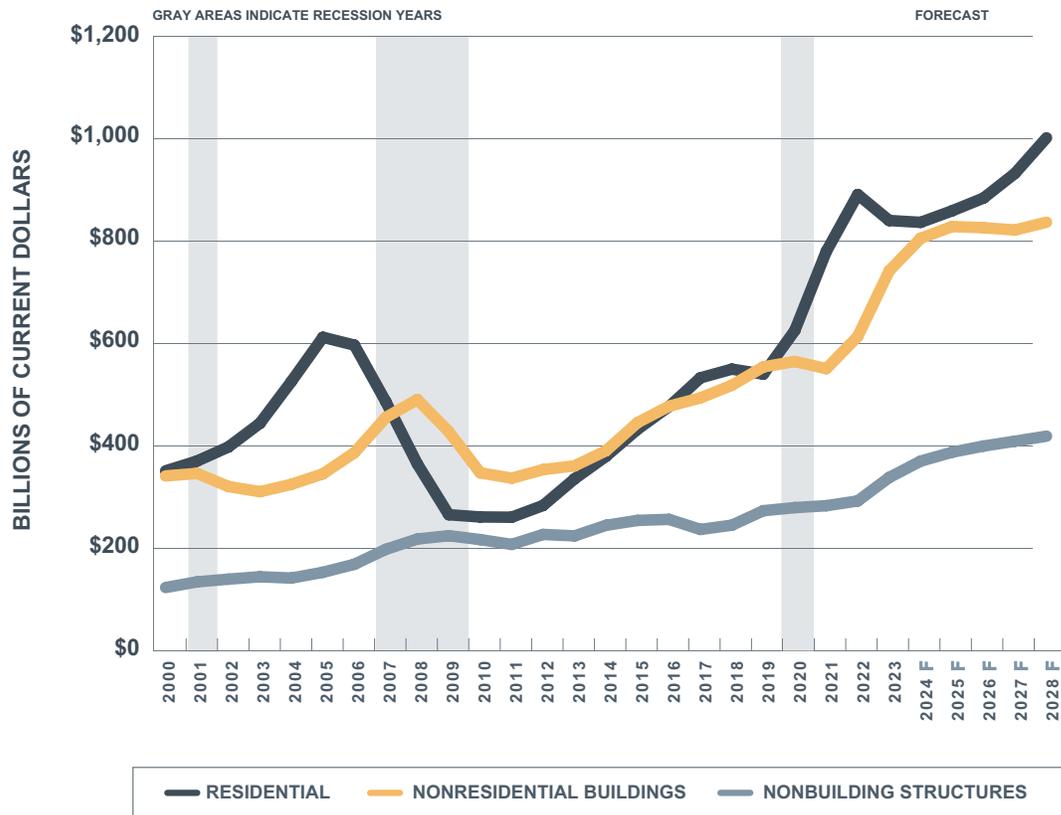
- Single-family
- Improvements
- Office



- Multifamily
- Commercial



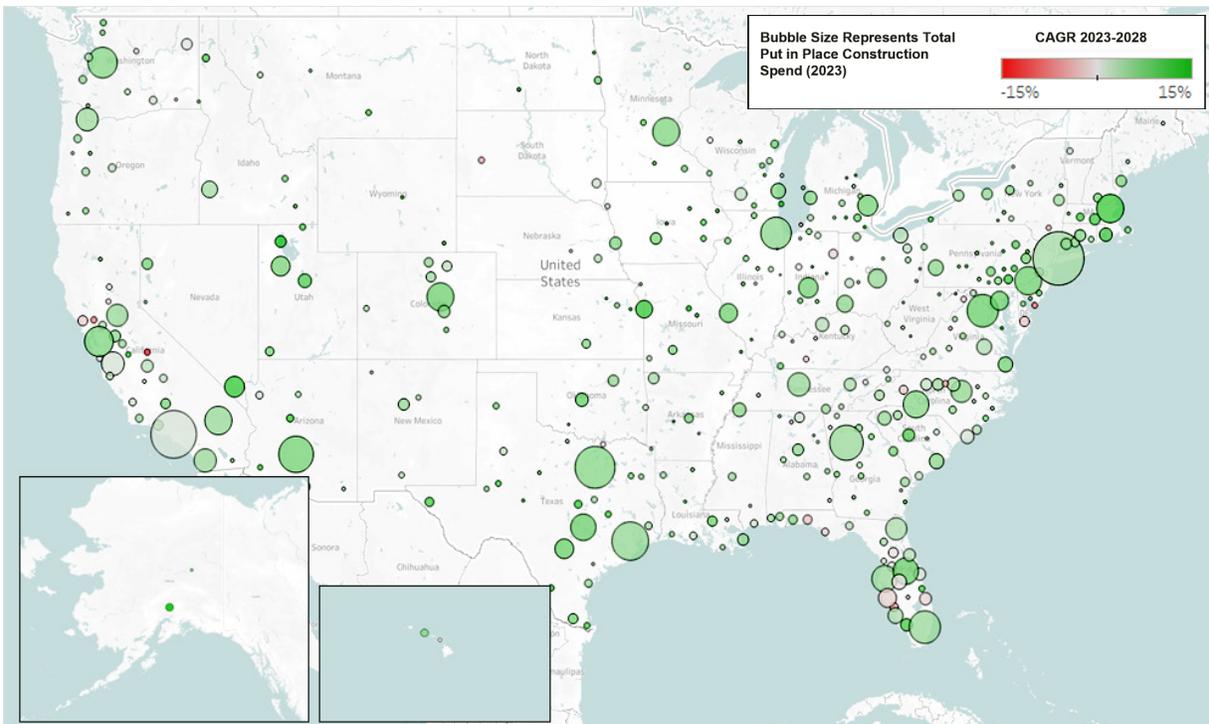
CONSTRUCTION SPENDING PUT IN PLACE ESTIMATED FOR THE UNITED STATES



SOURCE: FMI FORECAST Q2 2024



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



SOURCE: FMI FORECAST Q2 2024

RESIDENTIAL CONSTRUCTION PUT IN PLACE



SINGLE-FAMILY RESIDENTIAL



DRIVERS:

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

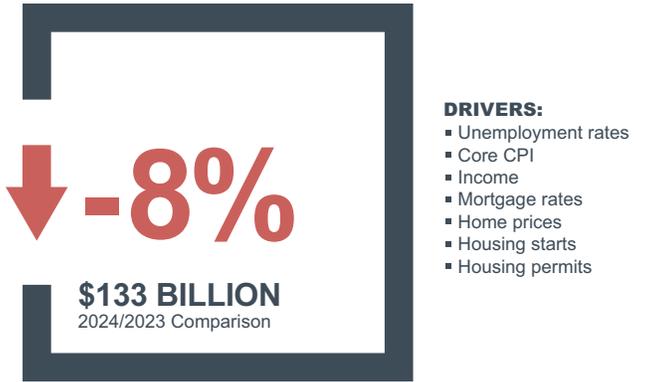


2025	UP	7%	\$422 B
2026	UP	6%	\$445 B
2027	UP	6%	\$474 B
2028	UP	7%	\$509 B

- Homebuilder sentiment strengthened through early 2024 while inventories of new homes remain above eight months' supply, and well over historic balanced supply levels.
- Homebuilders are aggressively competing with existing homeowners for sales. Conditions suggest ongoing builder incentives alongside more affordable and smaller homes with fewer upgrades but larger lots. The 30-year mortgage rates are anticipated to be between 6% and 7% through most of the year.
- The national median sale price of new homes is down about 7% from prior highs set in mid-2022. Starts also fell by 6% in 2023, and the National Association of Homebuilders (NAHB) expects starts to rise slightly in 2024.
- The home price to median household income ratio ended 2023 at all-time highs. Home prices measured by the Case-Shiller index are approximately 7.6 times the median annual household income.



MULTIFAMILY RESIDENTIAL



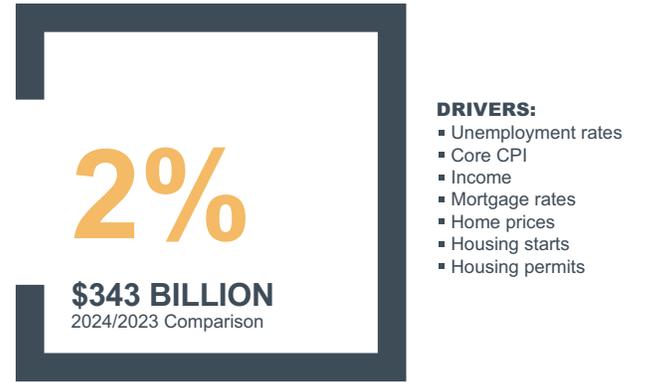
- DRIVERS:**
- Unemployment rates
 - Core CPI
 - Income
 - Mortgage rates
 - Home prices
 - Housing starts
 - Housing permits



2025	DWN	-16%	\$113 B
2026	DWN	-8%	\$103 B
2027	UP	5%	\$109 B
2028	UP	10%	\$120 B

- Affordability factors in the single-family home market helped support a large wave of multifamily units in development, which peaked at more than 1 million units in mid-2023.
- Development will remain challenged through 2024 due to rising construction costs, moderating rent growth and ongoing tightened lending conditions. Further, many new multifamily units are being delivered this year, adding more inventory to the market.
- Renting is more affordable than home ownership across the top 50 U.S. markets, and the gap is widening in most places. As a result, long-term spending growth across multifamily residential is expected to outpace single-family due to elevated construction and financing costs remaining a limiting factor for buyers.
- Infrastructure investments will continue to support urbanization and hybrid working.

IMPROVEMENTS



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



2025	UP	5%	\$359 B
2026	STA	3%	\$371 B
2027	UP	5%	\$389 B
2028	UP	7%	\$416 B

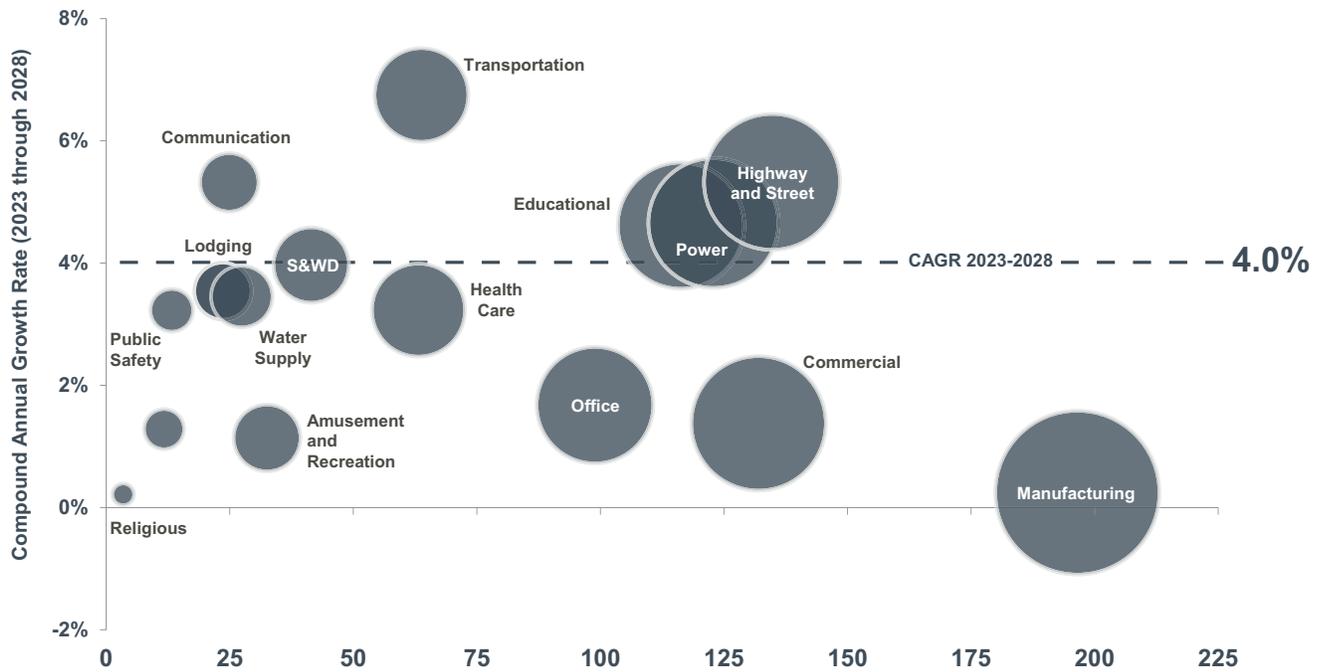
- Moderating and/or falling home prices will remain a limiting factor in many investment decisions outside of general repairs and maintenance spending. The median age of an owner-occupied home is over 40 years old and rising.
- We will see more sales and refinancing activity in 2024 and 2025, driven by a reduction in rates and price discovery from increased competition from existing homes.
- New homebuilders have been limiting custom and luxury options in recent years, which will encourage some owners to invest in upgrades on their new homes.

NONRESIDENTIAL CONSTRUCTION PUT IN PLACE





NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE FORECAST GROWTH BY CONSTRUCTION SEGMENT



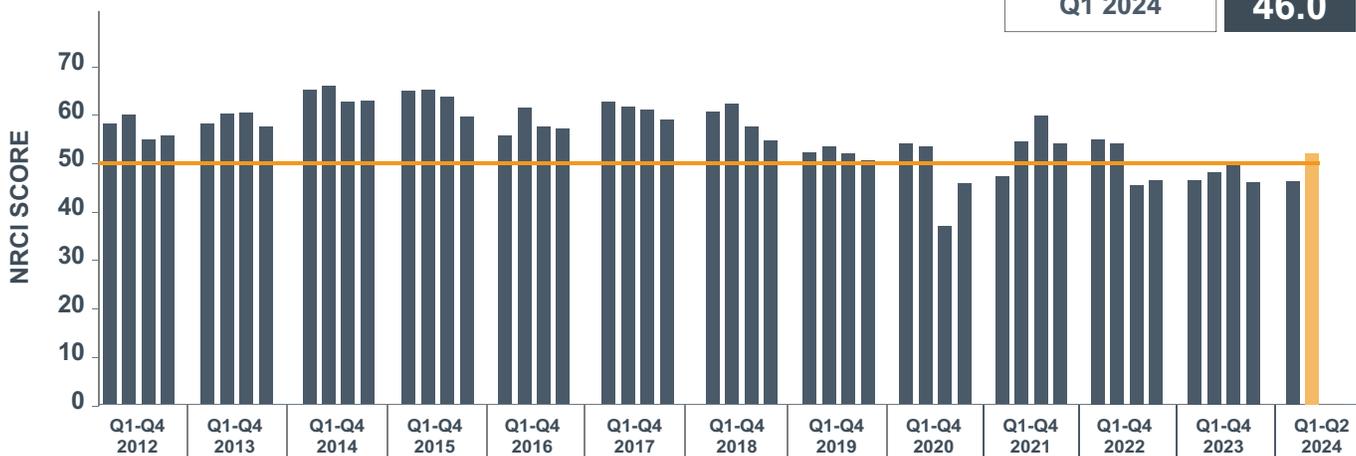
SOURCE: FMI FORECAST Q2 2024

TOTAL NONRESIDENTIAL CONSTRUCTION INDEX (NRCI)

Q1 2012 TO Q2 2024

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

Q2 2024 <i>Survey Dates Mar. 5-20</i>	51.9
Q1 2024	46.0

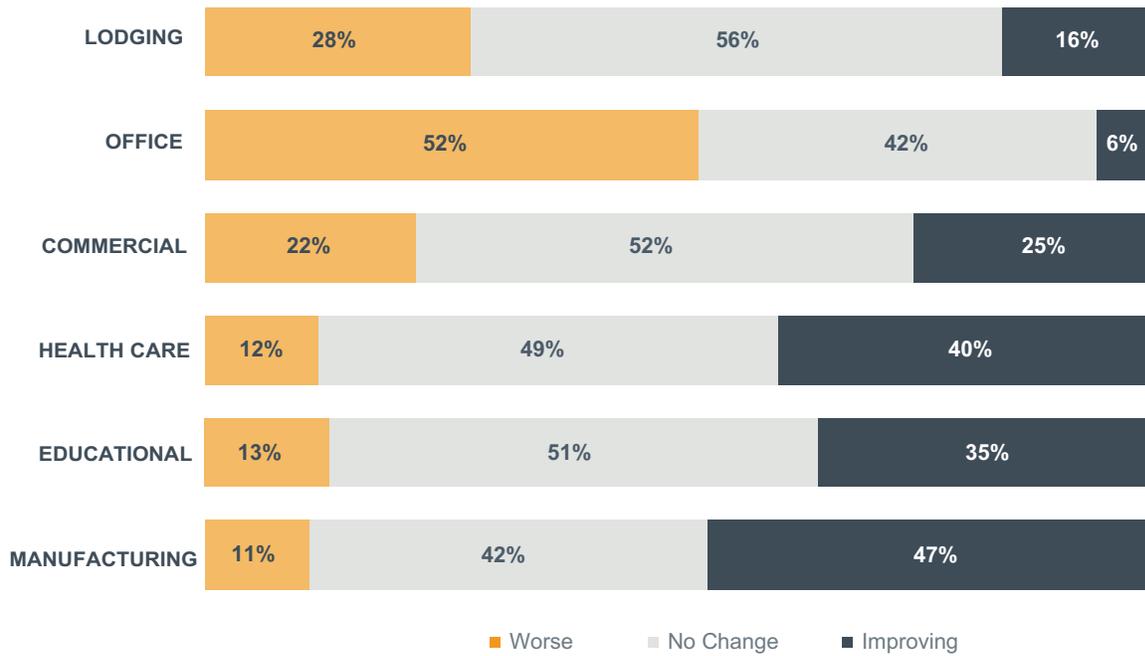


NRCI INDEX MOVEMENT		Q2 2024	Q1 2024
Overall U.S. Economy	↑	54.9	45.6
Economy Where We Do Business	↑	51.1	41.9
Our Engineering and Construction Business	↑	64.1	55.1
Engineering and Construction Where We Do Business	↑	54.3	47.1
Backlog	↑	57.8	53.7
Cost of Materials	↑	41.3	36.0
Cost of Labor	↑	27.7	21.3
Productivity	↑	54.9	50.7

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.

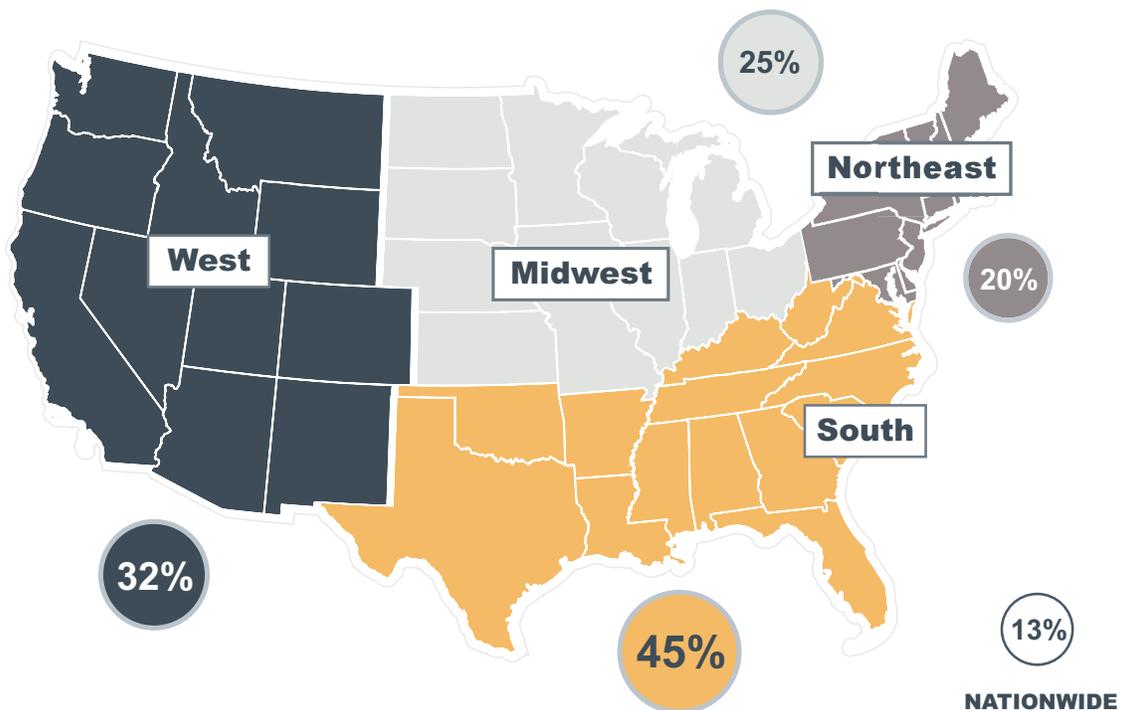
If you are interested in participating in this important industry index, please submit a request via our [NRCI Participation Request form](#).

PERCEPTION OF CHANGE BY SEGMENT FOR NEXT QUARTER*



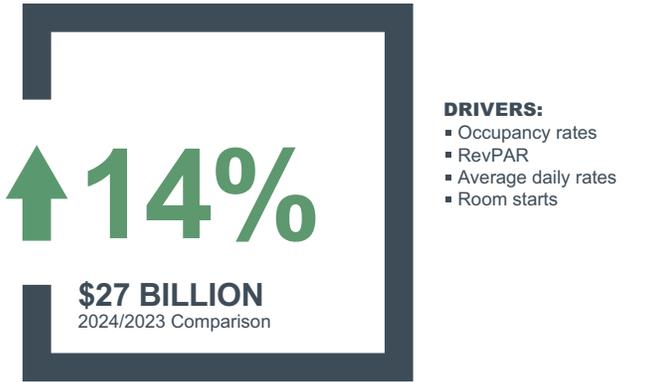
*SEGMENTS CAPTURED IN NRCI SURVEY.

WHERE SURVEY PARTICIPANTS WORK BY GEOGRAPHY*



*RESPONDENTS ARE ABLE TO SELECT MORE THAN ONE OPTION.

LODGING



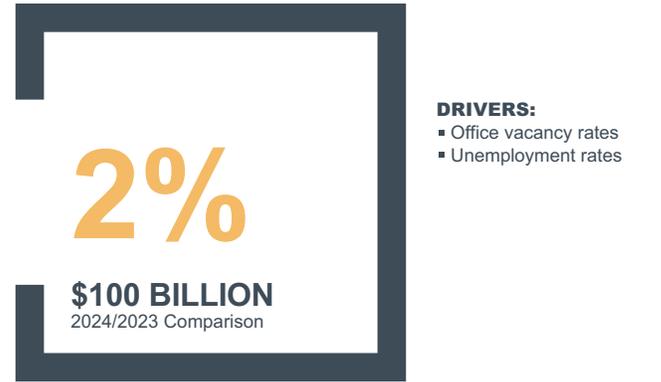
- DRIVERS:**
- Occupancy rates
 - RevPAR
 - Average daily rates
 - Room starts



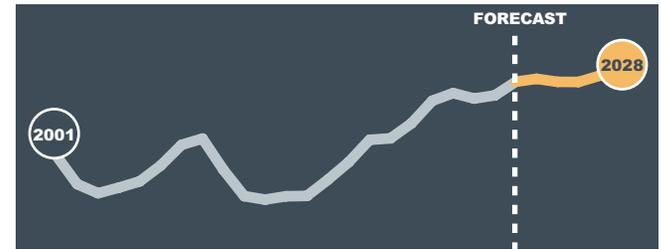
2025	STA	1%	\$27 B
2026	DWN	-6%	\$25 B
2027	STA	2%	\$26 B
2028	UP	8%	\$28 B

- As both businesses and consumers cut back on travel to manage spending, there will be fewer lodging projects that move forward through design phases. Large owners and chains will account for most construction activity through 2025.
- Destination cities continue to see increased demand from group business travel and more competition from aggregators such as Airbnb and Vrbo.
- Owners have noticed an increase in “blisure travel,” referring to when working professionals add leisure to one or both ends of business travel.
- Owners pursuing new and renovation projects will increasingly look to sustainable design and construction practices to meet demands of investors and guests.

OFFICE



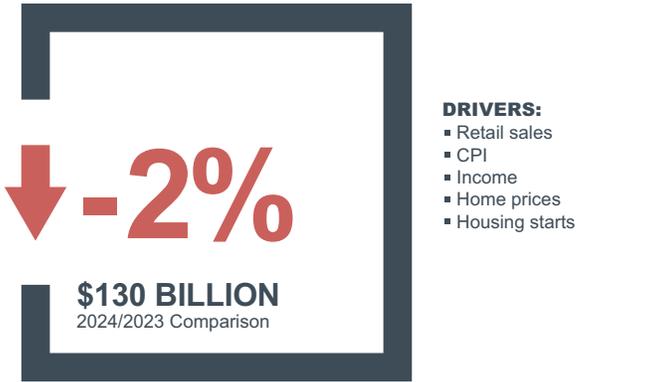
- DRIVERS:**
- Office vacancy rates
 - Unemployment rates



2025	DWN	-2%	\$99 B
2026	STA	0%	\$99 B
2027	STA	3%	\$102 B
2028	UP	5%	\$107 B

- The next two years are expected to reflect a continuation of 2023 trends. Office buildings have lost their appeal to most investors and new construction and renovation projects continue to be difficult to complete due to inflationary pressures on construction costs, tight lending, high interest rates and increases in insurance premiums.
- A vacancy rate of nearly 20% across traditional U.S. offices is the highest since the late 1970s, and occupancy levels are far worse.
- Office tenants have generally been downsizing square footage but upgrading or maintaining presence in the newest high-profile Class A space available. Sublease activity is at historically high levels and owners are using contract flexibility (e.g., shorter agreements) to attract interest.
- Expect ongoing strength in data center construction and upgrades to handle the processing requirements of artificial intelligence (AI), particularly in the form of liquid cooling capabilities.

COMMERCIAL



DRIVERS:

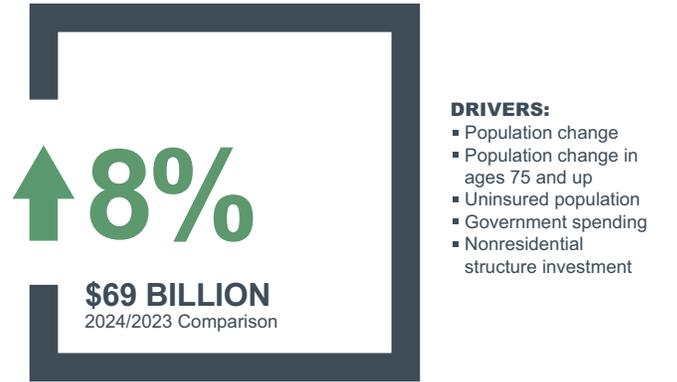
- Retail sales
- CPI
- Income
- Home prices
- Housing starts



2025	DWN	-5%	\$123 B
2026	STA	1%	\$125 B
2027	UP	5%	\$131 B
2028	UP	8%	\$141 B

- Commercial construction spending is expected to contract in 2024 for the first time since 2019, largely driven by the warehouse segment, which now represents more than half of annual commercial construction put in place.
- Consumer retail spending held strong in 2023 while property valuations have been under pressure against rising rates, limited access to capital, store closures and bankruptcies.
- Traditional retail is experiencing a shortage of available space, with strong retail sales in 2023, rising rents and vacancy rates at 15-year lows as of the end of 2023.
- A reduction in starts across multifamily and mixed-use developments will limit opportunities for new retail construction over the next several years.

HEALTH CARE



DRIVERS:

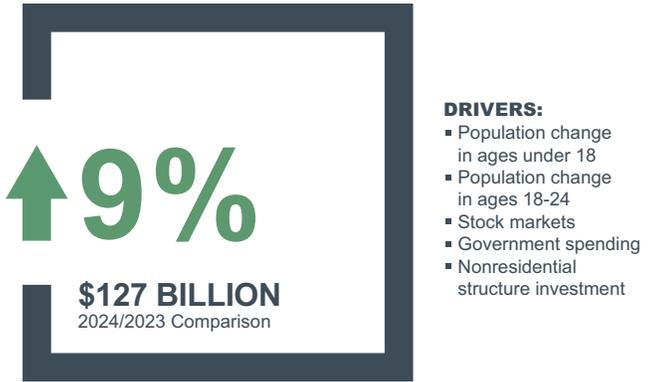
- Population change
- Population change in ages 75 and up
- Uninsured population
- Government spending
- Nonresidential structure investment



2025	UP	6%	\$73 B
2026	STA	2%	\$74 B
2027	DWN	-1%	\$74 B
2028	STA	0%	\$74 B

- Continued strong investments in the health care sector in 2024 will be led by medical office and hospital construction.
- We expect strong mergers and acquisitions (M&A) activity over the next several years as blending traditional and digital health care becomes more popular, which attracts investments across the technology, telecom and retail industries.
- Inflation Reduction Act (IRA) funding of \$64 billion will fund industry sustainability and renewable energy updates that use various systems to reduce owners' carbon footprints. These renovations will also highlight capacity and maintenance needs across older facilities.

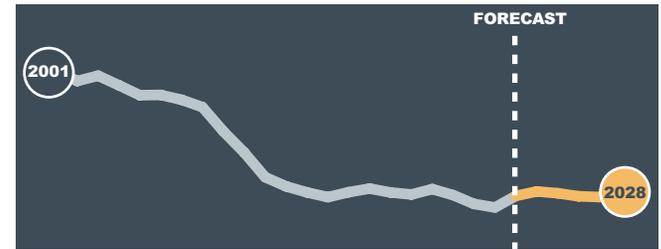
EDUCATIONAL



2025	UP	5%	\$133 B
2026	STA	3%	\$137 B
2027	STA	2%	\$140 B
2028	STA	4%	\$146 B

- Online and/or hybrid enrollment is outpacing in-person learning across higher education institutions, especially community colleges. Renovation investments in required infrastructure will include modernizing networks, updating data storage and enhancing computing power.
- IRA funds will be used to start projects into 2025, largely focused on heating, ventilation and air conditioning (HVAC), lighting, building envelopes, clean/renewable energy solutions and car charging stations.
- Renovation investments will help identify and prioritize additional repairs to aging buildings, particularly in K-12 facilities.
- 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 to support increased planned activity.

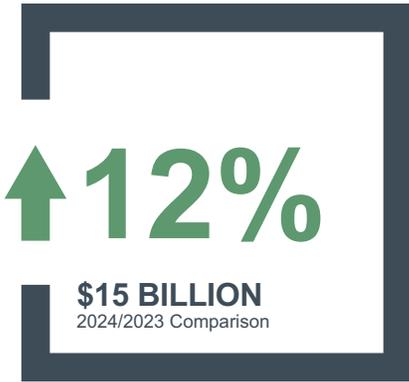
RELIGIOUS



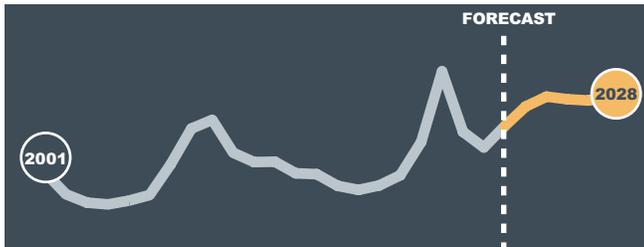
2025	DWN	-2%	\$4 B
2026	DWN	-4%	\$3 B
2027	DWN	-1%	\$3 B
2028	STA	3%	\$3 B

- In-person church attendance was down 10% in 2023 and is expected to continue to decline in 2024.
- Flat or contracting disposable incomes will affect donation levels over the forecast period.
- More churches continue to adopt digital platforms for online and hybrid services, which will shift investments toward expanding multiuse spaces, adding off-site resources and reducing square footage needs.

PUBLIC SAFETY



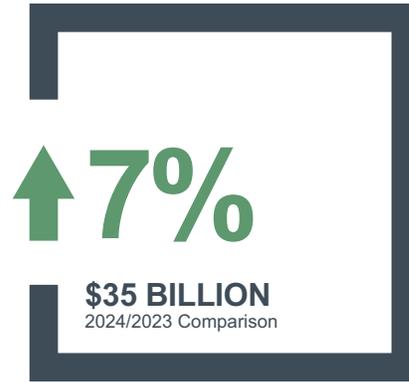
- DRIVERS:**
- Population
 - Government spending
 - Incarceration rates
 - Nonresidential structure investment



2025	UP	5%	\$16 B
2026	DWN	-1%	\$15 B
2027	DWN	-1%	\$15 B
2028	STA	2%	\$16 B

- Crime data released late last year indicates a significant decrease in violent crime rates, nearing the lowest levels in 50 years.
- The Department of Homeland Security (DHS), Customs and Border Protection (CBP) and Immigration and Customs Enforcement (ICE) all received expanded budgets in 2024, totaling nearly \$90 billion with combined increases of approximately \$500 million.
- A 2023 inspection led by the Department of Justice and the Office of Inspector General found that the Bureau of Prisons' buildings require \$2 billion in improvements and maintenance.

AMUSEMENT AND RECREATION



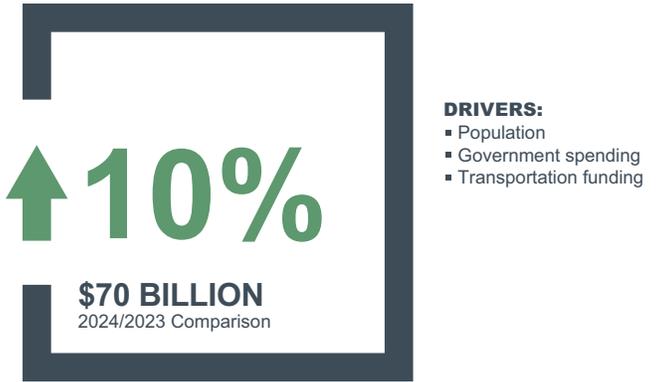
- DRIVERS:**
- Income
 - Personal savings rates
 - Unemployment rates
 - Employment



2025	STA	4%	\$37 B
2026	DWN	-4%	\$35 B
2027	DWN	-5%	\$33 B
2028	STA	4%	\$34 B

- 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 are those benefiting from public-private coordination and supported by new or expanding infrastructure (e.g., convention centers, stadiums and arenas).
- Both Live Nation and Ticketmaster expect continued strong growth through 2024 due to recent service expansions and consumers spending more on experiences.

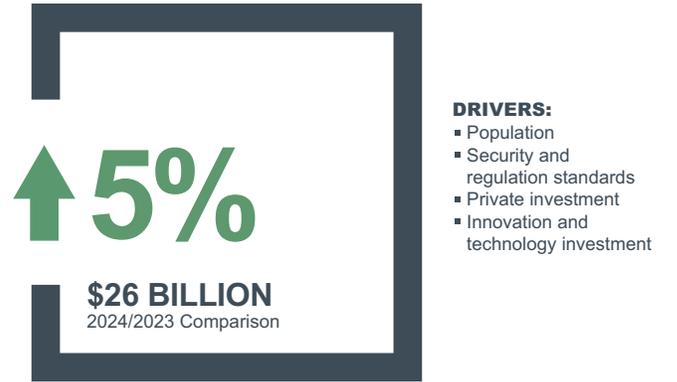
TRANSPORTATION



2025	UP	12%	\$79 B
2026	UP	8%	\$84 B
2027	STA	3%	\$87 B
2028	STA	2%	\$88 B

- The manufacturing construction boom in the U.S. will continue to drive expanding transportation needs, especially for freight rail and port activity.
- Global trade and petroleum production shifts have recently favored East Coast infrastructure, resulting in shorter inland hauls and slowing trucking activity nationwide.
- Airport infrastructure needs are expanding rapidly, with passenger and cargo volumes each expected to double before 2040. Airports Council International (ACI) estimates more than \$150 billion in U.S. airport investment needs through 2027, with 53% needed at large hub airports.

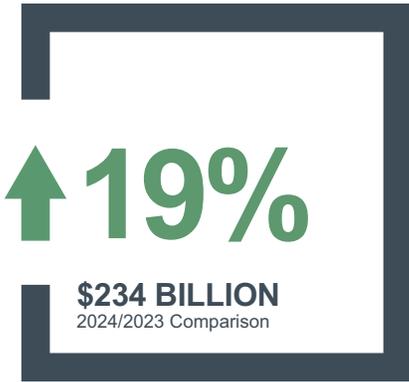
COMMUNICATION



2025	UP	6%	\$28 B
2026	UP	7%	\$30 B
2027	UP	5%	\$31 B
2028	STA	3%	\$32 B

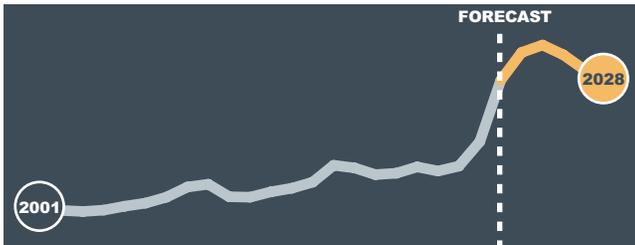
- Faster and more reliable networks will be needed to accommodate the growing use of AI and other cloud service offerings, the internet of things, and the shift to virtual offices, learning and entertainment.
- Industry demands will overlap with investment across data centers, manufacturing, transportation, 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 drive 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	STA	4%	\$243 B
2026	DWN	-5%	\$230 B
2027	DWN	-9%	\$211 B
2028	DWN	-6%	\$199 B

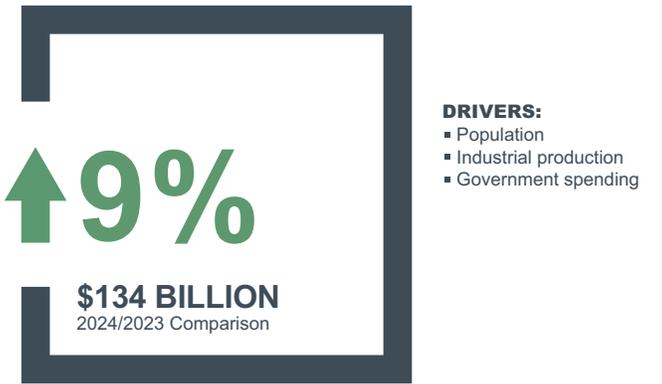
- The IIJA, CHIPS and Science Act and IRA have combined to spur record private sector investment in manufacturing, exceeding \$200 billion in planned construction spending in 2024, or nearly triple annual spending levels recorded in the 2010s.
- The construction investment boom is largely focused on semiconductors, electric vehicles and batteries, clean energy products and technologies, biomanufacturing and all the various components and materials that support these products and systems. Semiconductor manufacturing is the largest industry grouping, accounting for more than one-third of the planned investment.
- The Institute for Supply Management’s Purchasing Managers’ Index (ISM PMI) recently climbed above 50 after 16 months of suggested contraction to reach a 22-month high, indicating some return to confidence by owners in the manufacturing sector.
- Talent shortages and supply chain complexities will continue to cause strain on available resources and across planned investments in infrastructure and power.



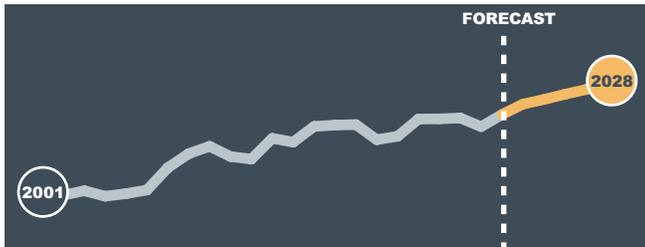
NONBUILDING STRUCTURES CONSTRUCTION PUT IN PLACE



POWER



- DRIVERS:**
- Population
 - Industrial production
 - Government spending



2025	STA	4%	\$139 B
2026	STA	4%	\$144 B
2027	STA	3%	\$149 B
2028	STA	3%	\$154 B

- Political support will remain focused on 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 aggressive investments in new manufacturing and industrial facilities, data centers, transportation and building electrification. For example, 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 trade infrastructure.

HIGHWAY AND SREET



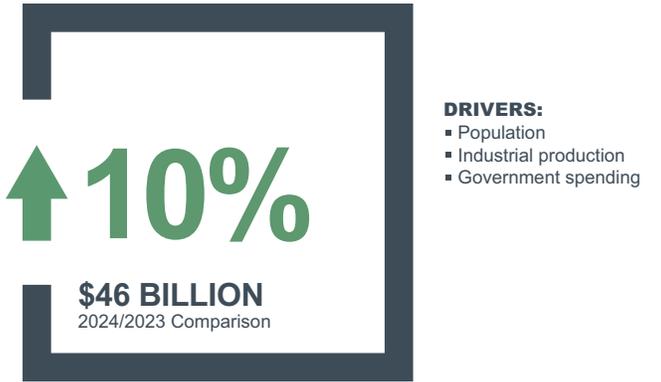
- DRIVERS:**
- Population
 - Government spending
 - Nonresidential structure investment



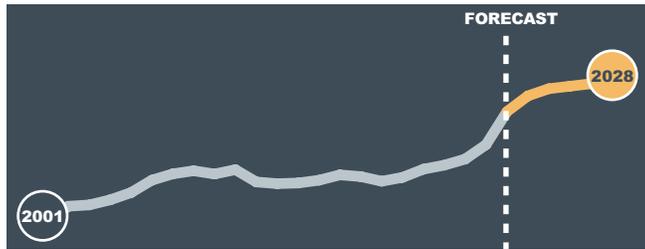
2025	UP	7%	\$161 B
2026	STA	4%	\$167 B
2027	STA	3%	\$171 B
2028	STA	2%	\$175 B

- Spending growth in 2024 will remain well over historical levels but will begin to slow this year and next as IIJA funds level off.
- Disinflation and reduced cost pressures will help states move projects forward in 2024 and 2025.
- An increasing share of funds is expected in new and/or capacity expansion projects over the forecast period, including several new and replacement bridges.

SEWAGE AND WASTE DISPOSAL



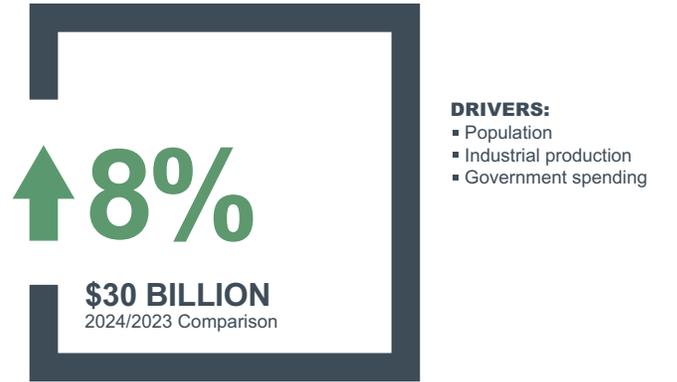
- DRIVERS:**
- Population
 - Industrial production
 - Government spending



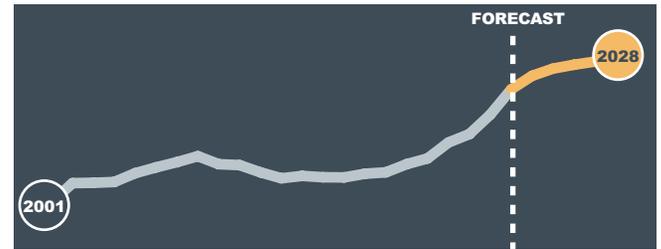
2025	STA	4%	\$48 B
2026	STA	1%	\$48 B
2027	STA	1%	\$49 B
2028	STA	3%	\$50 B

- Growth in spending in 2024 ties to the recent wave of residential and manufacturing investment, domestic migration, aging infrastructure, storm hardening/resiliency and the changing regulatory environment.
- Several federal funding mechanisms (including IIJA funds) are being applied to local sewage and waste disposal grants.
- The Environmental Protection Agency (EPA) is updating its Clean Watersheds Needs Survey (CWNS) later this year for the first time since 2012, which is an important means of determining investment needs and driving policy support for local and municipal infrastructure.

WATER SUPPLY



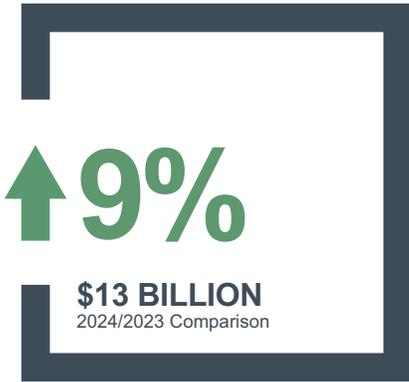
- DRIVERS:**
- Population
 - Industrial production
 - Government spending



2025	STA	4%	\$31 B
2026	STA	2%	\$31 B
2027	STA	2%	\$32 B
2028	STA	2%	\$33 B

- The EPA estimates that the U.S. needs \$650 billion over the next 20 years to improve safe drinking water infrastructure.
- 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

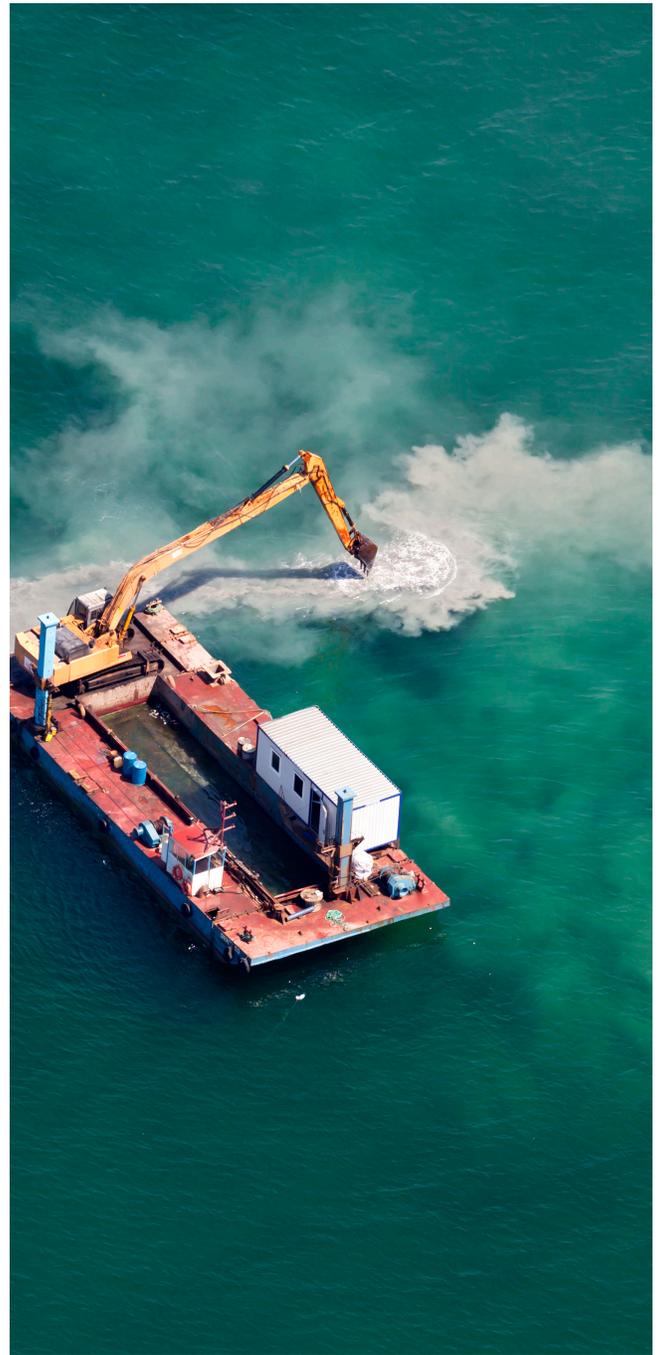


- DRIVERS:**
- Population
 - Government spending



2025	STA	3%	\$13 B
2026	DWN	-2%	\$13 B
2027	DWN	-3%	\$13 B
2028	STA	0%	\$12 B

- Growth in 2024 and 2025 stems from more than \$26 billion in combined IIJA and IRA projects awarded in 2023, up from \$22 billion in 2022.
- Dredging investment continues to expand and represents a growing share of conservation and development spending.
- Newly expanded manufacturing and trade infrastructure investments further emphasize conservation needs of coastal and intercoastal waterways.



Construction Put in Place Estimated for the United States Census Division

Millions of Current Dollars

2nd Quarter 2024 Forecast, Based on 4th Quarter 2023 Actuals and 1st Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	280,385	310,060	424,491	453,764	391,911	393,498	421,672	445,483	473,623	508,993
Multifamily	88,401	100,089	114,926	118,464	144,678	133,466	112,589	103,316	108,836	120,044
Improvements*	184,656	234,108	269,551	355,211	336,748	342,523	359,249	371,327	389,178	416,482
Total Residential	553,442	644,257	808,968	927,439	873,338	869,487	893,510	920,126	971,638	1,045,519
NONRESIDENTIAL BUILDINGS										
Lodging	33,461	28,483	19,082	19,745	23,606	26,840	27,050	25,369	25,955	28,091
Office	88,724	92,831	89,902	91,623	98,896	100,430	98,827	98,749	102,075	107,459
Commercial	84,345	89,714	97,394	121,349	132,013	129,755	123,483	124,693	131,208	141,355
Health Care	46,263	48,599	50,327	54,757	63,182	68,508	72,589	74,182	73,706	74,072
Educational	108,952	110,692	100,988	102,086	116,295	127,051	133,255	136,689	139,978	145,717
Religious	3,730	3,472	3,096	2,946	3,439	3,629	3,553	3,423	3,390	3,476
Public Safety	12,012	17,667	12,826	11,574	13,283	14,847	15,641	15,432	15,331	15,570
Amusement and Recreation	30,416	28,288	27,102	30,001	32,546	34,971	36,539	35,164	33,260	34,442
Transportation	57,448	60,734	59,075	58,725	63,793	70,429	78,552	84,470	86,825	88,439
Communication	22,184	23,876	23,091	24,306	24,879	26,188	27,848	29,698	31,199	32,241
Manufacturing	80,978	75,425	82,030	114,706	196,508	233,616	243,474	230,403	210,617	198,921
Total Nonresidential Buildings	568,513	579,781	564,913	631,818	768,440	836,265	860,811	858,271	853,544	869,783
NONBUILDING STRUCTURES										
Power	117,960	118,168	119,108	109,816	122,875	133,879	138,798	144,354	149,351	154,273
Highway and Street	99,402	102,321	103,381	114,107	134,736	150,453	160,585	166,892	171,182	174,674
Sewage and Waste Disposal	26,119	27,189	28,811	32,660	41,475	45,662	47,581	48,238	48,891	50,382
Water Supply	16,397	18,952	20,284	23,402	27,444	29,608	30,763	31,378	31,881	32,518
Conservation and Development	9,207	8,903	7,911	9,434	11,690	12,728	13,164	12,881	12,505	12,460
Total Nonbuilding Structures	269,085	275,533	279,495	289,419	338,220	372,331	390,891	403,744	413,810	424,307
Total Put in Place	\$1,391,040	\$1,499,571	\$1,653,376	\$1,848,676	\$1,979,998	\$2,078,083	\$2,145,211	\$2,182,141	\$2,238,992	\$2,339,609

Construction Put in Place Estimated for the United States Census Division

Change From Prior Year — Current Dollar Basis

2nd Quarter 2024 Forecast, Based on 4th Quarter 2023 Actuals and 1st Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	-3%	11%	37%	7%	-14%	0%	7%	6%	6%	7%
Multifamily	6%	13%	15%	3%	22%	-8%	-16%	-8%	5%	10%
Improvements*	-3%	27%	15%	32%	-5%	2%	5%	3%	5%	7%
Total Residential	-2%	16%	26%	15%	-6%	0%	3%	3%	6%	8%
NONRESIDENTIAL BUILDINGS										
Lodging	6%	-15%	-33%	3%	20%	14%	1%	-6%	2%	8%
Office	16%	5%	-3%	2%	8%	2%	-2%	0%	3%	5%
Commercial	-2%	6%	9%	25%	9%	-2%	-5%	1%	5%	8%
Health Care	6%	5%	4%	9%	15%	8%	6%	2%	-1%	0%
Educational	8%	2%	-9%	1%	14%	9%	5%	3%	2%	4%
Religious	7%	-7%	-11%	-5%	17%	6%	-2%	-4%	-1%	3%
Public Safety	28%	47%	-27%	-10%	15%	12%	5%	-1%	-1%	2%
Amusement and Recreation	8%	-7%	-4%	11%	8%	7%	4%	-4%	-5%	4%
Transportation	8%	6%	-3%	-1%	9%	10%	12%	8%	3%	2%
Communication	-9%	8%	-3%	5%	2%	5%	6%	7%	5%	3%
Manufacturing	12%	-7%	9%	40%	71%	19%	4%	-5%	-9%	-6%
Total Nonresidential Buildings	7%	2%	-3%	12%	22%	9%	3%	0%	-1%	2%
NONBUILDING STRUCTURES										
Power	18%	0%	1%	-8%	12%	9%	4%	4%	3%	3%
Highway and Street	8%	3%	1%	10%	18%	12%	7%	4%	3%	2%
Sewage and Waste Disposal	9%	4%	6%	13%	27%	10%	4%	1%	1%	3%
Water Supply	6%	16%	7%	15%	17%	8%	4%	2%	2%	2%
Conservation and Development	12%	-3%	-11%	19%	24%	9%	3%	-2%	-3%	0%
Total Nonbuilding Structures	13%	2%	1%	4%	17%	10%	5%	3%	2%	3%
Total Put in Place	4%	8%	10%	12%	7%	5%	3%	2%	3%	4%

*Improvements includes additions, alterations and major replacements. It 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 3% after dropping 1% in 2023. The stability in the market this year is fueled by sizable investments in nonbuilding structures.
- Growth in 2024 will be moderated by a declining residential housing market. Segments expected to be down include single-family, multifamily, improvements, lodging, office, commercial, and amusement and recreation. Stable segments (growth between 0% and 4%) include religious, communication and water supply.
- Health care, public safety, transportation, manufacturing, power, 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
Public Safety
Transportation
Manufacturing
Power
Highway and Street
Sewage and Waste Disposal
Conservation and Development



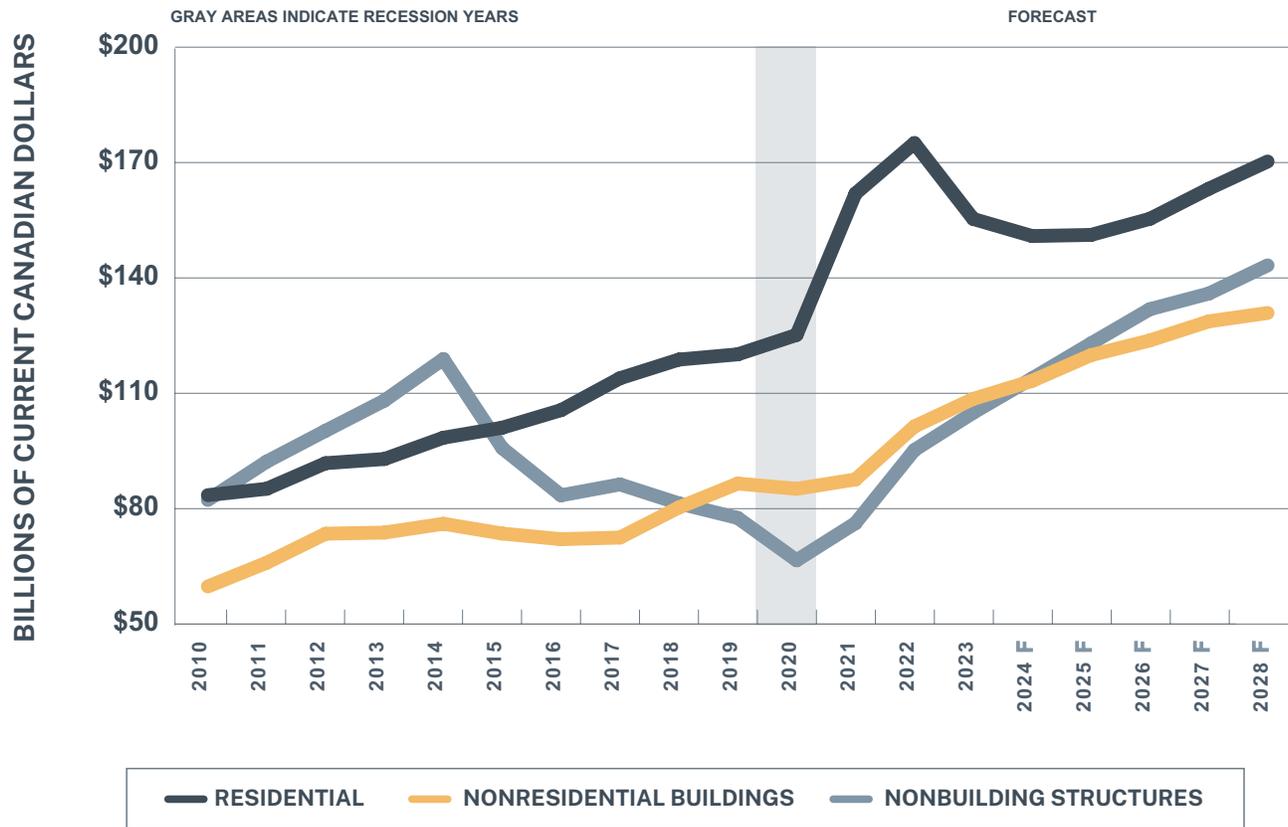
Education
Religious
Communication
Water Supply



Single-family
Multifamily
Improvements
Lodging
Office
Commercial
Amusement and Recreation



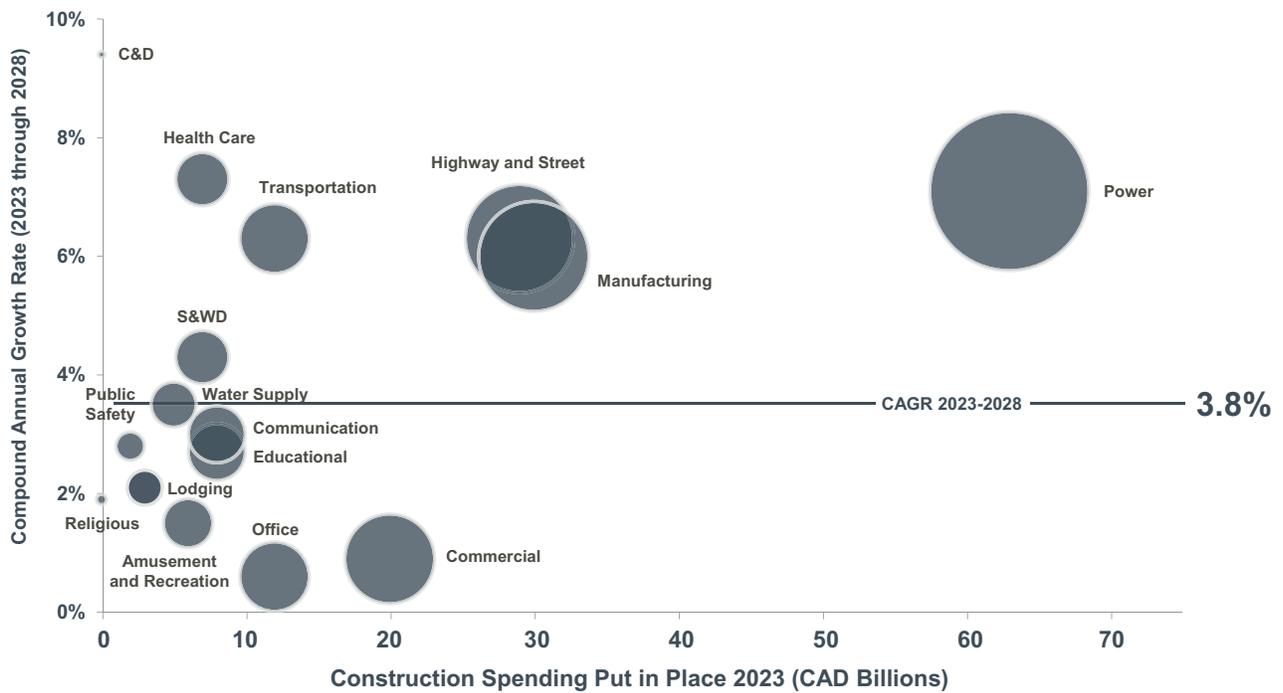
TOTAL CONSTRUCTION SPENDING PUT IN PLACE ESTIMATED FOR CANADA



SOURCE: FMI FORECAST Q2 2024



NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE FORECAST GROWTH BY CONSTRUCTION SEGMENT



SOURCE: FMI FORECAST Q2 2024

Construction Put in Place Estimated for Canadian Census Division

Millions of Current Canadian Dollars

2nd Quarter 2024 Forecast, Based on 4th Quarter 2023 Actuals and 1st Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	22,874	24,090	34,754	36,827	28,085	27,002	27,195	27,605	28,930	30,020
Multifamily	35,964	37,955	46,755	50,558	49,244	48,169	47,727	48,994	51,609	52,746
Improvements*	61,249	63,131	80,724	88,081	78,251	75,923	76,476	79,014	82,943	87,872
Total Residential	120,087	125,175	162,233	175,466	155,580	151,095	151,397	155,613	163,482	170,639
NONRESIDENTIAL BUILDINGS										
Lodging	2,750	2,567	2,626	3,397	3,358	3,299	3,327	3,408	3,617	3,726
Office	11,311	11,616	10,311	11,104	11,902	11,460	11,150	11,350	11,910	12,258
Commercial	16,072	15,003	15,346	19,851	19,625	19,191	18,721	19,096	19,851	20,543
Health Care	5,319	5,756	6,311	6,796	7,244	7,923	8,688	9,470	10,070	10,317
Educational	6,744	6,843	7,762	8,151	8,498	8,856	9,237	9,606	10,022	9,698
Religious	444	415	318	312	354	366	365	374	385	389
Public Safety	1,698	1,744	1,548	1,667	1,787	1,872	1,972	2,069	2,135	2,049
Amusement and Recreation	4,116	4,352	3,825	4,957	6,422	6,240	6,183	6,481	6,830	6,933
Transportation	8,698	8,875	10,328	11,006	11,591	12,246	13,305	14,594	15,133	15,725
Communication	5,878	6,784	6,900	7,874	8,460	8,536	8,854	9,226	9,667	9,805
Manufacturing	23,189	20,883	22,021	26,074	29,163	33,141	38,075	38,057	39,105	39,491
Total Nonresidential Buildings	86,221	84,840	87,295	101,191	108,405	113,130	119,876	123,730	128,725	130,932
NONBUILDING STRUCTURES										
Power	50,443	38,925	47,380	58,566	62,919	68,389	74,625	80,995	83,409	88,725
Highway and Street	18,557	19,027	19,935	26,043	29,919	32,777	34,802	36,760	38,418	40,118
Sewage and Waste Disposal	4,598	4,846	5,057	5,997	6,886	7,370	7,869	8,254	8,219	8,508
Water Supply	3,457	3,214	3,427	4,307	4,968	5,119	5,502	5,772	5,828	5,910
Conservation and Development	147	81	48	87	98	124	135	142	142	154
Total Nonbuilding Structures	77,202	66,093	75,847	95,000	104,790	113,779	122,933	131,923	136,016	143,416
Total Put in Place	\$283,510	\$276,108	\$325,376	\$371,657	\$368,775	\$378,004	\$394,207	\$411,267	\$428,223	\$444,987

Construction Put in Place Estimated for Canadian Census Division

Change From Prior Year — Current Canadian Dollars

2nd Quarter 2024 Forecast, Based on 4th Quarter 2023 Actuals and 1st Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	-13%	5%	44%	6%	-24%	-4%	1%	2%	5%	4%
Multifamily	13%	6%	23%	8%	-3%	-2%	-1%	3%	5%	2%
Improvements*	1%	3%	28%	9%	-11%	-3%	1%	3%	5%	6%
Total Residential	1%	4%	30%	8%	-11%	-3%	0%	3%	5%	4%
NONRESIDENTIAL BUILDINGS										
Lodging	-1%	-7%	2%	29%	-1%	-2%	1%	2%	6%	3%
Office	12%	3%	-11%	8%	7%	-4%	-3%	2%	5%	3%
Commercial	15%	-7%	2%	29%	-1%	-2%	-2%	2%	4%	3%
Health Care	1%	8%	10%	8%	7%	9%	10%	9%	6%	2%
Educational	-12%	1%	13%	5%	4%	4%	4%	4%	4%	-3%
Religious	16%	-7%	-24%	-2%	13%	3%	0%	3%	3%	1%
Public Safety	36%	3%	-11%	8%	7%	5%	5%	5%	3%	-4%
Amusement and Recreation	-6%	6%	-12%	30%	30%	-3%	-1%	5%	5%	1%
Transportation	7%	2%	16%	7%	5%	6%	9%	10%	4%	4%
Communication	0%	15%	2%	14%	7%	1%	4%	4%	5%	1%
Manufacturing	15%	-10%	5%	18%	12%	14%	15%	0%	3%	1%
Total Nonresidential Buildings	8%	-2%	3%	16%	7%	4%	6%	3%	4%	2%
NONBUILDING STRUCTURES										
Power	-5%	-23%	22%	24%	7%	9%	9%	9%	3%	6%
Highway and Street	-7%	3%	5%	31%	15%	10%	6%	6%	5%	4%
Sewage and Waste Disposal	21%	5%	4%	19%	15%	7%	7%	5%	0%	4%
Water Supply	-5%	-7%	7%	26%	15%	3%	7%	5%	1%	1%
Conservation and Development	-28%	-45%	-41%	81%	13%	27%	9%	5%	0%	8%
Total Nonbuilding Structures	-5%	-14%	15%	25%	10%	9%	8%	7%	3%	5%
Total Put in Place	1%	-3%	18%	14%	-1%	3%	4%	4%	4%	4%

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

AUTHORS



JAY BOWMAN is a partner at FMI. Jay assists a broad range of stakeholders in the architecture, engineering and construction industry. As the leader of FMI's Research and Analytics Practice, he develops data-driven, fact-based market intelligence to bring insights that catalyze exceptional company performance and competitive advantage. The research services he oversees include market sizing, forecasting, buying practices, preferences, competitive behaviors and response. He can be reached at jay.bowman@fmicorp.com.



BRIAN STRAWBERRY is chief economist at FMI. Brian leads FMI's efforts in market sizing, forecasting, building products and construction material pricing, and consumption trends. He focuses on primary research methods, including the implementation and analysis of surveys and interviews. Brian also leads and manages various external market research engagements and constructs tools and models for efficiently performing high-quality analyses. He can be reached at brian.strawberry@fmicorp.com.



EMILY BEARDALL is a senior consultant at FMI. Emily develops creative analytical tools that deliver powerful solutions for FMI's clients. She is committed to utilizing these strategic tools to improve company performance and profitability. She can be reached at emily.beardall@fmicorp.com.



CONTACT US



RALEIGH HEADQUARTERS
223 S. West Street
Suite 1200
Raleigh, NC 27603



919.787.8400

FMI is a leading consulting and investment banking firm dedicated to serving companies working within the built environment. Our professionals are industry insiders who understand your operating environment, challenges and opportunities. FMI's sector expertise and broad range of solutions help our clients discover value drivers, build resilient teams, streamline operations, grow with confidence and sell with optimal results.

OFFICES

Denver
44 Cook Street
Suite 900
Denver, CO 80206
303.377.4740

Houston
1301 McKinney Street
Suite 2000
Houston, TX 77010
713.936.5400

Tampa
4300 W. Cypress Street
Suite 950
Tampa, FL 33607
813.636.1364

FMICORP.COM