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Explore this Report

We are pleased to share the Gilbane Q1 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.

Our supply chain team, along with subject matter experts throughout the Gilbane organization, evaluate internal and external market data to deliver valuable market intelligence for our clients, project teams, and industry partners in the decision-making, planning, and delivery of their projects.

Please feel free to reach out to our team of experts; we're here to help.

#### **Key Contact**



Jay Pendergrass
Vice President, Director of
Supply Chain Management

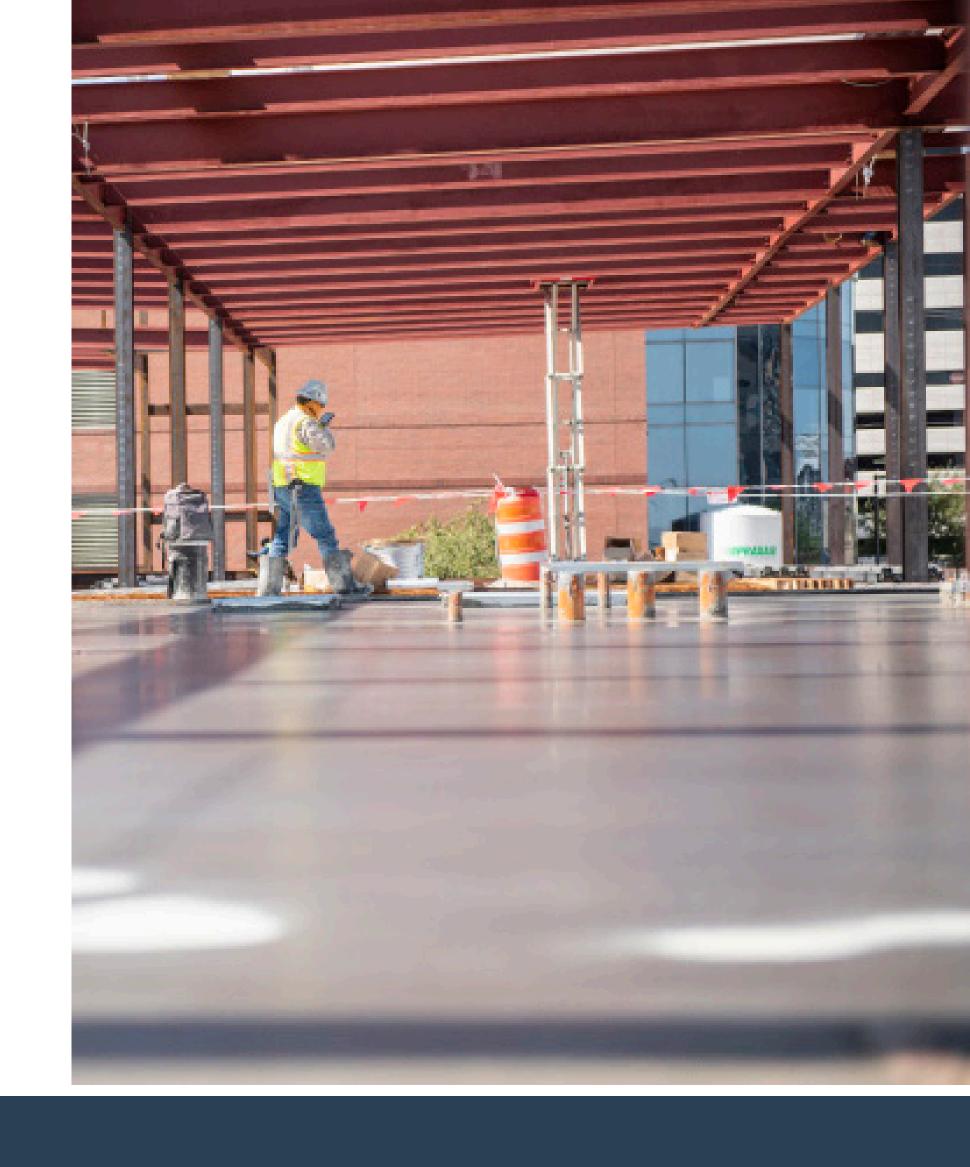






#### General Economic Outlook

- > While the U.S. economy finished above expectations in 2023, we should expect rather modest growth in 2024. Interest rates may keep demand constrained for the near term.
- > Construction demand is steady in some sectors and markets. Related equipment and material costs are increasing.
- > Generally, prices for building materials should see a typical seasonal increase to start the new year.
- > Suppliers for some building materials may limit production to keep prices at a reasonable level.
- > While some weakening has been observed, the labor markets remain strong.



#### General Economic Outlook

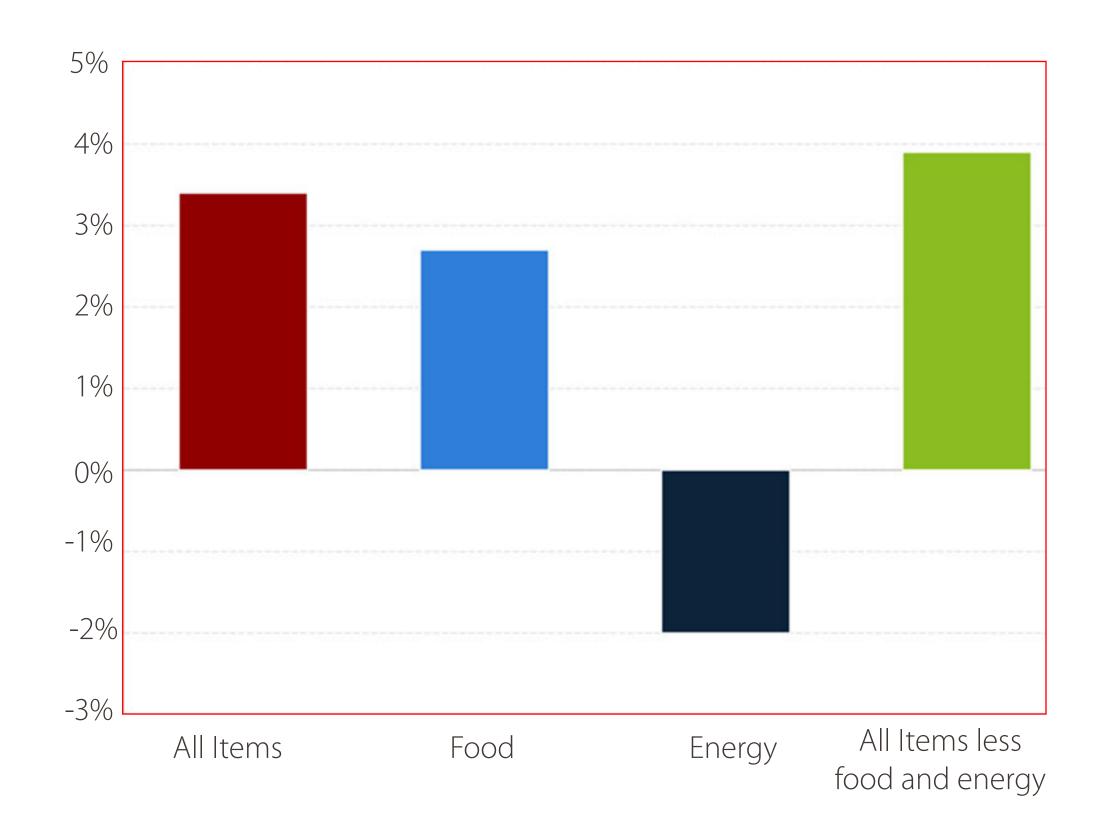
- > Most commodity prices are expected to either decrease slightly or stabilize in early 2024 in response to better supply chain conditions.
- > Strong backlog and volatility in the supply chains of some commodities, specifically in the electrical category, remain a risk to pressure cost inflation for those products and support continued lead time challenges.
- > While the Fed left the interest rate steady in December, speculations have begun on when 2024 rate cuts might be made. The Fed has already said adjustments will be slow to ensure inflation does not return to previous levels.
- Real gross domestic product (GDP) increased at an annual rate of 4.9 percent in the third quarter of 2023, according to the "third" estimate released by the Bureau of Economic Analysis. In the second quarter, real GDP increased 2.1 percent.



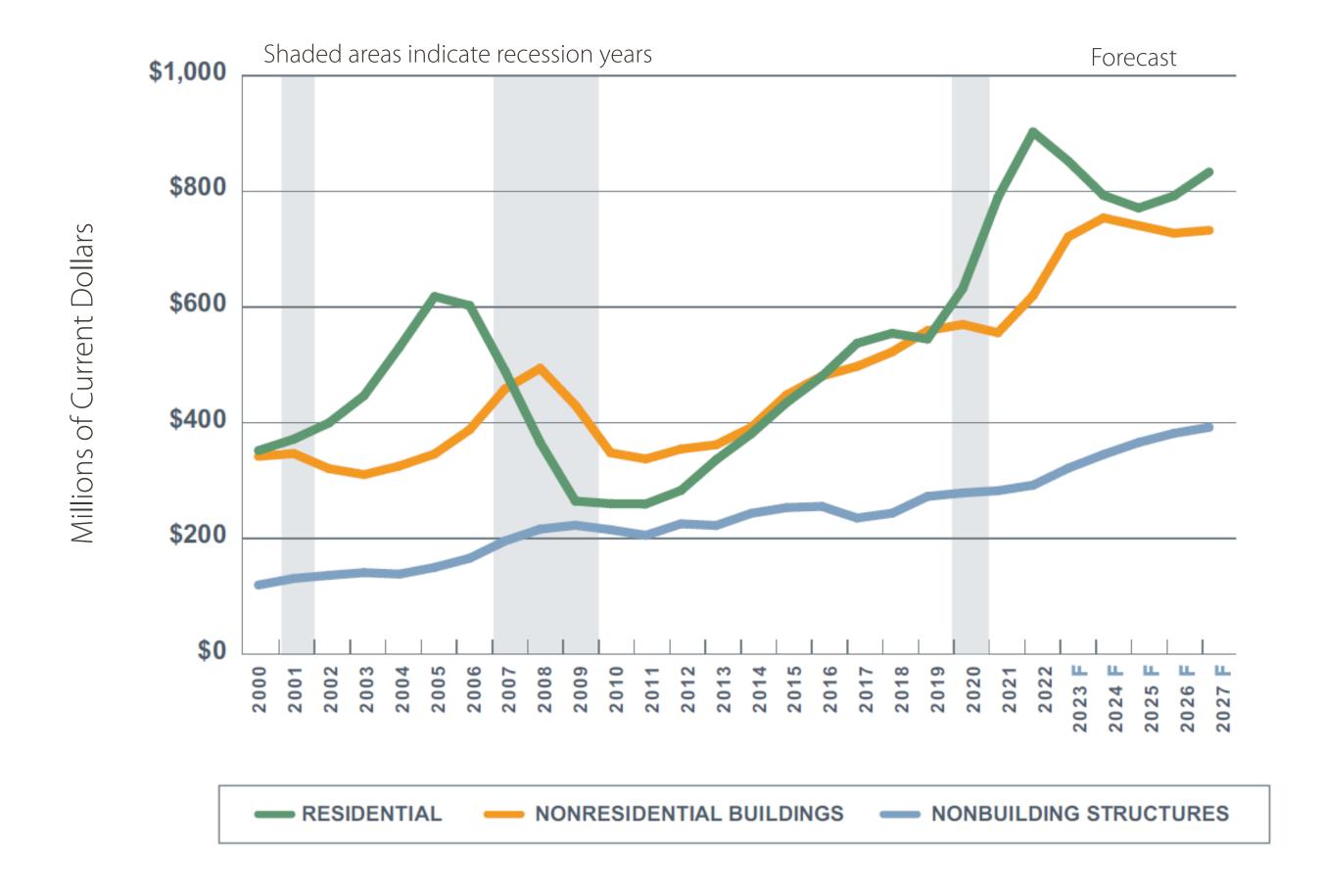
#### General Economic Outlook

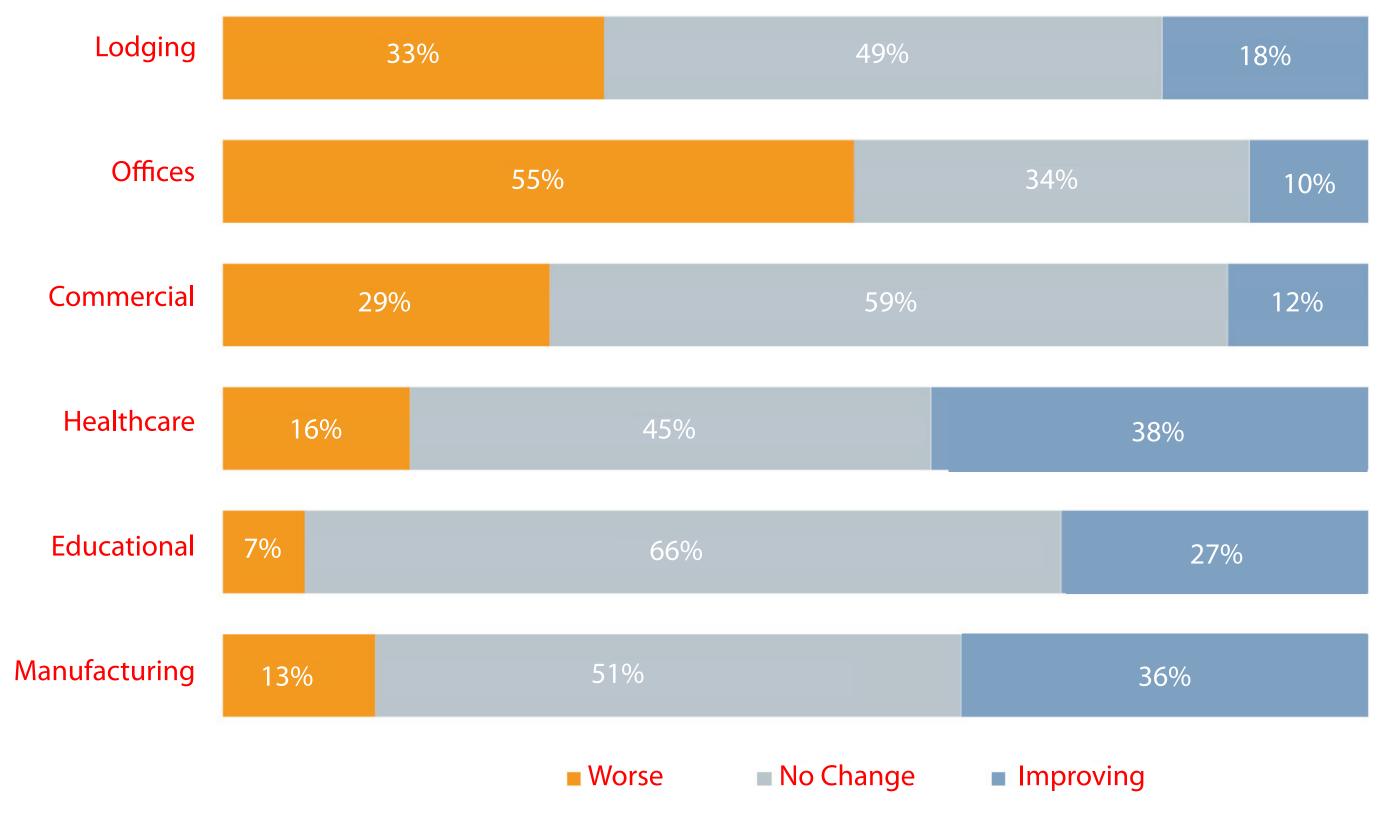
- > Compared to the second quarter, the acceleration in real GDP in the third quarter primarily reflected an upturn in exports and accelerations in consumer spending and private inventory investment that was partly offset by a deceleration in nonresidential fixed investment. Imports turned up.
- The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.3 percent in December on a seasonally adjusted basis after rising 0.1 percent in November, the U.S. Bureau of Labor Statistics reported.
- Over the last 12 months, the all items index increased
   3.4 percent before seasonal adjustment. The index for all items less food and energy rose 0.3 percent in
   December, the same monthly increase as in November.
   This index was up 3.9 percent over the past 12 months.

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

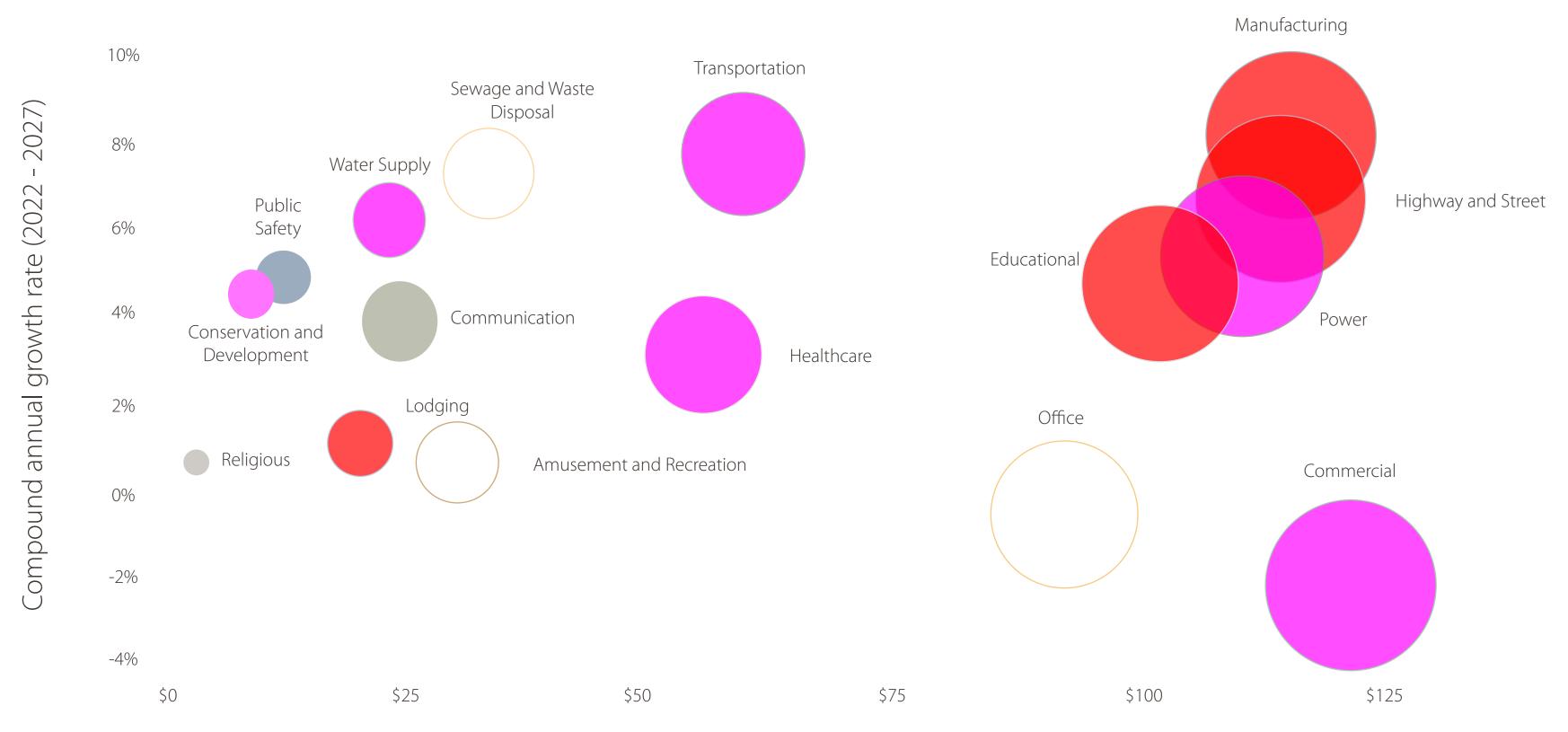


- > FMI forecast that total engineering and construction spending for the U.S. is forecast to end 2023 up 5%, compared to up 12% in 2022.
- > The several segments that are anticipated to reach strong, double-digit growth rates through the end of the year include data center, manufacturing, multi-family residential, and infrastructure.
- > Materials costs and lead times are improved in many areas, but electrical gear and components remain constrained.
- > Labor availability has resumed being the primary challenge for many contractors.
- Non-Residential Construction Index sentiment declined due to weakened perceptions toward the overall U.S. and local economies, engineering and construction business outlooks, backlogs, and ongoing challenges with labor, materials, and productivity.





\*Segments captured in Non-Residential Construction Index survey



Construction spending put in place in 2022 (billions of US dollars)

Source: FMI Forecast, Q4 2023

# Architectural Billings Report

#### **National**

Architecture firm billings continue to decline in November

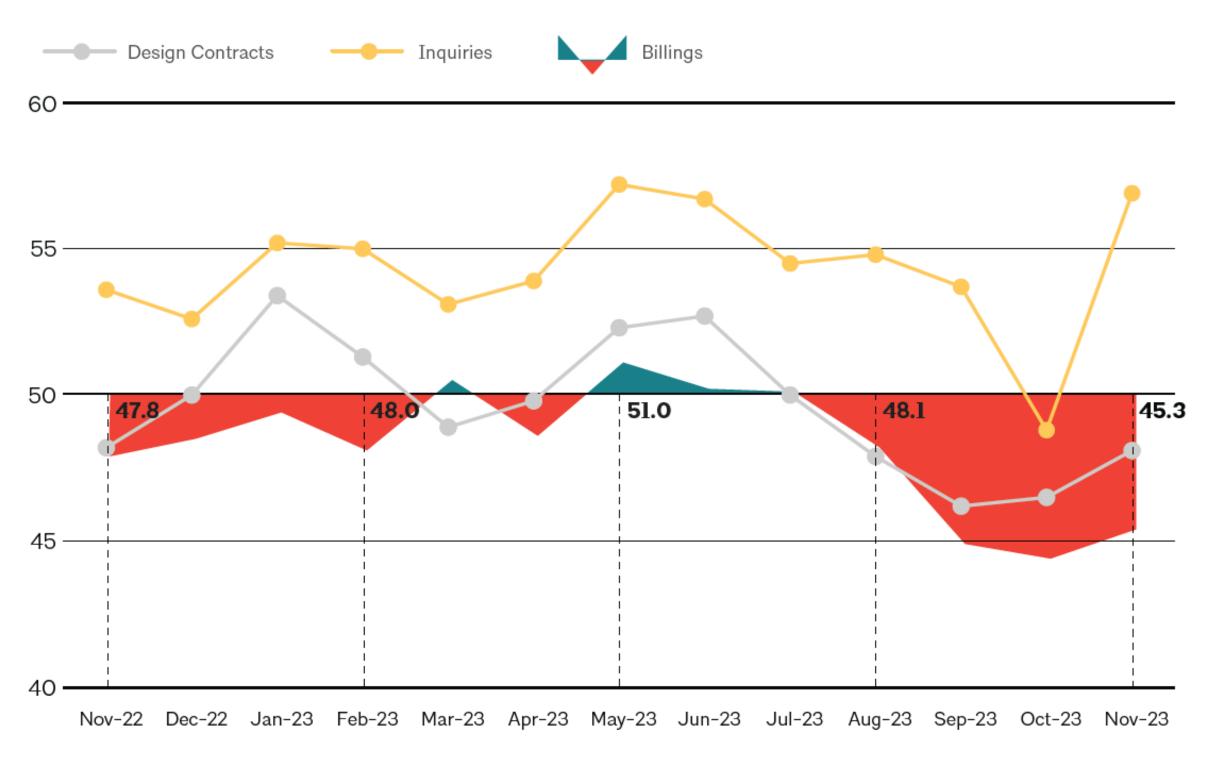






Below 50

Graphs represent data from November 2022-November 2023.

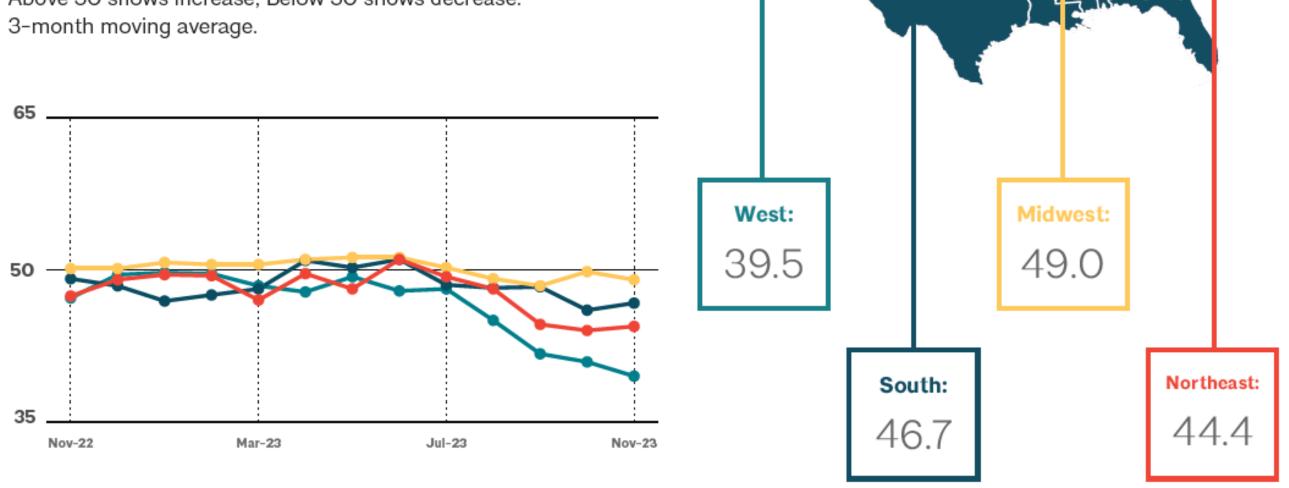


# Architectural Billings Report

# Regional

Business conditions remain weak across the country, most notably at firms in the West

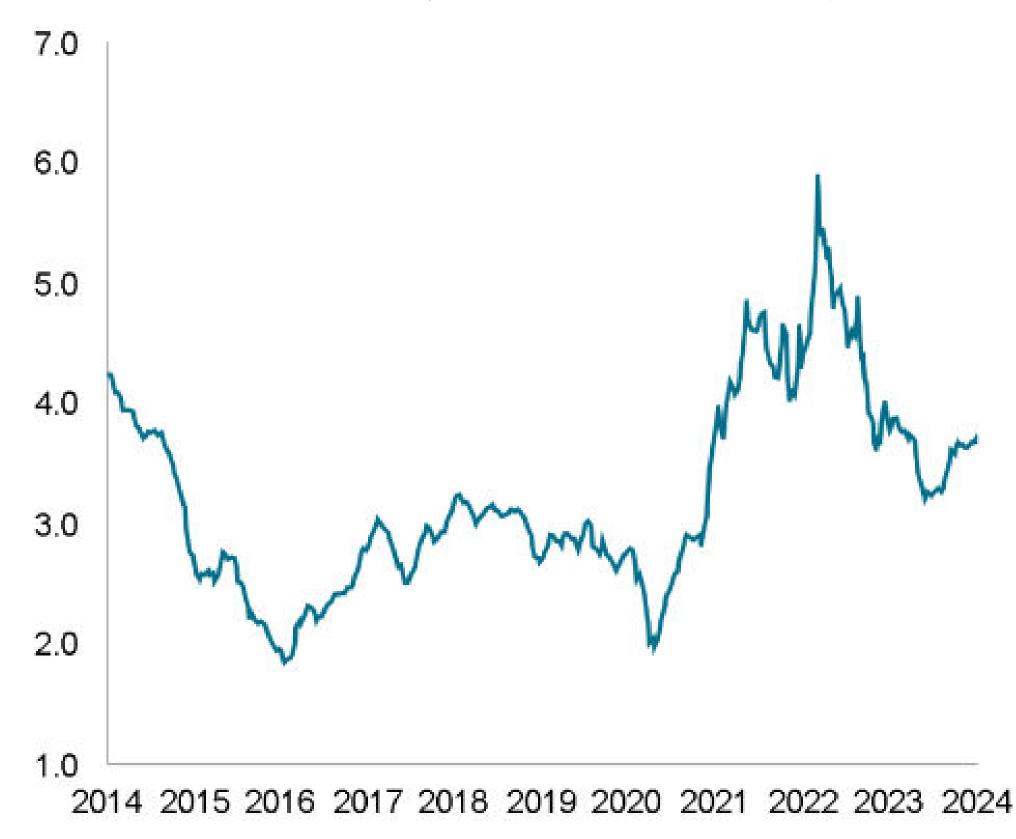
Graphs represent data from November 2022–November 2023 across the four regions. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



# Commodity/Input Cost Insights

- The Materials Price Index (MPI) by S&P Global Market Intelligence decreased 0.7% last week, with seven of the 10 subcomponents falling. The MPI sits 2% lower than the same week in 2023.
- However, non-energy commodity prices are 5.8% higher. Last week was a change from the pricing trends in the last six months, which saw weekly prices steadily rising.
- > 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

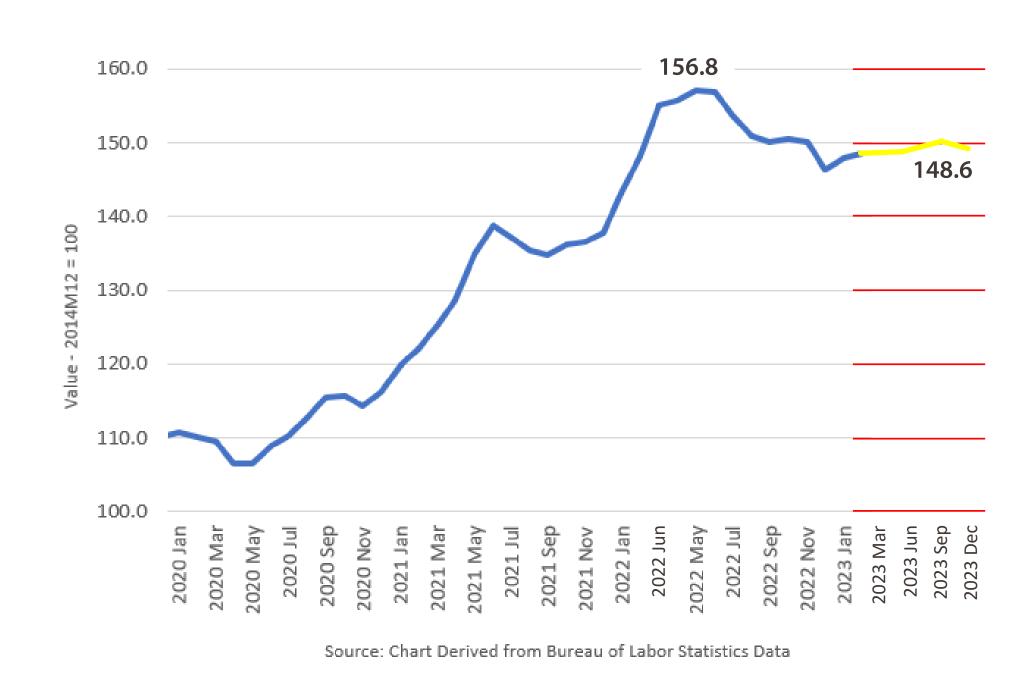


Date Compiled: Jan 16, 2024 Source: S&P Global Market Intelligence © 2023 S&P Global

## Commodity/Input Cost Insights

- > The PPI Inputs to Construction came in at 148.6 in December 2023, 2.4 points lower than the last quarter, as reported by the Bureau of Labor Statistics.
- > In December 2022, the PPI Inputs to Construction came in a bit lower at 146.2. The index is down about 5% since its peak in May 2022.
- > Prices for construction materials have been decreasing as many material input costs decline. However, the following chart indicates that over the past year, only about half of our tracked construction materials are following this narrative.

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



# Commodity/Input Cost Insights

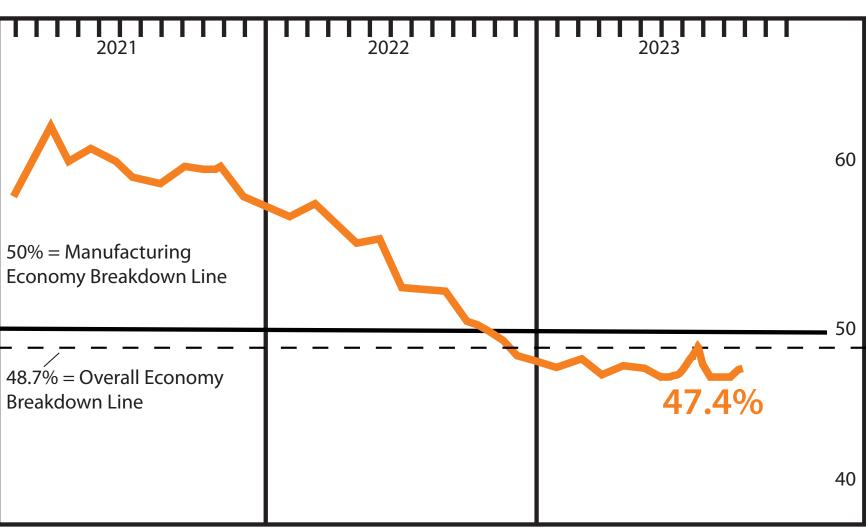
The following chart illustrates year-to-date through December 2023 percent (%) changes for select materials.

Material	% Change from last quarter	% Change Dec 2022 - Dec 2023	Material	% Change from last quarter	% Change Dec 2022 - Dec 2023
Ready Mix Concrete	-0.1		#2 Diesel Fuel	-23.7	-18.7%
Concrete Pipe			Aluminum Shapes	-0.7	-1.7%
Paving Mixtures and Blocks	-0.1		Copper and Brass Shapes	-0.6	-1.4%
Lumber	-4.9	-8%	Flat Glass		
Steel Mill Products	-0.8	-2%	<b>Gypsum Products</b>	-0.4	-2%
Fabricated Structural Steel			Steel Pipe and Tube	-2.5	-17.6%

Source: Select data taken from AGC PPI Tables, Updated 1/12/2024 (compiled from www.bls.gov/ppi)

- > The U.S. manufacturing sector contracted in December, as the Manufacturing PMI® registered 47.4 percent in December, up 0.7 percentage point as compared to November's reading of 46.7 percent. This is reported by the Manufacturing ISM® Report on Business®.
- > The New Orders Index logged its 16th month in contraction territory at a faster rate in December. The delivery performance of suppliers to manufacturing organizations was faster for the 15th straight month in December, as the Supplier Deliveries Index registered 47 percent.
- > Electrical Components and Semiconductors were the materials and commodities most reported as in short supply by the purchasing executives responding to the ISM Report on Business survey.

#### Manufacturing PMI



Source: Institute for Supply Management Report On Business, December 2023

# Supply Chain Spotlight:

Material Constraints and Disruptions



- > Wage growth is set to slow in the United States as inflation eases and demand slows.
- > Tight labor markets continue to keep wages at least supported even in the higher interest rate environment.
- > Construction and installation, maintenance, and repair worker wages are under the most pressure.
- > The unemployment rate for experienced construction workers registered 3.8% in September 2023, close to historic lows, but has increased since then to 4.8%, according to the Bureau of Labor Statistics.



Material	Lead Time	Cost	Explanation
Switchboards			
Panelboards	16-30 weeks (larger/complex up to 52 wks)	Material shortages/component delays, heavy demand, backlogs	
Switchgear LV/MV	40-70 weeks 55-75 weeks		
Generators			
Chillers (Water Cooled)	36-45 weeks		
Chillers (Air Cooled)			
AHUs (Simple/Small to Medium) 30-40 weeks (simple 14-20)			
AHUs (Complex/Medium to Large)	36-50 weeks	Strong demand, some backlogs	
<b>RTUs</b> (<50 ton)	20-28 weeks		
<b>RTUs</b> (>50 ton)	24-38 weeks		
Steel	8-20 weeks		Some producers announced increases on select products in late 2023
Millwork	8-16 weeks	Stable	
Elevators	14-22 weeks; High Rise 38-50 weeks	Stable	
Curtainwall	20-36 weeks	Stable	
Roofing	6-12 weeks	Stable	

<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 prices are still sluggish due to low demand. Both trucking and containerized freight prices are likely to stabilize this year as growth returns, albeit moderate.
- > Global supply chains continue to work to alleviate future disruptions from labor constraints as some companies are still struggling to find and retain the workers they need. Many have felt the pressure alleviated as labor shortages have eased, but the issue is more systemic and may resurface during the next major disruption.



- > Currently, port terminal operations in the U.S. continue to run without any major congestion. Delays of 2-4 days are possible in some ports due to congestion, construction project work, and equipment shortages.
- > In the Red Sea, piracy risk has accelerated and this has driven ships from the Suez Canal and around the Cape of Good Hope. In turn, this has caused global freight rates to nearly double in the first two weeks of 2024. This could put upward pressure on certain inputs, according to Associated Builders and Contractors (News Release, 1/12/24).
- > The Panama Canal has been experiencing low water levels, and the bottleneck may only worsen during the current dry season. The Panama Canal authority has reduced the number of ships that can pass and lowered the draft level, which in turn reduces the amount of cargo that can be carried. These delays will certainly impact shippers now and into this year.
- > In trucking, capacity is currently at risk due to high fuel costs, low rates from shippers, high capital access costs, and government mandates, as reported by ITS Logistics (ITS Logistics, US Port/Rail Ramp Freight Index November 2023).

## Mitigating Risk

Gilbane's supply chain experts have built risk mitigation strategies around the current market volatility. Front-end planning and thoughtful consideration should be undertaken during all project phases. While there are many mitigation techniques to consider, below are some suggested processes to evaluate:

- > The critical elements of design impacted by supply chain shortages and costs should be discussed and design locked down at the earliest stage so options such as alternate specifications or sources can be considered.
- > Encourage domestic or near-shored elements where supply or logistics challenges are known in lieu of internationally sourced elements.
- > Encourage review of prefabricated or modular components versus "kit of parts" purchasing strategies.

- > Build appropriate escalation allowances into estimates early in the cost model.
- Guard against unnecessary contingencies by establishing escalation based on published material indexes.
- > Utilize Gilbane Supply Chain Group and/or trade design- assist partners for early procurement, locking in labor supply and materials.
- Build travel expenses for travel into the budget to ensure equipment is being fabricated as contracted.

## Mitigating Risk

- > Utilize published data to set appropriate and measurable escalation allowances
- > Negotiate mutually protective escalation clauses in contracts to avoid unnecessary contingencies incorporated into trade costs.
- > Monitor prequalification closely to ensure that selected suppliers or subcontractors of equipment, materials, or services have the capacity and financial wherewithal to deliver against critical requirements and schedule.
- > Proactively source alternates to open optionality that may alleviate exposure.
- > Utilize Gilbane Supply Chain and your local team to leverage buying power where it best exists to safeguard against costs and secure priority.
- > Ensure suppliers that you have under agreement have a detailed procurement plan that is revisited frequently, updating project stakeholders regularly.

#### **External Sources**

- > ISM® Report On Business®, January 2024
- > AGC PPI Tables, 01/12/2024 (taken from BLS)
- > AGC 2024 US Construction Outlook
- > PPI Detailed Report, Data for December 2023, U.S. Department of Labor,
- > U.S. Bureau of Labor Statistics
- > U.S. Bureau of Economic Analysis, "Gross Domestic Product (Third Estimate), Corporate Profits (Revised Estimate), and GDP by Industry, Third Quarter 2023" news release (December 21, 2023)
- > CH Robinson, Insights and Advisories
- > S&P Global Market Intelligence Data, January 15, 2024
- > Associated Builders & Contractors News Release, January 12, 2024
- > FMI 2023 North American Engineering and Construction Industry Overview, Third Quarter Edition
- > ITS Logistics Port & Rail Ramp Index, November 2023
- > Matt Hardy, T&D Products, Inc.

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