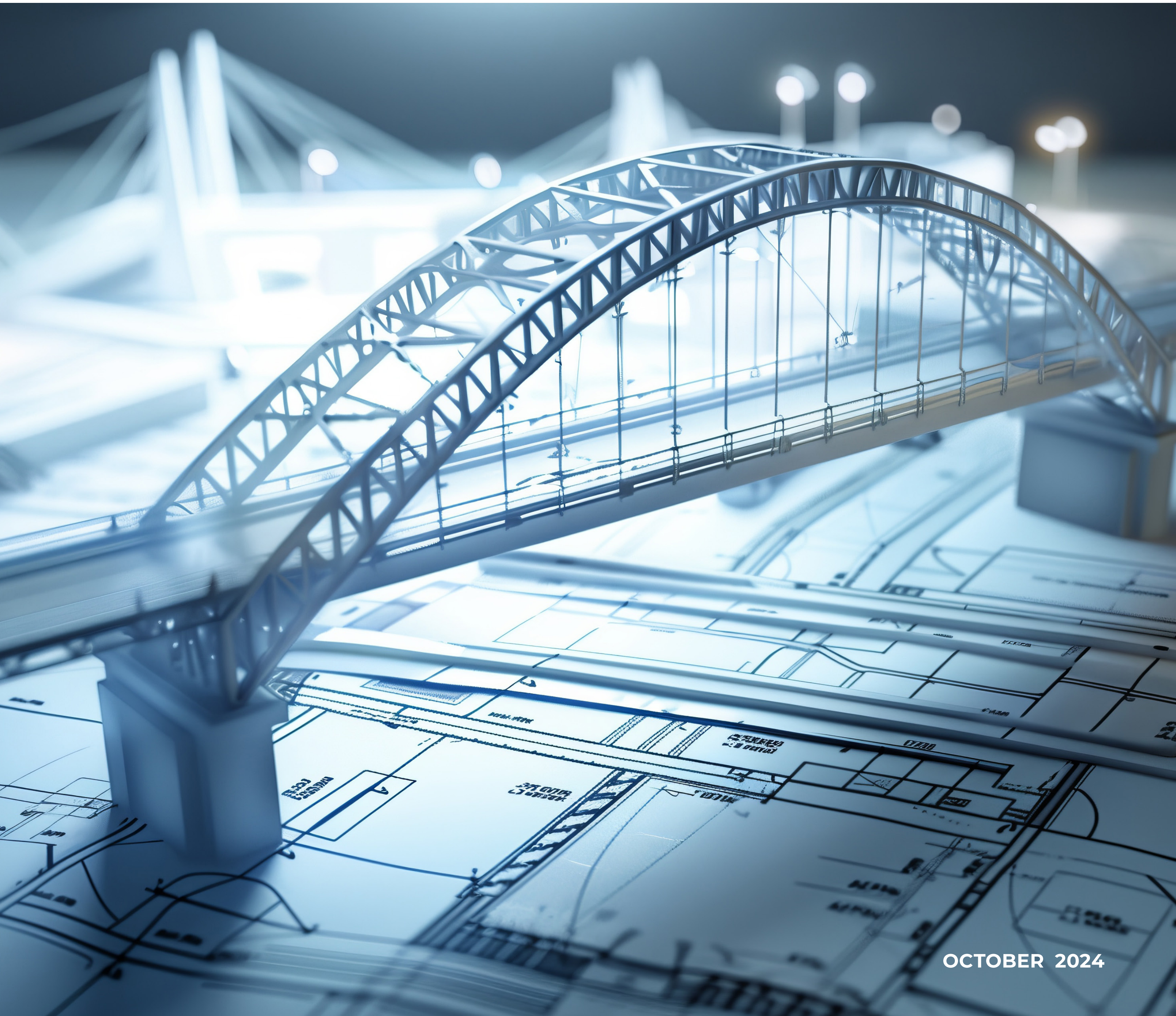
FOURTH QUARTER EDITION

2024 NORTH AMERICAN ENGINEERING AND CONSTRUCTION

OUTLOOK



OCTOBER 2024

Executive Summary

Despite the assumed recession for the broader U.S. economy in 2024 and into 2025, FMI anticipates engineering and construction spending will continue to expand, albeit at a slower rate 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 the recent onset of a rate-cutting cycle along with some anticipated political support in addressing affordability concerns and limitations. Multifamily residential is projected to suffer for the next couple of years due to the conclusion of a large and rapid building cycle. Residential improvements will continue to face challenges but experience relief through lower borrowing rates that unlock homeowner mobility and refinancing activity.

Other building construction sectors are generally positive, supported largely by legislation such as the Infrastructure Investment and Jobs Act (IIJA), Inflation Reduction Act (IRA) and CHIPS and Science Act. Beginning next year, many of these segments will slow, but overall nonresidential building construction is expected to stabilize, with forecast spending anticipated to expand alongside near-term inflation forecasts, between 1% and 2% per year.

Infrastructure construction remains the brightest spot in our forecast. FMI expects 2025 policies, no matter the outcome of the pending elections, will continue to support infrastructure investment, although likely in a much more limited fashion than current levels reflect. Additionally, reauthorization of major IIJA components beginning in 2026 will likely exceed current investment levels. Nonetheless, the current funding picture indicates several years of momentum and support for nonbuilding structures.

In short, after expanding by more than 40% cumulatively since 2020, growth is projected to slow for the industry overall during FMI's forecast period, with several segments and geographies performing above average. The expected return of single-family residential construction will stimulate demand for other construction segments (e.g., mixed use and institutional structures) and support ongoing industry expansion. Despite broader U.S. economic challenges, this slower pace of investment should allow many stakeholders to address some of the longer-term challenges facing the built environment.

U.S. KEY TAKEAWAYS

- Total engineering and construction spending for the U.S. is forecast to end 2024 up 5%, or just below 2023 growth, at approximately 6%. Anticipated growth in 2024 will remain strong across most sectors, led by nonbuilding structures.
- High-performing segments in 2024 point to strong investment growth across public safety, manufacturing, amusement and recreation, and water supply, each with anticipated year-end growth exceeding 10% above 2023 levels.
- Several of the segments sensitive to high interest rates, including multifamily residential, lodging and commercial, are expected to decline in 2024. Conversely, single-family residential, the largest segment in the industry, is expected to rebound from the large 12% drop in 2023.
- The fourth quarter 2024 Nonresidential Construction Index (NRCI) score of 48.4 is slightly higher than the prior quarter of 47.2 but maintains the index score under the neutral base of 50. Nine of the past 10 index readings have been under the neutral base of 50, suggesting participants continue to see contracting industry opportunities in the quarter and year ahead. Longer-term sentiment expectations showed the most strength this quarter.

U.S. 2024 SEGMENT PERFORMANCE
2024/2023 COMPARISON

UP
5% or more

Single-family
Residential Improvements
Public Safety
Amusement and Recreation
Transportation
Manufacturing
Power
Sewage and Waste Disposal
Water Supply

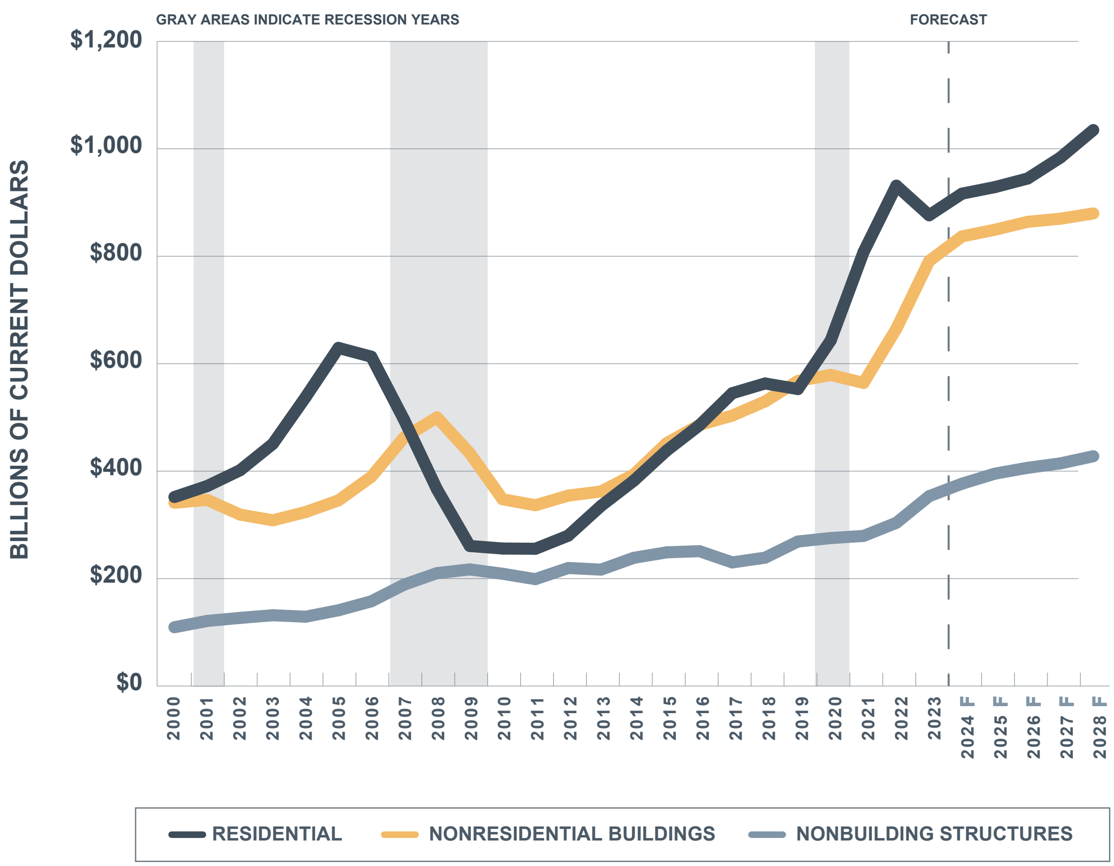
STABLE
0% to 4%

Office
Health Care
Educational
Religious
Communication
Highway and Street
Conservation and Development

DOWN
Under 0%

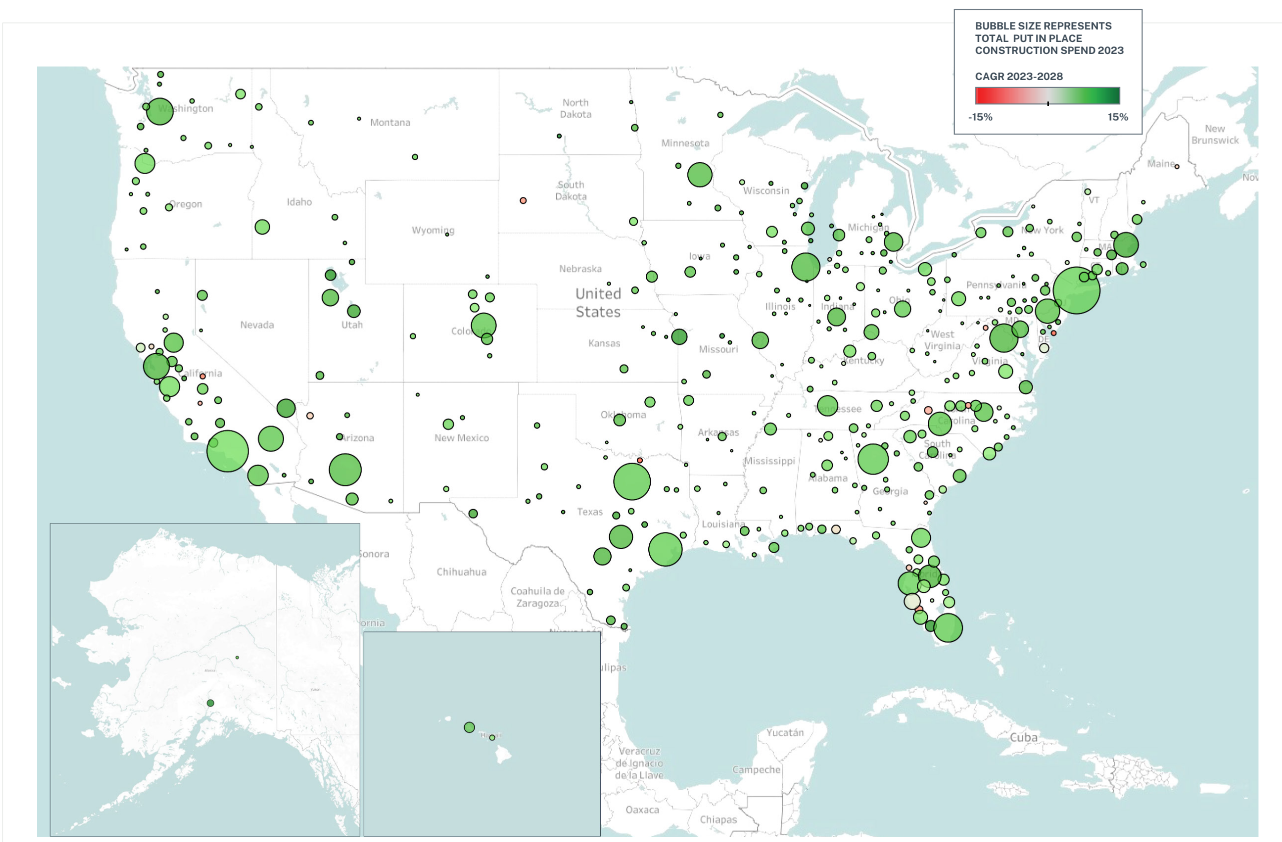
Multifamily
Lodging
Commercial

CONSTRUCTION SPENDING PUT IN PLACE
ESTIMATED FOR THE UNITED STATES



SOURCE: FMI FORECAST Q4 2024

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



SOURCE: FMI FORECAST Q4 2024

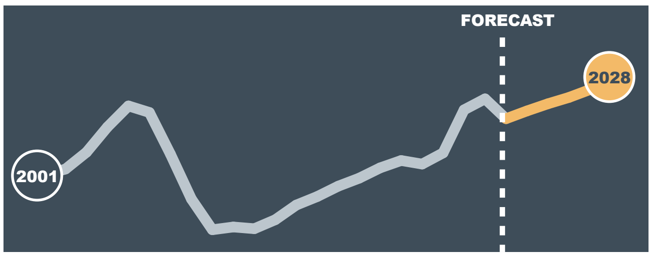
RESIDENTIAL CONSTRUCTION PUT IN PLACE

SINGLE-FAMILY RESIDENTIAL

5%

$422 BILLION
2024/2023 Comparison

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



2025	UP	5%	$441 B
2026	STA	4%	$457 B
2027	UP	5%	$478 B
2028	UP	6%	$505 B

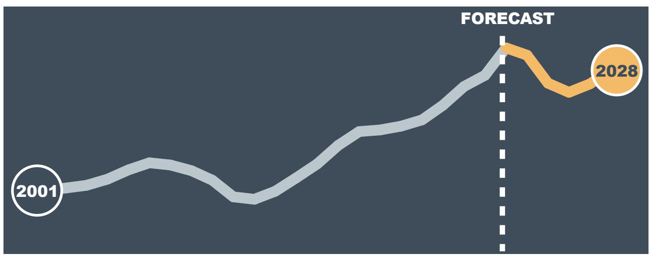
- Homebuilder sentiment remains below the index neutral base of 50, suggesting further industry contraction. The strongest component of the index in the next six months is expectations for sales.
- The industry faces an estimated 1.5 million shortage in homes, a figure that is expected to rise due to the cost of homes, debt and associated services (e.g., insurance). As a result, the small but growing investor-led single-family build-to-rent market has significant growth prospects.
- Due to declining interest rates, homebuilders plan to more regularly compete with existing homeowners' listings through the end of this year and into 2025. Builders will remain competitive against traditional lending on existing homes over the near term.
- Thirty-year mortgage rates are expected to be between 5.5% and 6.5% over the next six months, and lower than 5% by the end of 2025.

MULTIFAMILY RESIDENTIAL

-4%

$140 BILLION
2024/2023 Comparison

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



2025	DWN	-16%	$118 B
2026	DWN	-6%	$110 B
2027	UP	6%	$117 B
2028	UP	9%	$128 B

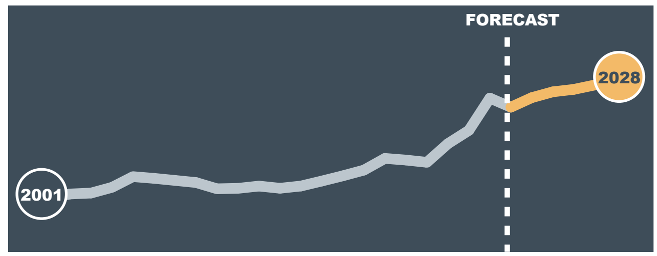
- Significant inventory was added in recent months and multifamily units in development have contracted through 2024. The market is also seeing stable or falling rental rates in many large metropolitan markets, causing many owners to either pause or reconsider new developments.
- Fewer multifamily projects breaking ground will disrupt other segments in the years ahead, notably retail, lodging, office, and amusement and recreation, due to fewer mixed-use developments.
- Developers are more likely to move forward with project plans going into next year, with ongoing rate cuts anticipated through 2025. Those projects will take some time to reach groundbreaking, and investments will be limited given that rental rates are no longer expanding rapidly.

IMPROVEMENTS

8%

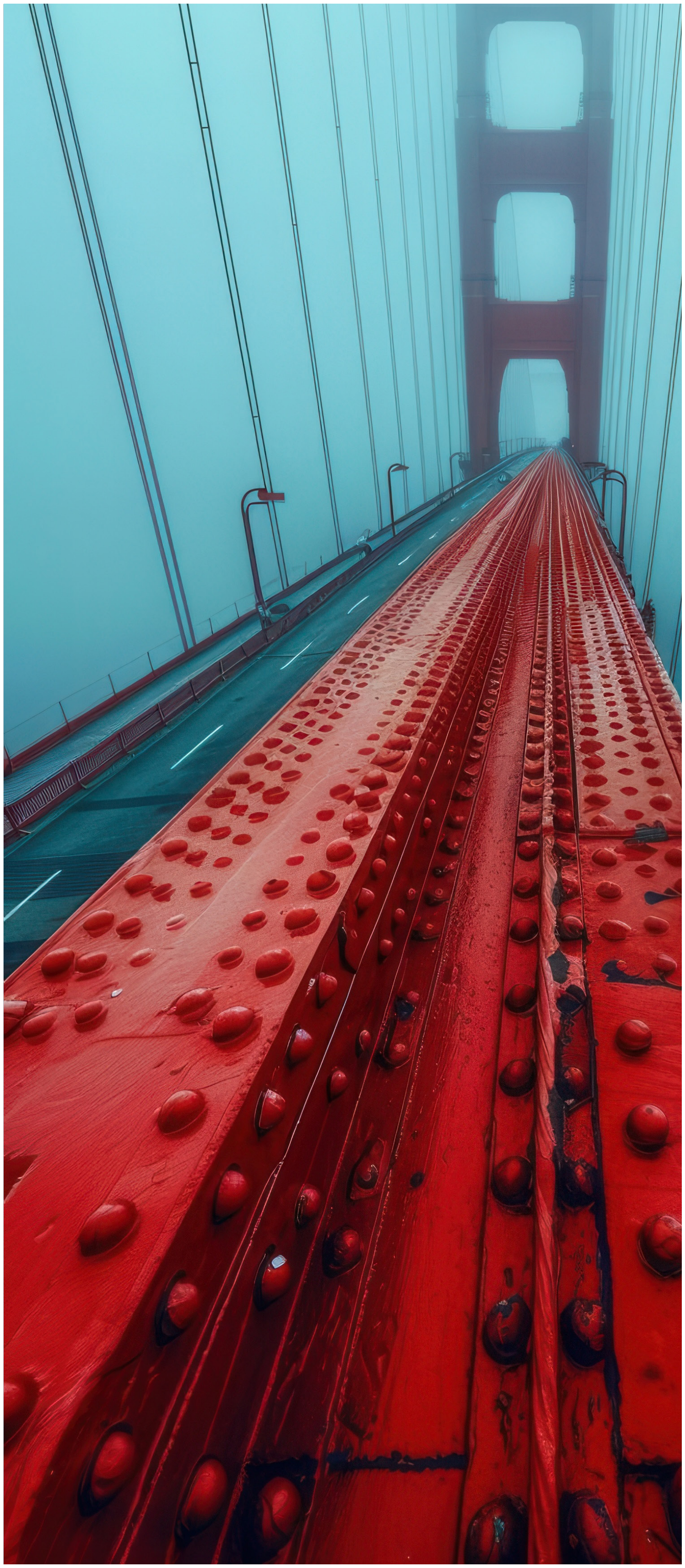
$357 BILLION
2024/2023 Comparison

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



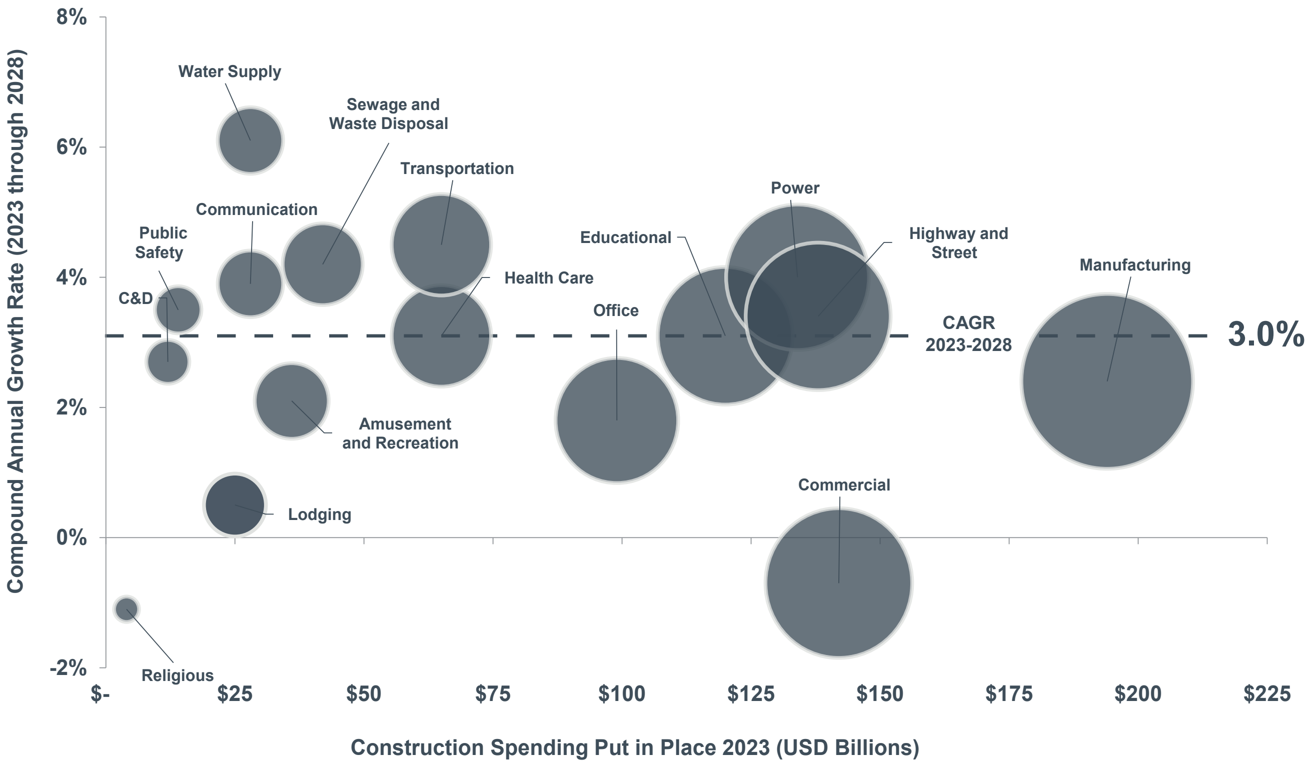
2025	STA	4%	$372 B
2026	STA	2%	$378 B
2027	STA	3%	$390 B
2028	STA	4%	$404 B

- Homeowners may delay improvements other than general repair and maintenance due to high materials, labor and financing costs combined with moderating home prices. The median age of an owner-occupied home is more than 40 years (and increasing).
- Big-box home-improvement retailers have been warning of consumer concerns and are expecting reductions in renovations and do-it-yourself projects. There will likely be more special financing and promotions offered as incentives to motivate buyers.
- Homeowners will likely be more mobile due to lower rates, which should increase demand for improvements due to higher buying and selling activity.
- New-home builders have been limiting custom and luxury options in recent years, which will encourage some to invest in upgrades on their new properties.



NONRESIDENTIAL CONSTRUCTION PUT IN PLACE

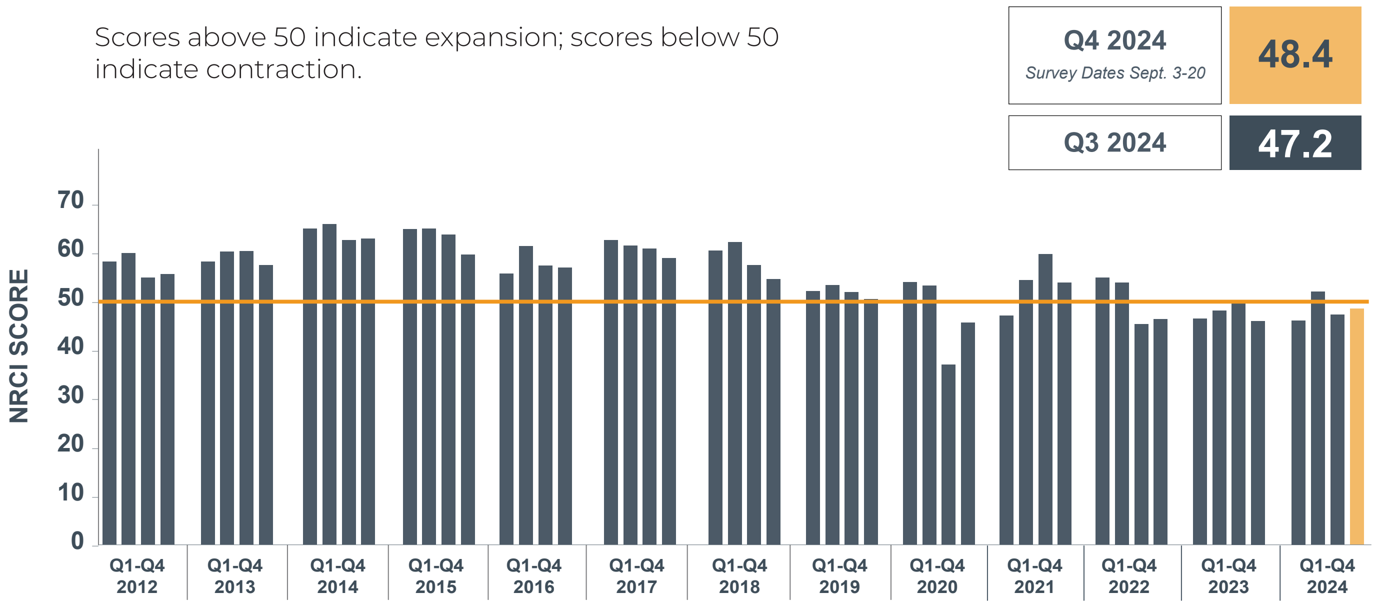
NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE
FORECAST GROWTH BY CONSTRUCTION SEGMENT



SOURCE: FMI FORECAST Q4 2024

TOTAL NONRESIDENTIAL CONSTRUCTION INDEX (NRCI)
Q1 2012 TO Q4 2024

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

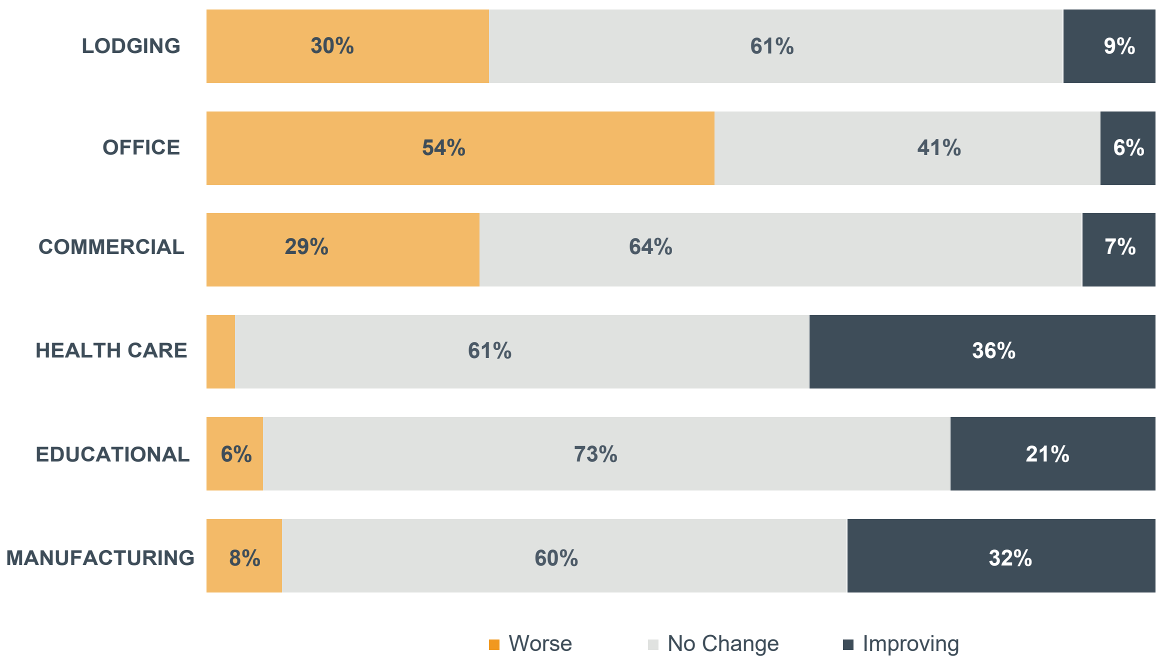


NRCI INDEX MOVEMENT		Q4 2024	Q3 2024
Overall U.S. Economy	↓	38.9	42.8
Economy Where We Do Business	↓	38.3	45.2
Our Engineering and Construction Business	↓	51.9	56.6
Engineering and Construction Where We Do Business	↓	43.8	45.0
Backlog	↓	49.4	54.2
Cost of Materials	↑	48.1	29.5
Cost of Labor	↑	36.4	22.9
Productivity	↑	50.0	48.2

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.

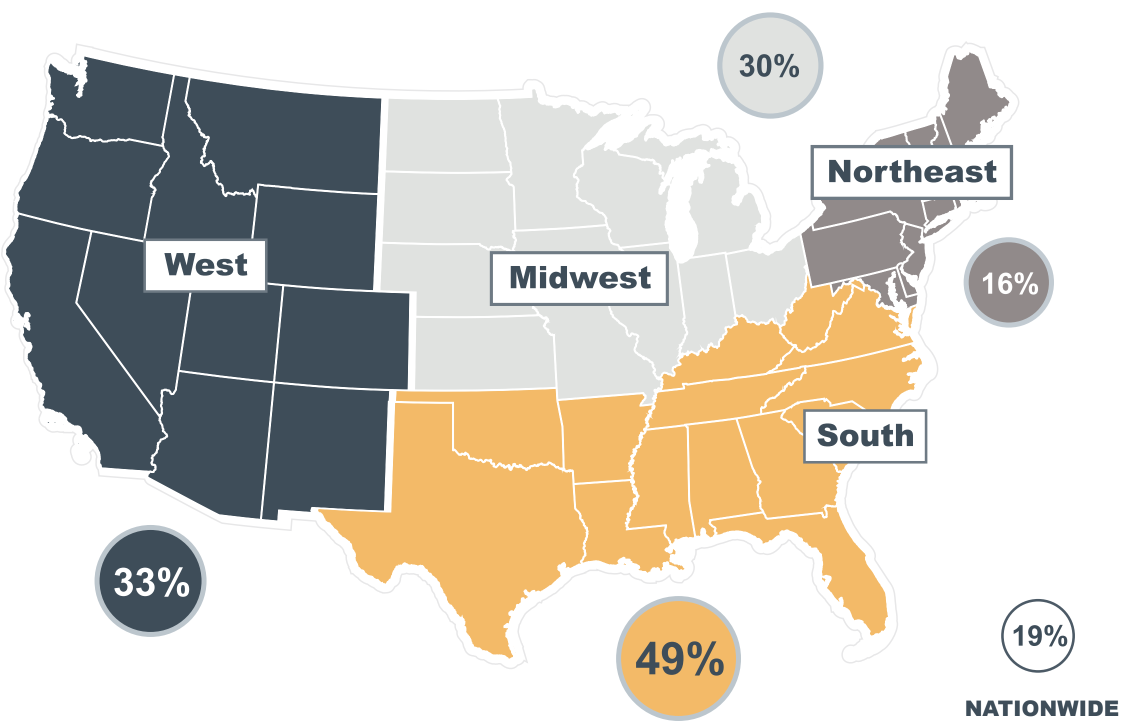
If you are interested in participating in this important industry index, please submit a request via our NRCI Participation Request form.

PERCEPTION OF CHANGE BY SEGMENT FOR NEXT QUARTER*



*SEGMENTS CAPTURED IN NRCI SURVEY.

WHERE SURVEY PARTICIPANTS WORK BY GEOGRAPHY*



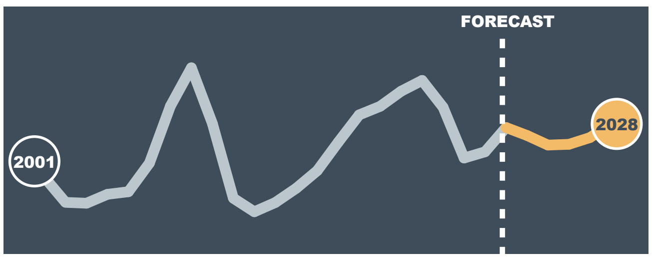
*RESPONDENTS ARE ABLE TO SELECT MORE THAN ONE OPTION.

LODGING

-6%

$23 BILLION
2024/2023 Comparison

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



2025	DWN	-8%	$21 B
2026	STA	1%	$22 B
2027	UP	6%	$23 B
2028	UP	11%	$25 B

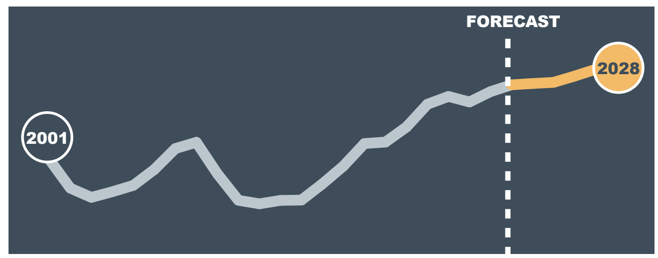
- Recent industry performance remains slightly positive year-over-year across all key measures, including occupancy, average daily rate (ADR) and revenue per available room (RevPAR).
- The hospitality industry is shifting from discretionary and leisure spending back to business travel as weekday demand continues to increase.
- Reduced labor cost pressures going into 2025 are anticipated to ease industry profitability challenges.
- Large owners and chains will account for most construction activity through 2025.

OFFICE

1%

$100 BILLION
2024/2023 Comparison

DRIVERS:
- Office vacancy rates
- Unemployment rates



2025	STA	1%	$100 B
2026	STA	3%	$104 B
2027	STA	3%	$107 B
2028	STA	1%	$108 B

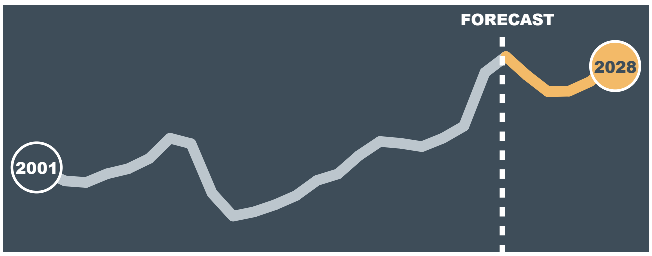
- Late 2025 and 2026 will likely see some reversal in extremely high office vacancy rates, which exceed 20% for the nation and are at the highest levels since the late 1970s. Several major metropolitan areas have availability rates exceeding 25%, including San Francisco, Atlanta, Dallas, Chicago and Houston.
- A few large employers (e.g., Amazon, Apple, Blackrock) recently announced plans for a return-to-the-office work week.
- The U.S. Census Bureau recently released and began publishing monthly private data center construction spending as a subset of office. Monthly private data center spending data through the first eight months of 2024 shows a 60% increase in investment above 2023 levels. Conversely, non-data center private office spending is down nearly 15%.

COMMERCIAL

-8%

$130 BILLION
2024/2023 Comparison

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



2025	DWN	-8%	$119 B
2026	STA	0%	$120 B
2027	UP	5%	$126 B
2028	UP	9%	$137 B

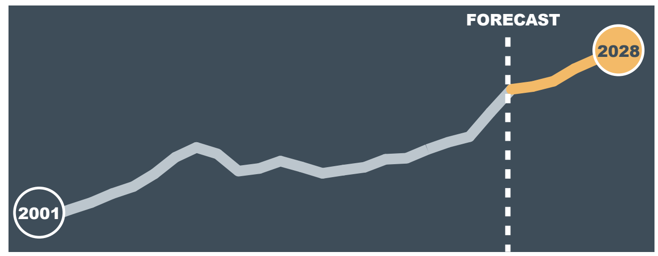
- The commercial sector is expected to contract in 2024 for the first time since 2019, largely driven by a 20% decline in year-over-year private warehouse construction.
- The recent wave of multifamily development is being followed by increased brick-and-mortar retail investment through 2025 to service new residents and will somewhat offset further contraction in warehouse.
- New starts will likely see ongoing challenges tied to increased financial stress on the consumer and reduced multifamily and mixed-use development investment over the next several years.

HEALTH CARE

1%

$66 BILLION
2024/2023 Comparison

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



2025	STA	3%	$68 B
2026	UP	6%	$72 B
2027	STA	4%	$75 B
2028	STA	2%	$76 B

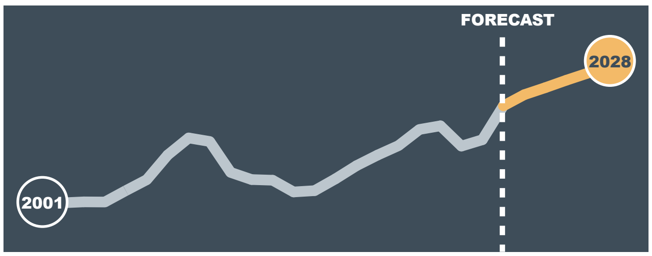
- Investment levels will be stable through 2025, led by private hospital construction, with many new large facilities and expansion projects underway. Many of these large projects, however, are being met with resource constraints and delays. Investment growth is expected to return in late 2025 and into 2026 with another wave of large-scale projects breaking ground next year.
- We anticipate mergers and acquisitions (M&A) activity over the next several years as the mix of traditional and digital health care becomes more common and desirable, with investors interested in the technology, telecom and retail industries.

EDUCATIONAL

4%

$126 BILLION
2024/2023 Comparison

DRIVERS:
- Population change in ages under 18
- Population change in ages 18-24
- Stock markets
- Government spending
- Nonresidential structure investment



2025	STA	3%	$129 B
2026	STA	3%	$132 B
2027	STA	3%	$136 B
2028	STA	3%	$140 B

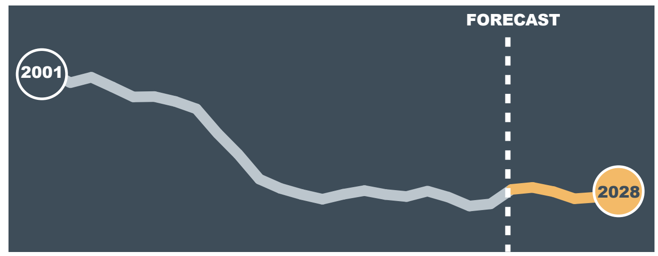
- The presidential election cycle is anticipated to allow state and local governments to pass a new wave of education bond measures that will stimulate investment growth over the next several years.
- Higher-education construction spending remains strong, outpacing K-12 through year-end, led by dormitory and instructional facility investments.
- IRA funds will be used to begin projects into 2025, largely focused on HVAC, lighting, building envelope, clean and renewable energy solutions, and car-charging stations.

RELIGIOUS

2%

$4 BILLION
2024/2023 Comparison

DRIVERS:
- GDP
- Population
- Income
- Personal savings



2025	DWN	-5%	$4 B
2026	DWN	-8%	$3 B
2027	STA	2%	$3 B
2028	STA	4%	$4 B

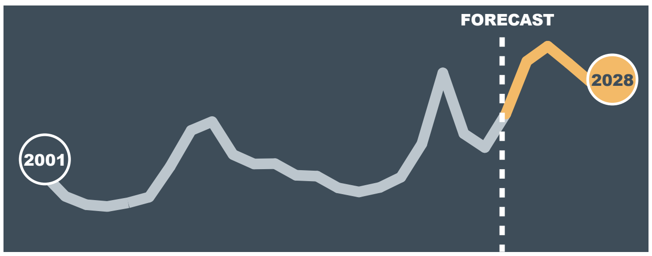
- Houses of worship (e.g., temples, churches, mosques, synagogues) are leading strong growth in the segment in 2024.
- Members' disposable incomes, the main driver for institutions receiving donations, will remain strained through 2025 given the rising unemployment rate.
- In-person church attendance has declined over the past several decades and is expected to continue to fall into the forecast period.

PUBLIC SAFETY

29%

$19 BILLION
2024/2023 Comparison

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



2025	UP	6%	$20 B
2026	DWN	-7%	$18 B
2027	DWN	-8%	$17 B
2028	STA	1%	$17 B

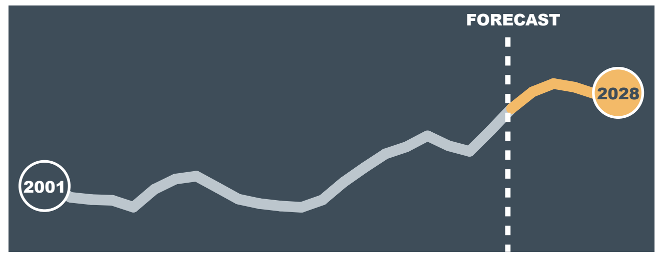
- Public safety construction investment rose rapidly over the past year, led by significant year-over-year spending increases across all subsegments, including correctional, detention, police and sheriff, fire and rescue, as well as the other category that includes armory and military structures.
- The latest buildings and facilities submission from 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

10%

$40 BILLION
2024/2023 Comparison

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



2025	STA	4%	$42 B
2026	DWN	-2%	$41 B
2027	DWN	-4%	$39 B
2028	STA	2%	$40 B

- Construction through early 2024 was led by public spending in social centers (e.g., community centers, golf and country clubs), neighborhood centers, convention centers and sporting facilities.
- The most viable large projects in planning (e.g., convention centers, stadiums and arenas) are those benefiting from public-private coordination and supported by new or expanding infrastructure.
- Year-to-date investment is contracting across most large private subsegments, including sports facilities, meeting centers, theme and amusement parks, and fitness facilities.

TRANSPORTATION

5%

$69 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Government spending
- Transportation funding

2025	STA	4%	$72 B
2026	UP	5%	$75 B
2027	STA	4%	$78 B
2028	STA	4%	$81 B

- IIJA transportation funds are set to expire in fiscal year 2026. While we expect some political posturing that could cause delays or extensions, we are forecasting an increase in funding.
- Airports led transportation investment through the first half of 2024, with significant gains in terminal spending. Airport infrastructure needs are expanding rapidly, with passenger and cargo volumes each expected to double before 2040.
- The manufacturing construction boom in the U.S. will support expanding transportation needs over the forecast period, especially for freight rail and port activity. Recent labor strikes will amplify awareness of these needs over the next several years.

COMMUNICATION

1%

$28 BILLION
2024/2023 Comparison

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

2025	STA	4%	$29 B
2026	UP	5%	$31 B
2027	UP	5%	$32 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, internet of things and virtual offices, as well as demands from online learning and entertainment.
- Industry demands will overlap with investment across data centers, manufacturing, transportation, power and logistics, and distribution.
- Owners are likely to remain concerned about pollution obstacles in urban markets while IIJA funds fuel increased fiber investment across suburban and rural markets.
- Growth in the use of global satellite services will continue to accelerate.

MANUFACTURING

↑21%

$235 BILLION
2024/2023 Comparison

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

2025	UP	5%	$247 B
2026	STA	0%	$248 B
2027	DWN	-5%	$235 B
2028	DWN	-7%	$218 B

- The IIJA, CHIPS and Science Act and IRA combined to spur record private sector investment in manufacturing, nearing $235 billion in planned construction in 2024, or more than triple average annual spending levels recorded through the 2010s.
- The manufacturing construction boom continues, with a focus on large-scale investments in semiconductors, electric vehicles and batteries, clean energy and biomanufacturing. Construction spending growth through 2024 has been led by chemical (e.g., plastics and rubber).
- The Manufacturing ISM PMI for August remains just below the 50% threshold, at 47.2%, indicating sector contraction for the fifth consecutive month. 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. Pricing volatility due to oil prices and labor disruptions across port infrastructure may amplify these complexities into next year.

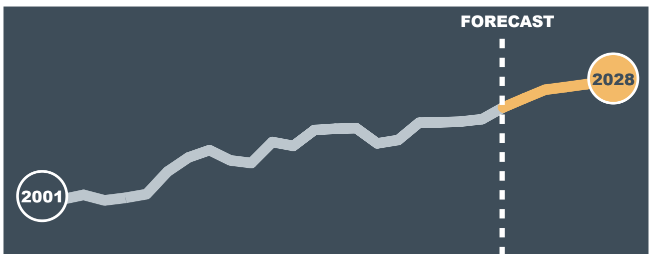
NONBUILDING STRUCTURES CONSTRUCTION PUT IN PLACE

POWER

7%

$144 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Industrial production
- Government spending



2025	UP	6%	$153 B
2026	STA	2%	$156 B
2027	STA	2%	$159 B
2028	STA	3%	$163 B

- Combined political, geopolitical and technological motivations will drive accelerated investment into the foreseeable future. FMI anticipates increasing spending over the forecast period no matter election outcomes.
- Short-term investment will remain focused on renewable energy investments, including solar, batteries and the shift toward electric transportation and building systems. Long-term investment and research and development will continue across all power generation platforms.
- Grid planners significantly raised their five-year load growth outlooks to a 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. Data center power needs are expected to triple by 2030.

HIGHWAY AND STREET

4%

$144 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Government spending
- Nonresidential structure investment

2025	STA	3%	$148 B
2026	STA	3%	$152 B
2027	STA	2%	$156 B
2028	STA	4%	$163 B

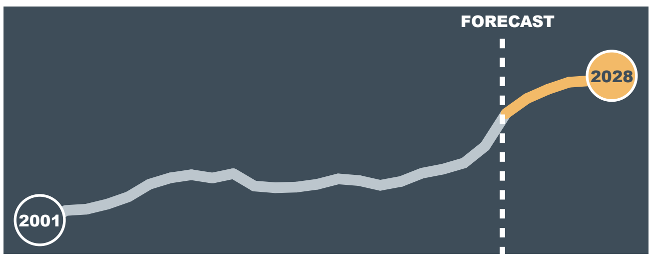
- Bridge investment will continue to lead highway and street construction growth through 2024. Strength in year-to-date spending, however, is upheld by expanded pavement spending.
- Programmed IIJA highway funds are set to expire in fiscal year 2026, upon which we anticipate political posturing possibly met with some delay or extension but ultimately leading to another boost in funding levels as various temporary and grant programs are deemed permanent.
- Spending levels will remain elevated but are beginning to level off through the second half of 2024, alongside increased competition and reduced pricing pressures on labor and materials relative to the past few years.

SEWAGE AND WASTE DISPOSAL

9%

$46 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Industrial production
- Government spending



2025	UP	5%	$48 B
2026	STA	4%	$50 B
2027	STA	1%	$51 B
2028	STA	2%	$51 B

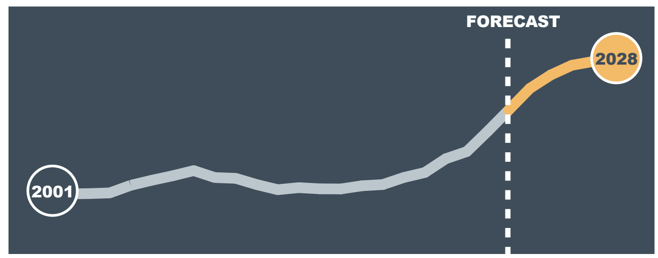
- Spending in 2024 is being led by treatment plant expansion projects tied to the recent wave of residential and manufacturing investment.
- Additionally, migration trends, aging infrastructure, storm cleanup/hardening/resiliency and the changing regulatory environment all contribute to long-term investment needs.
- The Environmental Protection Agency's (EPA's) Clean Watershed Needs Survey (CWNS) recently identified a $630 billion gap between available funds and needed infrastructure investments, a 73% increase over the gap cited in the previous report. The report highlights the need for additional plants, conveyance systems, CSO correction, recycled water distribution and desalinization. The states with the largest investment gap are New York and California.

WATER SUPPLY

14%

$32 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Industrial production
- Government spending



2025	UP	8%	$34 B
2026	UP	5%	$36 B
2027	STA	2%	$37 B
2028	STA	2%	$38 B

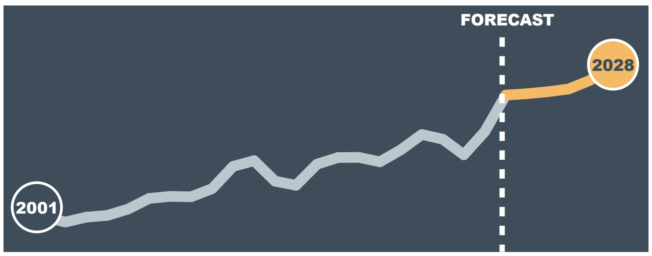
- The EPA estimates that the U.S. needs $650 billion over the next 20 years to improve safe drinking water infrastructure. Two-thirds of water supply infrastructure spending will be needed for the repair of transmission and distribution networks.
- IIJA funds provide supplemental federal appropriations through 2026 and are supported by recently expanded Safe Drinking Water Act (SDWA) programs. Approximately 70% of the IIJA's $50 billion in clean water funds were awarded through the first half of 2024.
- Strong year-to-date spending growth is split nearly evenly between plant and line construction.

CONSERVATION AND DEVELOPMENT

1%

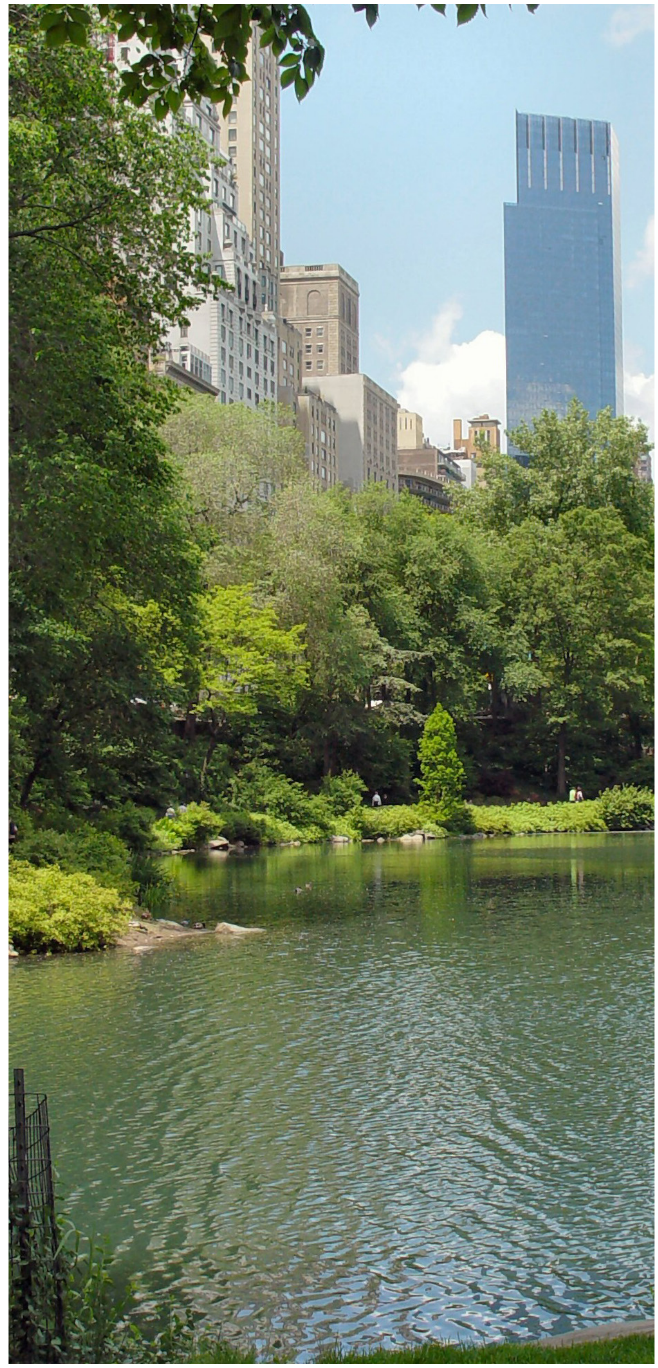
$12 BILLION
2024/2023 Comparison

DRIVERS:
- Population
- Government spending



2025	STA	1%	$12 B
2026	STA	1%	$12 B
2027	STA	4%	$13 B
2028	UP	6%	$13 B

- Dam/levee and dredging investment continues to expand and represents a growing share of conservation and development spend.
- Storm hardening across the southeast and newly expanded manufacturing and trade infrastructure investments emphasize conservation needs along important trade routes, including coastal and intercoastal waterways.



Construction Put in Place Estimated for the United States

Millions of Current Dollars

4th Quarter 2024 Forecast, Based on 2nd Quarter 2024 Actuals and 3rd 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	421,623	440,646	457,448	478,299	504,738
Multifamily	88,401	100,089	114,926	123,801	145,587	139,776	117,526	110,267	116,946	127,888
Improvements*	184,656	234,108	269,551	355,215	331,100	356,523	371,950	378,420	390,091	403,929
Total Residential	**553,442**	**644,257**	**808,968**	**932,768**	**877,596**	**917,921**	**930,122**	**946,134**	**985,336**	**1,036,555**
NONRESIDENTIAL BUILDINGS										
Lodging	33,461	28,483	19,082	20,236	24,740	23,267	21,484	21,625	22,866	25,396
Office	88,724	92,831	89,902	95,382	98,989	99,683	100,279	103,591	107,164	108,390
Commercial	84,345	89,714	97,394	131,503	141,702	129,697	119,340	119,625	125,670	136,540
Health Care	46,263	48,599	50,327	58,098	65,429	66,308	68,008	71,996	74,960	76,235
Educational	108,952	110,692	100,988	104,035	120,226	125,586	128,937	132,483	135,802	140,367
Religious	3,730	3,472	3,096	3,187	3,801	3,887	3,707	3,406	3,470	3,606
Public Safety	12,012	17,667	12,826	11,715	14,395	18,596	19,796	18,428	16,999	17,088
Amusement and Recreation	30,416	28,288	27,102	31,527	36,203	39,746	41,506	40,746	39,284	40,079
Transportation	57,448	60,734	59,075	60,908	65,246	68,678	71,551	75,266	77,991	81,468
Communication	22,184	23,876	23,091	24,366	28,004	28,164	29,197	30,638	32,282	33,897
Manufacturing	80,978	75,425	82,030	125,025	193,630	234,518	246,839	247,560	234,712	217,955
Total Nonresidential Buildings	**568,513**	**579,781**	**564,913**	**665,982**	**792,365**	**838,131**	**850,645**	**865,365**	**871,201**	**881,020**
NONBUILDING STRUCTURES										
Power	117,960	118,168	119,108	121,605	134,010	143,532	152,757	155,662	158,698	162,685
Highway and Street	99,402	102,321	103,381	115,655	138,060	143,754	148,137	152,376	155,955	162,922
Sewage and Waste Disposal	26,119	27,189	28,811	33,246	41,912	45,869	48,316	50,186	50,565	51,457
Water Supply	16,397	18,952	20,284	24,056	27,999	31,979	34,485	36,265	36,960	37,669
Conservation and Development	9,207	8,903	7,911	9,392	11,719	11,803	11,931	12,107	12,651	13,391
Total Nonbuilding Structures	**269,085**	**275,533**	**279,495**	**303,954**	**353,700**	**376,936**	**395,626**	**406,596**	**414,829**	**428,123**
Total Put in Place	**$1,391,040**	**$1,499,571**	**$1,653,376**	**$1,902,704**	**$2,023,661**	**$2,132,988**	**$2,176,393**	**$2,218,095**	**$2,271,365**	**$2,345,698**

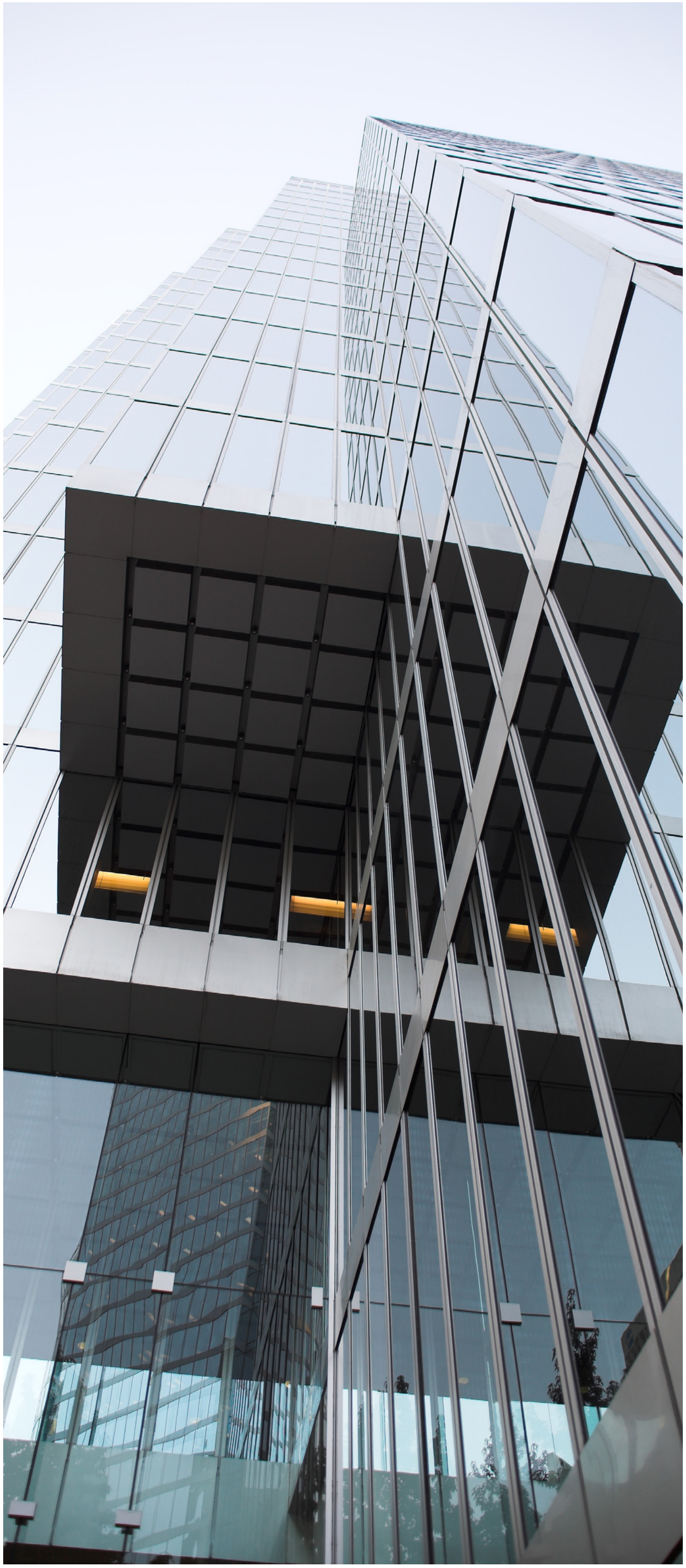
Construction Put in Place Estimated for the United States

Change From Prior Year — Current Dollar Basis

4th Quarter 2024 Forecast, Based on 2nd Quarter 2024 Actuals and 3rd Quarter 2024 Assumptions

	2019	2020	2021	2022	2023	2024F	2025F	2026F	2027F	2028F
RESIDENTIAL BUILDINGS										
Single-family	-3%	11%	37%	7%	-12%	5%	5%	4%	5%	6%
Multifamily	6%	13%	15%	8%	18%	-4%	-16%	-6%	6%	9%
Improvements*	-3%	27%	15%	32%	-7%	8%	4%	2%	3%	4%
Total Residential	**-2%**	**16%**	**26%**	**15%**	**-6%**	**5%**	**1%**	**2%**	**4%**	**5%**
NONRESIDENTIAL BUILDINGS										
Lodging	6%	-15%	-33%	6%	22%	-6%	-8%	1%	6%	11%
Office	16%	5%	-3%	6%	4%	1%	1%	3%	3%	1%
Commercial	-2%	6%	9%	35%	8%	-8%	-8%	0%	5%	9%
Health Care	6%	5%	4%	15%	13%	1%	3%	6%	4%	2%
Educational	8%	2%	-9%	3%	16%	4%	3%	3%	3%	3%
Religious	7%	-7%	-11%	3%	19%	2%	-5%	-8%	2%	4%
Public Safety	28%	47%	-27%	-9%	23%	29%	6%	-7%	-8%	1%
Amusement and Recreation	8%	-7%	-4%	16%	15%	10%	4%	-2%	-4%	2%
Transportation	8%	6%	-3%	3%	7%	5%	4%	5%	4%	4%
Communication	-9%	8%	-3%	6%	15%	1%	4%	5%	5%	5%
Manufacturing	12%	-7%	9%	52%	55%	21%	5%	0%	-5%	-7%
Total Nonresidential Buildings	**7%**	**2%**	**-3%**	**18%**	**19%**	**6%**	**1%**	**2%**	**1%**	**1%**
NONBUILDING STRUCTURES										
Power	18%	0%	1%	2%	10%	7%	6%	2%	2%	3%
Highway and Street	8%	3%	1%	12%	19%	4%	3%	3%	2%	4%
Sewage and Waste Disposal	9%	4%	6%	15%	26%	9%	5%	4%	1%	2%
Water Supply	6%	16%	7%	19%	16%	14%	8%	5%	2%	2%
Conservation and Development	12%	-3%	-11%	19%	25%	1%	1%	1%	4%	6%
Total Nonbuilding Structures	**13%**	**2%**	**1%**	**9%**	**16%**	**7%**	**5%**	**3%**	**2%**	**3%**
Total Put in Place	**4%**	**8%**	**10%**	**15%**	**6%**	**5%**	**2%**	**2%**	**2%**	**3%**

*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 4% after climbing 2% in 2023. The modest growth in construction spending is fueled by government investments in infrastructure, as well as strength in the manufacturing sector.
- Growth in 2024 will be tempered by a sluggish residential market and private sector investments. Segments expected to be down included single-family, multifamily, lodging, office, commercial and education. Stable segments (growth between 0% and 4%) include religious, public safety, communication, amusement and recreation.
- Residential improvements, health care, transportation, manufacturing, power, highway and street, sewage and water disposal, water supply, 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

UP
5% or more

Residential Improvements
Health Care
Transportation
Manufacturing
Power
Highway and Street
Sewage and Water Disposal
Water Supply
Conservation and Development

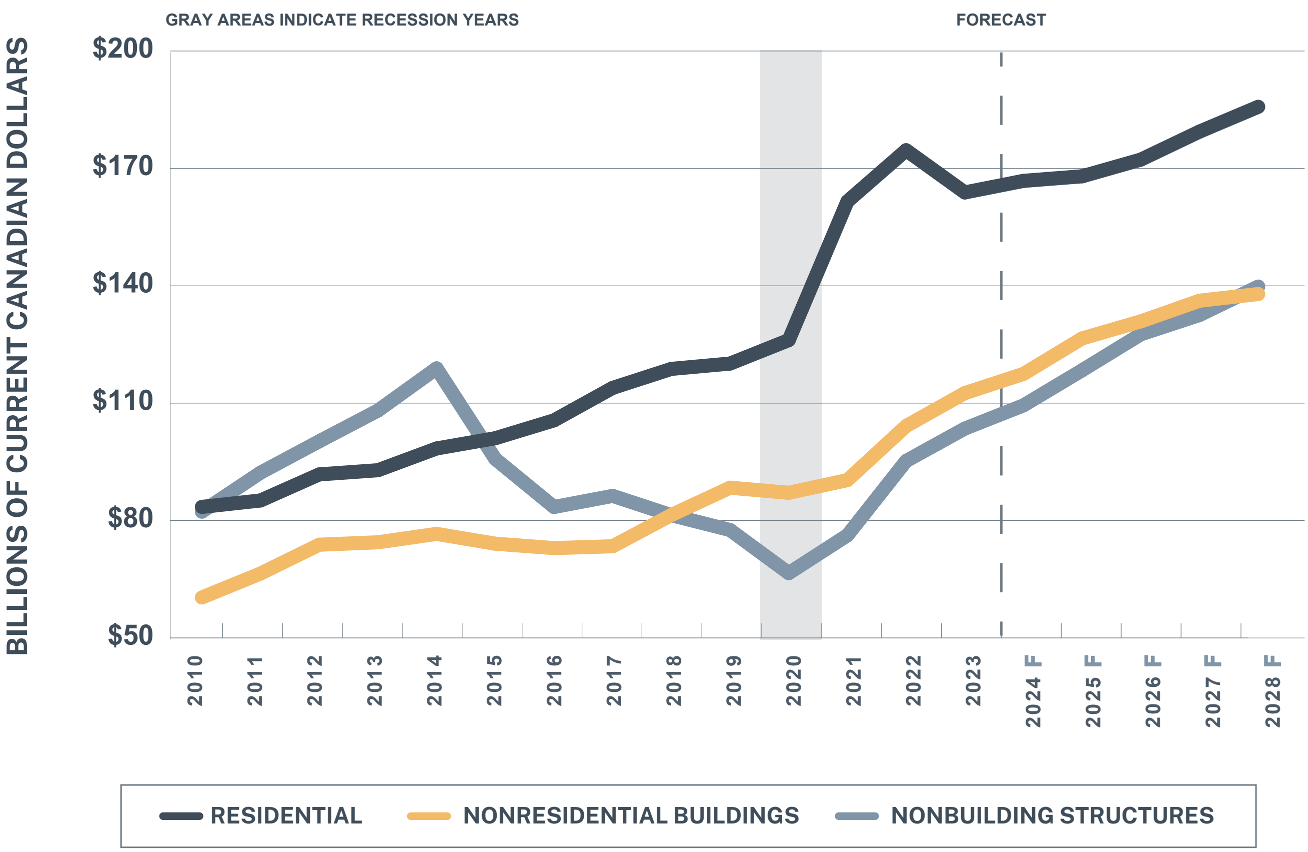
STABLE
0% to 4%

Religious
Public Safety
Amusement and Recreation
Communication

DOWN
Under 0%

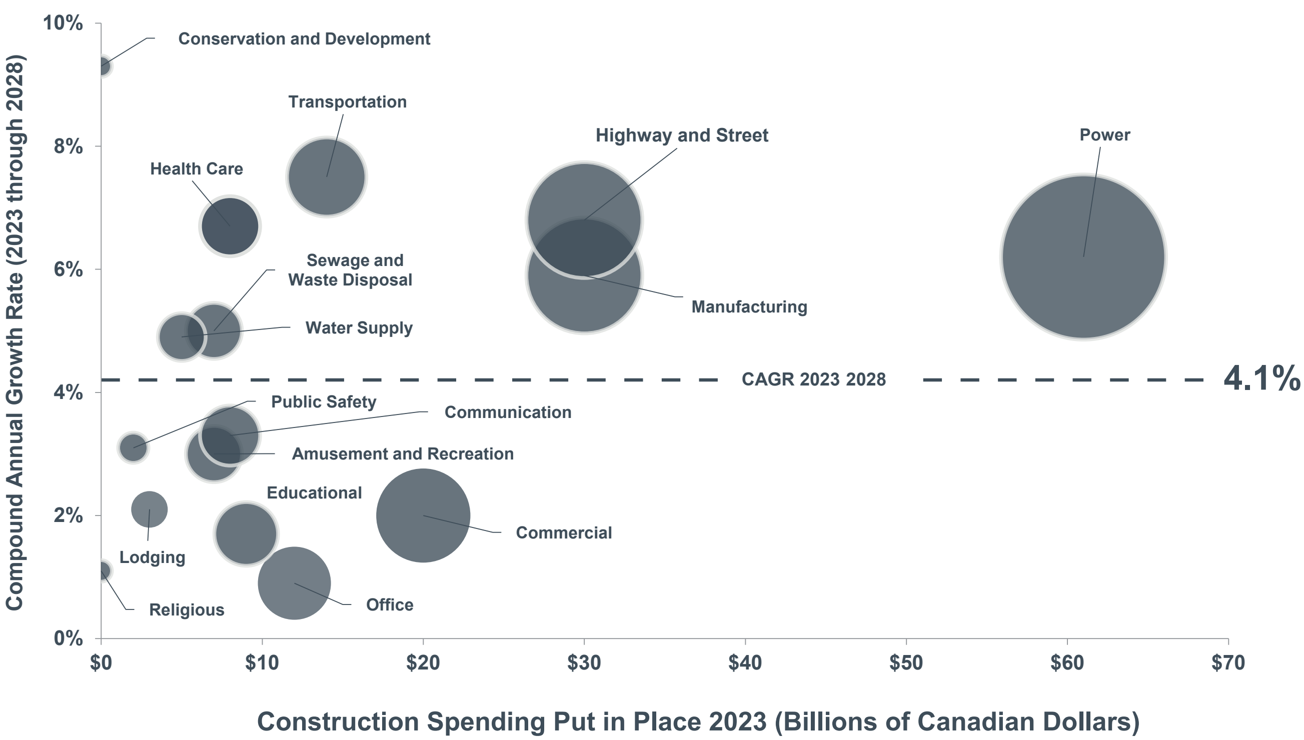
Single-family
Multifamily
Lodging
Office
Commercial
Educational

TOTAL CONSTRUCTION SPENDING PUT IN PLACE ESTIMATED FOR CANADA



SOURCE: FMI FORECAST Q4 2024

NONRESIDENTIAL CONSTRUCTION SPENDING PUT IN PLACE
FORECAST GROWTH BY CONSTRUCTION SEGMENT



SOURCE: FMI FORECAST Q4 2024

Construction Put in Place Estimated for Canada

Millions of Current Canadian Dollars

4th Quarter 2024 Forecast, Based on 2nd Quarter 2024 Actuals and 3rd 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	27,766	28,313	28,813	30,049	31,065
Multifamily	35,998	38,818	46,444	50,416	52,598	52,290	51,332	53,557	56,026	57,111
Improvements*	61,249	63,207	80,733	87,928	82,076	87,098	88,688	90,265	93,779	98,061
Total Residential	**120,087**	**126,120**	**161,871**	**175,045**	**164,169**	**167,155**	**168,333**	**172,635**	**179,854**	**186,237**
NONRESIDENTIAL BUILDINGS										
Lodging	2,750	2,569	2,634	3,405	3,375	3,371	3,386	3,503	3,709	3,751
Office	11,311	11,674	10,692	11,302	12,002	11,599	11,517	11,722	12,177	12,531
Commercial	16,072	15,013	15,393	19,897	19,719	19,526	19,411	19,948	21,162	21,724
Health Care	5,319	5,756	6,311	7,153	7,733	8,449	9,311	10,154	10,652	10,696
Educational	6,744	6,938	7,915	8,279	8,744	8,694	9,260	9,625	9,803	9,497
Religious	444	415	318	312	361	362	381	393	384	381
Public Safety	1,698	1,753	1,605	1,697	1,802	1,825	1,991	2,042	2,120	2,097
Amusement and Recreation	4,116	4,352	3,825	4,957	6,517	6,839	6,790	7,065	7,464	7,565
Transportation	10,582	10,662	12,442	12,979	13,839	15,354	17,167	18,701	19,665	19,895
Communication	5,878	6,784	6,900	7,874	8,449	8,692	9,070	9,466	9,920	9,933
Manufacturing	23,189	20,883	22,021	26,142	29,940	32,711	38,289	38,336	39,219	39,938
Total Nonresidential Buildings	**88,105**	**86,799**	**90,057**	**103,999**	**112,481**	**117,422**	**126,573**	**130,955**	**136,274**	**138,006**
NONBUILDING STRUCTURES										
Power	50,443	38,925	47,380	58,566	61,469	64,854	69,739	75,733	78,229	83,116
Highway and Street	18,557	19,027	19,935	26,043	29,918	31,687	34,987	37,581	39,532	41,575
Sewage and Waste Disposal	4,598	4,846	5,057	5,997	6,886	7,339	7,697	8,025	8,394	8,787
Water Supply	3,457	3,214	3,427	4,307	4,968	5,338	5,824	6,153	6,296	6,305
Conservation and Development	147	81	48	82	93	98	122	136	146	145
Total Nonbuilding Structures	**77,202**	**66,093**	**75,847**	**94,995**	**103,334**	**109,316**	**118,368**	**127,627**	**132,598**	**139,929**
Total Put in Place	**$285,394**	**$279,012**	**$327,776**	**$374,039**	**$379,984**	**$393,893**	**$413,275**	**$431,218**	**$448,726**	**$464,173**

Construction Put in Place Estimated for Canada

Change From Prior Year — Current Canadian Dollars

4th Quarter 2024 Forecast, Based on 2nd Quarter 2024 Actuals and 3rd Quarter 2024 Assumptions

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

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

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

Base case assumptions for our forecast include a recession beginning in 2024 and ending in 2025. These expectations are based on a range of predictive economic indicators, but especially the yield curve returning to normal alongside weakening labor data. The aggressive start to a rate-cutting cycle further supports our expectations. The depth and duration of the economic contraction will depend on policy response, but as with historical cycles, impact on the construction industry will likely be longer lasting.

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

Inflationary pressures significantly eased through 2023 and the first half of 2024 and appear to have stabilized above target levels, primarily due to housing services (e.g., insurance). Further, labor force participation and unemployment rates have slowly trended higher, while the Federal Reserve kicked off interest rate cuts in September. Additional interest rate cuts are anticipated through the end of the year and the first half of 2025 to stabilize rising unemployment while attempting to uphold consumer spending and asset prices.

In arriving at our base case assumptions, we also considered volatility in the current election cycle, which is weeks away, as well as wartime and economic turmoil in various countries (e.g., Russia, Ukraine, Israel/Middle East, China) adding to strain and uncertainty.

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