



# Market Conditions Q2 2023

FORZIONS

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# About this report



We're midway through the year, and the global economy has surpassed expectations. As inflation and unemployment rates steadily decline, the Federal Reserve's pursuit of a soft landing appears increasingly promising.

Those trends, however, only raise the complexity for capital planners. In the construction industry, we've reached an all-time high employment figure of 7,947,000 in June, as reported by the U.S. Bureau of Labor Statistics. And yet, job openings are still

high, at 396,000. While this may be an encouraging situation for individuals seeking employment, it poses a daunting challenge for companies endeavoring to plan for an increase in volume in 2024. This challenge, among others, directly impacts construction projects that are in progress or in planning.

Welcome to the highly anticipated second edition of *Horizons: Market Conditions*, tailored to business executives who desire easy-to-digest details about the current state of the construction industry and how capital projects could be impacted. Within these pages, you'll find an expansive array of data – from public sources, our own databases, and comprehensive surveys – all in a way that deconstructs the complex economic trends and forecasts to help you make decisions about your business.

CRB takes pride in delivering this report every quarter, and we hope the data and insights will serve as invaluable tools across all facets of your project planning. We welcome your feedback through our contact page at [crbgroup.com](http://crbgroup.com).

A handwritten signature in blue ink that reads "Mike Barrett". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mike Barrett

Vice President, Project Delivery Services, CRB



CRB's procurement team works with our trusted strategic trade partners and suppliers to keep a database of lead times for equipment and materials. Many of the products in this database are specific to the life sciences and food + beverage (F+B) industries, while others are key building components. We frequently add new equipment and materials to our database to better support our clients with information and options.

## FIGURE 1

*Database of lead times for equipment and materials*

● Improving ● Stable ● Increasing

CURRENT LEAD TIMES FOR EQUIPMENT AND MATERIAL: Q2 2023		
Equipment/Material	Lead Time (wks)	Trend
F+B Equipment – CIP Skid	30	●
F+B Equipment – Ribbon Blender	20	●
Media Prep & Hold Skids-316SS	52	●
Media Prep & Hold Skids-AL6XN	60	●
Buffer Prep & Hold Skids-316SS	52	●
Buffer Prep & Hold Skids-AL6XN	60	●
Purification Skids	30	●
WFI Distribution Skids	30	●
USP Water Distribution Skid	28	●
Pure Steam Generators	28	●
Stainless Steel Vessels - ID > 98"	58	●
Stainless Steel Vessels - ID < 98"	28	●
Single Use Bioreactors	28	●
Single Use Bioreactor Bags	18	●
Stainless Steel Bioreactors - ID > 98"	58	●
Stainless Steel Bioreactors - ID < 98"	28	●
Chromatography Skids/Columns	45	●
Stainless Steel Tubing	0	●
Modular Cleanroom Panels	14	●
Medium Voltage GIS Switchgear (35kV class, 1200A)	75	●

(continued)

Source: CRB



## FIGURE 1 (CONT.)

Database of lead times for equipment and materials

● Improving ● Stable ● Increasing

CURRENT LEAD TIMES FOR EQUIPMENT AND MATERIAL: Q2 2023		
Equipment/Material	Lead Time (wks)	Trend
Medium Voltage Fused Switchgear (15kV class, 1200A)	30	●
Medium Voltage Fused Switchgear (4160V class, 1200A)	35	●
Medium Voltage Transformer - 3Ph - 45-500kva	75	●
Medium Voltage Transformer - 3Ph - 501-1500kva	103	●
Medium Voltage Transformer - 3Ph - 1501-3000kva	103	●
Medium Voltage Transformer - 3Ph - 3001-5000kva	53	●
Medium Voltage Transformer - 3Ph - 5001+kva	53	●
ANSI Switchgear (3000-4000A)	68	●
Switchboard (3000A-4000A)	55	●
Switchboard (2000A-2500A)	55	●
Panelboards (480V, Any ampacity)	20	●
Panelboards (208V, Any ampacity)	20	●
Dry Type Transformers (112.5kVA and below)	16	●
Busway (Any Ampacity)	20	●
Standard MCC	29	●
Smart MCC	37	●
Copper Tubing and Fittings	0	●
Standard Packaged RTUs	32	●
Cooling Towers	16	●
Water-Cooled Chillers	32	●
Air-Cooled Chillers, < 250 Tons	48	●
Air-Cooled Chillers, > 250 Tons	55	●
Boilers, 500 HP Water Tube	42	●
Boilers, 800 HP Fire Tube	30	●
Large-diameter Control Valves-Modulating	8	●
Stainless Steel Zero-Static / Block Body Valves	12	●
HEPA Filters & Housings: 1 Rd Housings	22	●
HEPA Filters & Housings: Multi Rd Housings	26	●
HEPA Filters & Housings: Orticlean	26	●

(continued)

Source: CRB



## FIGURE 1 (CONT.)

Database of lead times for equipment and materials

● Improving ● Stable ● Increasing

CURRENT LEAD TIMES FOR EQUIPMENT AND MATERIAL: Q2 2023		
Equipment/Material	Lead Time (wks)	Trend
Sterile Pass-Thrus	18	●
Sanitary Heat Exchangers	20	●
Custom AHUs (Small Indoor Units)	40	●
Custom AHUs (Large Outdoor Units)	40	●
DOAS AHUs (Dedicated Outdoor Air System)	20	●
Semi-Custom AHUs (Small Indoor Units)	32	●
Semi-Custom AHUs (Large Outdoor Units)	52	●
HDPE Piping <4"	8	●
HDPE Piping >4"	6	●
Insulated Metal Panels (IMP)	14	●
RO Skids	40	●
BioWaste Kill Skids	40	●
Waste Neutralization Skids, 100 GPM	18	●
Waste Neutralization Skids, < 25 GPM	16	●

Source: CRB

### Key takeaway:

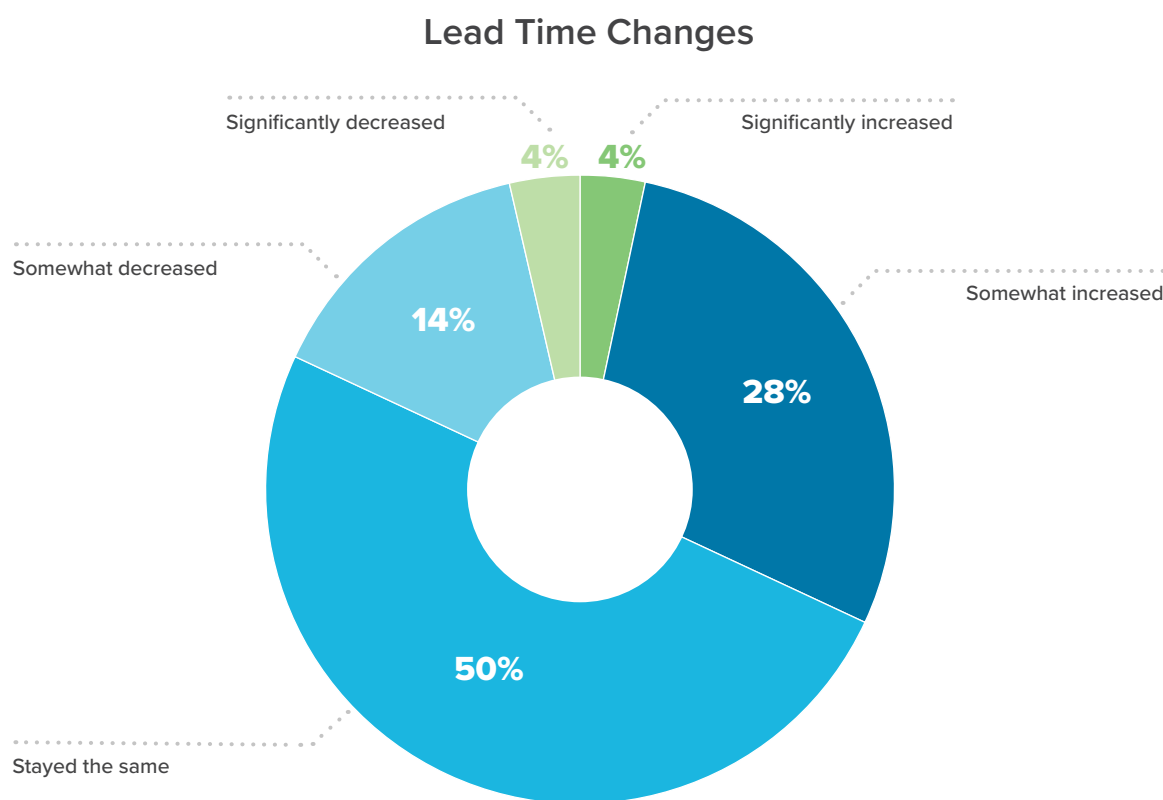
Lead times for facility electrical equipment have not improved substantially from last quarter. With transformers taking 1-2 years to arrive, they should be planned for and procured as early as possible to keep your project on track.



This quarter, in addition to compiling the latest lead times, we also surveyed 28 trade partners that CRB frequently works with to gather additional insights. The respondents consisted of companies from life sciences and food and beverage equipment manufacturers, MEP contractors, and material fabricators.

**FIGURE 2**

*How would you describe the lead times for your products in the second quarter (Q2) as compared to the first quarter (Q1)?*



Source: CRB

A survey of CRB’s trade partners shows that lead times still vary widely across product offerings. About a third of CRB’s trade partners indicated that their lead times had increased (Figure 2). Many of CRB’s partners have implemented strategies to improve supply chain challenges such as:

- Adding second shifts
- Expanding factory space
- Increasing staff headcount
- Pre-ordering components for popular long lead items

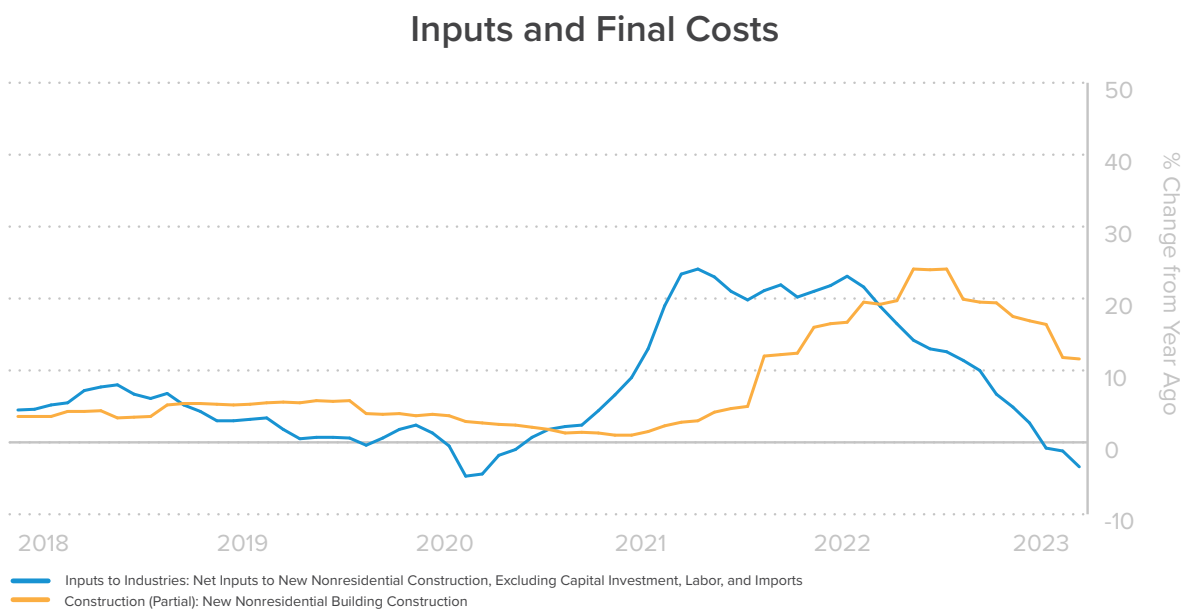


Producer price indexes (PPI) are a family of indexes that measure the average change over time in selling prices received by domestic producers of goods and services. The price information is provided to the U.S. Bureau of Labor Statistics by over 16,000 establishments, providing approximately 64,000 price quotations per month. CRB uses data from PPIs to measure price movement specific to the construction industry and the products we purchase for our projects.

Figure 3 shows two different types of indexes. The blue line is an input index that represents the most common composition of materials used in non-residential building construction projects. The yellow line is considered a selling-price index, or, in other words, an index that measures the change to final construction costs for consumers, inclusive of labor, material, overhead and profit costs. For this figure, each data point shows the percentage of change in the index value over the preceding twelve months.

**FIGURE 3**

*Construction inputs and bid price producer price indexes*



Graphic Source: CRB  
Data Source: U.S. Bureau of Labor Statistics

Inputs show a decrease of 3.4% in May, continuing a year-over-year trend that first emerged in March. Stabilization of the supply chain and decreasing pressures from residential markets for common materials are thought to be the primary contributor to this new pattern.





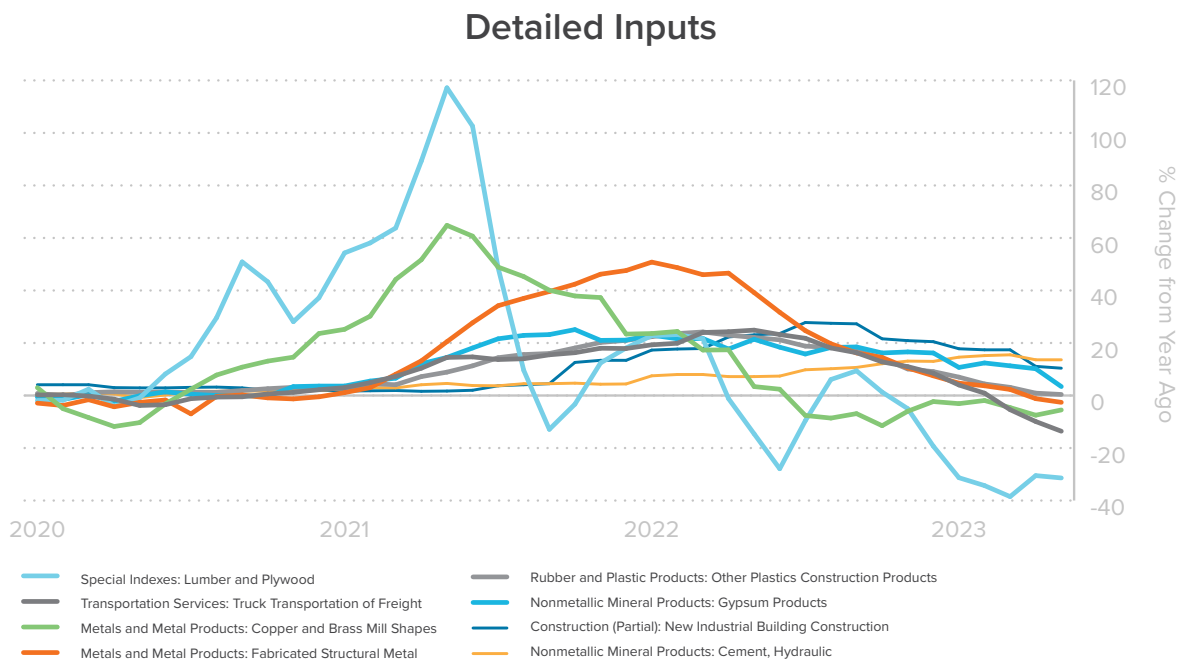
Final costs to construction consumers are still on an upward trajectory, with the latest data showing an 11.6% increase in final cost for the same project as compared to a year ago. While this value remains well above the historical average for construction inflation, the rate of increase has been on a steady decline since the peak recorded in September 2022.

A closer look into the composite inputs decrease (Figure 4) shows that lumber has led the charge, currently experiencing a 31% decrease in cost as compared to a year ago. Transportation cost, having decreased by 10% over the last year, is a welcome change, and one that nods towards overall supply chain stabilization.

While this news is positive, materials more common to construction of new manufacturing buildings such as steel and concrete have held steady or remain on an upward trajectory when compared to values a year ago.

**FIGURE 4**

*Construction inputs and bid price producer price indexes*



Graphic Source: CRB  
Data Source: U.S. Bureau of Labor Statistics

**Key takeaway:**

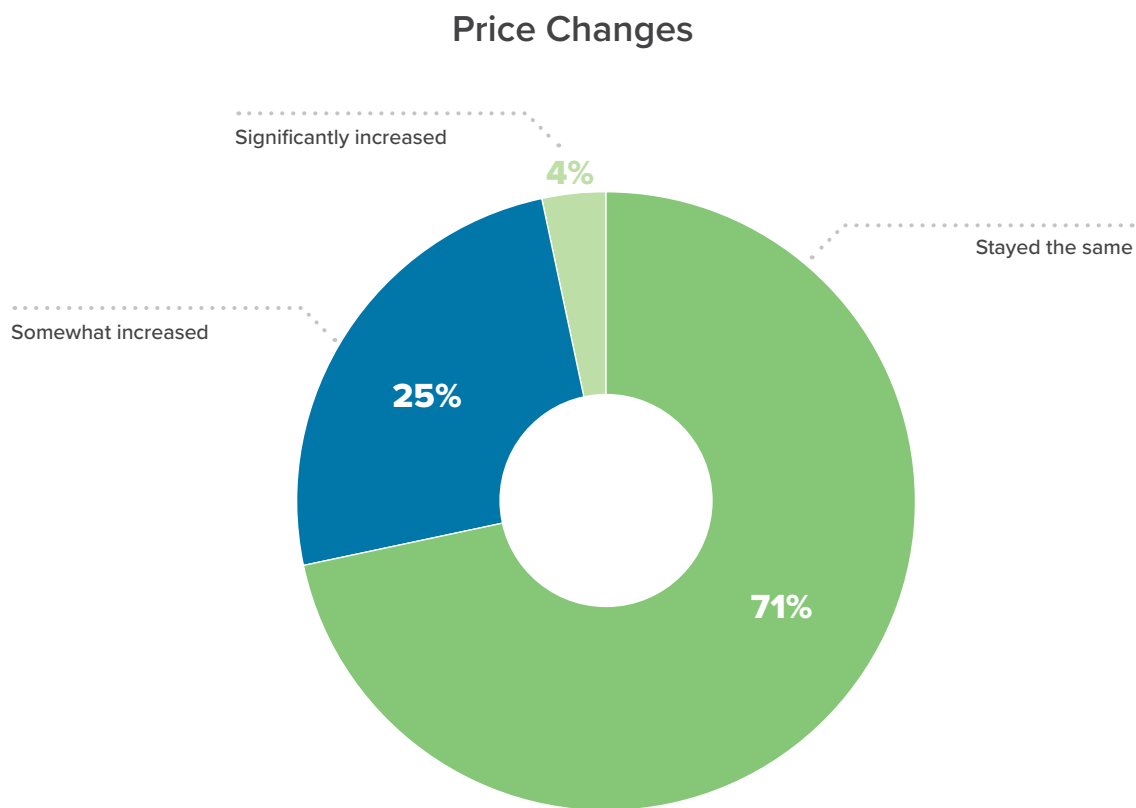
*Costs for transportation of freight have decreased by 10% over the last year; a positive indication of overall supply chain stabilization.*



A survey of CRB's trade partners also indicates good news. 71% of those surveyed said that the prices of their products stayed the same in the second quarter of 2023, as compared to the first quarter.

## FIGURE 5

*How would you describe the prices of your products in the second quarter (Q2), as compared to the first quarter (Q1)?*



Source: CRB

The best way to take advantage of stabilized costs on capital projects is to integrate key trade partners early and move quickly when approving design packages. By selecting key trade partners as a first priority and integrating their specialized knowledge into the preconstruction effort, teams can build certainty into the project's plan early in the delivery process. This strategy improves the accuracy and transparency of the estimating process and reduces the risk of costly surprises in the field once construction begins.



Sitting at nearly \$1.06 trillion, on a seasonally adjusted annualized basis, nonresidential spending for May was 17.3% higher than last year. The [AIA Consensus Construction Forecast](#) predicts that will level out to 5.8% for 2023 and 0.8% in 2024.

**FIGURE 6**

*AIA Consensus Construction Forecast*

**Combined Forecast**

	2023	2024
	% change from previous year	
<b>Consensus</b>	<b>5.8</b>	<b>0.8</b>
Dodge Construction Network	13.7	-2.0
S&P Global, Market Intelligence	8.2	1.0
Moody's Analytics	7.7	2.3
FMI	7.9	1.1
ConstructConnect	5.6	3.7
Associated Builders and Contractors	1.9	1.0
Wells Fargo Securities	2.8	-1.2
Markstein Advisors	4.5	3.3
Piedmont Crescent Capital	-0.5	-2.0

Graphic Source: CRB  
Data Sources: American Institute of Architects

CRB's Director of Estimating, Greg Casper, recommends carrying 5% annual cost escalation when developing new budgets. This is above historical trends, because demand is still high, but below the rapid inflation realized in 2021 and 2022.

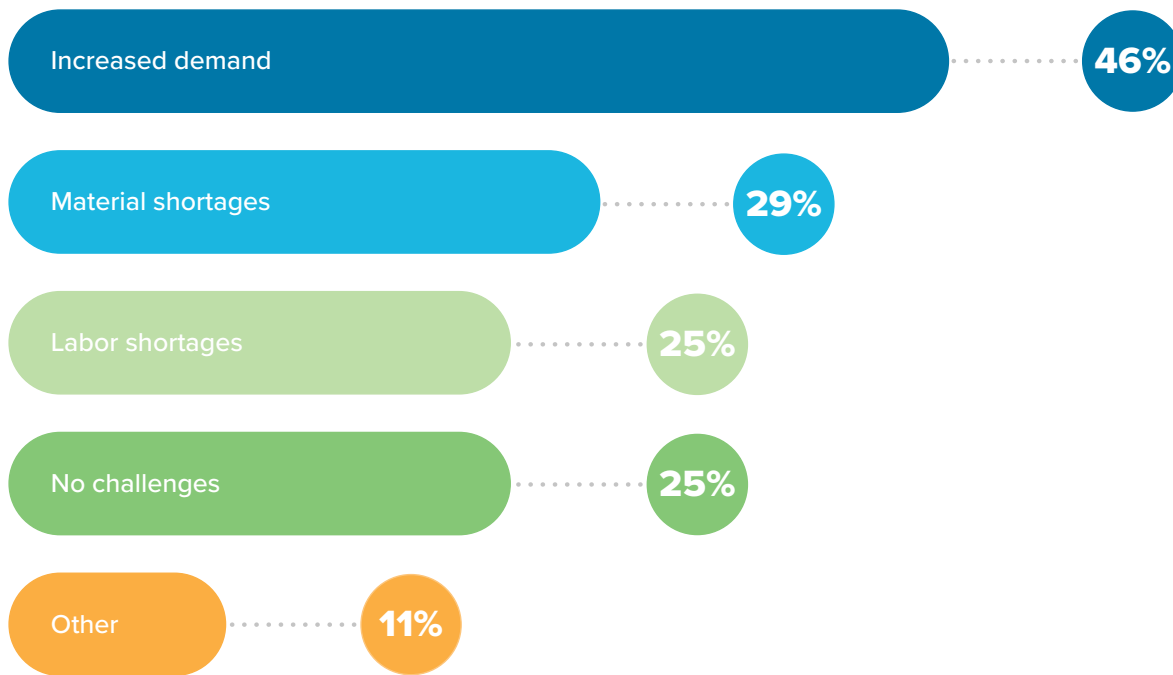


Despite May bringing the first monthly decrease in U.S. nonresidential construction spend in 11 months, 46% of suppliers and subcontractors surveyed are still experiencing challenges due to increased demand (Figure 7). That’s no surprise, given spending was up more than 17% over that 11-month span.

**FIGURE 7**

*What factors have contributed to any challenges or constraints in the second quarter (Q2)?*

**Current Market Challenges**



Source: CRB

**Projects to know:**

*Three companies broke ground on projects over \$1 billion in May. Steel Dynamics in Columbus, Mississippi, Eli Lilly & Co in Indianapolis, Indiana, and Ford in Sheffield, Ohio.*

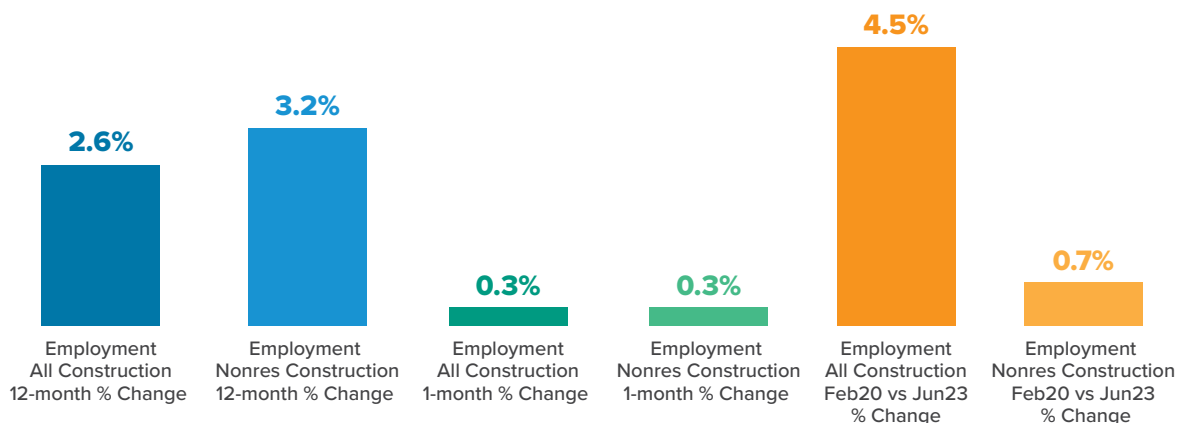


Construction employment increased again in June to an all-time high of 7,947,000. With 396,000 construction job openings as of the end of May, it looks like employment will continue to rise through the second half of the year. But can it keep up with demand? [Dodge](#) reported that nonresidential construction starts rose 8% in May, while [BLS](#) data shows employment increased less than 1%.

An interesting trend, pointed out by [Construction Analytics](#) in a June brief, is that this has been a common theme over the last year. Major increases in volume of nonresidential construction haven't been matched with an equal increase in employment. This is likely due to absorbed workload from companies keeping labor on staff even as volume dropped during the pandemic. But as we near pre-pandemic volume levels, companies are becoming increasingly concerned about their ability to continue this trend without hiring. At some point, these trade contractors will have to become more selective in what projects they take on, which means costs will likely increase.

FIGURE 8

### June 2023 U.S. Construction Employment Statistics



Graphic Source: CRB  
 Data Source: U.S. Bureau of Labor Statistics

Figure 8 shows June 2023 employment statistics published by the U.S. Bureau of Labor Statistics. Additional commentary and details by state or metro location is published monthly by the [Associated General Contractors of America](#).



**Greg Casper** is the Director of Estimating, leading a team of estimating professionals across CRB's global offices. Greg has over 15 years of experience providing preconstruction, procurement, estimating and scheduling services for life sciences and food + beverage projects.



**Valerie Silva** is the Director of Procurement and has more than 15 years of experience with global cost optimization, project management and supply chain issues. She leads a team of procurement experts to offer our clients end-to-end sourcing and managing of equipment and construction services for capital projects.



**John Urbanowicz** is the Vice President of Project Management and has more than 30 years of experience in capital project delivery. John drives consistency in project management and project delivery across CRB through training, mentoring and coaching.

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# Reference Data

Much of the economic information in this report is compiled from third-party resources that are available to the public and not owned by CRB. All references are included in the body of the report.



[crbgroup.com](http://crbgroup.com)

