CREDE

CONSTRUCTION
DATA ANALYSIS Q3

Table of Contents

CREDE'S Market Outlook

The Q3 2024 Construction Industry Outlook reflects a cautiously optimistic view as the sector adapts to the evolving post-pandemic landscape. Four years into COVID-19's economic realignment, the industry is facing challenges such as labor shortages, rising costs, and high borrowing pressures, but it is also seizing new opportunities for growth. Key sectors are leading the way—manufacturing construction now makes up over a quarter of nonresidential building spending, doubling its share since 2019. Warehouses and data centers are also on the rise, with warehouse spending increasing from 6% to over 9% of the nonresidential market, and data centers growing rapidly to account for over 3%. These trends highlight the industry's resilience and its ability to thrive in a changing environment, showing that, even amid challenges, the construction sector is not just surviving but actively evolving and expanding into areas of significant demand and future potential.

The residential construction sector, while facing affordability challenges, also presents significant growth opportunities. Rising demand for housing, especially in suburban and exurban areas, is driving new developments. Although high-end, luxury residences have dominated recent construction, there is growing recognition of the need for more affordable housing. This awareness, coupled with potential regulatory shifts, could spur increased investment in affordable housing projects, helping to meet the needs of a broader range of consumers and creating new opportunities for developers.

CREDE'S Market Outlook (Continued)

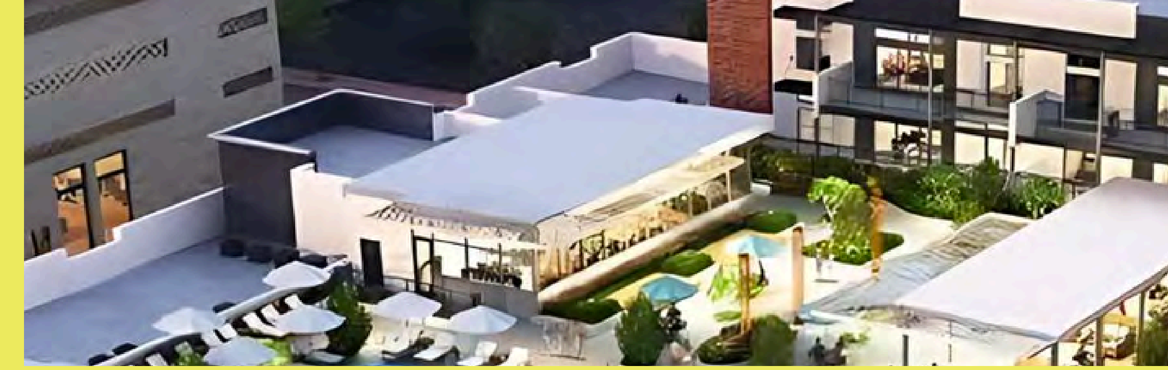
The U.S. industrial real estate market is experiencing some pressure from oversupply, with vacancy rates rising as speculative development has outpaced demand. There's still strong demand in key areas like Manufacturing and E-commerce logistics, creating significant opportunities, especially in markets where these sectors are leading the charge. As new construction begins to taper off and the market heads toward equilibrium, these industries are primed for strategic investments, positioning us for a more balanced and promising landscape by early 2025.

The hospitality sector has shown remarkable resilience, rebounding as travel and tourism continue to recover. There is a growing demand for innovative hospitality spaces, particularly in the mixed-use and experiential sectors. Developers are capitalizing on this trend by creating projects that blend hospitality with retail, dining, and entertainment, offering guests a more immersive experience. This resurgence in hospitality construction is not only revitalizing existing properties but also driving new developments in both urban and resort locations, signaling a strong recovery and future growth potential.

CREDE'S Market Outlook (Continued)

The broader construction industry continues to benefit from federal investments in infrastructure and manufacturing, which are driving growth in key sectors. Despite the challenges of high borrowing costs and labor shortages, the influx of federal funds is helping to offset some of these pressures, enabling companies to undertake significant projects that contribute to long-term industry stability. The ongoing focus on sustainability and technology adoption also positions the industry to capitalize on emerging trends, enhancing efficiency and opening new avenues for growth.

Overall, our Q3 Construction Data Analysis suggests that this is a sector that is poised to thrive amidst change. While challenges remain, the industry's ability to adapt and innovate offers a promising path forward. By embracing new opportunities, harnessing federal investment, and identify new markets for development, the construction industry is well-positioned to achieve sustainable growth through the remainder of 2024 and into 2025.



Architectural Billing Index – National

- While the ABI/Deltek Architecture Billings Index (ABI) score of 48.2 for the month indicates that fewer firms reported a decline in billings in July than in May, it still means that more than half of responding firms this month are still experiencing soft business conditions.

- As far as future work in the pipeline at firms, the value of newly signed design contracts decreased for the fourth consecutive month in July, but the pace of that decline slowed as well.

- Inquiries into new projects continued to increase in July, although that growth continued at the same slow pace they have been growing at for much of the year so far.

CREDE Perspective

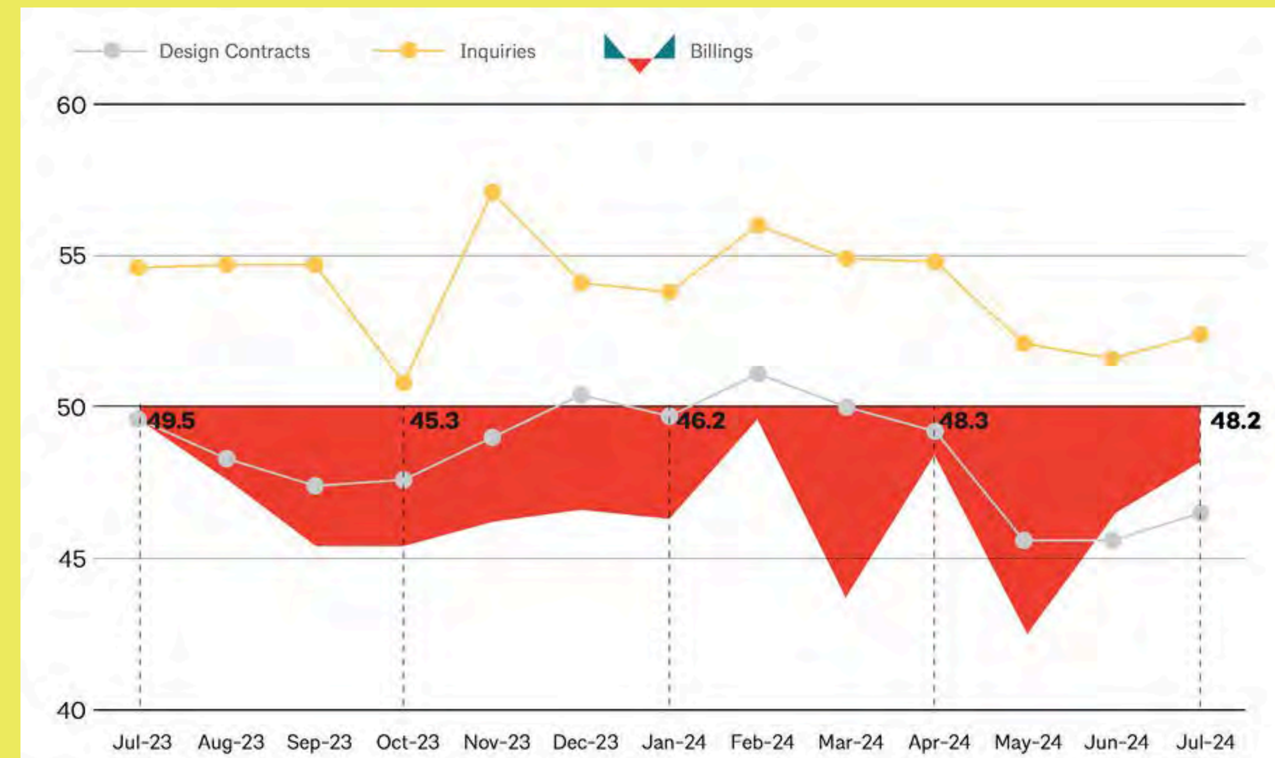
The ABI score of 48.2 reflects the current challenges in our industry, but we view this as a moment to sharpen our focus. While the decline in new design contracts suggests caution, the consistent increase in project inquiries indicates that opportunities are emerging.

NATIONAL

Architecture firms billings decline at slower pace in July

Graphs represent data from July 2023–July 2024.

Above 50 | Below 50 | No change from previous period



Source: The American Institute of Architects

Architectural Billing Index – By Sector

Graphs represent data from July 2023–July 2024 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.

- Regionally, architecture firm billings were flat for the second consecutive month at firms located in the Northeast in July, marking the first two-month period with a score at or above 50 for the region since mid-2022.
- Billings declined at firms in all other regions this month, but the pace of the decline slowed in all of them.
- Business conditions also remained soft at firms of all specializations in July, although there were some notably encouraging signs at firms with an institutional specialization, where billings were nearly flat.

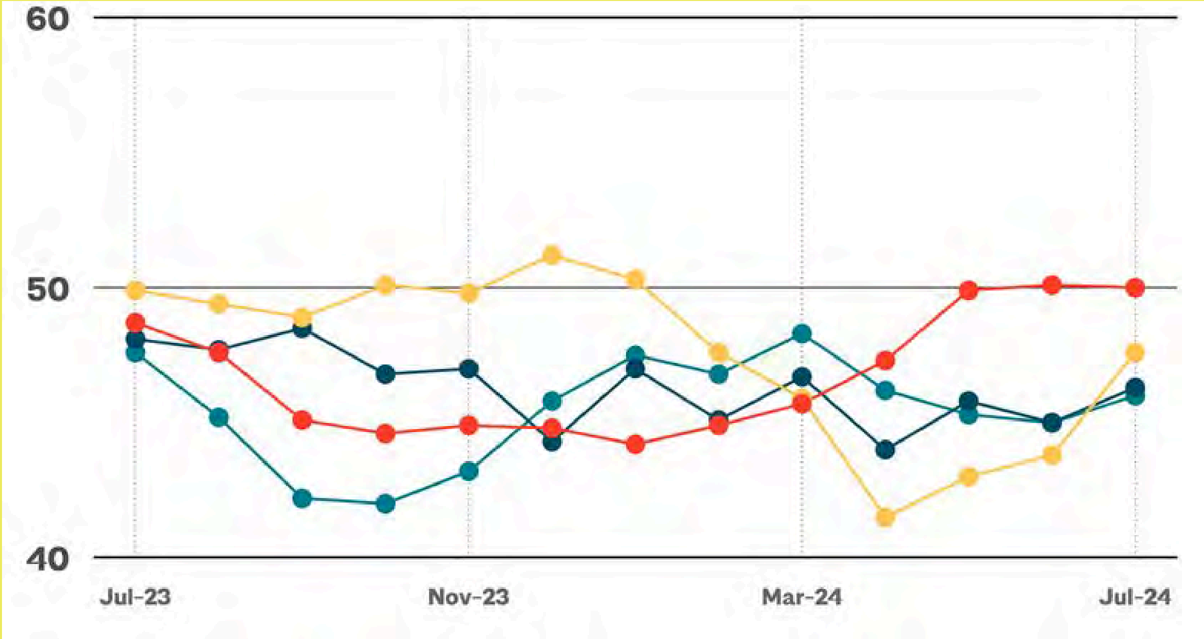
CREDE Perspective

The stabilization of billings in the Northeast is an encouraging sign, and we're closely monitoring this trend. Although other regions remain weak, the slower decline and consistent performance in institutional sectors indicate key areas where we can strategically direct our growth efforts.

REGIONAL

Billings remain flat at firms in Northeast, while decreasing elsewhere

WEST	SOUTH	MIDWEST	NORTHEAST
46.0	46.3	47.6	47.6



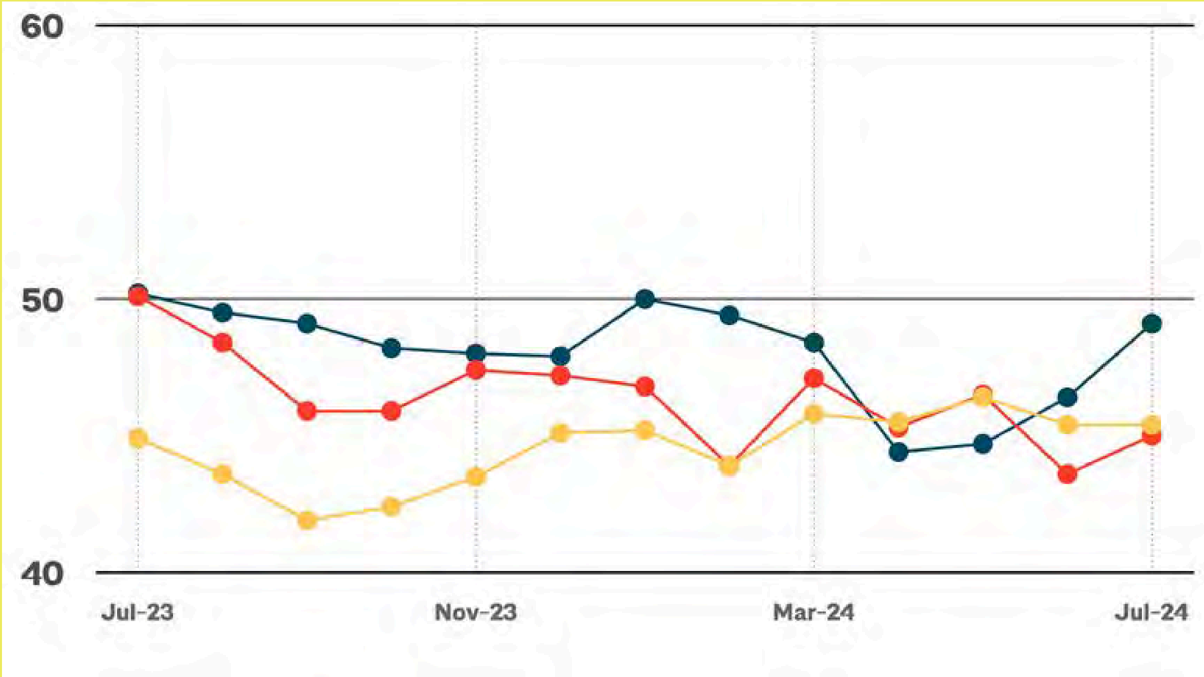
SECTOR

Business conditions still softest at firms with commercial/industrial, multifamily residential specializations

Commercial/ Industrial: 45.0

Institutional: 49.1

Residential: 45.4



Source: The American Institute of Architects

Architectural Billing Index – Mid Year Update

- Spending on nonresidential buildings is projected to increase over 7% this year, but then slow to only 2% growth next year.

- Commercial facilities activity effectively will be flat this year and next, manufacturing construction will increase almost 14% this year before stabilizing in 2025, and institutional construction will see a more than 10% gain this year before slowing to 4% in 2025.

- On the commercial/industrial side, a few key sectors have been generating strong growth while others are stagnating. For example, manufacturing construction currently accounts for well over a quarter of all spending in the nonresidential building sector, a share that has doubled since 2019.

	Actual $	Forecast % Change	
	2023	2024	2025
Nonresidential Total	700.3	9.0	-2.7
Commercial Total	222.8	-0.8	-1.5
Office	83.9	0.8	0.8
Retail & Other Commercial	115.7	-3.1	-8.7
Hotel	23.2	4.3	23.1
Industrial Total	195.3	16.1	-11.4

Source: S&P Global, Market Intelligence, The American Institute of Architects

CREDE Perspective

As we progress through 2024, the 7% growth in nonresidential building spending presents a strong opportunity for investors, especially in the manufacturing sector where we're seeing significant gains. Looking toward 2025, even as growth stabilizes, we'll continue to focus on these high-performing areas, ensuring we stay ahead of the curve and well-positioned for long-term success.

Construction Back Log Indicator

- According to the Associated Builders and Contractors, the Construction Backlog Indicator remained unchanged at 8.4 months in July. However, this marks a decrease of 0.9 months compared to July 2023.

- Only the largest contractors, those with greater than $100 million in annual revenues, have longer backlog than one year ago. On a monthly basis, the decline in backlog was driven by declines among the smallest contractors, those with less than $50 million in annual revenue.

- ABC's Construction Confidence Index readings for sales, profit margins and staffing levels fell in July. All three readings remain above the threshold of 50, indicating expectations for growth over the next six months.

CREDE Perspective

The steady backlog at 8.4 months is a solid foundation, but the year-over-year decline reminds us to stay agile, especially as smaller contractors face more pressure. We're encouraged by the continued positive outlook for sales, profit margins, and staffing levels, which signals that there's still momentum to be harnessed in the coming months.

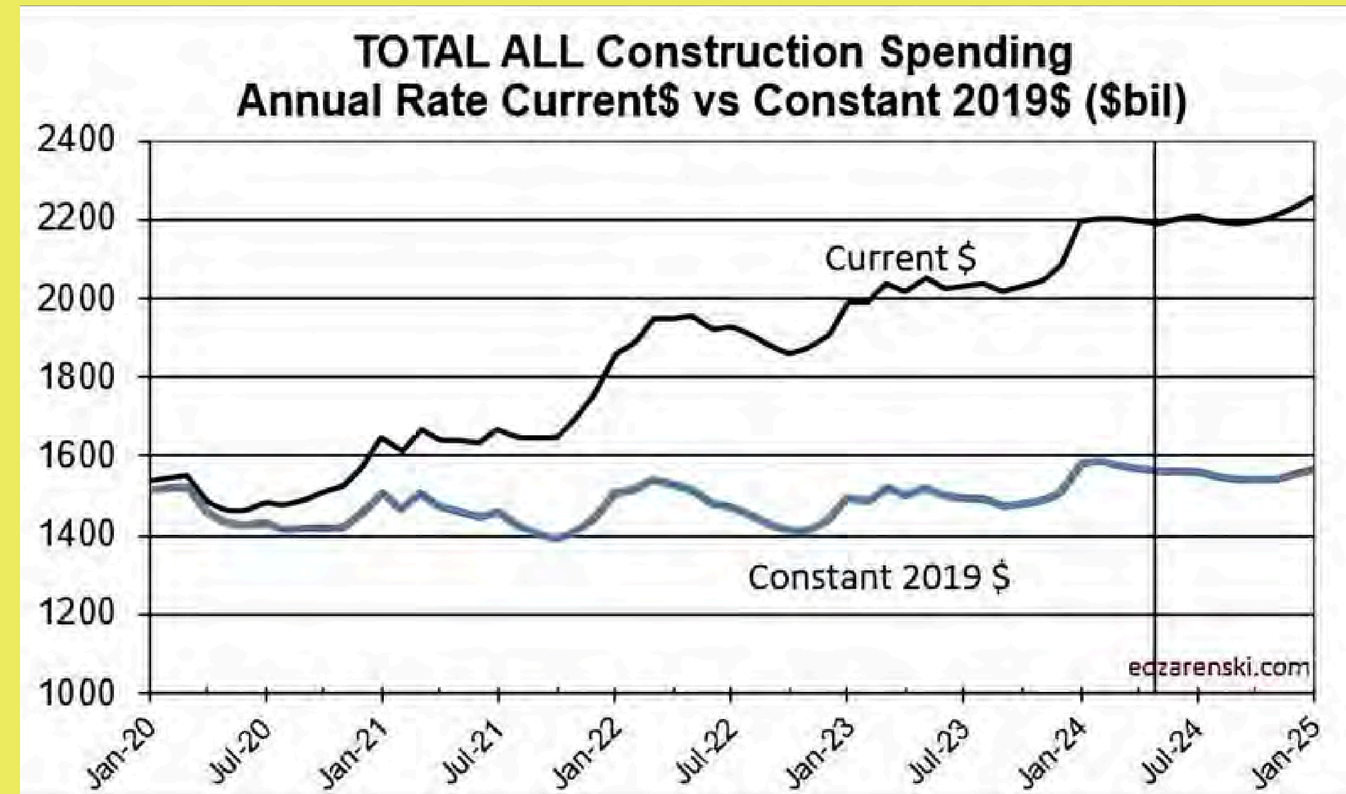
Construction Backlog Indicator

	July 2024	June 2024	July 2023	1-Month Net Change	12-Month Net Change
Total	**8.4**	**8.4**	**9.3**	**0.0**	**-0.9**
Industry					
Commercial and institutional	8.6	8.5	9.8	0.1	-1.2
Heavy industrial	11.1	9.6	5.2	1.5	5.9
Infrastructure	7.5	8.2	8.2	-0.7	-0.7
Region					
Middle States	7.2	7.4	8.1	-0.2	-0.9
Northeast	7.2	8.0	9.6	-0.8	-2.4
South	9.8	9.5	10.6	0.3	-0.8
West	8.6	8.4	8.9	0.2	-0.3
Company Size					
<$30 Million	7.2	7.7	8.7	-0.5	-1.5
$30-$50 Million	9.0	10.0	11.0	-1.0	-2.0
$50-$100 Million	9.5	9.5	12.9	0.0	-3.4
>$100 Million	12.2	10.0	10.6	2.2	1.6

Source: Associated Builders and Contractors

Construction Spending - Through July 2024

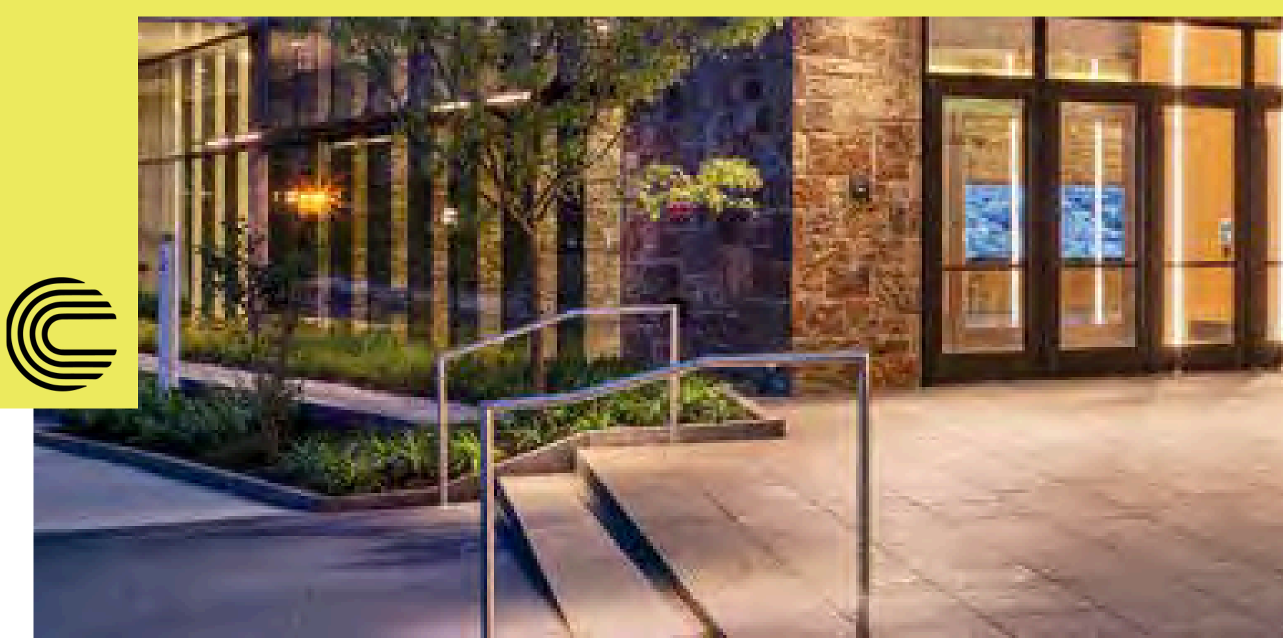
- Overall, total construction spending, including the May data for 2024, is now forecast +8.5% over 2023. With the upward revisions to Jan-Apr, Residential spending forecast is now +7.7% for 2024.
- Retail and office spaces, experienced stagnation, reflecting broader economic adjustments and the ongoing impact of remote work trends.
- From 2012 to 2024, construction spending has been up every year, averaging +8.2%/year. It's been as low as +4% and as high as +15% in that time.



Source: Associated Builders and Contractors, Ed Zarenski.com

CREDE Perspective

With total construction spending poised to increase by 8.5% in 2024, we're seeing solid industry-wide growth, even as retail and office spaces adjust to economic shifts and remote work dynamics. We're strategically leveraging data-driven insights to prioritize and focus our efforts on the sectors with the highest growth potential.



Forecasted New Construction Projects: Residential, Commercial, & Industrial

- Single-family residential starts are expected to grow by 5.9% this year, while multifamily starts are projected to drop by 11.4%. Overcapacity and high financing costs are key risks in the multifamily segment due to rising apartment vacancy rates. New apartment construction in 2024 is expected to be 33% lower than in 2022.

- Commercial construction is forecast to decline by 4.1% in 2024. While the overall economy remains strong, high interest rates and concerns in the commercial real estate sector are limiting new projects. However, strong growth is expected in amusement parks, transport terminals, and parking garages.

- Despite several megaprojects, new industrial construction has fallen 43.5% year-to-date. Three major industrial projects this quarter are valued at around $5.6 billion combined.

U.S. Forecasted Starts: Type-of-Structure ($ Billions USD)

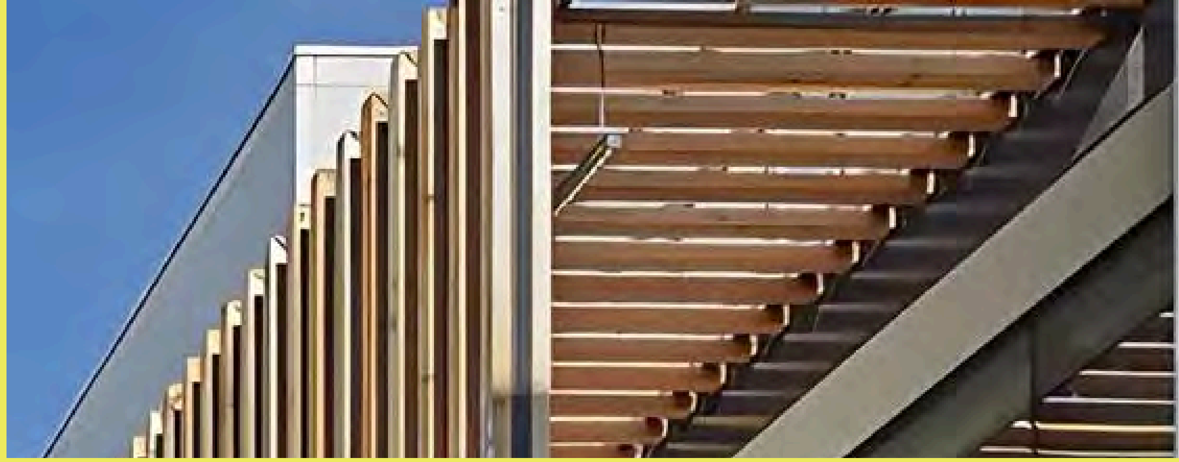
	Actuals		Forecasts		
	2022	2023	2024	2025	2026
Single Family	224.96	201.88	213.45	242.01	269.14
Multi-Family	148.72	112.57	103.01	117.18	136.75
TOTAL RESIDENTIAL	373.68	314.45	316.47	359.19	405.89
(Yt/yr % change)	3.1%	-15.9%	-0.4%	13.5%	13.0%
Hotels/Motels	11.07	14.21	13.71	16.59	18.63
Shopping/Retail	15.38	14.14	14.76	17.7	19.97
Parking Garages	2.42	2.08	2.33	2.44	2.59
Amusement	7.87	9.16	10.88	10.84	11.41
Private Offices	24.59	29.64	27.61	29.99	30.86
Governmental Offices	13.25	16.29	15.69	15.19	15.67
Laboratories (Schools & Industrial)	4.91	4.82	4.43	4.02	4.12
Warehouses	30.47	21.61	20.95	23.79	25.31
Sports Stadium/Convention Center	6.98	9.37	8.03	9.29	9.96
Transportation Terminals	5.98	6.87	8.11	8.17	8.55
TOTAL COMMERCIAL	122.94	128.19	134.03	146.23	155.64
(Yt/Yr % change)	14.1%	4.3%	-4.1%	9.1%	6.4%
TOTAL INDUSTRIAL (manufacturing)	115.41	101.76	70.14	72.84	69.96
(Yt/Yr % change)	229.0%	-11.8%	-32.1%	9.1%	-3.9%

Source: Construct Connect

CREDE Perspective

CREDE is focusing on the stable growth in single-family residentials while navigating challenges in multifamily. The commercial construction decline highlights the need for selective investments, but sectors like amusement and transport infrastructure present strong opportunities. In the industrial sector, high-value megaprojects offer promising returns despite overall slowed activity.

Forecasted New Construction Projects: Institutional, Non-Res, & Civil Engineering



- Institutional construction is projected to grow by 3.2% in 2024, building on the two years of strong growth with starts at record levels. The largest gains are to be found in prisons and the medical subsectors, growing by 17% and 22.9% respectively.

- Total nonresidential building activity is expected to fall 8.3% in 2024. While we forecast a decline this year, it should continue to be noted that nonresidential building starts have been near record highs since the explosive growth in 2022. This is especially prominent in manufacturing starts

- Civil engineering is set to continue its multiple years of growth with starts expected to increase by 18.5% in 2024. Miscellaneous civil engineering starts and power projects are forecast to be the best performing subsectors, rising by 46.1% and 48.7% respectively.

U.S. Forecasted Starts: Type-of-Structure ($ Billions USD)

	Actuals		Forecasts		
	2022	2023	2024	2025	2026
Religious	1.04	1.09	1.21	1.22	1.26
Hospitals/Clinics	25.84	20.91	22.73	24.59	26.11
Nursing Homes/Assisted Living	4.59	2.80	3.11	3.45	3.63
Libraries/Museums	3.60	4.25	4.94	5.23	5.45
Courthouse	1.66	2.37	2.33	2.43	2.53
Police/Fire	4.22	5.09	5.41	5.61	5.82
Prisons	2.96	7.04	8.18	5.98	5.69
Military	9.73	16.24	11.81	14.99	15.77
Education Facilities	74.54	91.54	97.31	98.52	101.56
MED misc	13.70	9.06	11.58	12.54	13.15
TOTAL INSTITUTIONAL	141.88	160.36	168.11	174.49	180.99
(Yt/Yr % change)	24.6%	13.0%	3.2%	3.8%	3.7%
Miscellaneous Non-Res Building	8.00	6.96	7.56	8.21	8.58
TOTAL NON-RES BLD	388.2	397.3	372.3	393.5	406.6
(Yt/Yr % change)	47.6%	2.3%	-8.3%	5.7%	3.3%
Airport	7.63	9.98	12.49	9.82	10.35
Roads	84.48	95.38	104.39	109.02	114.71
Bridges	27.66	24.42	29.17	32.67	35.01
Dams/Canal/Marine	9.41	11.93	11.37	12.51	13.33
Water & Sewage Treatment	43.41	47.84	55.95	56.44	58.93
Misc Civil (Power, etc.)	29.36	39.97	59.01	61.77	65.43
TOTAL ENGINEERING	201.96	229.52	272.38	282.22	297.76
(Yt/Yr % change)	29.1%	13.6%	18.5%	3.6%	5.5%

Source: Construct Connect

CREDE Perspective

We see strong strategic value in the growing institutional sector, especially with the expansion of medical and prison projects. The anticipated decline in nonresidential activity feels more like a market adjustment after exceptional growth in manufacturing. The surge in civil engineering, driven by power projects and infrastructure, signals a clear shift in market priorities.

Construction Input Pricing – Producer Price Index

- Construction input prices increased 0.4% in July compared to the previous month, according to an Associated Builders and Contractors analysis of U.S. Bureau of Labor Statistics Producer Price Index data. Nonresidential construction input prices also increased 0.4% for the month.

- Overall construction input prices are 1.1% higher than a year ago, while nonresidential construction input prices are 0.8% higher. Prices increased in all three energy subcategories last month.

- Natural gas prices were up by 13.3%, while unprocessed energy materials and crude petroleum prices rose 6.2% and 5.5%, respectively.

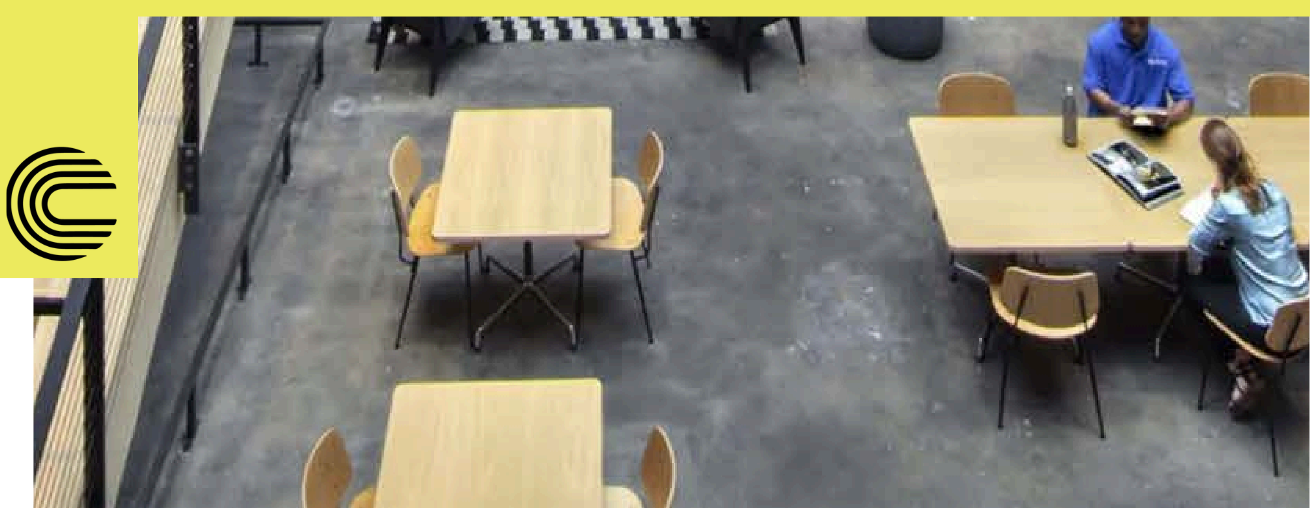
CREDE Perspective

Even with the recent monthly rise in petroleum and natural gas prices, input costs have stayed remarkably steady, with only a 1.1% increase year over year. This limited price escalation over the past 12 months is a welcome relief, providing a level of stability that's crucial in an otherwise unpredictable market.

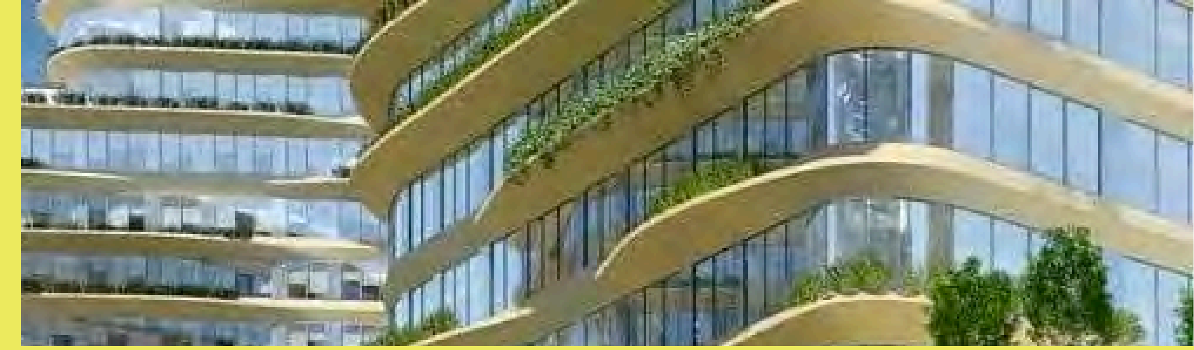
Producer Price Index, July 2024

	1-Month % Change	12-Month % Change	Change Since Feb 2020
Inputs To Industries			
Inputs to construction	0.4%	1.1%	39.9%
Inputs to multifamily construction	0.2%	1.8%	39.7%
Inputs to nonresidential construction	0.4%	0.8%	40.2%
Inputs to commercial construction	0.2%	0.7%	40.5%
Inputs to healthcare construction	0.2%	1.0%	40.4%
Inputs to industrial construction	0.3%	1.8%	37.0%
Inputs to other nonresidential construction	0.5%	0.7%	40.0%
Inputs to maintenance and repair construction	0.5%	1.3%	38.3%
Commodities			
Adhesives and sealants	0.1%	0.2%	34.2%
Brick and structural clay tile	0.1%	4.8%	31.0%
Concrete products	0.0%	4.6%	38.2%
Construction machinery and equipment	0.2%	2.4%	30.3%
Construction sand, gravel, and crushed stone	0.5%	7.4%	36.2%
Copper wire and cable	-3.1%	13.9%	49.4%
Crude petroleum	5.5%	10.4%	68.3%
Fabricated structural metal products	0.1%	-1.0%	49.4%
Gypsum products	0.4%	4.0%	48.0%
Hot rolled steel bars, plates, and structural shapes	-0.7%	-8.0%	40.8%
Insulation materials	0.1%	5.6%	45.7%
Iron and steel	-1.8%	-9.6%	44.8%
Lumber and wood products	-0.5%	-3.0%	23.8%
Natural gas	13.3%	0.1%	41.1%
Plumbing fixtures and fittings	0.7%	1.5%	19.3%
Prepared asphalt, tar roofing and siding products	0.4%	1.2%	42.9%
Softwood lumber	-1.8%	-13.1%	5.7%
Steel mill products	-3.3%	-14.0%	51.2%
Switchgear, switchboard, industrial controls equipment	0.5%	7.4%	47.5%
Unprocessed energy materials	6.2%	8.3%	77.8%

Source: U.S. Bureau of Labor Statistics, Associated Builders and Contractors



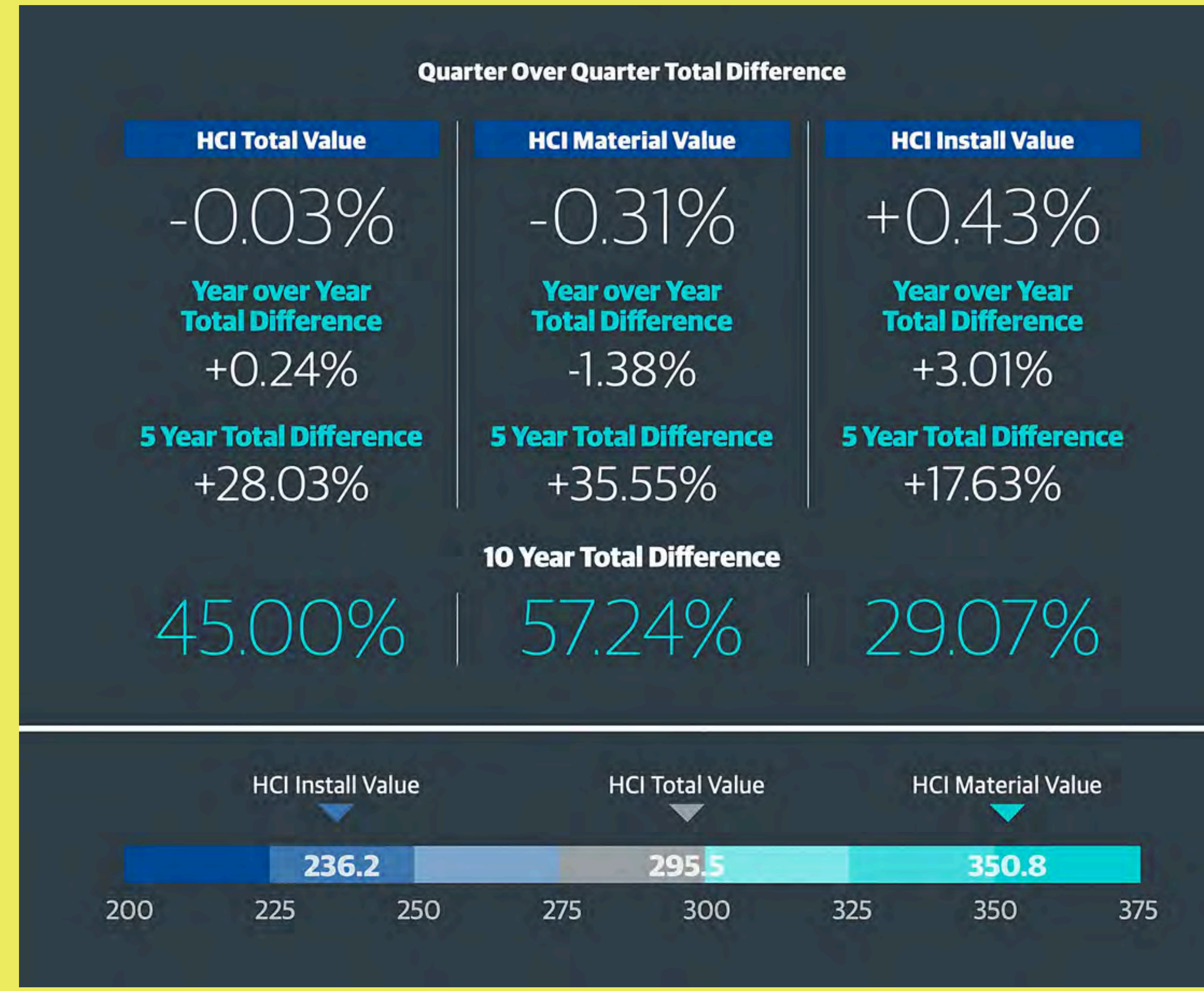
Construction Costs – Historical Cost Index



- In Q3 2024, construction material pricing was generally stable, with fluctuations in certain sectors. Cold-rolled steel prices dropped sharply, while clay brick prices surged.

- Near-shoring and reshoring efforts have stabilized pricing and improved supply chains. The industry's shift toward digitization is also set to revolutionize material sourcing and pricing strategies.

- Manufacturing constraints and high demand have extended lead times and raised prices, especially in HVAC and electrical equipment, with AI and data center projects intensifying these challenges.



Source: Gordian

CREDE Perspective

While material pricing has stabilized, the construction industry needs to stay agile, especially in sectors hit by rapid tech growth like AI and data centers. Near-shoring is paying off, but with ongoing pressures in HVAC and electrical equipment, strategic foresight and flexibility are key to maintaining cost efficiency and project timelines.

National Average Cost of Construction Per Square Foot

Offices
- Prime: Low $335 / High $564
- Secondary: Low $227 / High $357

Retail
- Shopping Center: Low $233 / High $445
- Strip Mall: Low $197 / High $339

Hotels
- 5-Star: Low $472 / High $708
- 3-Star: Low $318 / Hight $467

Hospital
- General: Low $585 / High $907

Industrial
- Warehouse: Low $132 / High $209

Parking
- Ground: Low $115 / High $166
- Garage: Low $157 / High $237

Residential
- Multi-Family: Low $245 / High $423
- Single-Family: Low $266 / High $480

Education
- Elementary: Low $403 / High $568
- High School: Low $431 / High $637
- University: Low $540 / Hight $730

	OFFICES				RETAIL SHOPPING				HOTELS				HOSPITAL		INDUSTRIAL		PARKING				RESIDENTIAL				EDUCATION					
	PRIME		SECONDARY		CENTER		STRIP		5 STAR		3 STAR		GENERAL		WAREHOUSE		GROUND		BASEMENT		MULTI-FAMILY		SINGLE-FAMILY		ELEMENTARY		HIGH SCHOOL		UNIVERSITY	
LOCATION	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
USA																														
Boston	415	670	255	365	225	335	170	270	450	655	310	440	515	1030	125	210	100	160	130	180	260	360	295	410	415	570	465	725	515	775
Chicago	330	550	200	330	200	440	160	270	490	765	360	490	420	875	135	225	95	140	150	270	200	460	275	550	310	460	350	490	435	875
Denver	350	500	250	350	200	350	170	230	425	625	285	425	675	900	125	195	125	200	165	250	185	355	230	465	310	475	400	575	600	850
Honolulu	360	595	220	350	280	575	260	435	685	830	395	625	525	890	125	265	155	210	180	290	275	470	310	580	525	870	540	740	675	995
Las Vegas	265	460	185	250	160	630	145	340	410	760	245	415	520	625	80	155	80	105	100	185	195	465	230	460	425	530	505	690	655	870
Los Angeles	255	385	195	285	175	375	150	215	410	635	295	390	655	995	135	205	115	140	155	210	250	410	220	390	390	510	335	590	490	665
New York	390	905	225	565	340	675	360	710	485	730	360	485	610	920	135	225	115	195	155	235	235	460	340	675	520	655	565	720	555	795
Phoenix	250	425	160	225	200	335	115	195	395	620	210	315	480	675	80	145	55	105	85	155	180	275	190	515	280	395	310	480	425	650
Portland	275	365	250	340	260	360	250	325	485	630	360	470	800	1100	200	285	200	240	220	295	275	385	275	420	460	570	510	650	550	700
San Francisco	430	740	330	530	315	520	240	410	550	900	390	650	700	1100	150	255	130	205	250	350	400	625	310	520	390	570	440	750	570	1000
Seattle	345	615	230	325	260	415	195	320	455	690	325	455	605	860	170	240	125	190	200	295	270	455	250	380	420	630	355	630	555	760
Washington	335	555	230	365	180	325	150	245	430	665	280	440	510	915	130	210	75	100	90	155	210	355	265	390	385	585	400	600	450	725

Source: Cushman & Wakefield, Rider Levett Bucknall

National Average Cost of Construction Per Square Foot (Continued)

- In the third quarter of 2024, construction costs per square foot saw a mixed trend across different sectors. Generally, there was a slight increase in costs, with some materials experiencing price normalization after the volatility of previous years.
- During Q3 2024, the U.S. national average increase in construction cost is approximately 1.12 percent; compared to 1.31 percent in Q2.
- Regionally, the Midwest felt greater impacts from declining metal prices and rising labor rates. In most regions, material prices remained steady from Q1 to Q3 2024, suggesting market stability after years of fluctuation.

CREDE Perspective

While the national construction market is stabilizing with a moderate cost increase, regional disparities, particularly in the Midwest, highlight the need for tailored strategies to manage localized economic impacts. This environment presents an opportunity to refine cost management and leverage emerging stability to maintain project efficiency and budget control.

Date	NCCI
Q3 2020	209.29
Q4 2020	209.82
Q1 2021	211.90
Q2 2021	218.06
Q3 2021	221.36
Q4 2021	225.38
Q1 2022	228.93
Q2 2022	234.42
Q3 2022	239.68
Q4 2022	244.19
Q1 2023	247.49
Q2 2023	251.34
Q3 2023	255.24
Q4 2023	258.62
Q1 2024	262.00
Q2 2024	264.94

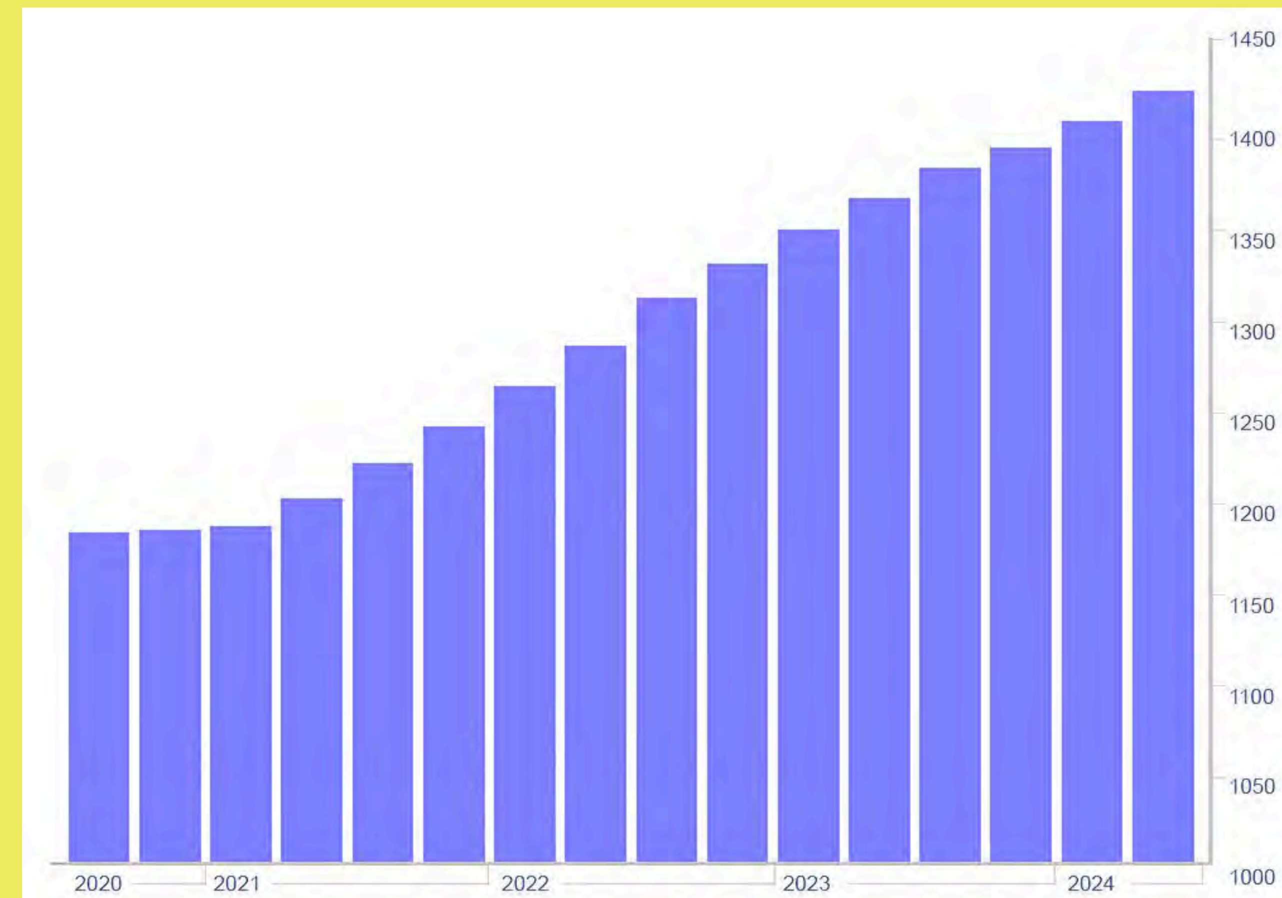
Source: Rider Levett Bucknall

National Construction Building Cost Index

- In Q3 2024, the Construction Building Cost Index for U.S. non-residential construction rose to 1421, a 0.92% increase from Q1 and a 4.10% rise year-over-year from Q2 2023.

- Material prices have mostly stabilized, and lead times have shortened, reflecting improved supply chains. However, mechanical and electrical equipment still face delays, indicating ongoing challenges.

- Workforce development initiatives are addressing the skilled labor shortage, especially in mechanical and electrical trades, which are critical for the growing industrial and advanced technology sectors.



Source: Turner Construction Company

CREDE Perspective

The data shows a controlled rise in construction costs, with material prices stabilizing and lead times improving, signaling a more predictable market. However, delays in mechanical and electrical equipment and skilled labor shortages highlight the need for targeted strategies in key sectors like industrial and advanced technology.

FED Projections – Q3 2024

- The near-term U.S. economic outlook has improved, with experts now predicting 2.1% growth this quarter and 2.0% next, up from the previous 1.5% forecast, according to a Federal Reserve Bank of Philadelphia survey.
- Forecasters expect real GDP to grow 2.5% in 2024 and 1.9% in 2025, slightly revised up by 0.1 percentage points from three months ago.
- Unemployment rate projections remain steady, with expectations for a rise from 3.9% in 2024 to 4.1% by 2027.

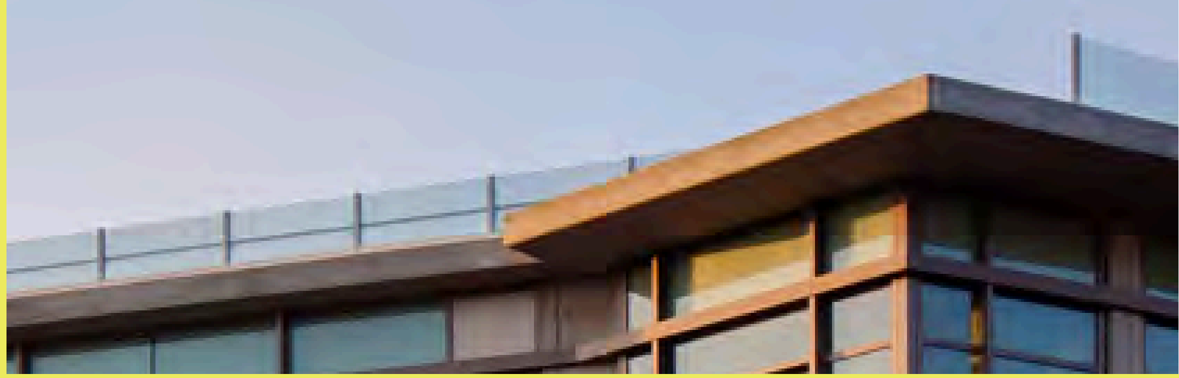
	REAL GDP (%)		UNEMPLOYMENT RATE (%)		PAYROLLS (000S/MONTH)	
	PREVIOUS	NEW	PREVIOUS	NEW	PREVIOUS	NEW
Quarterly data:						
2024:Q2	1.5	2.1	3.9	3.9	119.8	200.0
2024:Q3	1.5	2.0	4.0	4.0	114.6	147.3
2024:Q4	1.7	1.5	4.0	4.0	122.4	129.7
2025:Q1	1.8	1.8	4.1	4.1	133.5	144.2
2025:Q2	N.A.	2.0	N.A.	4.1	N.A.	108.7
Annual data (projections are based on annual-average levels):						
2024	2.4	2.5	3.9	3.9	190.0	212.6
2025	1.8	1.9	4.1	4.1	111.7	140.6
2026	2.2	1.9	4.1	4.1	N.A.	N.A.
2027	1.7	2.1	4.0	4.1	N.A.	N.A.

Source: Federal Reserve Bank of Philadelphia

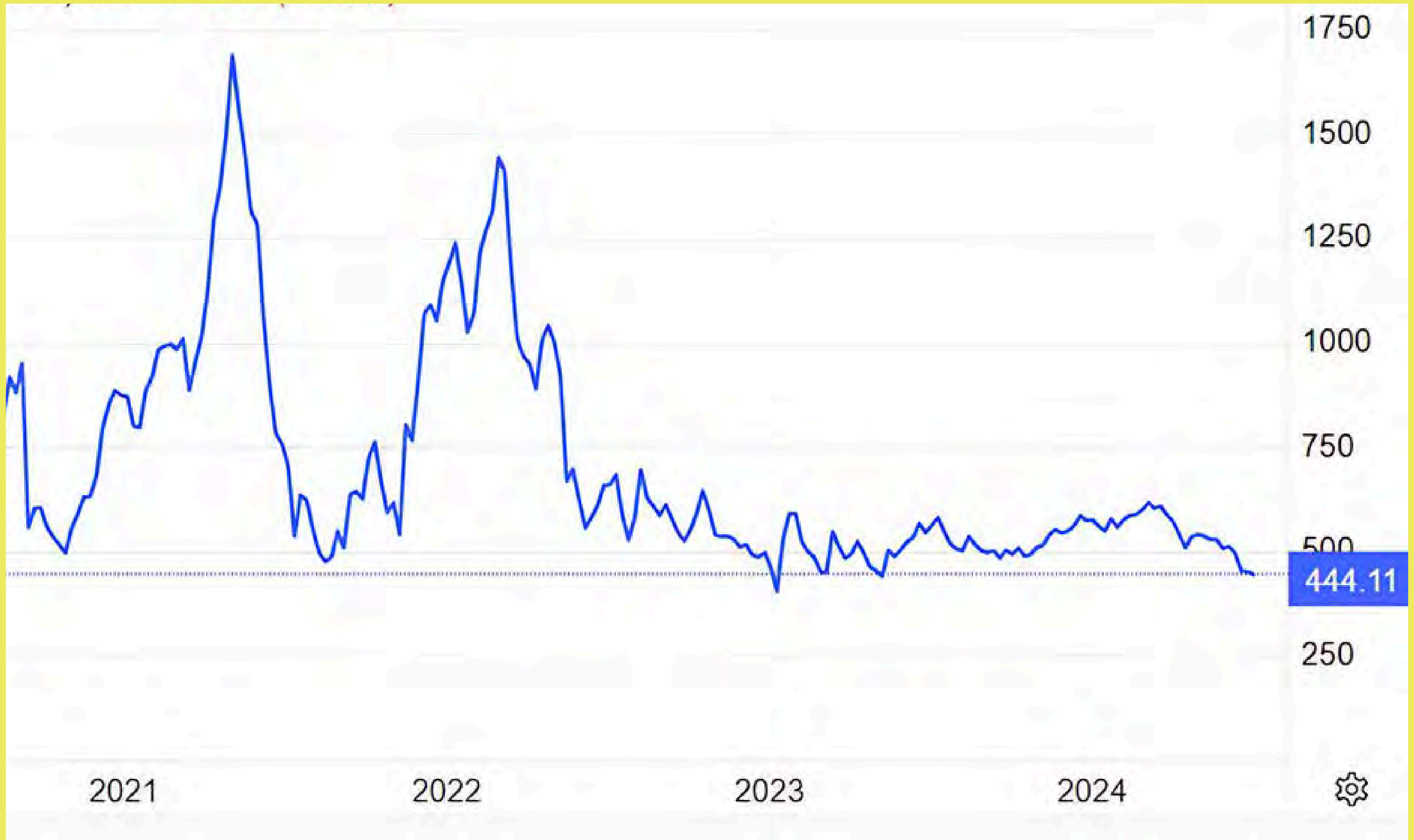
CREDE Perspective

The U.S. economy is improving, with growth projections slightly higher than expected. However, the projected rise in unemployment signals potential labor market challenges that could affect hiring. This combination of growth and rising unemployment calls for strategic planning and proactive workforce management.

Lumber Pricing Insights



- Lumber prices have fallen by 78.44 USD/1000 board feet, or 13.70%, since early 2024, down from a mid-$50/green ton peak in Q4 2022 due to a pulplog shortage.
- S&P Global Market Intelligence predicts a 5.8% decline in softwood lumber prices in 2024, with a 4.2% rebound in 2025. Plywood prices are expected to fall 0.6% in 2024 and another 0.9% in 2025.
- Drier logging conditions boosted production, increasing inventories at sawmills. Many mills implemented weekly log quotas to prevent excess logs and manage spoilage and inventory build-up.



Source: Trading Economics, CoreLogic, S&P Global

CREDE Perspective

High mortgage rates, persistent inflation, and declining home sales are straining hardwood lumber demand in the U.S., compounded by economic and political uncertainties. As a result, lumber prices are expected to keep falling through 2024.

Steel Pricing Insights

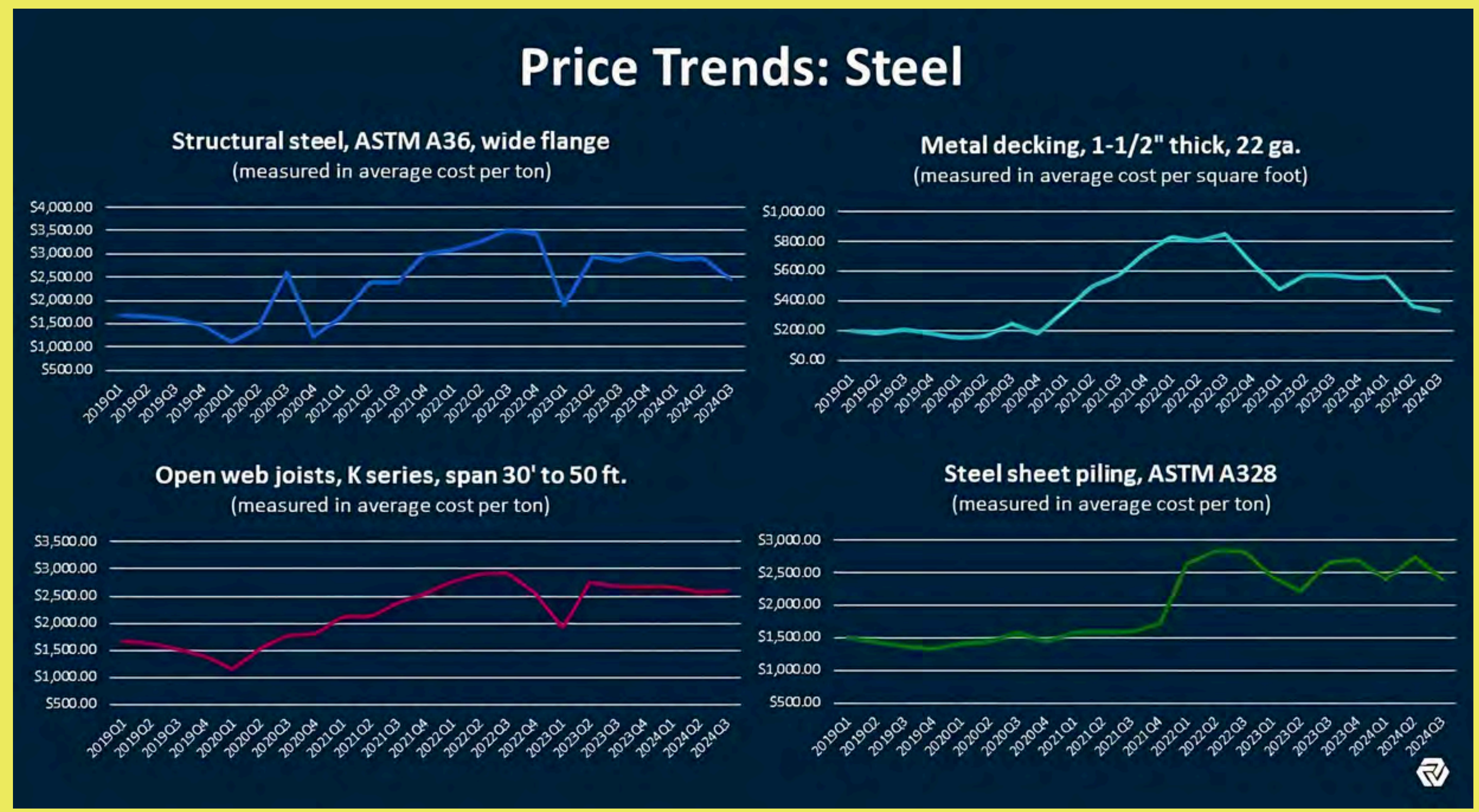
- Steel prices declined in Q3 2024, with hot-rolled coil (HRC) dropping to $885 per ton from $1,041.7 in the previous quarter. Currently, HRC prices in the U.S. are below $700 per short ton.

- Cold-rolled steel products, like metal decking and galvanized sheets, saw a significant double-digit price drop in Q3 2024 due to lower demand and improved supply chains.

- The drop in hot-rolled steel prices was driven by increased production, lower raw material costs, and a more stable supply chain.

CREDE Perspective

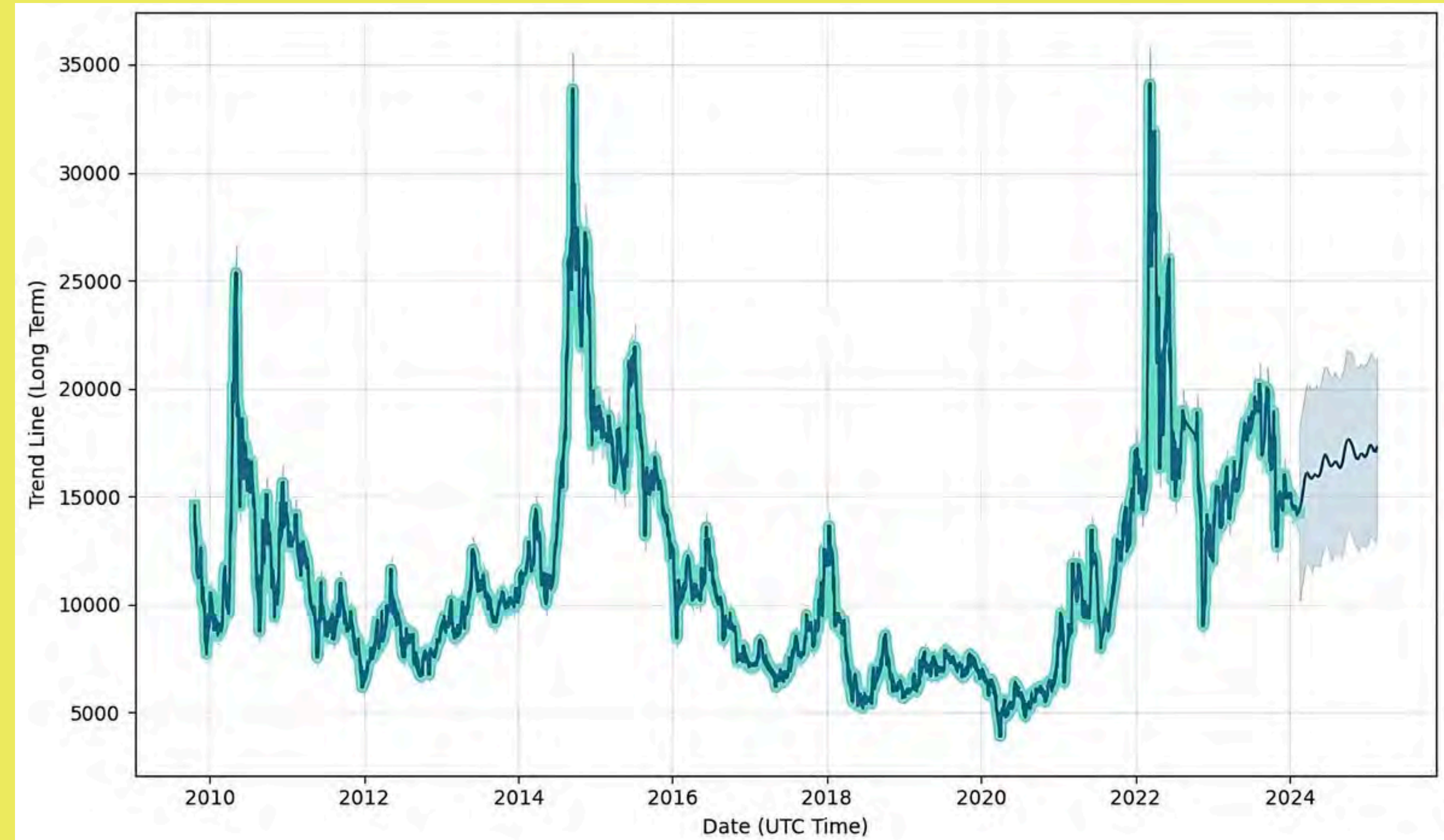
The steel market is seeing a notable price drop due to increased production, better supply chains, and lower raw material costs. This trend is expected to continue through 2024, providing companies a chance to benefit from lower material costs, optimize procurement, and improve project margins.



Source: Steel Market Update, Gordian, Reuters

PVC Pricing Insights

- The Q3 ending price for PVC Pipe Grade FOB Texas stood at USD 813/MT compared to 755/MT at the end of Q1 2024.
- Price increases were driven by constrained supply and rising input costs, especially limited inventories and a two-month high in crude oil prices.
- Severe weather, including hurricanes and floods, disrupted demand and production, straining supply chains. Container shortages and logistical issues also pushed PVC prices up.



Source: Chem Analyst, Procurement Resource

CREDE Perspective

Despite the Q3 price uptick, we expect a decline and stabilization through the rest of 2024. Economic uncertainties and cautious buying will likely keep prices under pressure, with some fluctuations, but the broader trend points to lower prices as the market balances.

Construction Raw Material Costs

- The national average for material costs in the U.S. increased by 0.2% over the past quarter and decreased by -0.1% over the past 12 months.

- A few construction Inputs are up 5%, Concrete Products and Copper. Steel Products are down ytd 5% to 7%. Otherwise the PPI for Construction Inputs is up year-to-date only 1% to 2%.

- Construction raw material costs are driven by supply chain disruptions, global economic conditions, severe weather, energy prices, material availability, and regulatory changes.

CREDE Perspective

As we enter Q4 2024, the raw material landscape remains stable with some shifts. Concrete and copper are rising, while steel prices are easing. While overall costs may not change dramatically, closely tracking specific materials will be key to navigating the rest of the year.

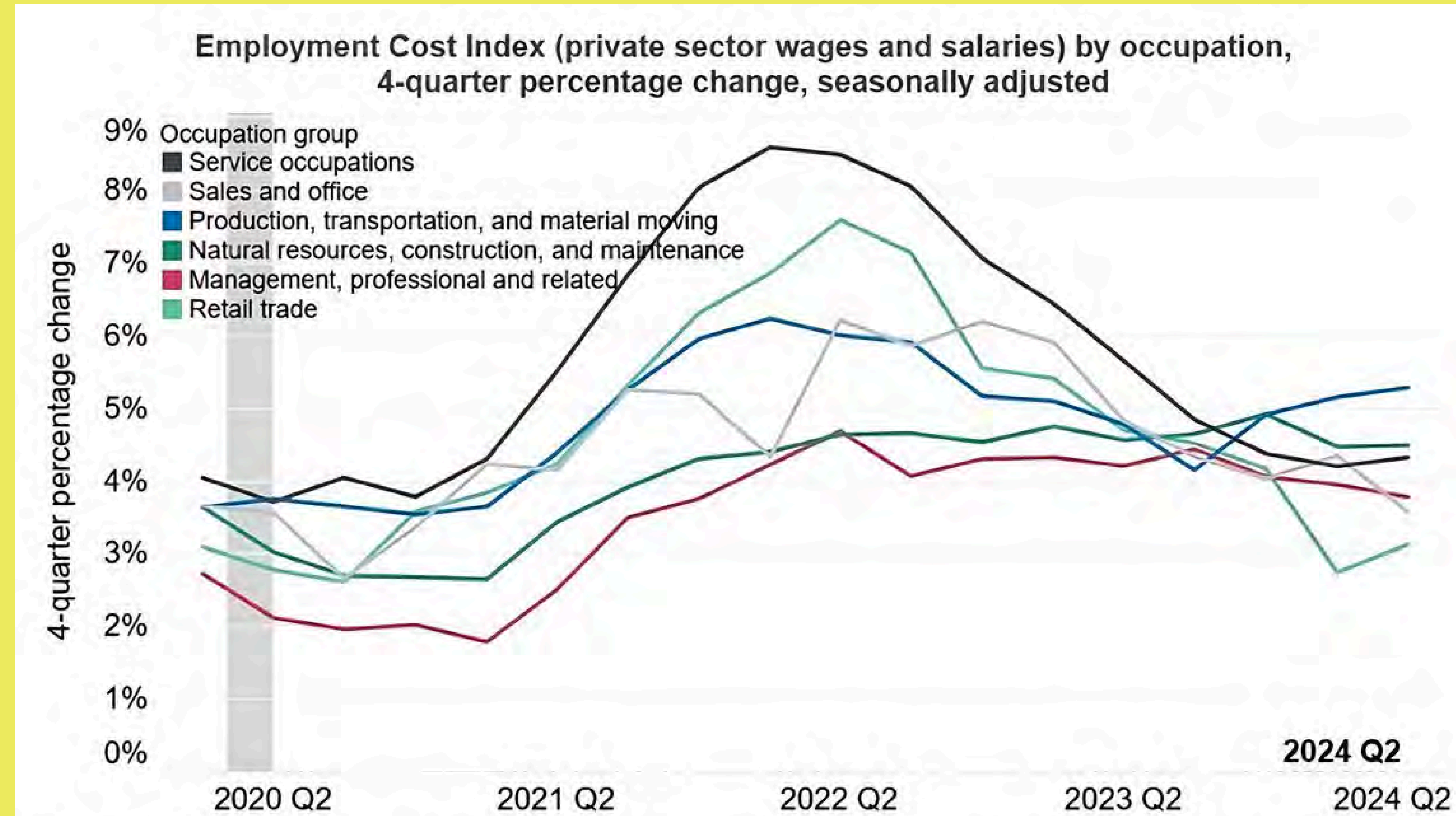
Materials Inputs Forecast for June 2024

% Change In Index Avg/Avg	2021 Avg %	2022 Avg %	2023 Avg %	2024 JUN %	YTD'24 as of JUN vs Avg 2023	YTD'24 Avg % vs Dec23
Inputs to Non Res Construction %	18.5%	15.7%	-0.3%	-0.08%	0.8%	1.0%
Inputs to Res Construction	18.3%	12.6%	-2.6%	0.19%	0.2%	2.0%
Ready Mix Concrete	3.8%	10.3%	11.2%	0.05%	5.4%	3.9%
Concrete Pipe	4.6%	19.6%	13.0%	0.16%	5.0%	2.3%
Concrete Block & Brick	4.2%	12.0%	11.0%	0.83%	5.3%	2.3%
Paving Mixtures	3.6%	16.7%	4.5%	0.65%	3.9%	5.2%
Lumber/Plywood	41.1%	-0.9%	-23.1%	-0.22%	-2.1%	1.5%
Steel Mill Products	90.2%	8.7%	-16.1%	-1.81%	-3.5%	1.1%
Fabricated Structural Steel	26.7%	27.8%	-0.5%	-1.36%	-5.7%	-7.5%
Steel Pipe and Tube	44.9%	26.9%	-17.2%	-1.79%	-6.2%	0.3%
Sheet Metal	19.6%	20.8%	1.1%	0.01%	1.5%	1.0%
Asphalt Roofing/Siding	11.5%	17.7%	3.8%	-0.67%	2.6%	0.3%
Rubber & Plastics	22.3%	23.3%	-1.6%	0.06%	-0.6%	0.4%
Gypsum Products	16.2%	18.7%	3.6%	0.00%	1.4%	2.7%
Flat Glass	5.3%	10.4%	5.8%	-0.64%	1.0%	0.6%
Nonferrous Wire and Cable	27.0%	13.0%	-0.4%	0.42%	3.1%	4.9%
Copper & Brass Mill Shapes	41.8%	2.9%	-1.6%	2.08%	4.4%	6.2%
Aluminum Mill Shapes	25.0%	12.8%	-8.4%	2.42%	-1.5%	1.2%
#2 Diesel Fuel	79.8%	65.9%	-24.9%	-3.80%	-10.4%	3.1%

Source: CoreLogic, Ed Zarenski

National Labor Outlook

- The national average for labor costs in the U.S. increased by 0.7% over the past quarter and increased by 3.7% over the past 12 months.
- Payroll employment growth slowed in July, dropping to 114,000 from June's revised 179,000. Though job growth is concentrated in specific sectors, gains remain notable and exceed 2019 levels.
- With the unemployment rate increasing to 4.3% in July, marking its fourth consecutive month of rise, this data signals a potential softening in the national labor market.
- As August's payroll figures showed further weakening and inflation continues to cool as reflected in July’s CPI and PCE readings, the Federal Reserve is likely to consider a rate cut in September.

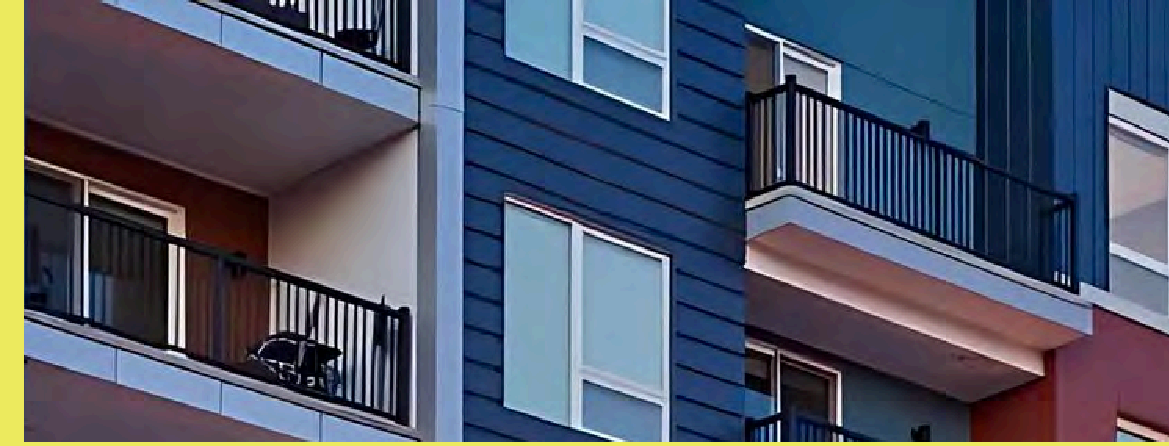


Source: US Bureau of Labor Statistics, The Conference Board

CREDE Perspective

The cooling national labor market, with slowing payroll growth and rising unemployment, signals a shift from recent months. While easing wage pressures might offer some short-term relief, the broader trend suggests we should prepare for potential slowdowns in new project starts.

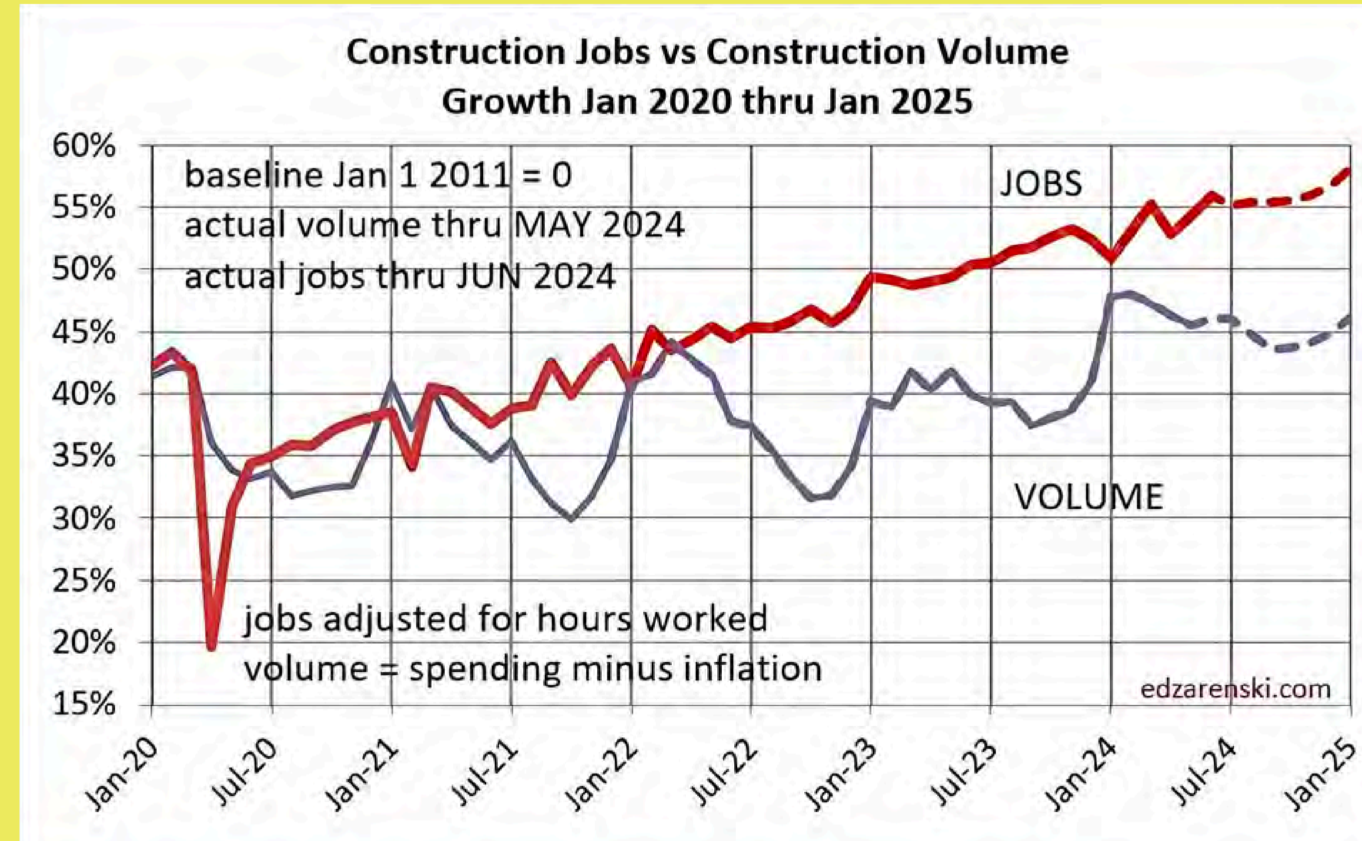
Construction Industry Labor Outlook



- The construction industry employs over 8.1 million people, but demand for talent is growing as spending is expected to rise in the coming years. The industry will need more than half a million new skilled workers annually.

- Year-to-date, residential construction jobs are up 1.0% with a 6.4% rise in volume, non-residential jobs increased 2.0% with a 1.0% volume rise, and non-building jobs grew 1.4% with a 1.3% volume increase. Overall, total construction jobs are up 1.5%, with a 3.3% rise in volume.

- Labor costs in construction have been rising steadily. As of Q3 2024, average hourly wages increased by 5.2% year over year and about 17% since the pandemic lockdowns in March 2020.

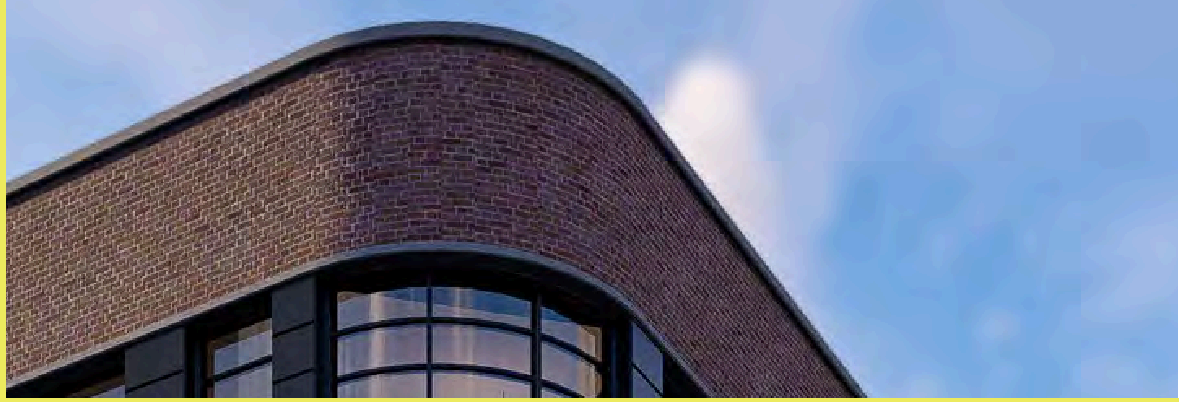


Source: National Center for Constuction Education and Research, Ed Zarenski

CREDE Perspective

The construction industry labor outlook presents challenges but remains manageable. Wages are rising due to a persistent shortage of skilled labor, putting pressure on margins, particularly for smaller firms. However, by focusing on strategic hiring, improving efficiency, and retaining top talent, these labor cost pressures can be effectively managed.

Container Shipping Outlook

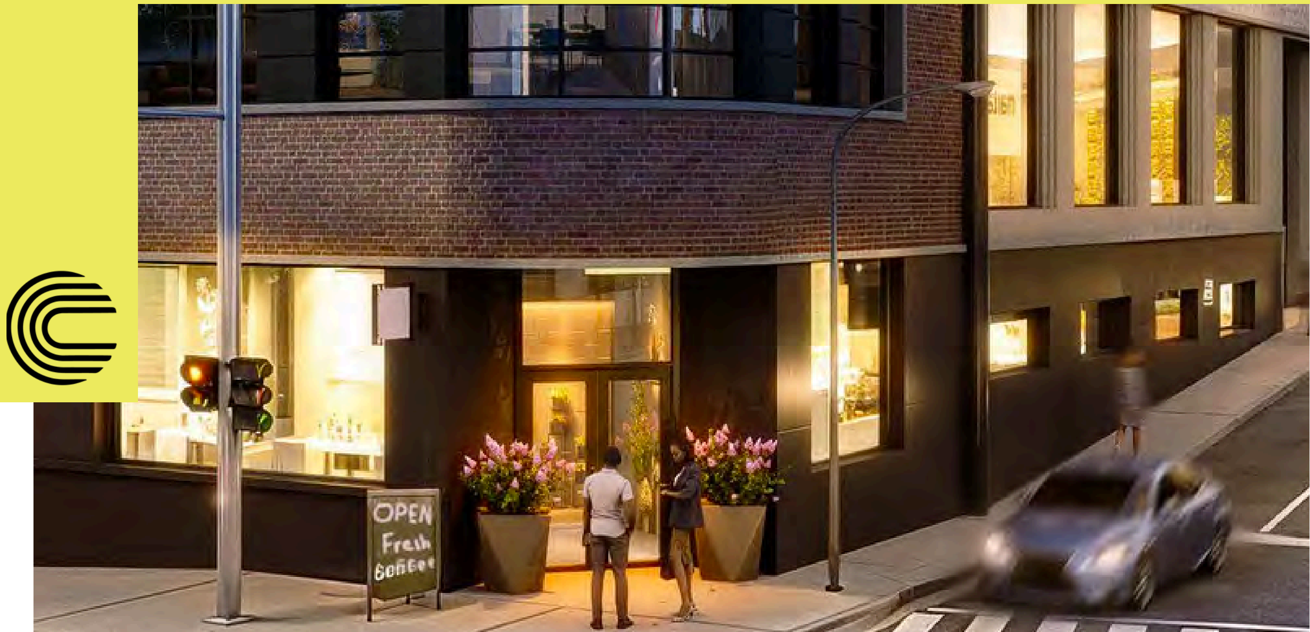


- In the first half of 2024, the average distance traveled by shipped containers increased by 9.3%, resulting in an 18.3% rise in global TEU miles.
- If demand from May to December matches that of 2023, overall demand for the year is expected to grow by 2.6%, with supply increasing by 8.4%.
- The market has been affected by an oversupply of container capacity, which led to a decline in rates in 2023. A record number of new ships in 2024 is expected to keep downward pressure on rates.
- Rather than struggling to fill ships, carriers are now urgently adding capacity due to the 18.3% increase in TEU miles.

Source: Xeneta, Freightos Terminal - FBX

CREDE Perspective

With demand growth at 2.5% and supply rising by 8.4%, overcapacity is no longer the main driver of freight rates. Carriers are rapidly deploying new ships to secure larger volume contracts, increasing competition and rate fluctuations. While Houthi attacks in the Red Sea are a concern, we expect a modest decline in freight rates in Q3 2024 as the market adapts to the new supply landscape.

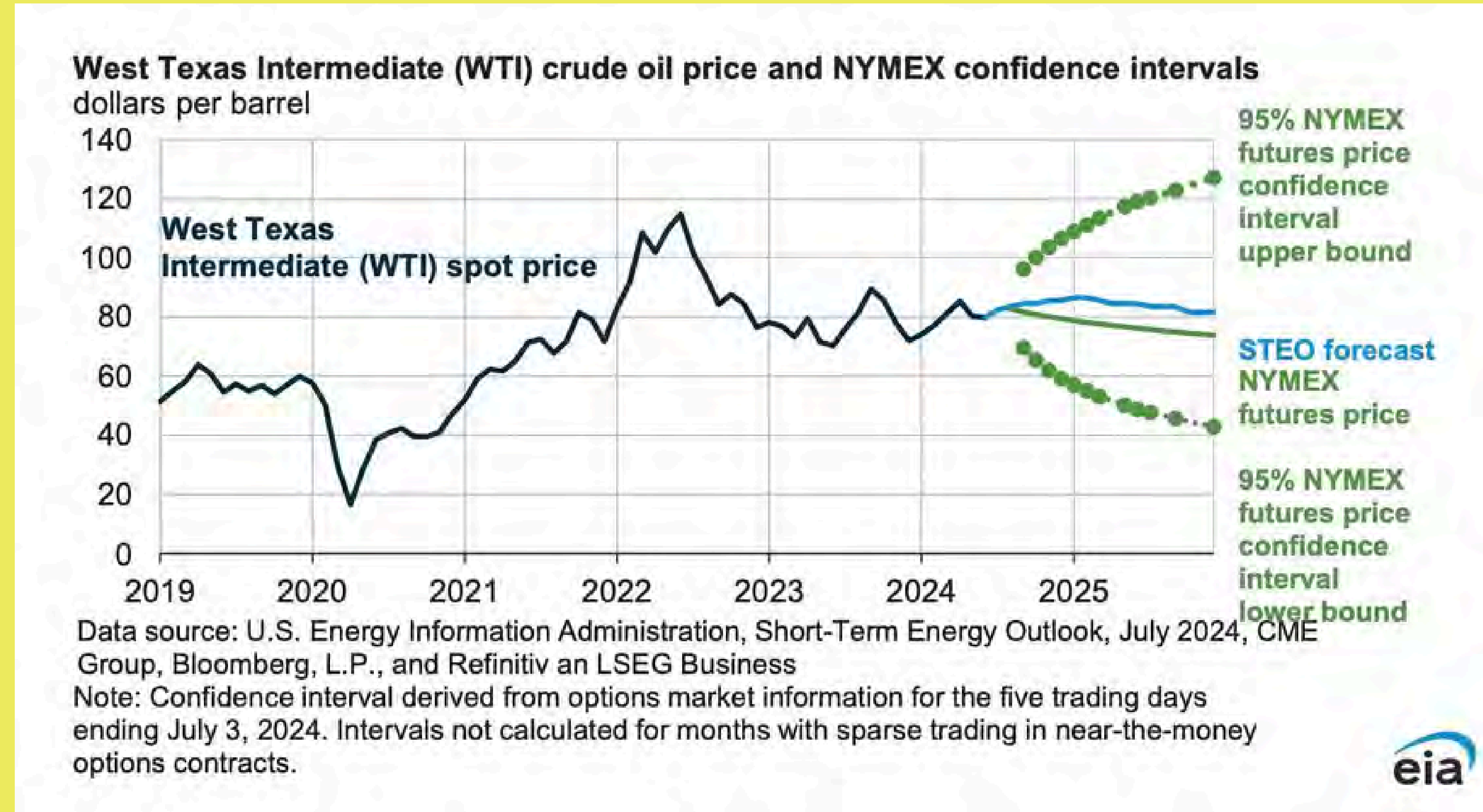


Energy Outlook

- Crude oil prices are expected to average $89 per barrel in the second half of 2024, up from $84 in Q1, driven by global oil inventory declines of 0.7 million barrels per day in Q2 and 0.5 million in Q1.

- The Henry Hub natural gas spot price is forecast to average $2.90 per MMBtu in the second half of 2024, up from $2.10 in the first half. Lower prices early in 2024 were due to mild winter weather, but reduced drilling has since tightened supply.

- Regular gasoline prices are expected to average $3.50 per gallon in 2025, with consumption at 8.9 million barrels per day. Despite improved vehicle efficiency, U.S. gasoline consumption will be 1% lower than in 2023 and 5% below the 2018 peak.



Source: U.S. Energy Information Administration

CREDE Perspective

As we move into Q4, we're anticipating a continued climb in Brent crude oil and natural gas prices. This upward trend will undoubtedly push energy costs higher across the board, from transportation logistics to the production of energy-intensive materials like concrete and steel. The construction industry will need to stay agile, managing these rising costs to protect margins and keep projects on track.

Insurance Marketplace Realities

- The market corrections of the past few years have contributed to improved insurer combined loss ratios and a more stabilized rate environment in the construction industry.
- The challenge for contractors and their broking partners is to try to counterbalance the market's continued upward rate pressure due to inflation and litigation expense with each individual account's own loss experience and risk mitigation strategies.
- Interest and investment in technology are rising to address labor shortages, improve efficiency, and capture meaningful data. AI and robotics are gaining traction as contractors work to meet growth goals and succession planning in a labor-constrained environment.

CREDE Perspective

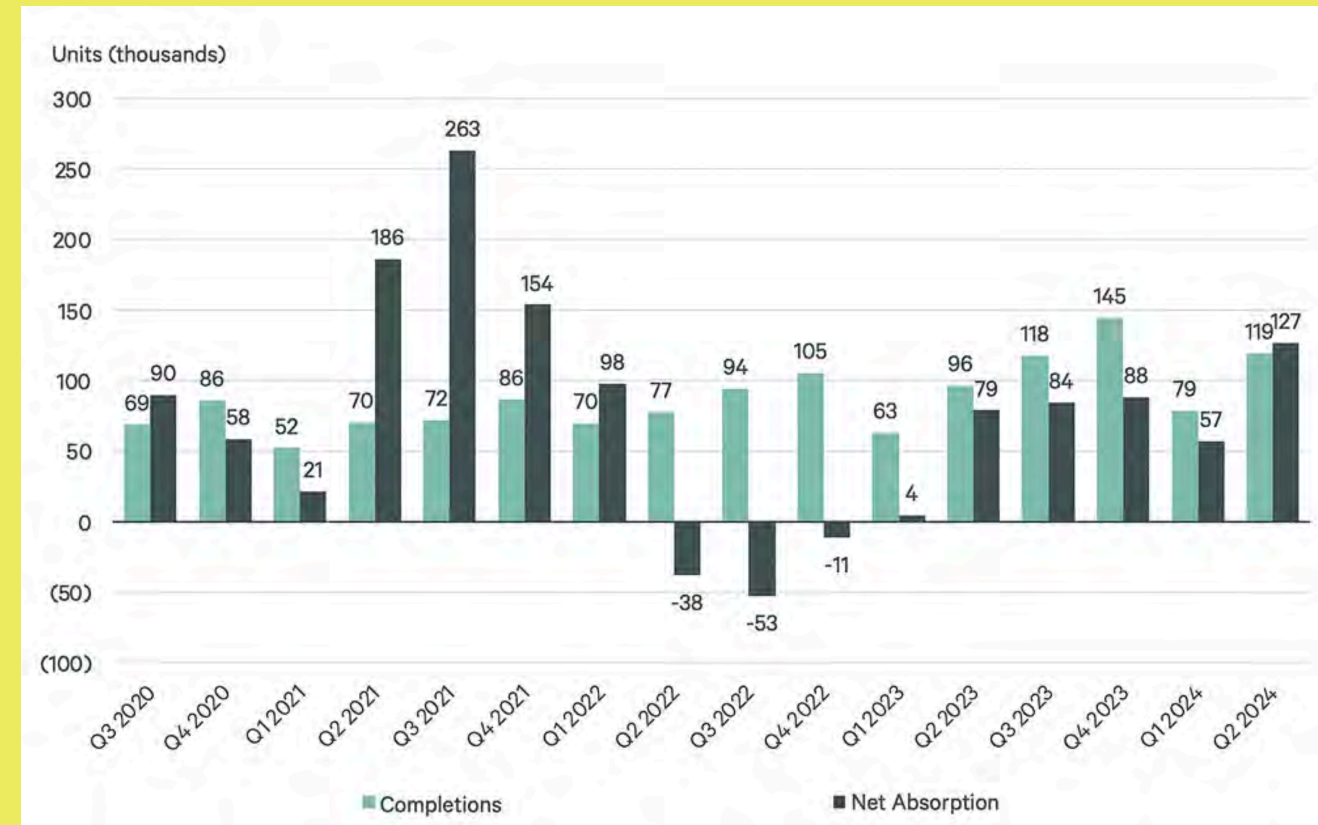
Top developers are doubling down on advanced technologies, using data analytics and key performance indicators to sharpen performance and manage risk more effectively. This push is also fueling a shift towards more collaborative project models, with a growing trend in joint ventures and the adoption of alternative contract types like Public-Private Partnerships (P3) and Engineering, Procurement, and Construction (EPC) contracts.

	Trend	Range
General liability		+5% to +15%
Auto liability and physical damage		+10% to +15%
Workers compensation		Flat to +5%
Umbrella (lead)		+5 to +15%
Excess		+10% to +15%
Non high hazard NATCAT project builders risk		+5% to +10%
High hazard NATCAT project builders risk		+10 to +20%
Masters builders risk/contractors block program (renewable business)		+5% to +10%
Professional liability		Flat to +5%
Contractors pollutions liability		+5% to +10%
Subcontractor default insurance		Flat to +5%
Project-specific/controlled insurance programs		+5% to +15%, +10% to +30% for excess

Source: Willis Towers Watson plc.

Multi-Family Forecast

- Demand outpaced new supply, with net absorption reaching 126,600 units in Q2—the highest Q2 total in over 20 years and comparable to the pre-pandemic Q2 average.
- Construction completions hit 119,400 units in Q2, raising the four-quarter total by 29% year-over-year to a record 460,000 units. For the first time in two years, quarterly demand exceeded completions, and the annual gap continues to narrow.
- There is expected to be a large influx of new apartment units in 2024, with over 900,000 units currently under construction and 440,000 units projected for delivery
- Q2 saw an 82% quarter-over-quarter increase in multifamily investment volume, totaling $38.3 billion, with $10 billion of that attributed to Blackstone's acquisition of the AIR Communities portfolio.
- Year-over-year rent growth eased to 0.3% in Q2, down from 0.4% in Q1, but is expected to accelerate in Q4 as occupancy levels increase.



Source: FreddieMac, CBRE Inc.

CREDE Perspective

The data paints a clear picture: demand is outpacing supply, with net absorption hitting levels we haven't seen in over 20 years. For developers, this is a strong signal to stay aggressive but strategic, especially with over 900,000 units in the pipeline for 2024. Investors should take note—despite a slight dip in rent growth, the market is set for acceleration in Q4 as occupancy climbs, making multifamily a prime area for investment with robust returns on the horizon.

Industrial Forecast

- In the past two years, the U.S. completed a record 1.1 billion square feet of new industrial space, much of it speculative. This surge raised the national industrial vacancy rate by 287 basis points, from 3.6% in mid-2022 to 6.4% by the end of Q2.

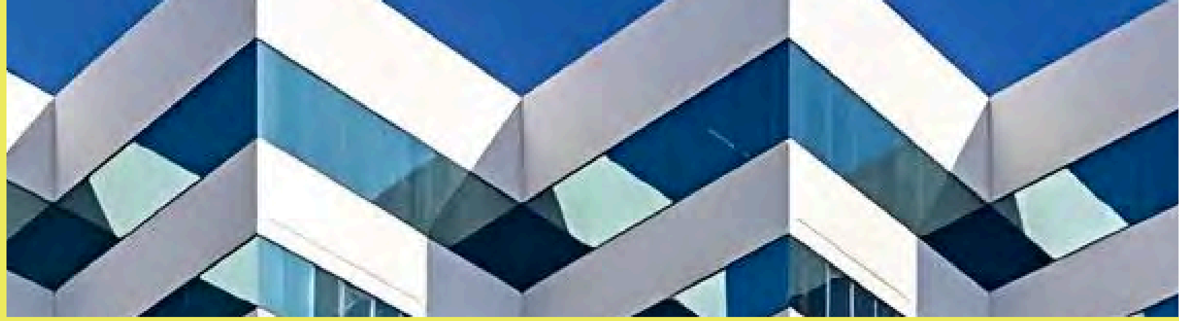
- Demand, as indicated by net absorption, reached 43 million square feet in the second quarter, representing a 53% increase compared to the previous quarter’s figures.

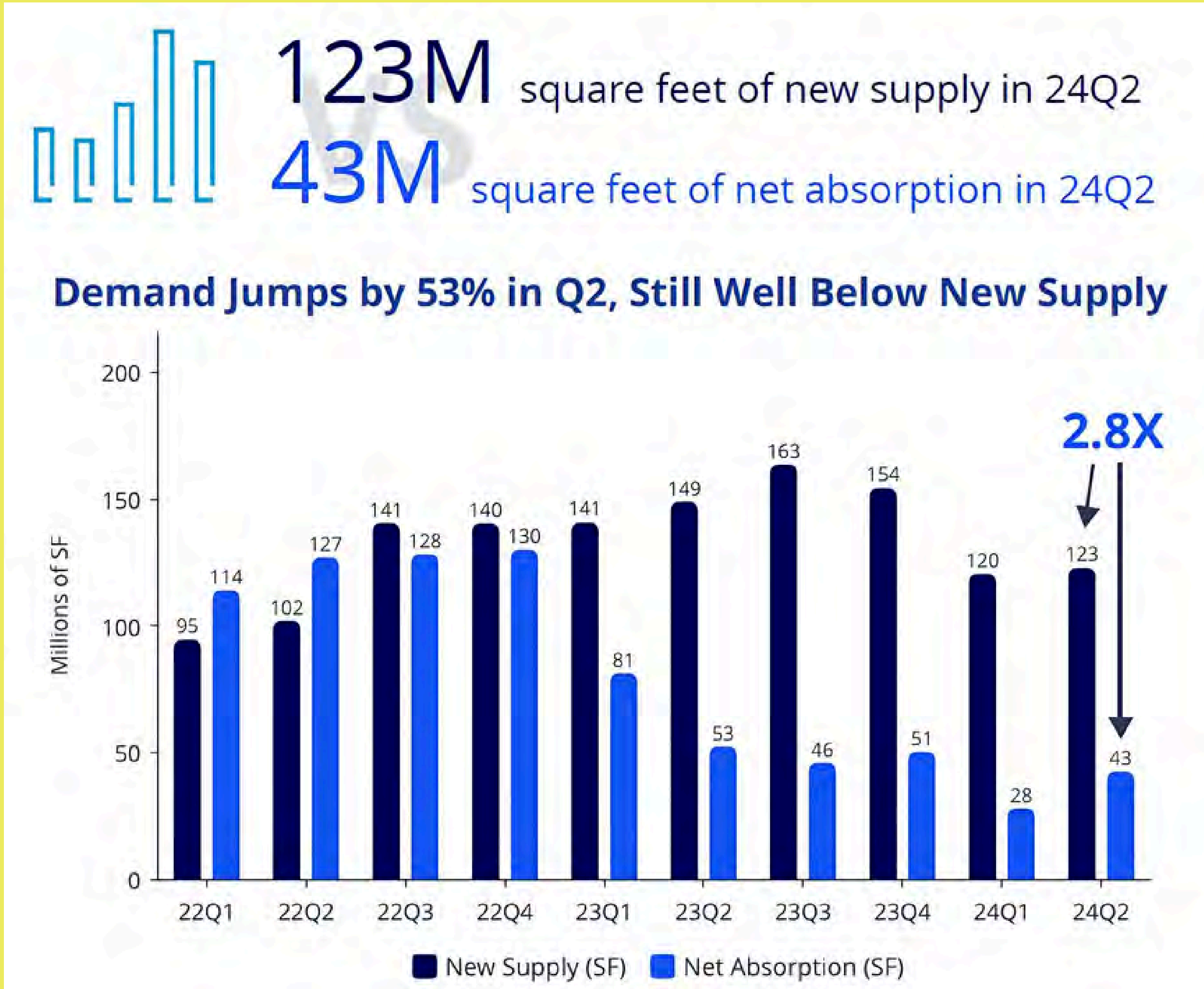
- New supply, reflected by construction completions, also saw an uptick, totaling 123 million square feet. However, this figure is expected to decline in the coming quarters due to a reduction in the construction pipeline. The disparity between tenant demand and new supply is anticipated to narrow in the second half of 2024, potentially reaching equilibrium by early 2025.

- By the close of the second quarter, 342 million square feet of industrial space was under construction, representing a 50% decrease from the 681 million square feet in progress a year earlier. Although construction starts saw an uptick, the majority of these projects were build-to-suit and manufacturing developments.

CREDE Perspective

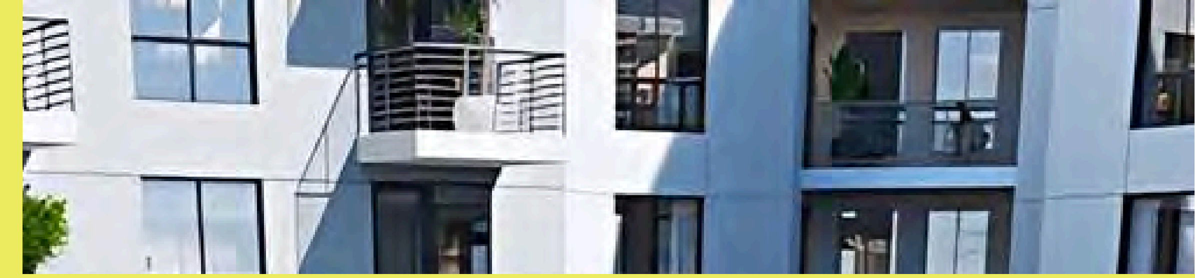
The U.S. industrial real estate market is facing an oversupply, with rising vacancy rates as speculative construction has outpaced demand. However, strong demand in sectors like Manufacturing and e-commerce and logistics presents significant opportunities, especially in markets where these industries are driving growth. As new construction slows and the market moves toward equilibrium, these sectors are poised to benefit, with potential for strategic investments and development by early 2025.





Source: Colliers U.S. Industrial Market Statistics

Hospitality Forecast



- At the close of Q2, both the number of projects and rooms in the pipeline reached record levels. The U.S. pipeline now comprises 6,095 projects, reflecting a 9% year-over-year increase, and 713,151 rooms, up 8% from the previous year.

- Currently, 1,171 projects with 147,611 rooms are under construction, reflecting a 10% increase in projects and 4% rise in rooms compared to last year. In the next 12 months, 2,350 projects with 268,378 rooms are set to break ground, showing a 5% increase in projects and 3% in rooms year-over-year. Early-stage planning is also strong, with 2,574 projects (up 13%) and 297,162 rooms (up 15%) in development.

- In the first half of 2024, 250 new hotels with a total of 29,777 rooms opened across the U.S. LE projects that by year-end, an additional 400 hotels with 44,451 rooms will open, bringing the total to 650 hotels with 74,228 rooms. This represents a 35% increase compared to the 480 hotels (60,922 rooms) opened in 2023.

- Renovations and conversions remain strong in the U.S., with 2,007 projects (a 4% increase YOY) and 262,178 rooms (a 3% increase YOY) currently underway.

United States | Q2 2024 Hotel Development Activity

New Construction
Projects
6,095
Rooms
713,151

Renovations & Conversions
Hotels
2,007
Rooms
262,178

Hotel Openings 2024 Forecast
Hotels: 650
Rooms: 74,228
Q1 – Q2 '24 Actual:
Hotels: 250
Rooms: 29,777
Q3 – Q4 '24 Forecast:
Hotels: 400
Rooms: 44,451

Hotel Openings 2025 Forecast
Hotels
779
Rooms
87,405

Source: Lodging Econometrics, Hotel Investment Today

CREDE Perspective

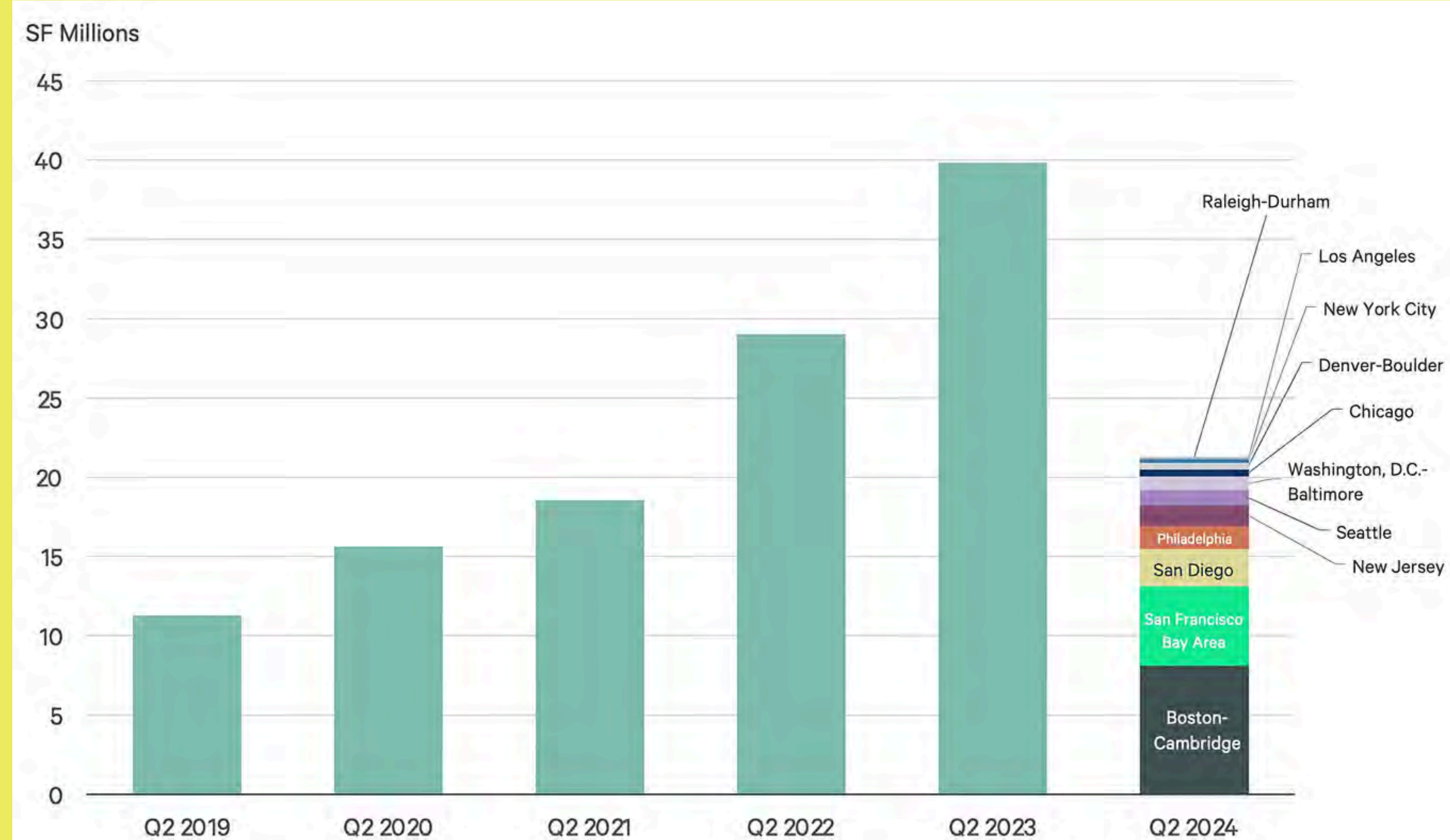
This data clearly shows that the U.S. hospitality market is experiencing significant growth, with a record number of projects and rooms in the pipeline. For developers and investors, this surge presents strong opportunities, especially as we anticipate a substantial increase in hotel openings by year-end 2024. The continued momentum in renovations and conversions also underscores the potential for strategic investments in enhancing existing properties.

Life Science Forecast

- Net absorption of 294,390 square feet in Q2 was outweighed by 4.6 million square feet of new vacant space, pushing the Lab/R&D vacancy rate up nearly 2 percentage points to 16.7%.
- Lab/R&D space under construction fell to 21 million square feet in Q2, the lowest since Q2 2021. Nearly 5 million square feet of new space was delivered, with just 7% pre-leased.
- Leasing activity dropped 17% quarter over quarter to 2.6 million square feet, with 57% from new leases and expansions. Tenant requirements also fell by nearly 1 million square feet, totaling 12.1 million square feet.

CREDE Perspective

The Lab/R&D real estate market is cooling, with rising vacancies as new space outpaces demand. Leasing activity is down, reflecting a pullback, and developers are responding with caution, scaling back construction. We anticipate a period of adjustment with elevated vacancy rates through the rest of the year, but demand should stabilize, leading to a more balanced market in 2025 as developers focus on pre-leasing to better align supply and demand.



Source: CBRE Research, Globest

Data Center Forecast

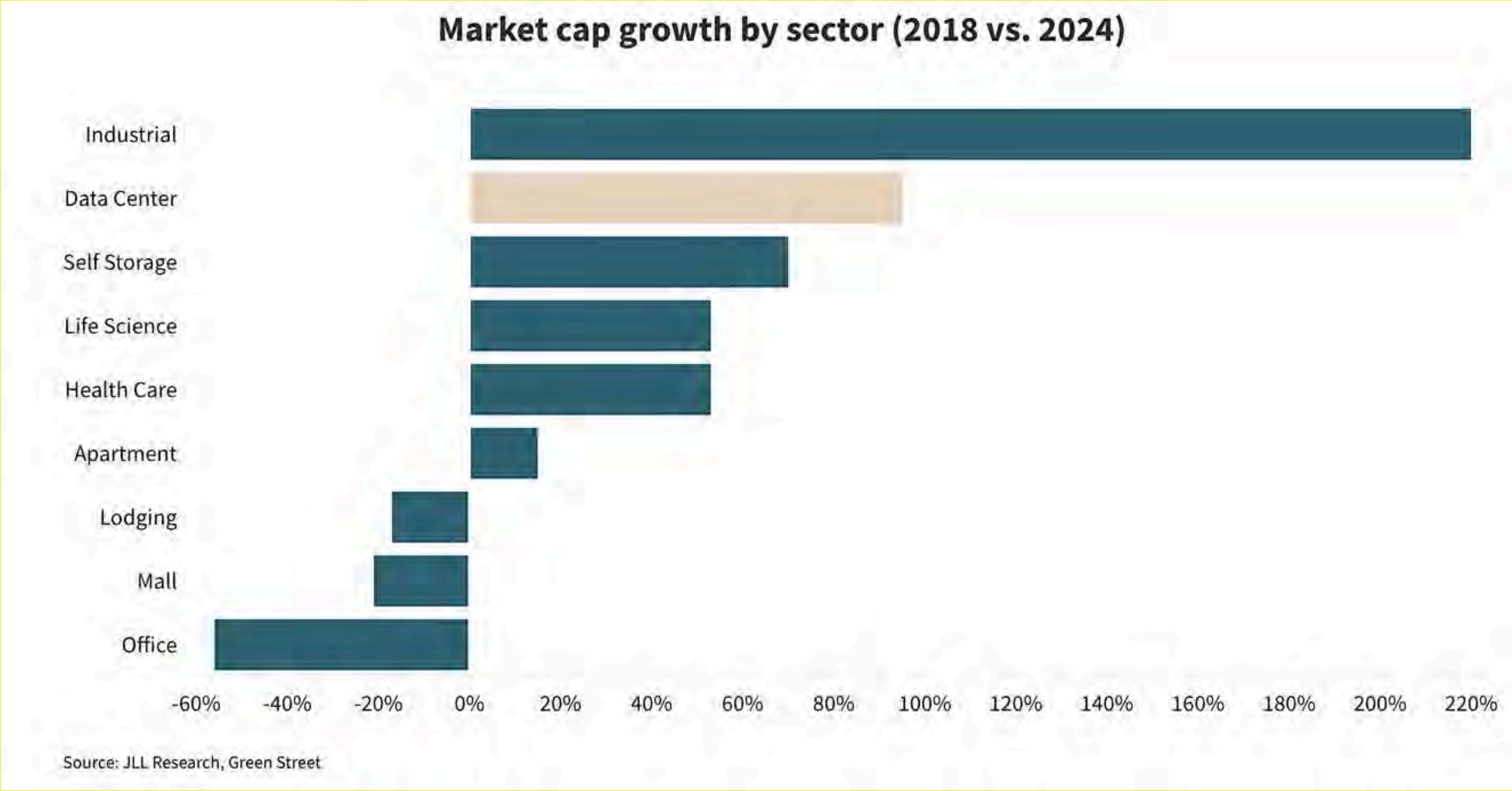
- By the end of Q3 2024, around 30 million square feet of data center space was under construction, with over 70% already pre-leased. National data center vacancy rates remained low, dropping slightly to 4.2%, down from 4.5% in the previous quarter.

- Capital investment in data center construction totaled $10.7 billion in Q3 2024, reflecting a 12% increase from Q1 2024. The bulk of this investment was directed toward the expansion of existing facilities and the development of hyperscale data centers.

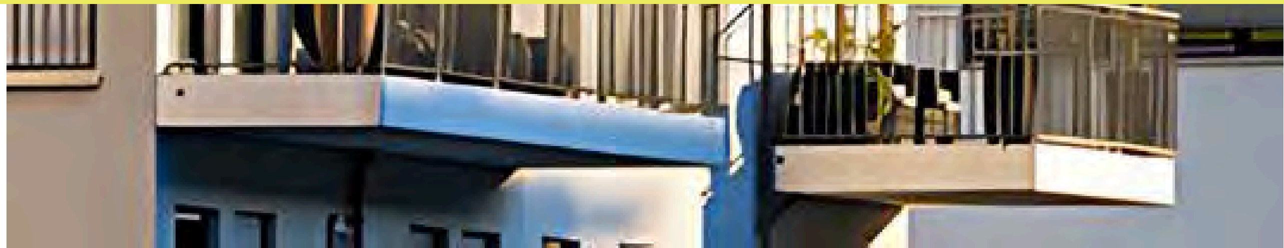
- In Q3 2024, over 65% of new data center projects incorporated renewable energy solutions, primarily solar and wind. Nearly half of these projects aimed for LEED certification or similar sustainability standards, reflecting a strong commitment to environmental responsibility.

CREDE Perspective

The data center market is ripe with opportunity, with strong demand driving quick absorption of new projects and reducing speculative risk. The push toward expanding hyperscale facilities meets the increasing need for advanced infrastructure, making large-scale developments particularly appealing. As the industry continues its shift toward sustainability, projects that prioritize eco-conscious solutions will be well-positioned for investment, and we expect this trend to gain even more momentum heading into 2025.



Source: CoreSite, Jones Lang LaSalle IP, Inc.

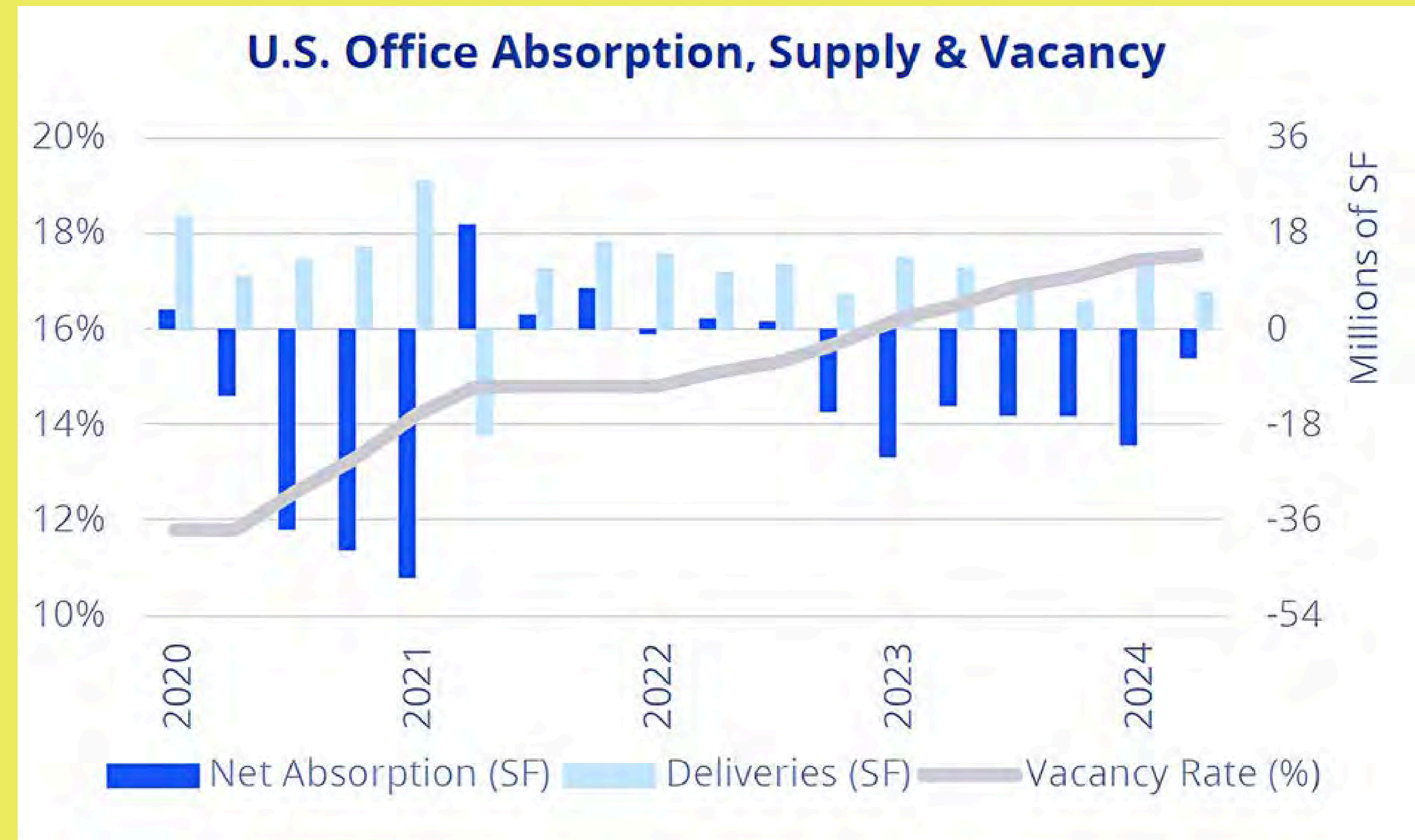


Office Forecast

- The U.S. average office vacancy rate rose to 17.6%, up 10 basis points from the previous quarter. The Central Business District (CBD) vacancy rate hit 18.7%, a 20 basis point increase from last quarter and 130 basis points higher than a year ago. Suburban vacancy rates climbed to 17.0%, up 10 basis points from Q1.

- U.S. net absorption for the quarter was negative 5.4 million square feet, bringing the year-to-date total to negative 27.3 million. However, this marks a significant improvement from the average quarterly losses of negative 14.0 million square feet over the past two years.

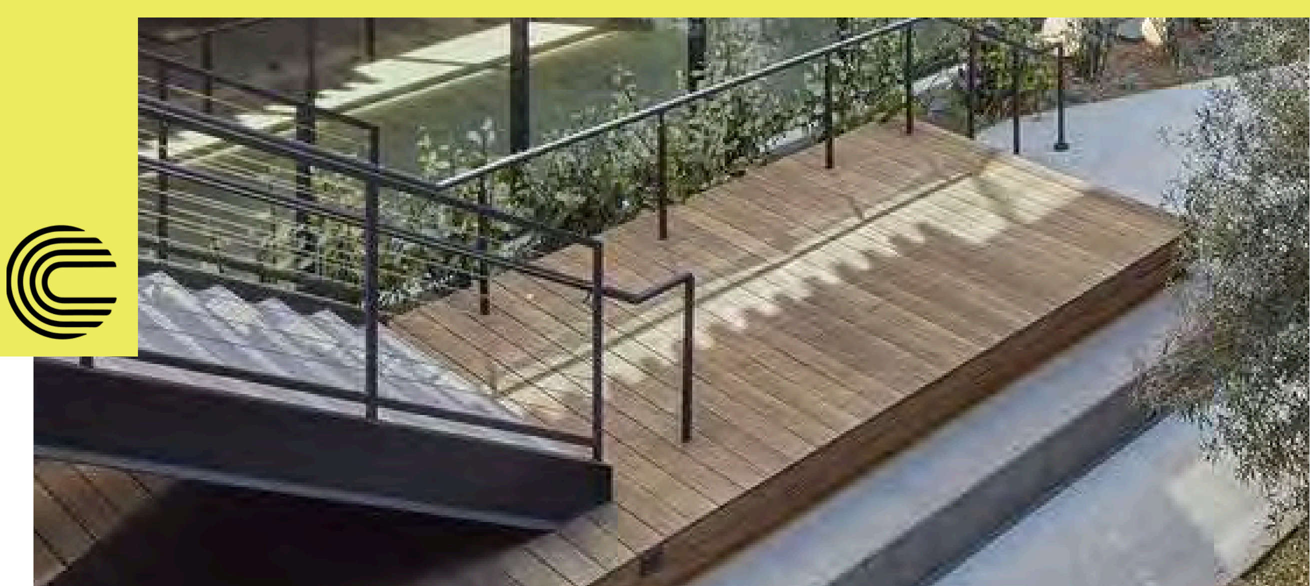
- The average asking rent was $36.87 per square foot, down 0.1% from the previous quarter but up 1.05% from the same quarter in 2023. This marks the smallest year-over-year growth in over five years and the first quarterly decline in two years.



Source: Colliers

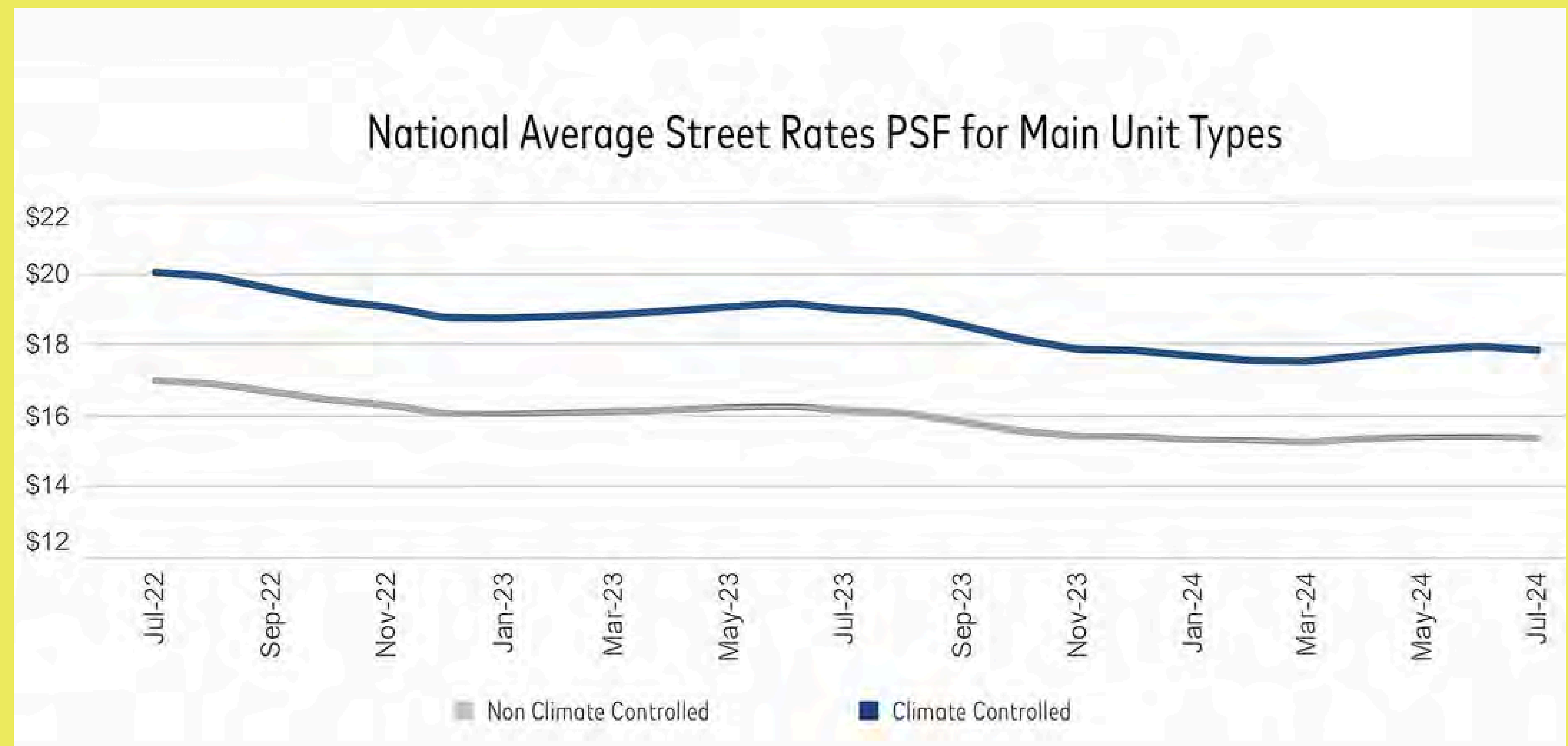
CREDE Perspective

The rising vacancy rates and continued negative absorption highlight a challenging office market, with demand still trailing as companies adapt to evolving work models. This trend is likely to persist throughout the rest of the year, making it crucial to focus on opportunities to reposition or enhance existing spaces to attract and retain tenants. Strategic, cautious investment will be key, with a focus on markets where demand remains more stable and potential value can be unlocked in underperforming assets.



Self-Storage Forecast

- As of July's end, the national pipeline had 64.6 million net rentable square feet (NRSF) under construction, 3.5% of existing stock, a slight 10 basis point drop from the previous month.
- Construction starts slowed in Q4 2023 and Q2 2024, keeping the pipeline stable in early 2024. New supply for the year is expected at 59.6 million NRSF (3.2% of stock), with further moderation in 2025, dropping to 50.1 million NRSF (2.6% of stock).
- REIT results for Q3 2024 show slowing growth in the self-storage sector, with declining occupancy and low street rates. Same-store revenue growth was -0.2%, the first negative since Q3 2020.



Source: Yardi Matrix, Karr-Cunningham Storage

CREDE Perspective

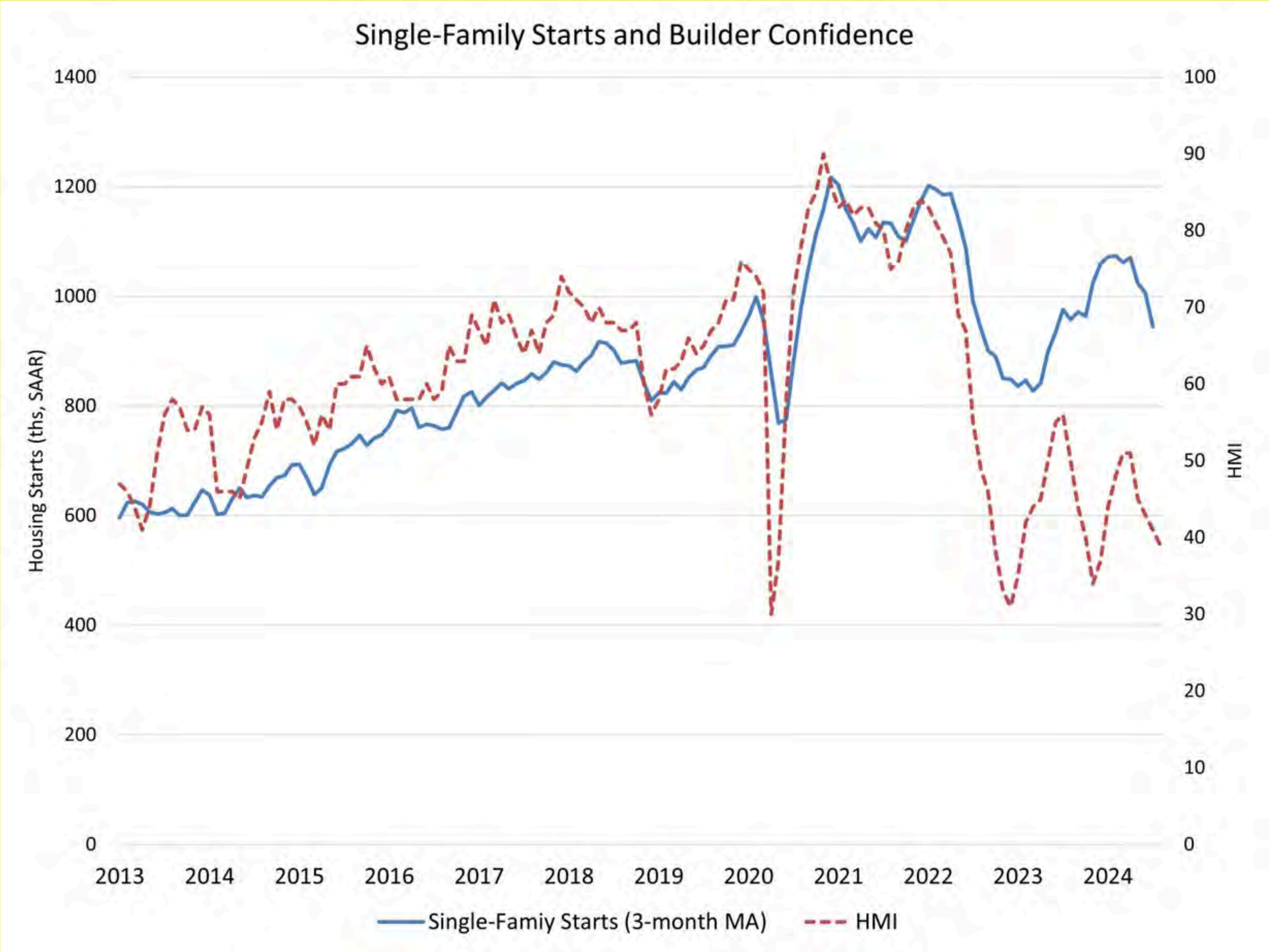
The self-storage sector is cooling, with slowing construction and shifting market dynamics signaling a need for a more measured approach. As this trend continues into 2025, focusing development in cities like Dallas, Phoenix, and Atlanta—where demand remains strong—will be crucial to avoiding oversaturation. Strategic, targeted investment in these markets will be key to navigating these changes and capitalizing on real opportunities.

Housing Demand

- Housing starts fell by 6.8% in July, down to a seasonally adjusted annual rate of 1.24 million units, according to the U.S. Department of Housing and Urban Development and the U.S. Census Bureau. This marks the slowest construction pace since May 2020.
- The number of single-family homes under construction decreased to 653,000, marking a 4.1% decline compared to the previous year.
- Regionally, year-to-date combined single-family and multifamily starts are down by 1.3% in the Northeast, 5.1% in the Midwest, 5.4% in the South, and 5.1% in the West.

CREDE Perspective

The slowdown in new home construction reflects challenges like affordability, high loan rates, and supply chain issues. Builders are also dealing with labor shortages and limited lot availability, slowing growth. However, by Q1 2025, there is optimism that these pressures will ease, leading to a rebound in housing activity as the market stabilizes and demand increases.



Source: National Association of Realtors, Eye on Housing

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