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# Message from Our Experts

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We are pleased to share the Gilbane Q3 2024 Market Conditions Report. This quarterly report provides a national macroeconomic view of the overall economy and its impacts on the U.S. construction industry, focusing on market-driven data, end-to-end supply chain constraints, equipment and material availability, costs, and risk mitigation strategies.

This quarter, in addition to our interactive Geographic Insights, our Supply Chain Spotlight focuses on the upcoming EPA-driven refrigerant transition for HVAC equipment and the resulting impacts.

Our overarching goal is to be your leading resource in supply chain management, construction equipment, and material resources. Reach out to our team of experts today; we're here to help.

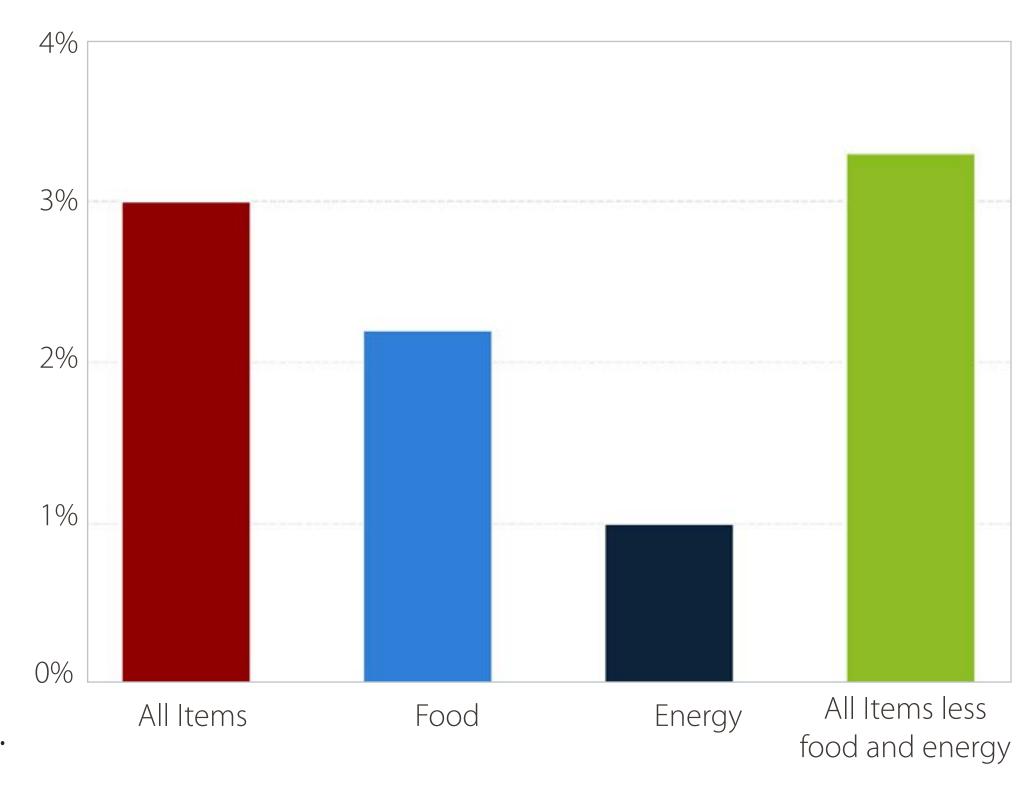
### **General Economic Outlook**

The economy has remained resilient, indicating the Fed has been successful in navigating a "soft landing."

- Although growth has slowed, consumer spending has continued to rise. Both real and current-dollar personal income have also increased.
- > Total non-farm employment increased by 206,000 in June. The unemployment rate increased only slightly from 4.0 percent to 4.1 percent.
- > Real average hourly earnings increased 0.4 percent from May 2024 to June 2024 and are up 0.8 percent from June 2023 to June 2024.
- > The value of the U.S. Dollar has continued to appreciate against the Euro in 2024. The increasing strength in the U.S. Dollar reflects easing inflation.

### 12-month percentage change, Consumer Price Index

Selected categories, June 2024, not seasonally adjusted



Source: US Bureau of Labor Statistics

### **General Economic Outlook**

General economic indicators impacting the construction industry

### **Gross Domestic Product**

- > Real gross domestic product (GDP) increased 0.7 percent (annual rate of 2.8 percent) in Q2 2024 from Q1 2024, according to the "advance" estimate released by the Bureau of Economic Analysis. In Q1 2024, real GDP increased 0.35 percent (annual rate of 1.4 percent) from the previous quarter.
- > The acceleration in growth of real GDP reflects increases in consumer spending, inventory investment, and business investment.
- > Construction contributed 0.31 percentage point to the annual growth in GDP in Q1 2024, the second-largest industry contribution after retail trade. Contributions to percent change in real GDP by industry group are not yet available for Q2 2024.
- > From Q2 2023 to Q2 2024, real GDP grew 3.1 percent.

### **Inflation**

- > The Consumer Price Index for All Urban Consumers (CPI-U) decreased 0.1 percent in June on a seasonally adjusted basis and rose 3.0 percent over the past 12 months, not seasonally adjusted, according to the U.S. Bureau of Labor Statistics.
- > The All Items Less Food and Energy Index rose 0.1 percent in June and 3.3 percent over the past 12 months. This was the smallest 12-month increase in the Index since April 2021.
- > June 2024 was the first monthly decline in the CPI-U since May 2020.
- > As a reflection of inflation, this decrease in the CPI-U suggests the long-awaited interest rate cuts may be on the horizon.

### **General Economic Outlook**

General economic indicators impacting the construction industry

### **Business Investment**

- Gross private domestic investment grew 2.1 percent (annual rate of 8.4 percent) in Q2 2024 from Q1 2024, according to the "advance" estimate released by the Bureau of Economic Analysis. In Q1 2024, private investment increased 1.1 percent (annual rate of 4.4 percent) from the previous quarter.
- > From Q2 2023 to Q2 2024, gross private domestic investment grew 5.8 percent.

### **Government Investment**

- expenditures and gross investment rose 0.77 percent (annual rate of 3.1 percent) in Q2 2024 from Q1 2024, according to the "advance" estimate released by the Bureau of Economic Analysis. In Q1 2024, government expenditures and investment increased 0.45 percent (annual rate of 1.8 percent) from the previous quarter.
- > From Q2 2023 to Q2 2024, government consumption expenditures and gross investment rose 3.8 percent.

### **Corporate Profits**

- > Corporate profits declined 1.4 percent in Q1 2024 from Q4 2023, according to the "third" estimate released by the Bureau of Economic Analysis. By contrast, corporate profits increased 4.1 percent in Q4 2023 from the previous quarter. However, corporate profits were 6.4 percent higher in Q1 2024 than in Q1 2023. Preliminary corporate profits data for Q2 2024 is not yet available.
- Corporate profits are a key measure of the financial health of corporate America, according to the Bureau of Economic Analysis.



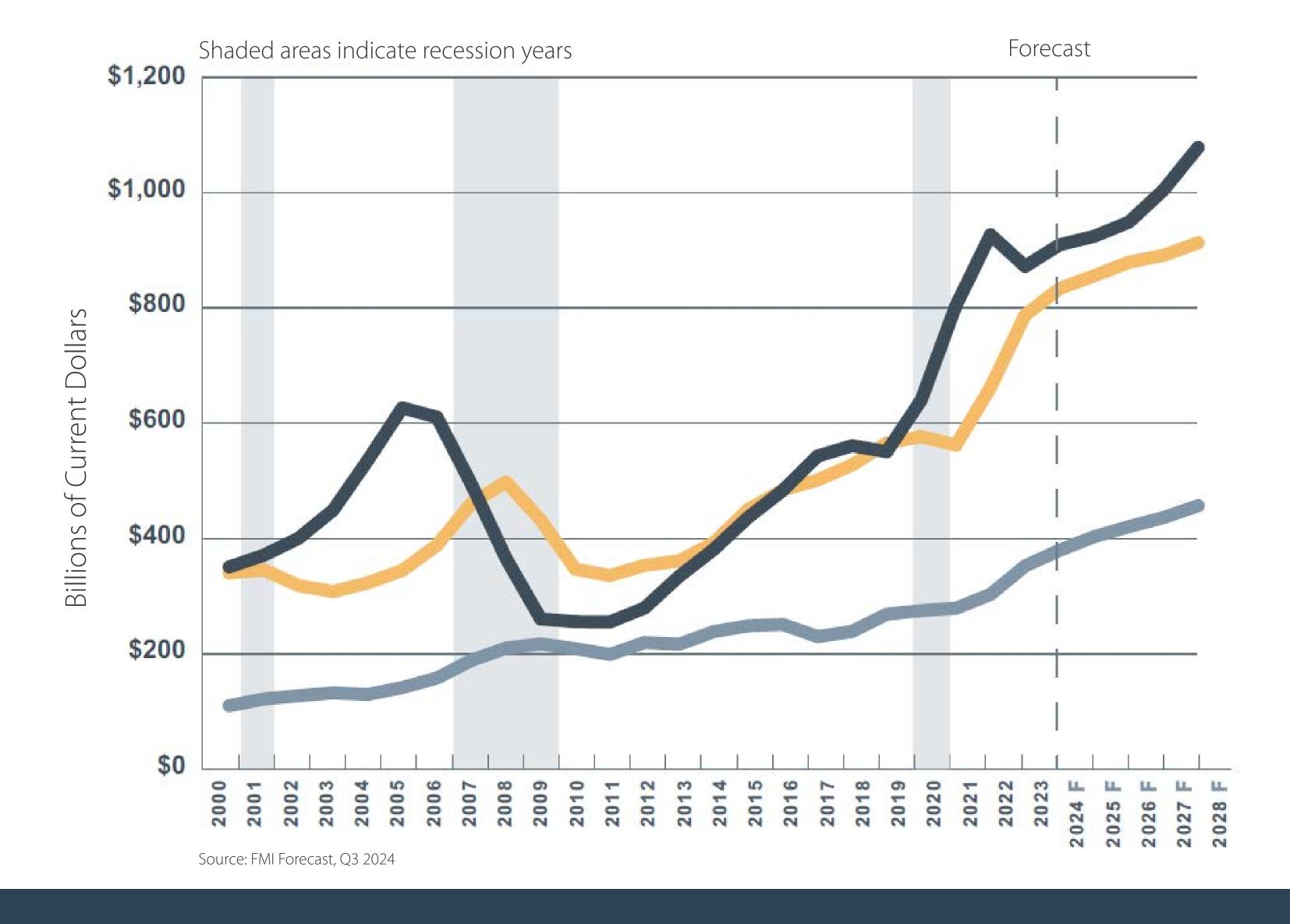
## **Construction Market Overview**

Following strong industry performance in 2023, sentiment remains positive for opportunities and growth in 2024.

- > Total engineering and construction spending for the U.S. is forecast to end 2024 up 6 percent, or in line with 2023 growth of approximately 6 percent, according to FMI. Total construction spending dipped slightly in May 2024, declining 0.1 percent from April 2024.
- > High-performing segments in 2024 point to strong investment growth across manufacturing and public safety, each with anticipated year-end growth of more than 20% above 2023 levels.
- > Construction demand continues to be strong for new data centers, industrial, manufacturing, and large infrastructure projects. FMI survey participants expect short-and long-term strength in education, healthcare, and manufacturing to drive industry opportunities over the next three years.
- > Strong backlog and volatility in the supply chains of some commodities, specifically in the electrical category, remain a risk to cost inflation for those products and support continued lead time challenges.

# **Construction Market Overview**

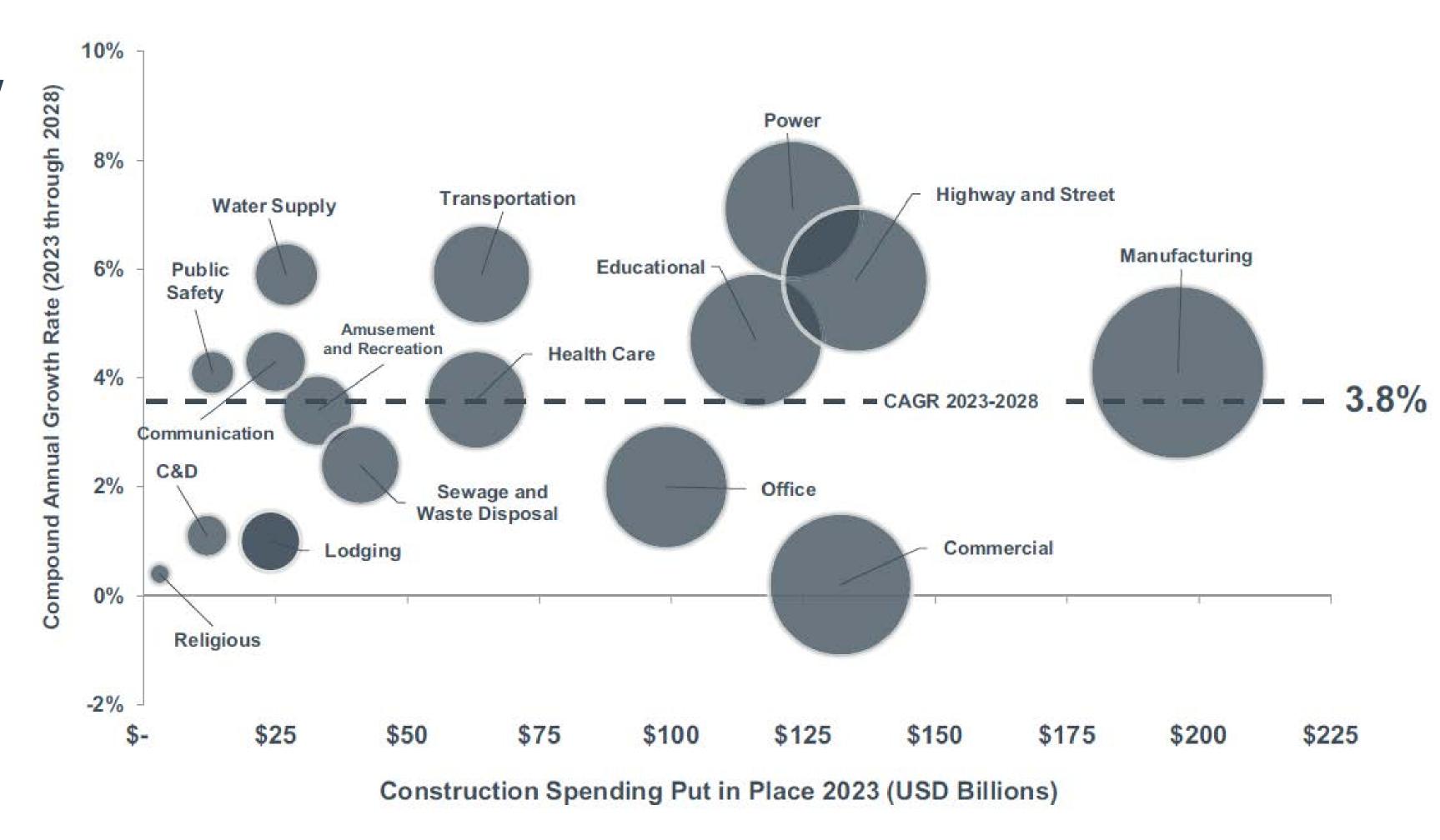
Total Construction
Spending Put in Place
Estimated for the U.S.



# **Construction Market Overview**

Non-Residential Construction Spending Put in Place

Forecast Growth by Construction Segment



Source: FMI Forecast, Q3 2024

# Construction Market Overview: Geographic Insights

### **Mid-Atlantic:**

The Mid-Atlantic region is seeing strong activity in the K-12, higher education, healthcare, and sports market segments. In New Jersey, competition remains high at both the contract manager and subcontractor levels as firms seek to build backlogs. New rounds of funding and tax credits from the New Jersey Economic Development Authority have been helping to greenlight projects. Meanwhile, the Philadelphia market continues to contend with a chronic labor shortage, although the strong union presence keeps labor costs somewhat predictable. Material prices are stabilizing but prices remain high.

### **New York:**

**NYC:** The prevalence of remote work has led businesses to downsize their offices, leading some building owners to pursue conversions. Office conversion projects can be complex due to the significant floor plan changes that are required. The public sector continues to exhibit growth through transportation, sports, and entertainment projects, while healthcare and affordable housing projects are also picking up. Labor availability remains a persistent issue due to an aging workforce. While market price volatility is stabilizing, lead times for specialty equipment remain extended.

**NY State:** Demand in the capital region remains stable, with new opportunities arising in the advanced manufacturing and life sciences market segments. Ongoing labor shortages are expected to continue to elevate pricing. Multiple coinciding project timelines may further exacerbate labor shortages and price increases. In particular, a multi-billion-dollar Fab project in the region will stretch thin the capacity of the local labor market over the next five to 10 years. Project teams will likely need to leverage out-of-state and out-of-region labor to support labor needs in New York State.

### **Southeast:**

In the Southeast, prices have finally stabilized for most materials. Lead times are universally lower and are continuing to improve. Prices are still rising for equipment that uses the new low GWP refrigerants, including chillers, RTUs, and heat pumps. However, lead times for large chillers and AHUs have come down from around 50 weeks to 36+ weeks. The Georgia market has been busy with many large data center projects and remains strong for education, life sciences, and healthcare. Strength in the Georgia market has led to lengthy backlogs for several major electrical subcontracting companies. In the North Carolina market, high labor demand continues to keep prices high.

# Construction Market Overview: Geographic Insights

### **New England:**

Contractor capacity is tight due to unprecedented growth in K-12 spending in the New England region, particularly in Rhode Island. In Connecticut, higher education, healthcare, and infrastructure remain strong as well. New opportunities in advanced manufacturing, housing, and industrial segments are also arising in the Connecticut market. The commercial developer market is extremely sluggish due to high interest rates impacting the multifamily and mixed-use sectors.

### West:

Extended lead times for electrical and mechanical equipment continue to challenge project timelines in the West region. Meanwhile, labor shortages continue to hinder growth. While trade contractors' backlogs have been decreasing, their capacities to take on new work have been limited by ongoing labor shortages.

### **Southwest:**

**Texas:** Labor shortages are less prevalent in Texas than in previous quarters. Lead times for electrical and mechanical equipment remain extended. Raw steel markets are exhibiting cost decreases, which may trickle down to finished steel products in construction projects. Prices for gypsum and insulation have stabilized, and the materials are readily available.

### **Midwest:**

The Midwest continues to see strong activity in multiple markets, including K-12, higher education, healthcare, advanced manufacturing, industrial, and the public sector. Labor availability remains the largest challenge in all market sectors in the Midwest. Major industrial and manufacturing projects are gaining strength and could put further pressure on labor availability.

# Architectural Billings Report

### **National**

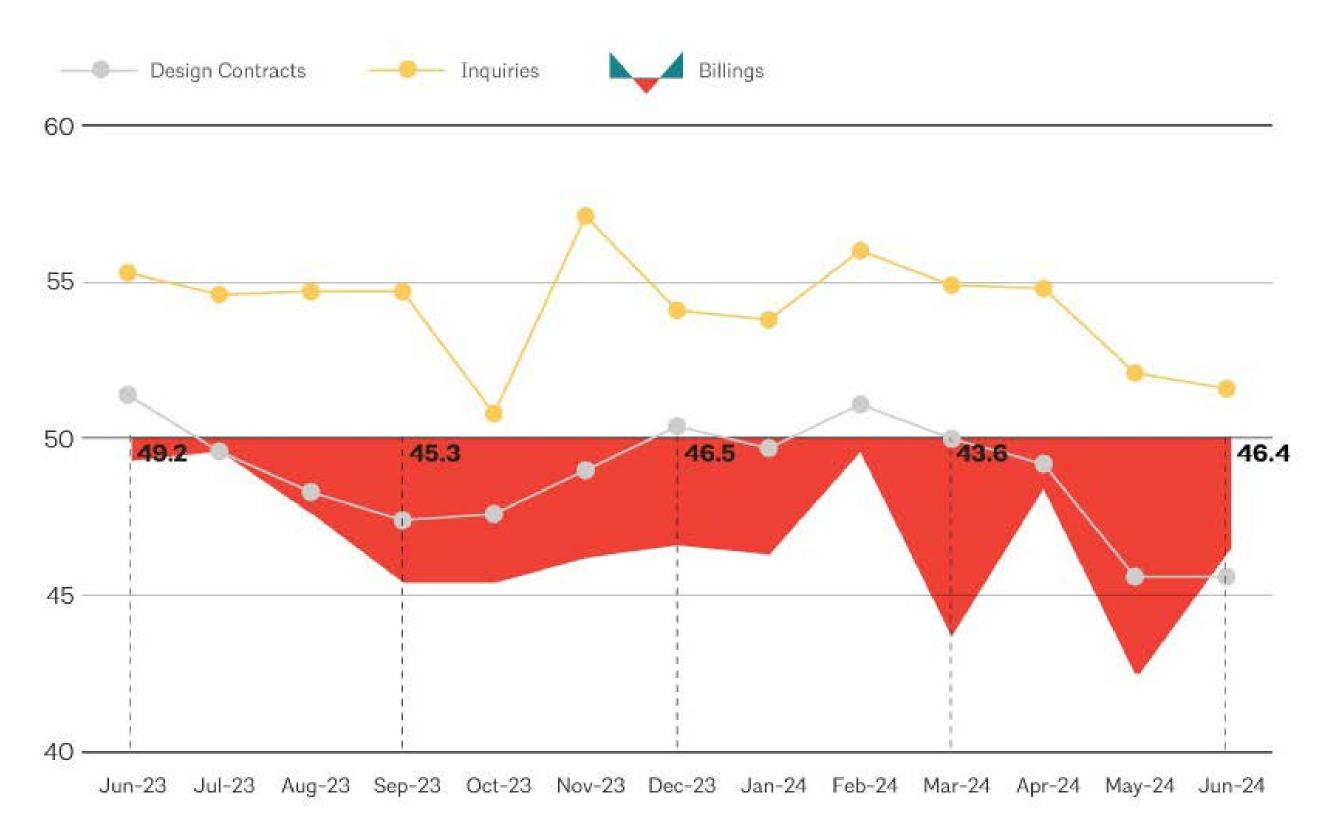


Above 50



from previous period

Graphs represent data from June 2023-June 2024.



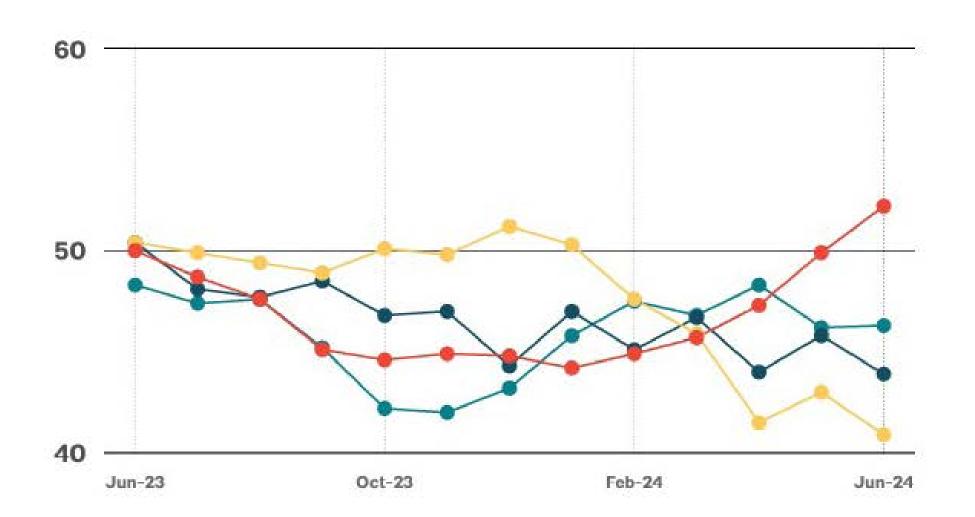
Source: American Institute of Architects (AIA)/Deltek, Architecture Billings Index (ABI), June 2024, 23 Jul. 2024.

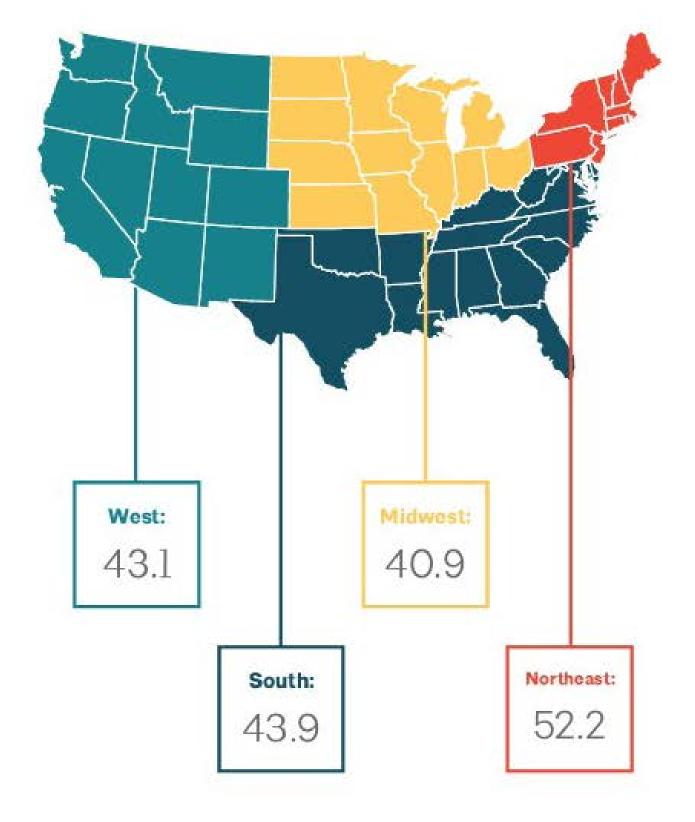
# Architectural Billings Report

# Regional

# Billings declined further in all regions except the Northeast

Graphs represent data from June 2023–June 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.





Source: American Institute of Architects (AIA)/Deltek, Architecture Billings Index (ABI), June 2024, 23 Jul. 2024.

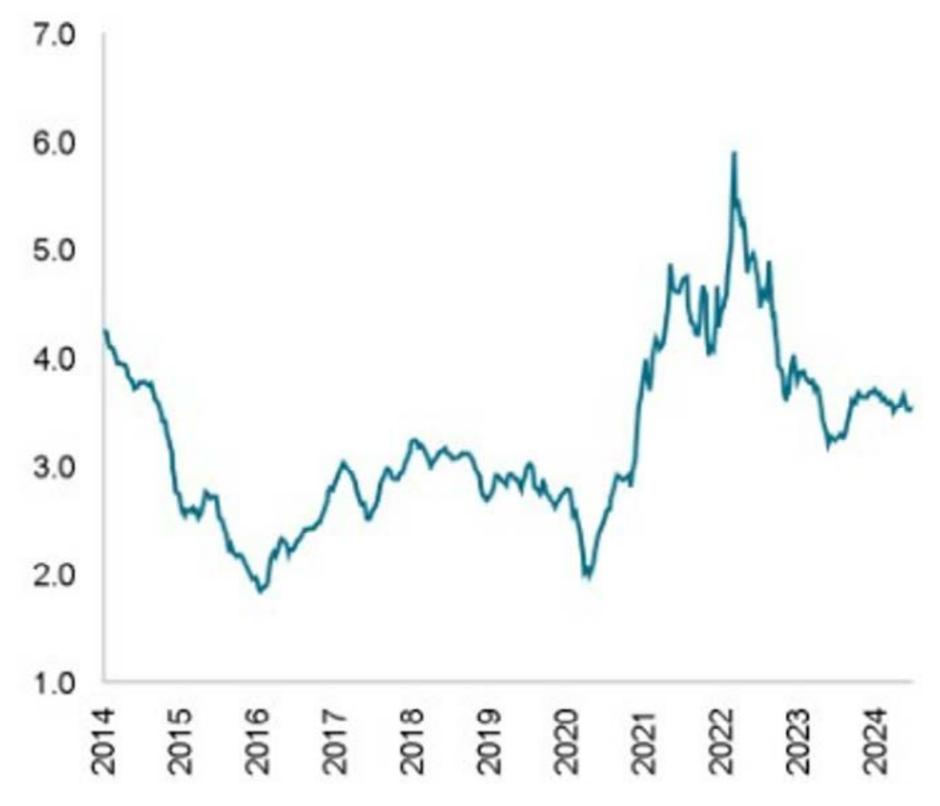
# **Commodity/Input Cost Insights**

### Material Price Index

- > The Materials Price Index (MPI) by S&P Global Market Intelligence rose 1.1 percent in the first week of July 2024, with five of the 10 subcomponents rising. The MPI sits 10 percent higher than the same week in 2023.
- Rising iron ore prices drove the increase in the MPI during this week. The steel-making raw materials subindex rose
   3.1percent, the fastest weekly increase since November
   2023. Meanwhile, the broader nonferrous metal subindex rose 1.8 percent.
- > By contrast, the global energy subindex fell 0.4 percent, the first decline since early June, due to an uptick in supply.
- > The MPI is a weighted average of weekly spot prices for a key collection of globally traded manufacturing inputs.

### Materials Price Index by S&P Global Market Intelligence

 $(\text{week } 1\ 2002 = 1.00)$ 



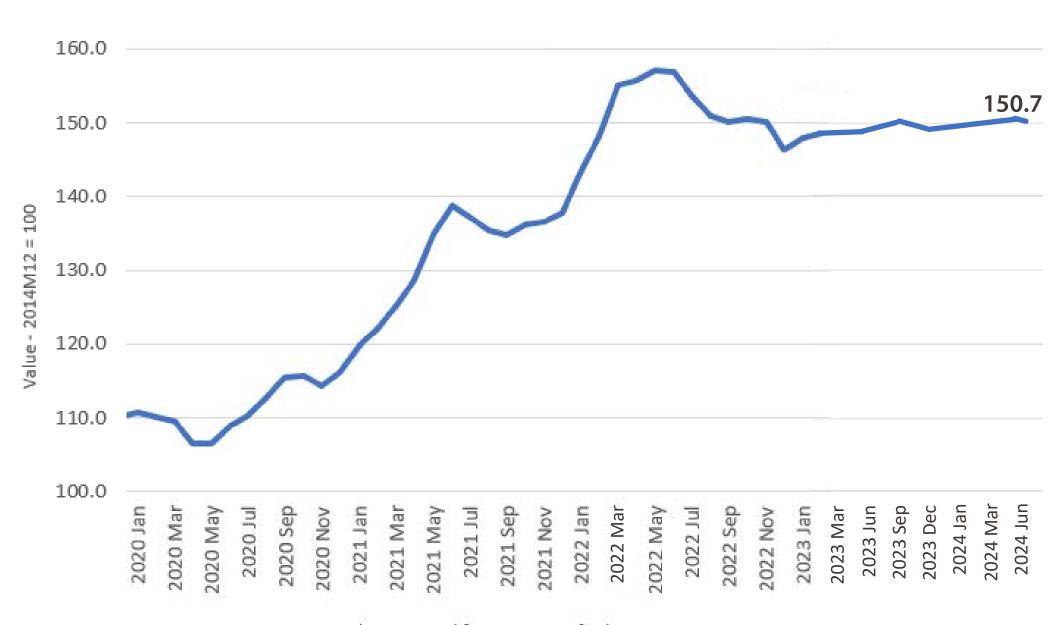
Date Compiled: July 9, 2024 Source: S&P Global Market Intelligence © 2023 S&P Global

# Commodity/Input Cost Insights

### Producer Price Index – Inputs to Construction

- > The PPI Inputs to Construction came in at 150.7 in June 2024, 0.2 percent lower than the last quarter, as reported by the U.S. Bureau of Labor Statistics.
- > The index has increased 1.8 percent year-over-year from June 2023. However, the index is down about 4.1 percent since its peak in May 2022.
- > Prices for construction materials have dipped alongside a slight decline in inflation in June 2024.

### **Producer Price Index - Inputs to Construction**



Source: Chart Derived from Bureau of Labor Statistics Data

# **Commodity/Input Cost Insights**

### **Construction Materials**

The following chart illustrates year-to-date through June 2024 percent (%) changes for select materials.

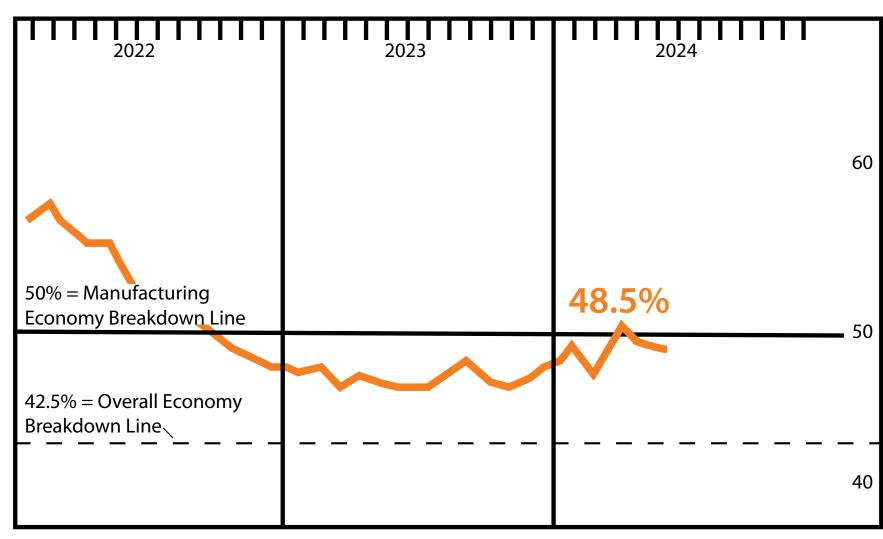
Material	% Change from last quarter	% Change Jun 2023 - Jun 2024	Material	% Change from last quarter	% Change Jun 2023 - Jun 2024
Ready Mix Concrete	-0.5	6.5	#2 Diesel Fuel	-20.2	-10.6
Concrete Pipe	-0.2	4.3	Aluminum Shapes	7.5	2.8
Paving Mixtures and Blocks	-5.2	3.3	Copper and Brass Shapes	11.4	14.0
Lumber	-0.8	-2.1	Flat Glass	-0.5	0.0
Steel Mill Products	-3.9	-15.0	<b>Gypsum Products</b>	-0.7	2.3
Fabricated Structural Steel	-1.2	-9.8	Steel Pipe and Tube	-3.5	-9.1

Source: Select data taken from AGC PPI Tables, Updated 7/12/2024 (compiled from www.bls.gov/ppi)

### Purchasing Managers' Index®

- > The U.S. manufacturing sector contracted in June for the third consecutive month and the 19th time in the past 20 months. The Manufacturing Purchasing Managers' Index (PMI®) registered 48.5 percent in June, down 0.2 percentage points from May's reading of 48.7 percent. This is reported by the Manufacturing ISM® Report On Business®.
- > While the New Orders Index grew 3.9 percentage points from 45.4 percent in May to 49.3 percent in June, it remains in contraction territory.
- > The delivery speed of suppliers to manufacturing organizations was slower in June, as the Supplier Deliveries Index registered 49.8 percent, 0.9 percentage points higher than the 48.9 percent recorded in May.

### **Manufacturing PMI**



Source: Institute for Supply Management Report On Business, July 2024

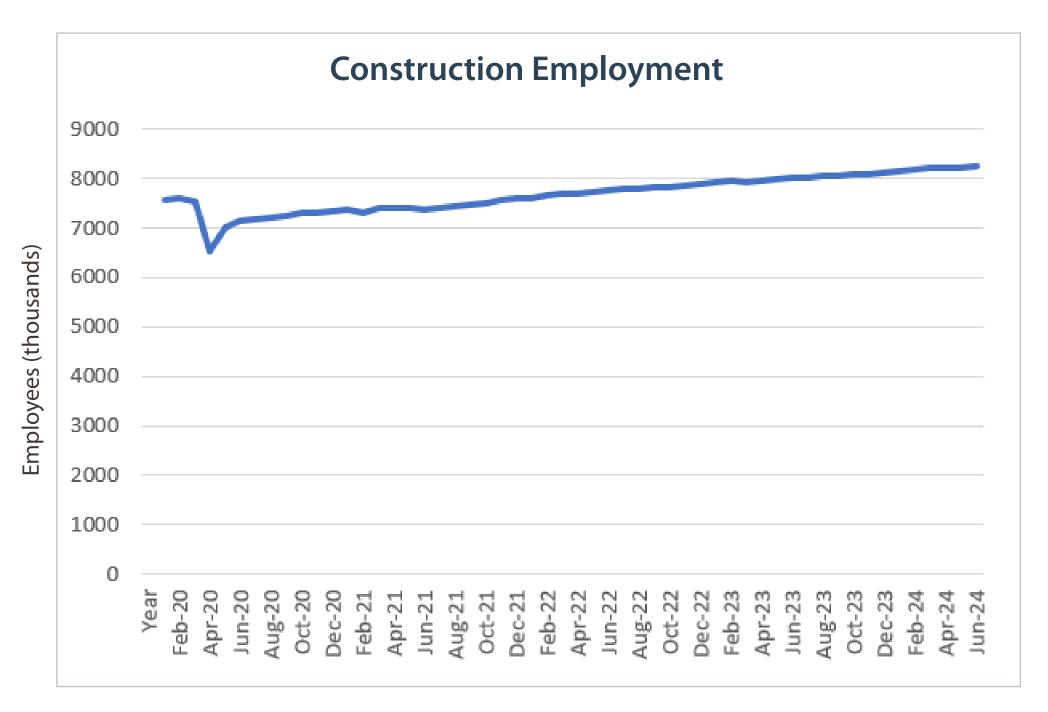


### Purchasing Managers' Index®

- > The Inventories Index registered 45.4 percent in June, 2.5 percentage points lower than the May reading of 47.9 percent. Contracting inventories make on-time deliveries more difficult, decreasing the accuracy of revenue projections and hindering customer service.
- > The Backlog of Orders Index contracted in June, registering at 41.7 percent, down 0.7 percentage point from the 42.4 percent recorded in May. Contractions in production and new orders have been limiting backlogs.
- > Electrical components, electrical equipment, and carbon steel remain the materials and commodities most reported as in short supply by the purchasing executives responding to the ISM® Report on Business® survey.

### **Labor Outlook**

- According to the U.S. Bureau of Labor Statistics, the unemployment rate for construction workers registered
   3.3 percent in June 2024, the lowest it has been since September 2019.
- > The Bureau of Labor Statistics also reported an increase of 27,000 construction jobs in June.
- > Labor demand will likely ease somewhat beginning in 2025 as projects tied to the Inflation Reduction Act, Infrastructure Investment and Jobs Act, and CHIPS Act approach completion.
- > However, skilled construction wages are expected to rise upwards of 4.0 percent despite softening demand, according to S&P Global Market Intelligence.



Source: Chart Derived from Bureau of Labor Statistics Data

### **Employment Cost Index**

The following chart illustrates year-to-date through March 2024 percent (%) changes in the Employment Cost Index (ECI) for total compensation in select labor categories.

Labor Category	% Change Dec 2023 – Mar 2024	% Change Mar 2023 - Mar 2024	Labor Category	% Change Dec 2023 – Mar 2024	% Change Mar 2023 - Mar 2024
Private Industry Workers – All	1.1	4.1	Private Industry Workers – Construction	0.9	3.8
Private Industry Workers – All Union	1.7	5.3	Private Industry Workers – Mining, Construction, & Manufacturing – Union	1.2	4.1
Private Industry Workers – All Nonunion	1.4	3.9	Private Industry Workers – Mining, Construction, & Manufacturing – Nonunion	1.3	3.8

Source: U.S. Bureau of Labor Statistics (BLS) Employment Cost Index (ECI), April 2024

Selected Equipment and Material: General Lead Times (from Internal Survey Results and Supplier/MFG data)\*

Material	Lead Time	Cost	Explanation	
Switchboards	38-65 weeks	Stable	While demand is still heavy, lead times have eased slightly. Manufacturers have had less schedule slippage. Price increases have slowed.	
Panelboards	12-30 weeks (longer for larger/complex)	Stable		
Pad Mounted Transformers	<b>40-104 weeks</b> (basic transformer lead times are improving)	Slightly Increasing		
Switchgear LV	52-70 weeks	Slightly Increasing		
Switchgear MV	<b>52-70 weeks</b> (steady or slight decrease)	Slightly Increasing		
Generators	44-72 weeks (longer for larger generators)	Slightly Increasing		
Chillers (Water Cooled)	29-49 weeks	Slightly Increasing	Demand remains strong. The backlog is steady. Price increases should be small.	
Chillers (Air Cooled)	28-46 weeks	Slightly Increasing		
AHUs (Commercial Grade)	24-40 weeks	Stable		
AHUs (Custom)	32-53 weeks	Slightly Increasing		
RTUs (<50 ton)	20-34 weeks	Slightly Increasing		
RTUs (>50 ton)	25-42 weeks	Slightly Increasing		
Packaged Rooftop Heat Pumps	16-28 weeks	Increasing	Decarbonization efforts are increasing demand.	
Modular Air-to-Water Heat Pumps	24-38 weeks	Increasing		

<sup>\*</sup>Lead times are typical & indicative general ranges for each category and may differ based on specifications, requirements, manufacturer, production facility and other supply chain factors. Shorter lead times than those shown may be available for stock/quick ship catalog items and longer lead times may apply for large and more custom specifications. Lead times are after release of order or release to fabrication as applicable and does not include procurement cycle, submittals process, performance/witness tests, or transportation and these should be planned as applicable.

Selected Equipment and Material: General Lead Times (from Internal Survey Results and Supplier/MFG data)\*

Material	Lead Time	Cost	Explanation
Computer Room A/C units - Air	18-30 weeks	Stable	
Cooling Towers	13-21 weeks	Stable	
Lab Exhaust Fans	17-29 weeks	Stable	
<b>Energy Recovery Units</b>	14-23 weeks	Stable	
Exhaust AHUs	26-30 weeks	Stable	
Heat Recovery Skids	20-24 weeks	Stable	
Millwork	14-23 weeks	Stable	
Elevators	22-37 weeks (up to 48 weeks for high rise)	Stable	
Curtainwall	23-39 weeks	Stable	
Roofing	12-20 weeks	Stable	
Steel	<b>15-25 weeks</b> (shorter for mill cycle)	Stable	Steel prices are moving according to global economic conditions, supply chain disruptions, and fluctuating demand.



Reach out to our team of experts to support your project planning.

<sup>\*</sup>Lead times are typical & indicative general ranges for each category and may differ based on specifications, requirements, manufacturer, production facility and other supply chain factors. Shorter lead times than those shown may be available for stock/quick ship catalog items and longer lead times may apply for large and more custom specifications. Lead times are after release of order or release to fabrication as applicable and does not include procurement cycle, submittals process, performance/witness tests, or transportation and these should be planned as applicable.

### Transportation and Logistics

- > Truckload capacity is currently in a surplus. However, cost pressure will likely increase in the coming months due to escalating diesel prices in July as well as the typical seasonal demand.
- > Global container freight prices have been steadily rising since April 2024, according to the Freightos Baltic Index (FBX). Following further rate hikes in July, global container shipping rates may have peaked but will likely remain elevated at least through the third quarter of 2024.
- > Various disruptions to ocean freight routes have been contributing to higher rates. Rates will continue to be responsive to any further complications arising from port congestion, strikes, or a widening of the Red Sea crisis. Given the dynamic transportation market and challenges previously mentioned in this report, shippers must continue to monitor current conditions and be flexible with plans. Alternative solutions may be necessary to control costs and meet shipping strategy objectives.



# **Supply Chain Spotlight:**

Impacts of the Transition to Low GWP Refrigerant HVAC Equipment

### Overview of Changes

- > Beginning in 2025, R-410 refrigerant will not be used in commercial and residential cooling equipment. It is being phased out in accordance with EPA requirements set in 2021. R-410 contains a high level of hydrofluorocarbons (HFCs), which negatively impact the earth's ozone layer.
- > R-410 is being replaced with a group of A2L refrigerants, which provides the same cooling performance, with lower HFC emissions.
- > A2L refrigerants cannot be used in existing systems without significant retrofitting. R-410 will still be available to service existing systems.
- Manufacturers have already incorporated the new refrigerants into updated designs. Prices for A2L equipment are averaging about 1-2% more than R-410 equipment.

### Actions to Take

- > If your project design includes R-410 and you have not released the equipment yet, confirm with your supplier that the new equipment can be manufactured in time.
- > Because A2L refrigerants are slightly flammable, technicians need updated training in the handling and installation of the refrigerants to avoid problems during system installation and servicing.
- > In some equipment, A2L compressors weigh slightly more than R-410 compressors, and the refrigerant will have a design impact on Variable Refrigerant Flow (VRF) systems. Ensure your architectural and structural designers are working with the latest manufacturer's information.

### **External Sources**

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