

# Construction Delivery Outlook



Q4 2023 / Q1 2024

**LGE** | DESIGNBUILD

# What We're Seeing Now.

Dallas and Phoenix stand at the forefront of local trends in construction and real estate. Dallas, ranking as the nation's third busiest city, is currently experiencing a construction boom marked by rising costs and labor shortages. In Phoenix, now a rising tech hub, major projects from industry giants like Google and Intel reflect the city's efforts to attract stability. The growth of the semiconductor industry in Phoenix reflects a pivotal role for technology without direct reference to national initiatives. However, labor shortages remain a shared challenge impacting construction and manufacturing locally.

Both cities defy national trends in industrial space occupancy, showcasing adaptability within their specific economic landscapes. The Dallas-Fort Worth region's remarkable rise aligns with its resilience to overall economic slowdowns, rather than being part of a national economic strategy. Phoenix's leadership in occupied space gain reflects local interest in strategic locations with expanding consumer bases.

As this document explores office real estate, construction trends, and supply chain challenges, it presents a localized view of how Dallas and Phoenix navigate economic shifts. From the cautious optimism in Phoenix's office real estate to Texas's defiance of remote work trends through continued construction, this narrative captures the unique positioning and challenges faced by these cities within their local economic contexts as of the closing quarter of 2023.

– Blake Wells  
Vice President of Preconstruction

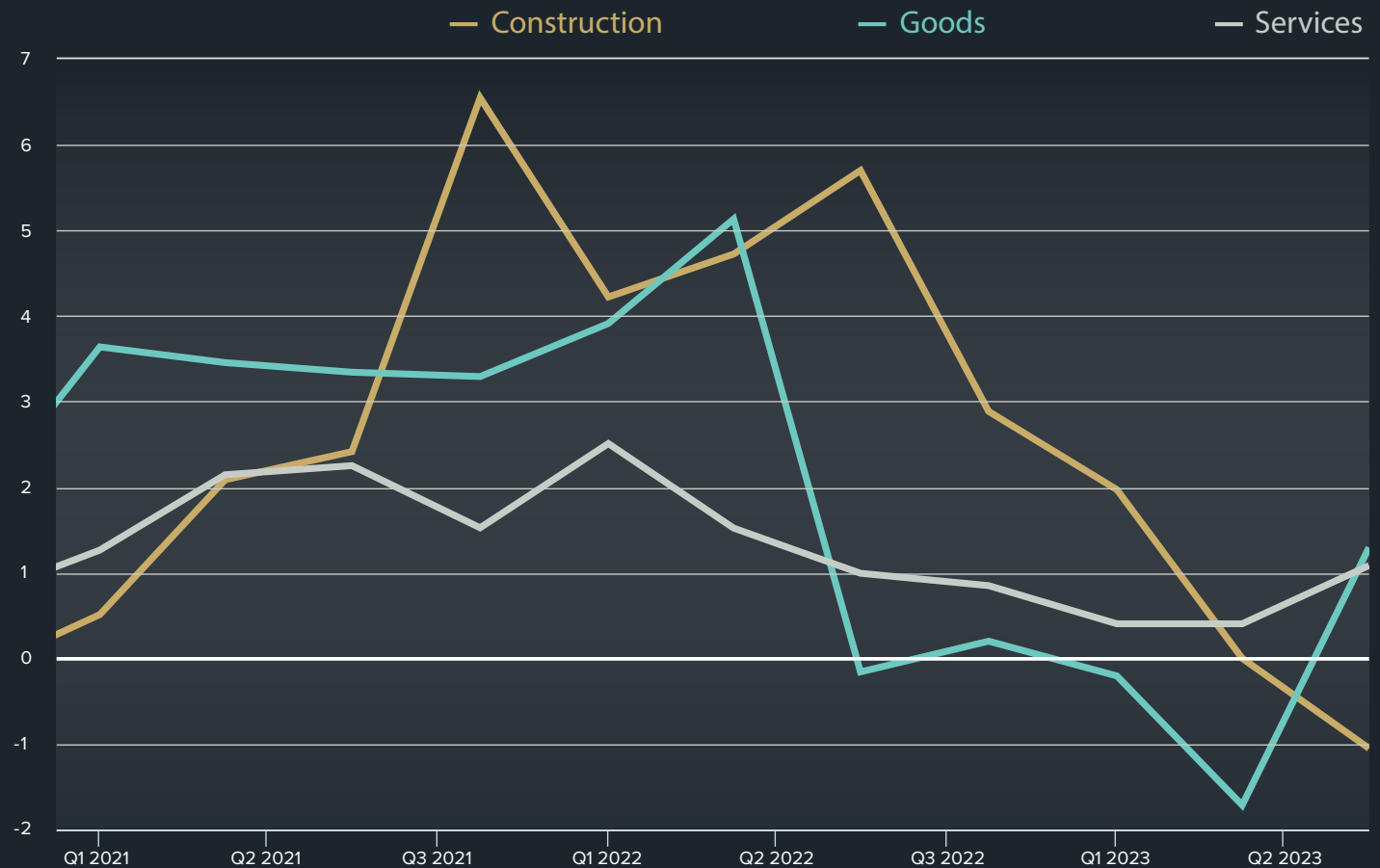
**We acknowledge the dynamic nature of the market. The information contained in this report is using the most up-to-date data available as of the closing quarter of 2023.**

# The 'Why' Behind Cost and Duration

Our mission is to provide you with the latest insights into market trends and conditions. This report is a valuable resource, offering comprehensive data that not only answers the 'Why' behind current market conditions but also outlines their impact and proactive strategies to prepare for the future. With a particular focus on the design and construction sectors, this report equips us with the knowledge needed to enter the market with confidence and readiness in Dallas and Phoenix.

PRODUCER PRICE INDEX

## FINAL DEMAND CONSTRUCTION



Percent change in Producer Price Indexes for final demand, January 2021 to November 2023.

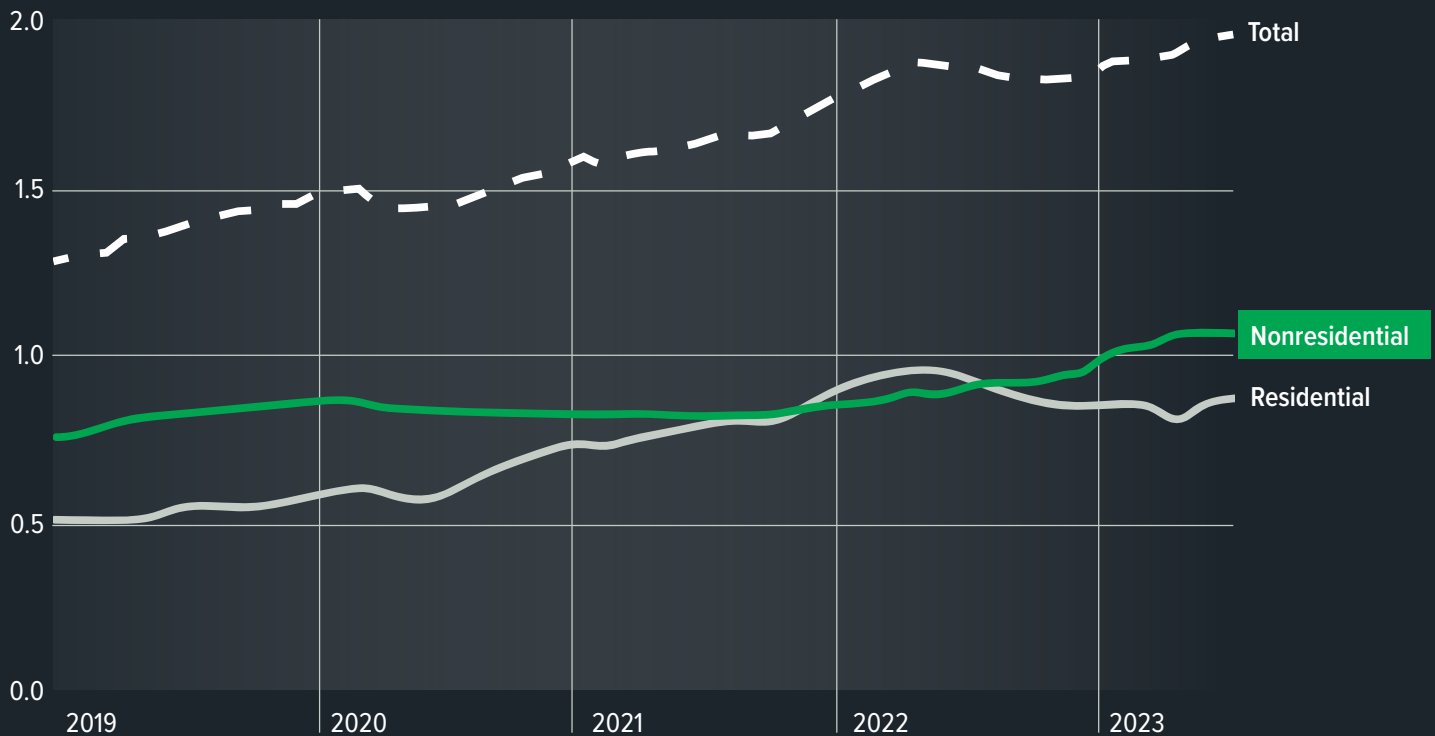
# Demand for our Core Markets

## DALLAS

Ranked as the third busiest city in the country, Dallas is expanding outward to integrate surrounding cities. The current construction boom, focused on schools and hospitals, presents challenges due to labor shortages, thus leading to increased costs. Despite potential economic slowdowns, there are plans to sustain growth in smaller industrial projects, mixed-use developments and return-to-office trends. While the industrial sector shows signs of moderation, retail and hotel sectors have rebounded reaching pre-pandemic levels.

**Total construction spending will likely continue to grow in 2024, driven heavily by the manufacturing and infrastructure categories.**

SHARE OF RESIDENTIAL AND NONRESIDENTIAL (US\$ TRILLION)

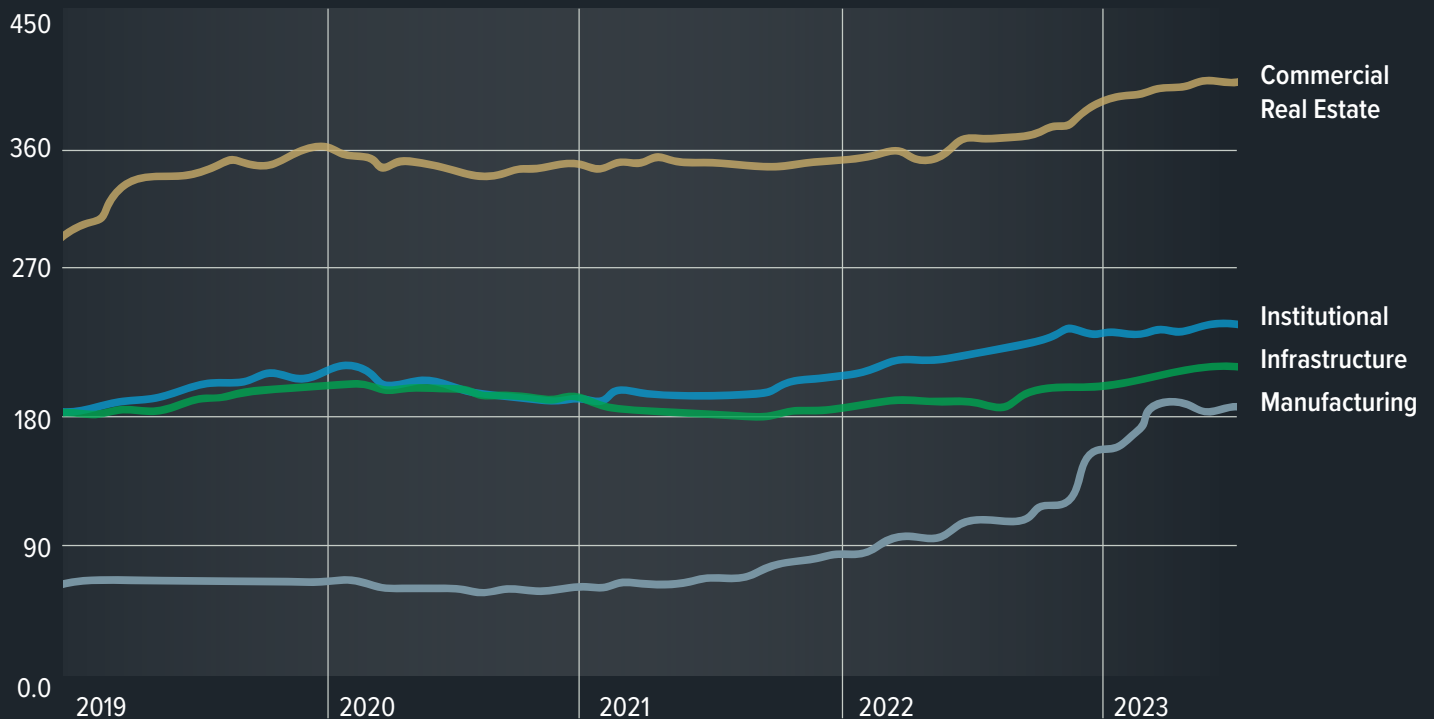


## PHOENIX

Phoenix's metro area is becoming a hot-spot for tech giants like Intel, Google, and semiconductor manufacturers due to its favorable conditions, including a lack of natural disaster risks and a stable climate. The \$600 million Google data center in Mesa and \$20 billion semiconductor fabs in Chandler are among the major projects in the region. Low utility costs, a business-friendly environment, and regulatory measures contribute to Phoenix's attractiveness, drawing not only tech firms but also corporations in education and financial services. Despite a predicted decline in the residential construction market, the semiconductor industry's growth, fueled by the Chips & Science Act's funding, provides stability and employment opportunities, although labor shortages remain a challenge.

Note: Commercial real estate includes lodging, office, and commercial. Institutional includes health care, educational, religious, public safety, and amusement and recreation. Infrastructure includes transportation, communication, power, highway and street, sewage and waste disposal, water supply and conservation and development.

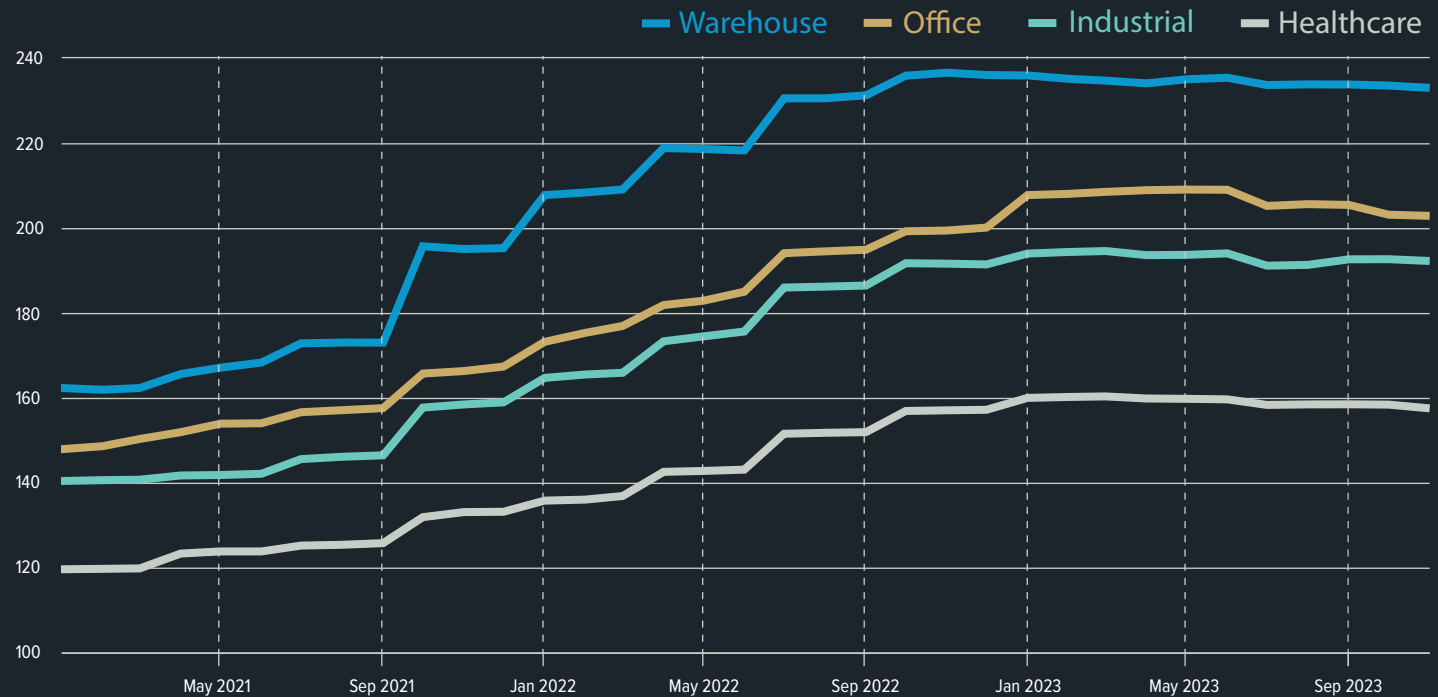
NONRESIDENTIAL CONSTRUCTION SPENDING BY CATEGORY (US\$ BILLION)



# Demand by Product Type

## NEW BUILDING CONSTRUCTION

PRODUCER PRICE INDEX. MONTHLY



### DALLAS INDUSTRIAL

Phoenix and the Dallas-Fort Worth region stand out as exceptional leaders in industrial space occupancy amidst a national decline. Despite the overall slowdown in demand, the strategic demographics and logistics infrastructure of the Dallas-Fort Worth region position it for sustained growth. Witnessing a significant rise of 30 million square feet in the past year, the area thrives on diverse demand from e-commerce, retailers, and manufacturing firms. This growth is fueled by population expansion and robust logistics networks.

### PHOENIX INDUSTRIAL

Phoenix secured the top spot with a 3% gain in occupied space, attributed to its expanding consumer base and accessibility to trade points. Despite the national trends of an overall slowdown in demand, Phoenix's strategic location and demographics contributed to the delivery of 16.5 million square feet of buildings during the third quarter of 2023.



## PHOENIX OFFICE

The overall outlook for office real estate in Phoenix is cautious due to potential negative impacts from factors such as a further national economic slowdown, ongoing inflation, and elevated interest rates. Despite challenges, positive indicators include ongoing demand for well-equipped office spaces, and newer Class A and Trophy buildings, to aid in the return-to-work efforts by many companies. While interest from smaller tenants may mitigate unstable vacancy rates, the moderate pace of new office construction is expected to limit immediate supply-side risks. However, larger entities may explore cost-cutting measures, such as reducing office footprints, if national economic conditions worsen, and a full recovery to pre-pandemic levels is anticipated to take time.

## DALLAS OFFICE

Despite the prevalence of remote work and high office vacancies, Texas sees a rise in new office construction projects, particularly in Austin, Dallas, and Houston. The continued construction is driven by expectations of economic growth and population migration to Texas, with developers anticipating sufficient demand to absorb the new office space, even as the office sector faces challenges from persistent remote work and changing market conditions.

# Construction Labor

## ARIZONA

Arizona's construction workforce is expanding alongside the state's economic growth, with a surge in construction projects. There were over 900 Construction Jobs added in the Phoenix Metro area in November for a total of 161,400 according to Arizona Office of Economic Opportunity. The state has fostered partnerships, training programs, and initiatives like the Voluntary Protection Programs to enhance workplace safety, apprenticeship opportunities, and overall workforce development, contributing to Arizona's robust construction talent pipeline.

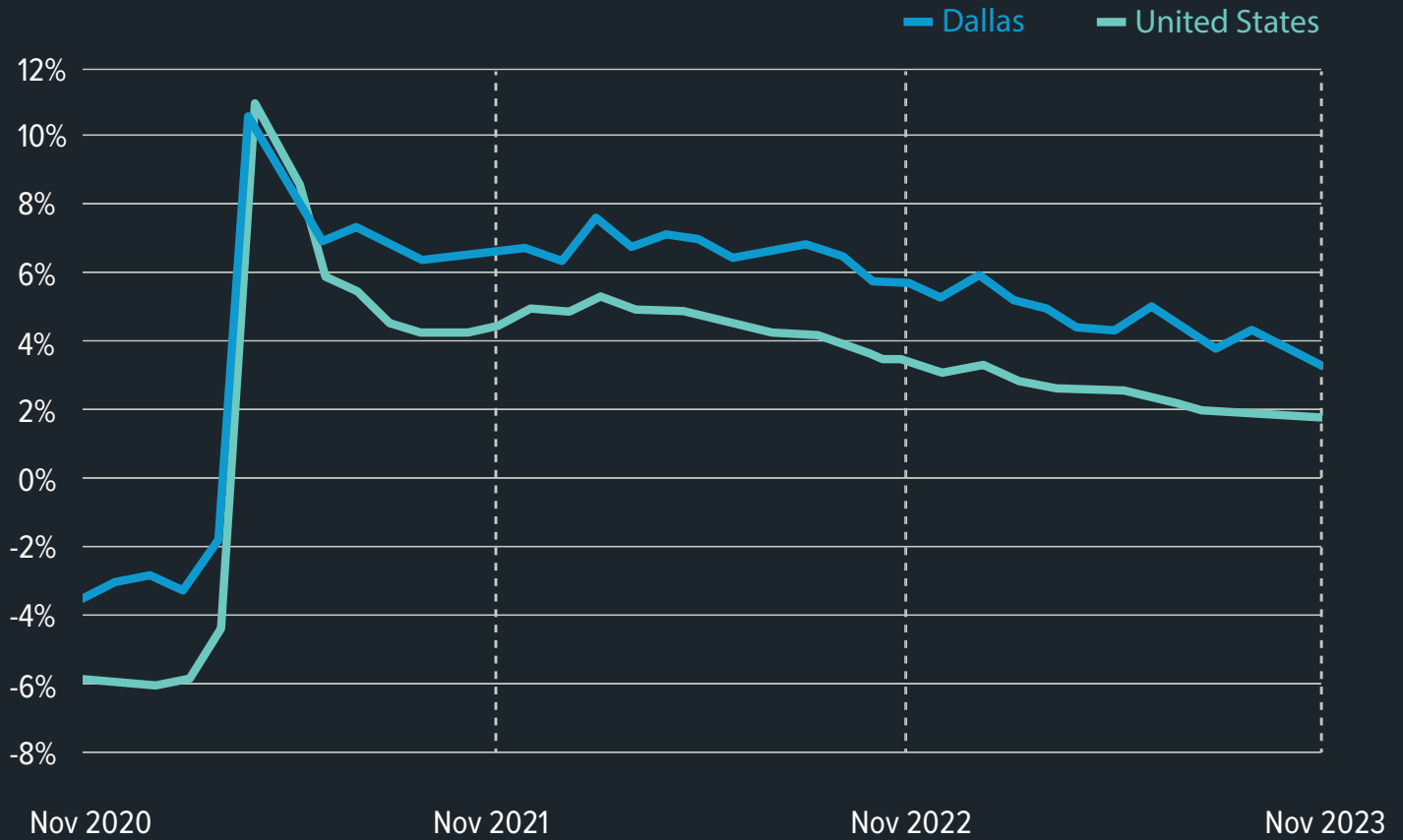
## DALLAS

Total nonfarm employment for the Dallas-Fort Worth-Arlington, TX, metropolitan area increased by 139,700 over the year in November, according to the U.S. Bureau of Labor Statistics. In November, job growth in the U.S. increased, but the unemployment rate rose to 3.8%, marking the highest level since February 2022, before the Federal Reserve began raising rates. This is up from 3.5% in July, and wage gains slowed down, indicating a softening of labor market conditions. This reinforces the belief that the Federal Reserve is unlikely to raise interest rates soon, as the labor market is slowing down in response to the central bank's efforts to cool down economic demand through substantial rate hikes.





## Over-the-year percent change for total nonfarm employment in the United States and the Dallas metropolitan area, November 2020–November 2023.



Source: U.S. Bureau of Labor Statistics.

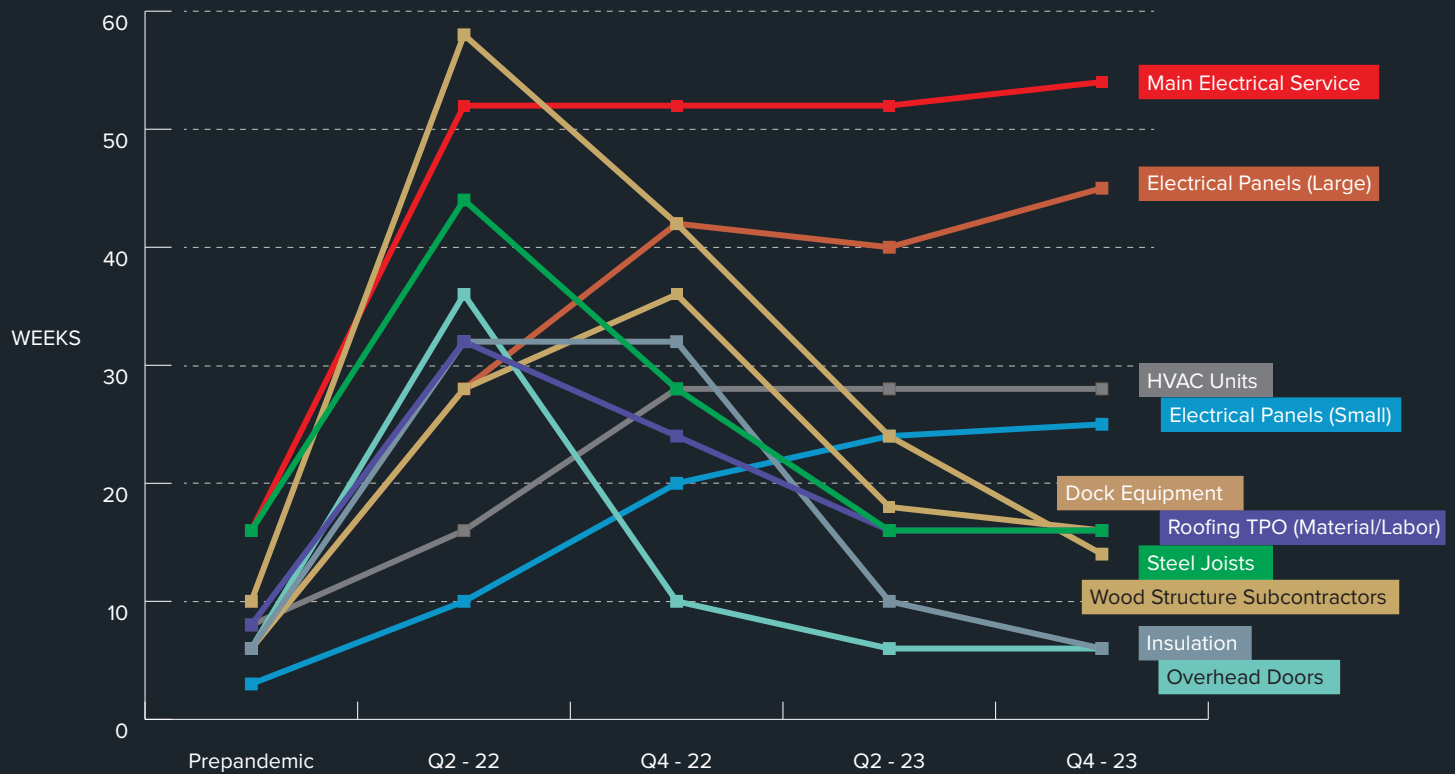


# Supply Chain

Suppliers are expressing optimism about stabilizing prices and improved lead times during the closing of 2023. Trucking freight has experienced a surge in overall demand with the American Trucking Associations' For-Hire Truck Tonnage Index indicating a 1.3% increase. Furthermore, future increases are projected and could potentially cause price hikes. Ongoing developments in the U.S. Government's budget process may also be expected to impact imported goods and associated services. Despite a decrease in supply chain disruptions, shortages of skilled professionals in the supply chain persist according to supply executives, requiring a combined effort of people and technology to rebuild and strengthen the supply chains.

## MATERIAL LEAD TIMES

QUARTERLY INCREASE/DECREASE



## PROCUREMENT PAIN POINTS:

**HVAC Units:** Shortages have been reported of copper and electrical components, such as motors and compressors, which are specific to the units that use them. There is also a shortage of microchips that are components in high-efficiency systems and furnaces, and resins used in the evaporator coil pans are scarce, creating longer lead times.

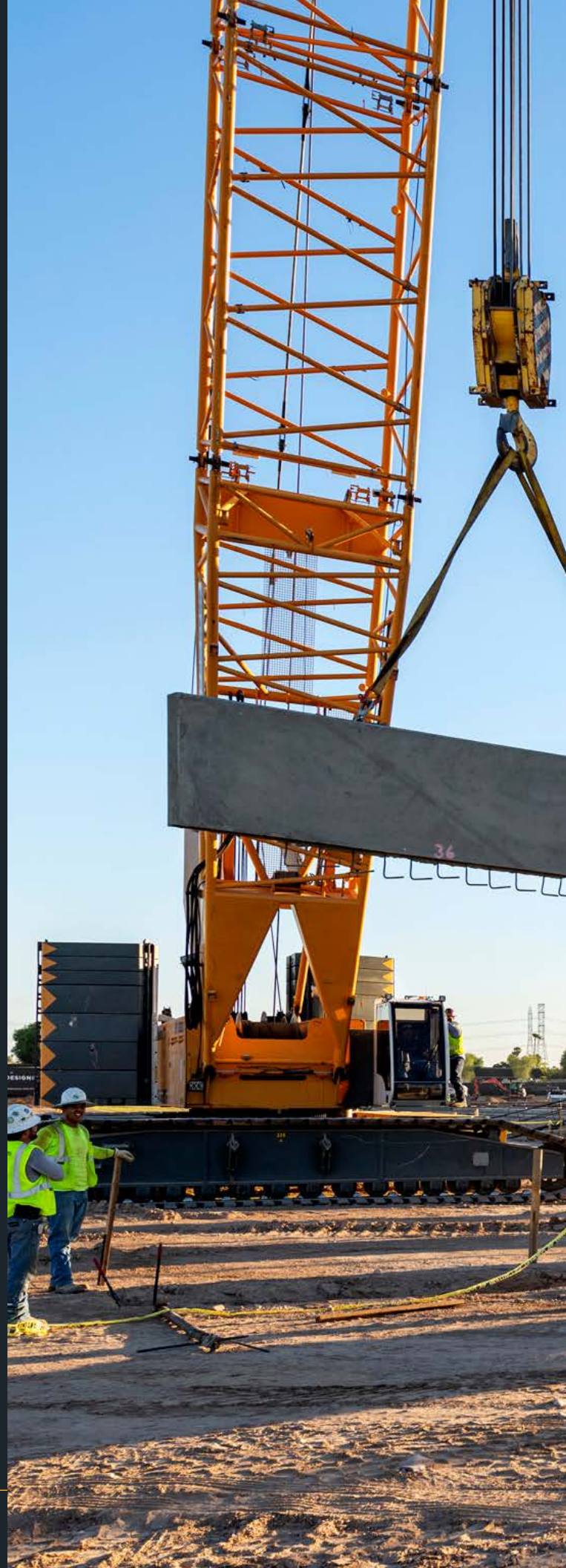
**Electrical:** High demand in commodity electronic components, including automotive, consumer goods, and IoT, has strained supply, leading to increased competition. During the peak of the COVID pandemic, homebound consumers boosted personal electronics sales. However, the competitive landscape eased in 2023, and data suggests a potential downturn in electronic equipment and chip demand in 2024.

**Drywells:** In the Phoenix market, subcontractors focusing on Drywell installations are encountering challenges in meeting demand across the entire valley. There is a scarcity of subcontractors specifically catering to drywell installation in this region. Intriguingly, it appears that the timing of drywell installation is more influenced by the availability of materials rather than the availability of manpower.

# Material Costs

Material prices increases in the construction industry are stabilizing at historical levels of 3% to 5%, but electrical gear and HVAC equipment face ongoing price increases due to high demand and limited manufacturing capacity. The shift away from Asian suppliers towards more dependable sources is a notable trend. Regional cost pressures are evident in raw, heavy materials like concrete, gypsum, and asphalt, with transportation costs influencing higher prices in specific regions.

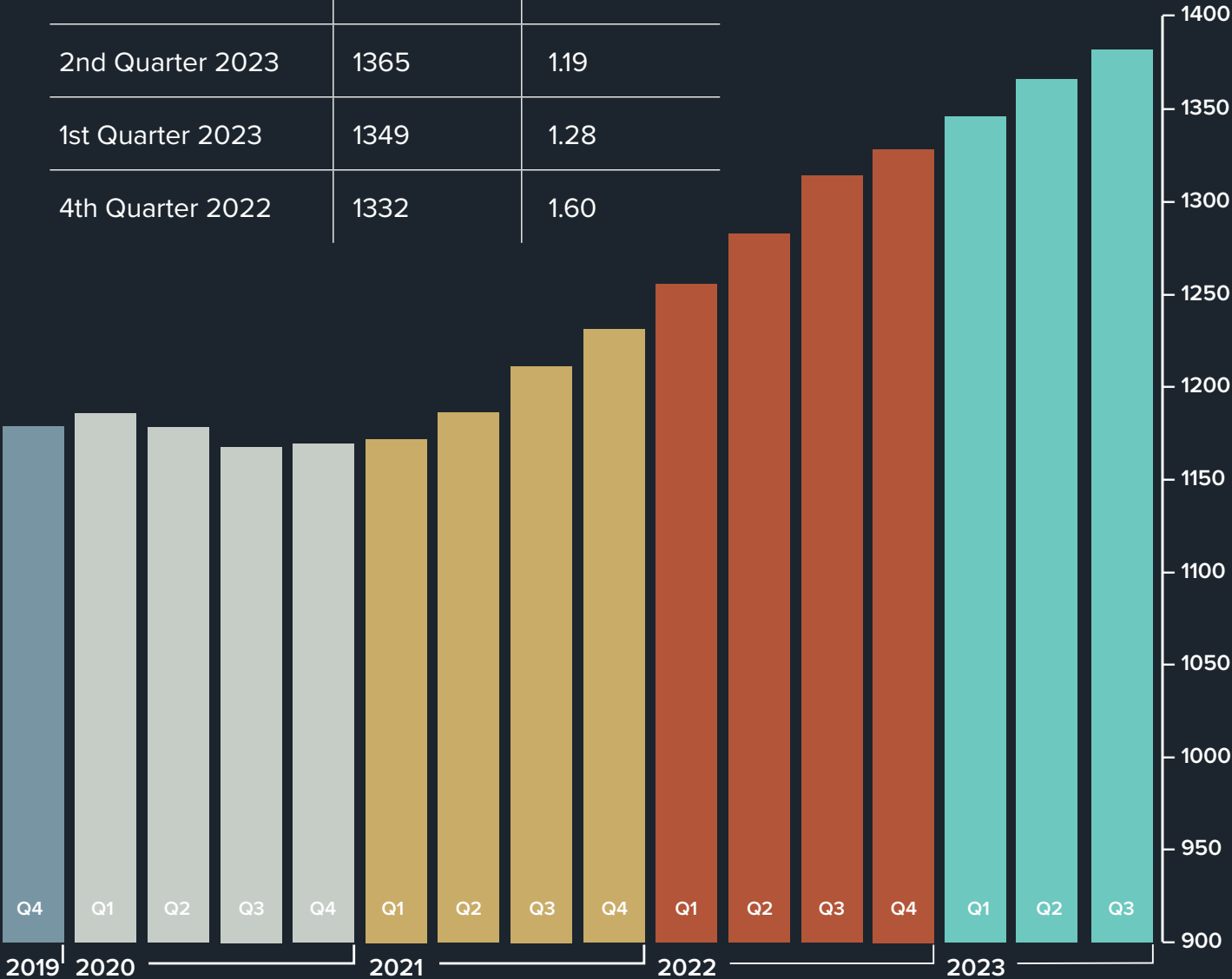
In the fourth quarter of 2023, construction costs were highest in the familiar states of Alaska, Hawaii, California, and the Northeast, compared to the national average. Material costs exhibit a clear pattern, with higher prices observed the farther one is from the Mississippi River and major manufacturing centers in the central U.S. Installation costs follow a similar delineation, with the Southeast and mountain states maintaining lower labor costs, while the Midwest, West Coast, Northeast, and overseas locations continue to experience higher costs.



TURNER BUILDING COST INDEX

# CONSTRUCTION COST ESCALATION BY QUARTER

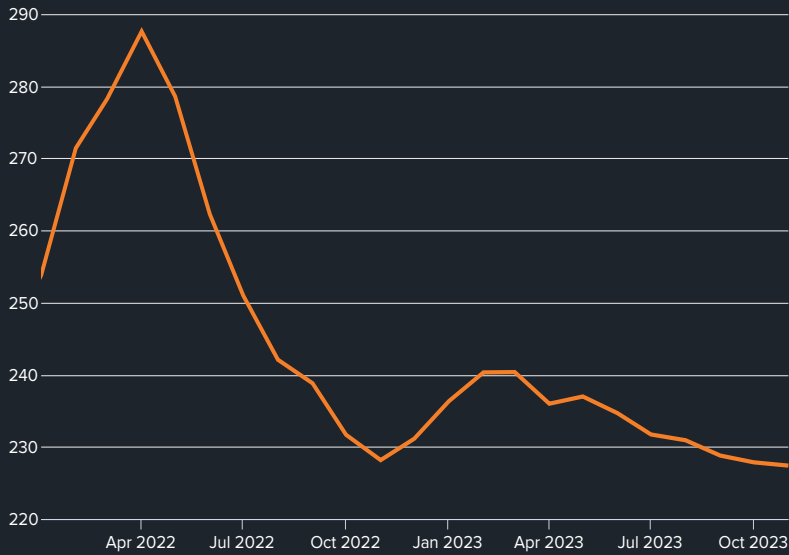
Quarter	Index	% Change
3rd Quarter 2023	1381	1.17
2nd Quarter 2023	1365	1.19
1st Quarter 2023	1349	1.28
4th Quarter 2022	1332	1.60



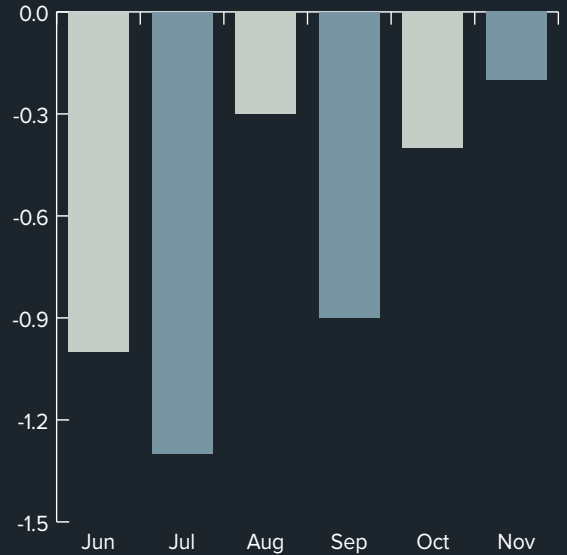
The Cost Index is determined by several factors considered on a nationwide basis, including labor rates and productivity, material prices, as well as the competitive condition of the marketplace.

# CONSTRUCTION MATERIALS PRICE MOVEMENT

## ALUMINUM MILL SHAPES

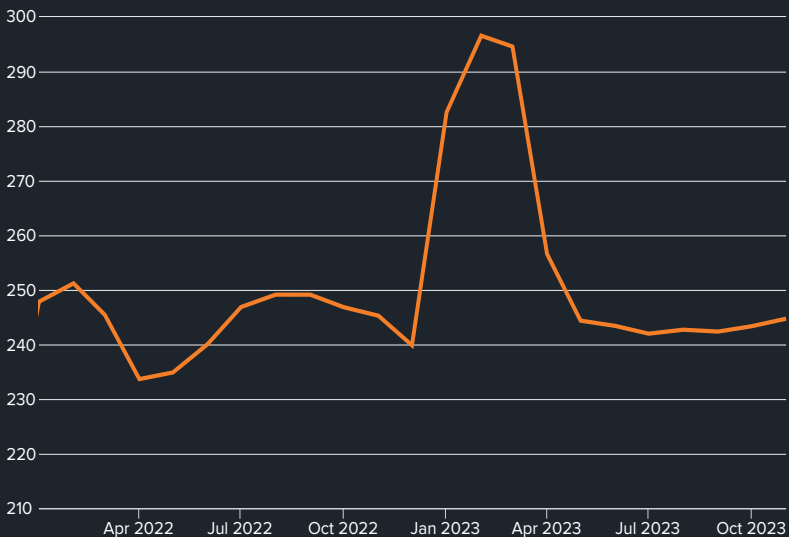


Price Index, Year-Over-Year

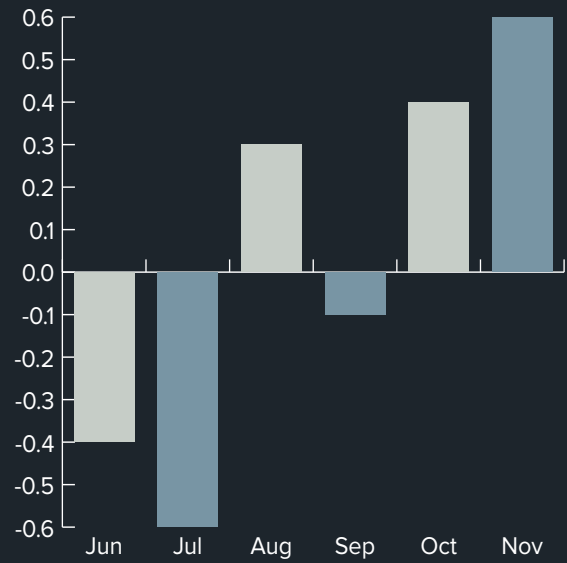


Percent Change, Monthly

## ASPHALT & TAR PAVING MIXTURE

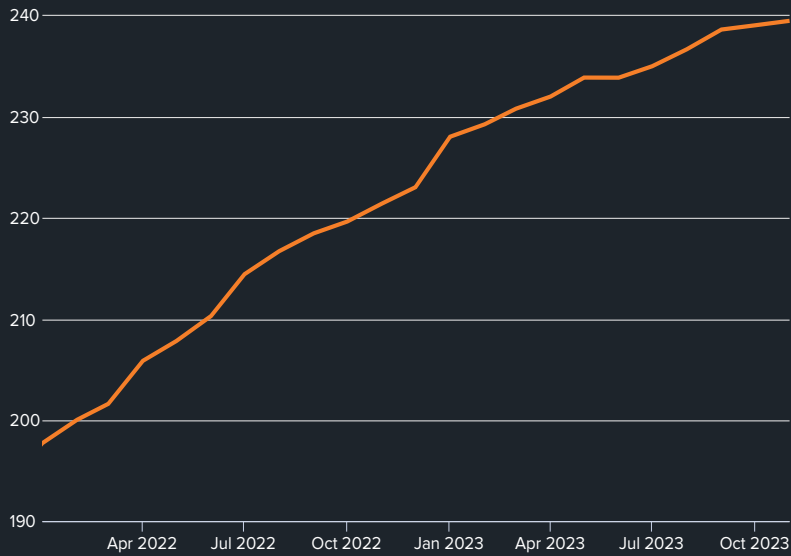


Price Index, Year-Over-Year

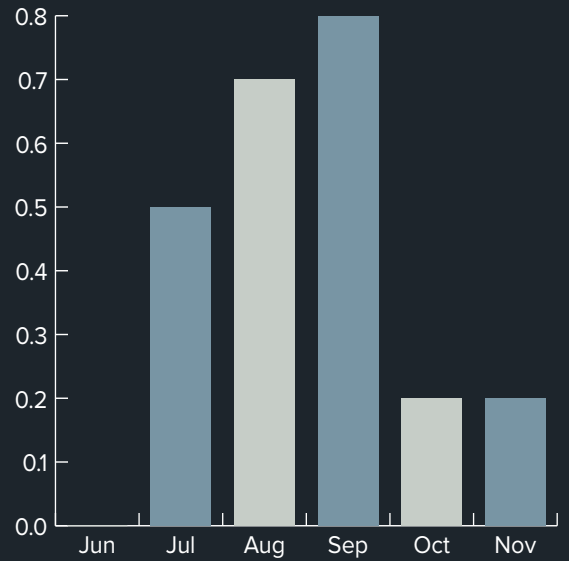


Percent Change, Monthly

### CONCRETE

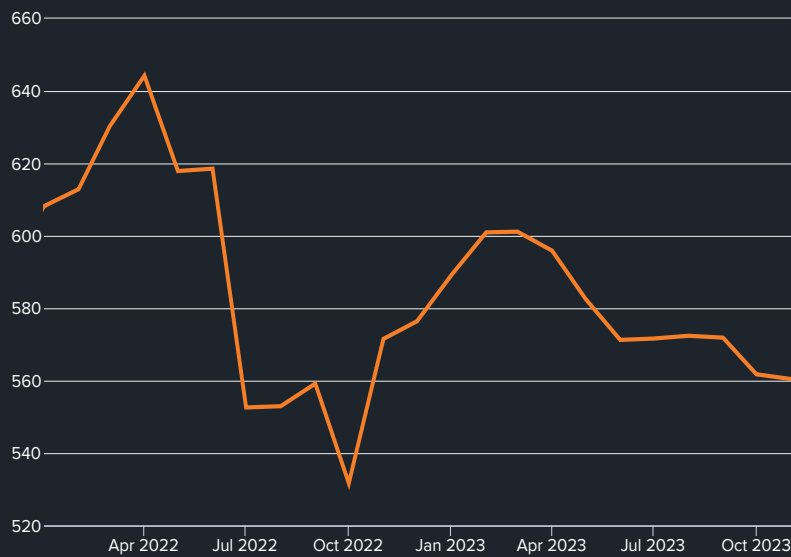


Price Index, Year-Over-Year

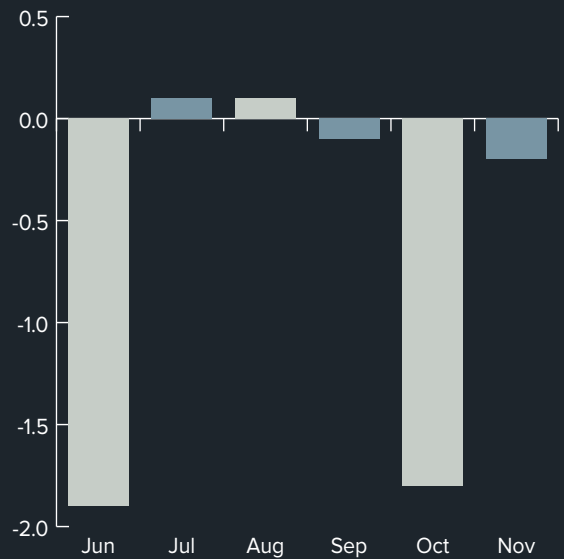


Percent Change, Monthly

### COPPER

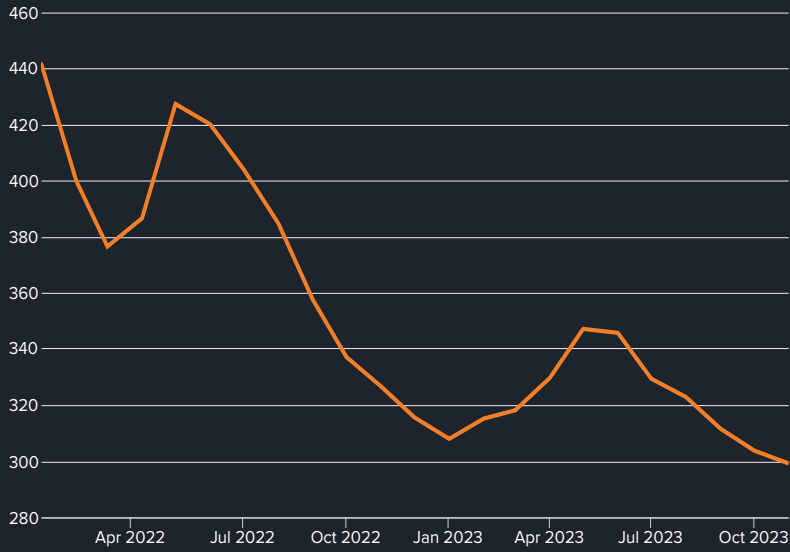


Price Index, Year-Over-Year

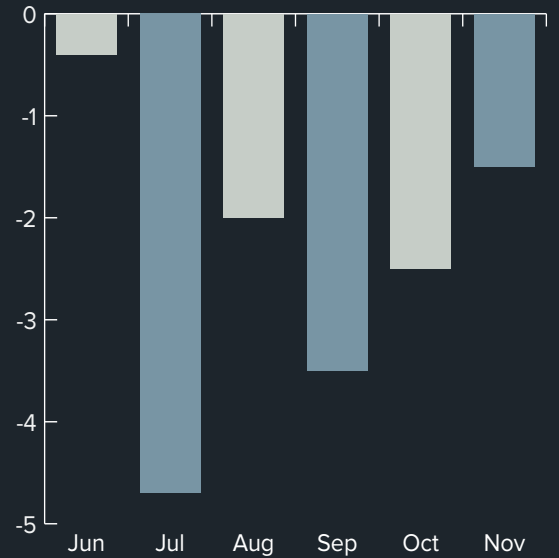


Percent Change, Monthly

## LUMBER

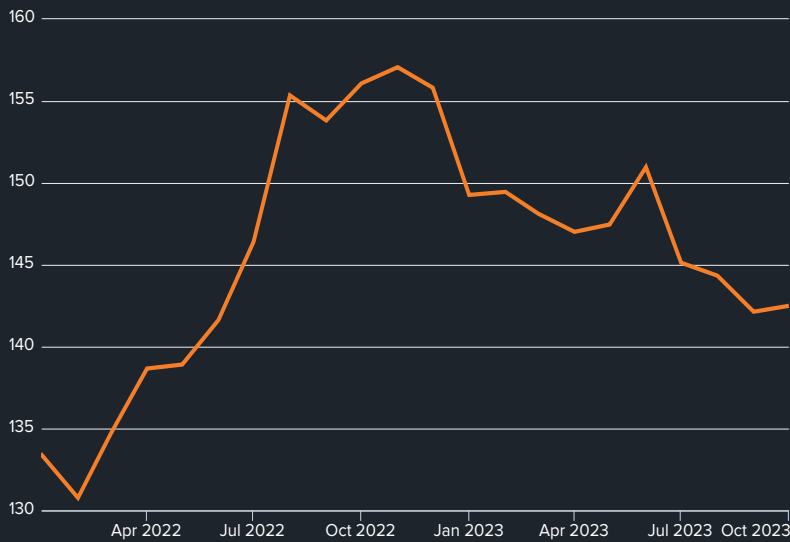


Price Index, Year-Over-Year

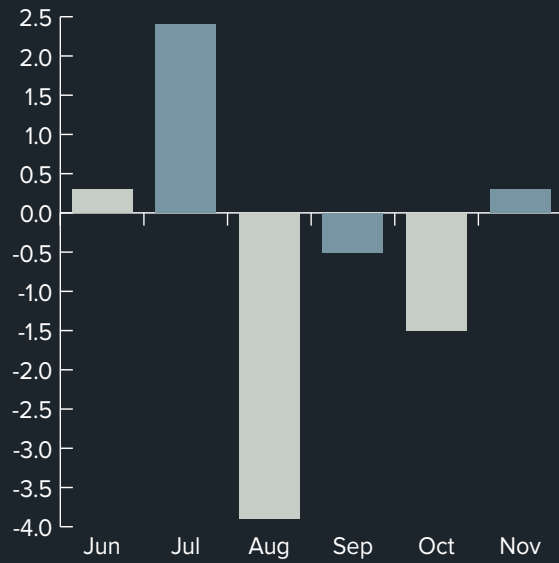


Percent Change, Monthly

## FLAT GLASS



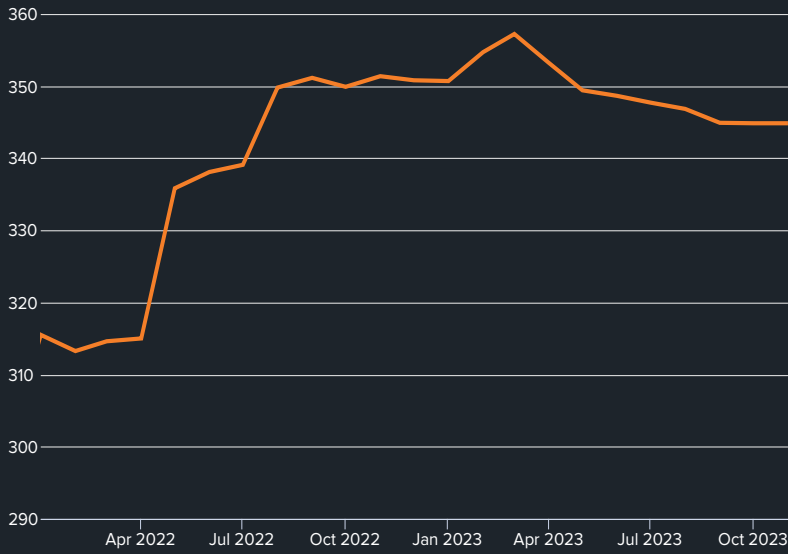
Price Index, Year-Over-Year



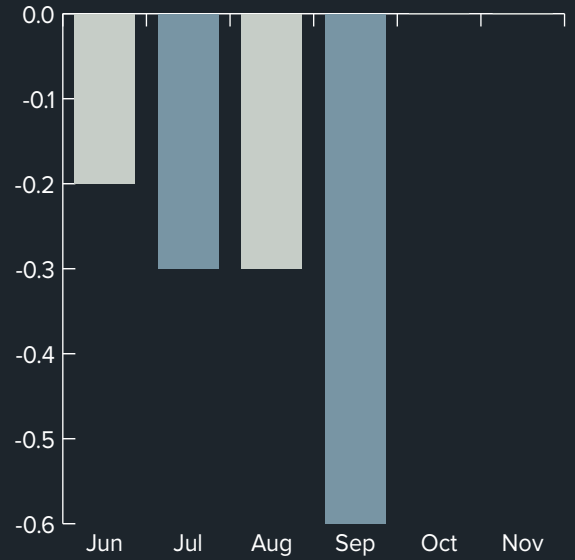
Percent Change, Monthly



### GYPSUM

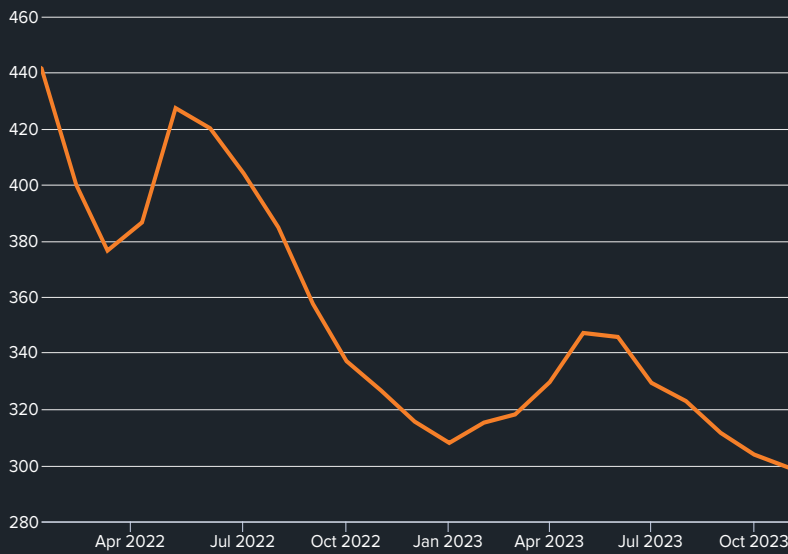


Price Index, Year-Over-Year

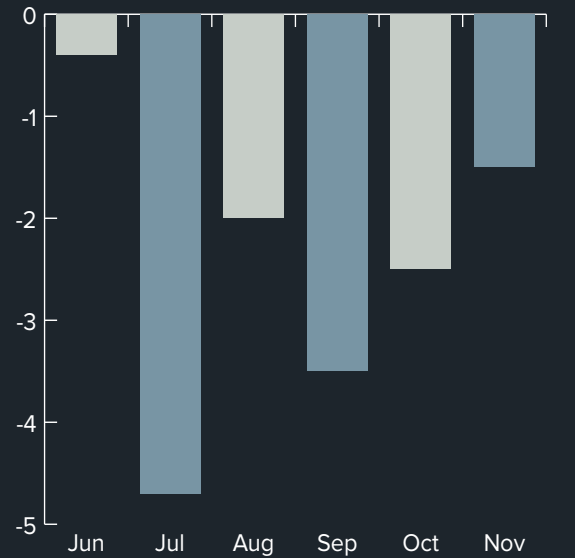


Percent Change, Monthly

### STEEL MILL PRODUCTS



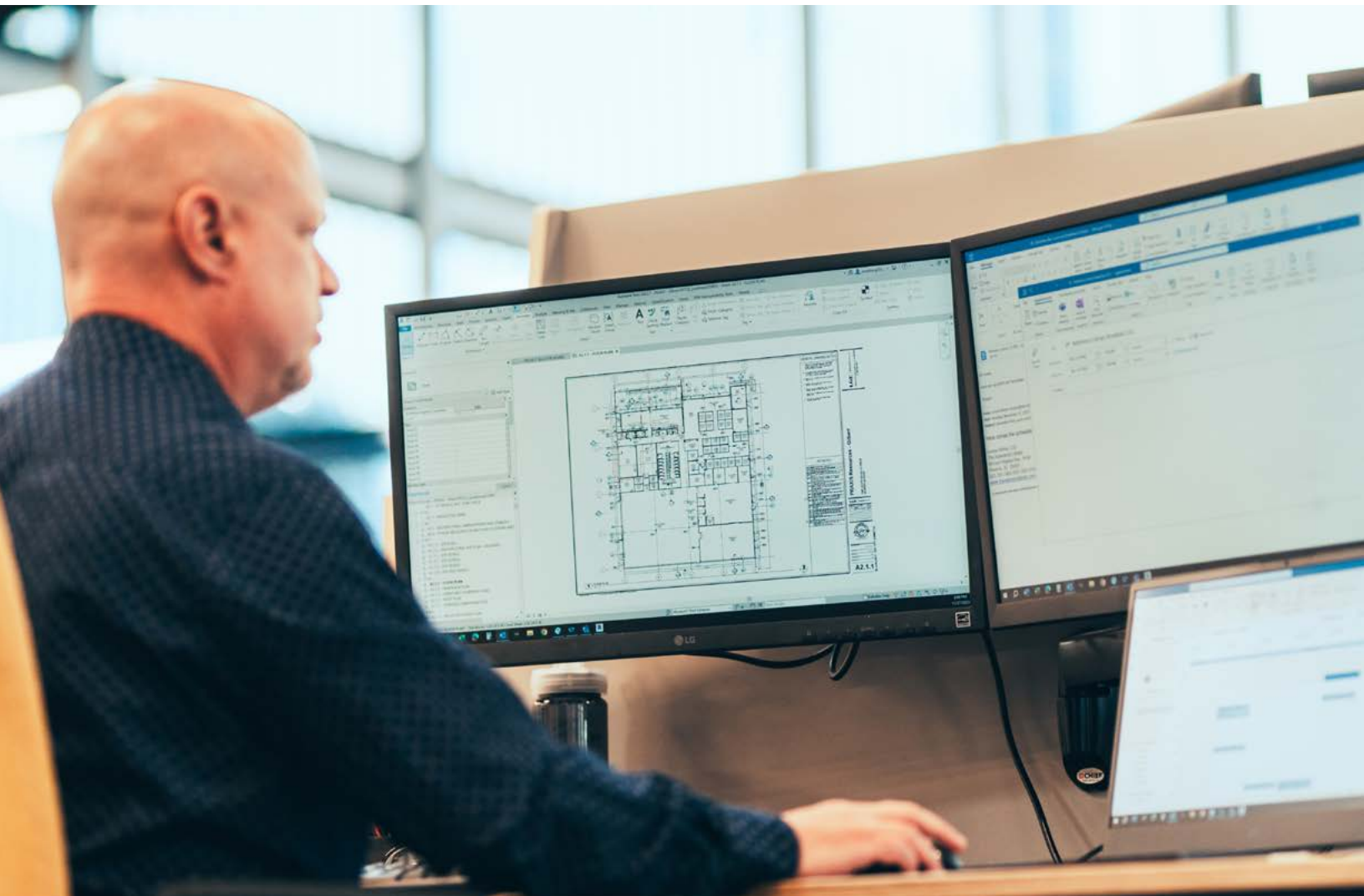
Price Index, Year-Over-Year



Percent Change, Monthly

# Design Expectations

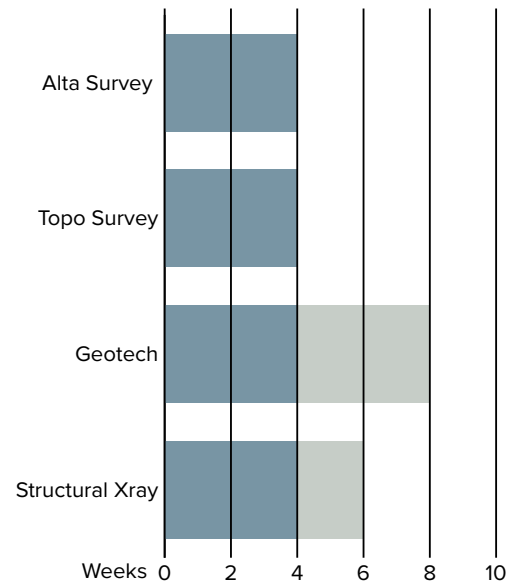
The continued effects of labor issues, supply chain problems, and material volatility are being felt by more than just the construction team. Our architectural team is tasked with conceptual design, preliminary pricing, entitlements, construction documents, and construction administration through completion. Many of these steps are seeing long lead times because of heavily booked due diligence consultants, ever-changing design expectations from municipalities, as well as increasing entitlement and permit review durations.



## Municipalities Design Expectations\*

Design aesthetics are becoming more and more influenced by the desires of the municipalities' Design Review Boards (DRB). In many of our current markets, we have seen a greater desire to have new industrial projects look more like Class A office buildings. This is being accomplished through:

- Increased plane changes across facades
- Increased glazing amount and height
- Multiple materials and textures
- Increased landscape requirements
- Taller parapets, removing the ability to use screen walls

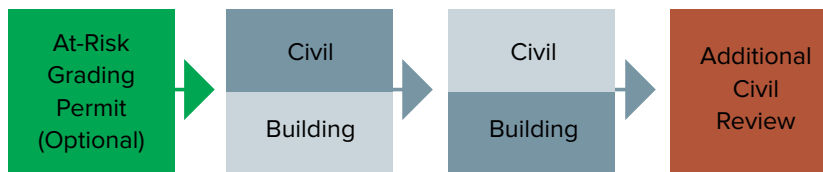


\*Does not apply to all municipalities.

## Entitlement and Permit Review Durations

Municipalities across the country are experiencing increased development demands, which is putting additional strain on their ability to meet the published review times. The expectation for timely reviews is no longer the reality.

Some municipalities are seeing a 50 percent increase in review durations and certain ones are beginning to require an additional civil review, bringing the total to three. This is compounded by the already-existing two building permits required, which can be sought simultaneously with the civil reviews.





# Solutions and Strategies

Early collaboration of design and construction is the critical difference between design build and a traditional approach. Developers, engineers, architects, and subcontractors are interacting on a daily basis, using their insight to avoid future issues. We can avoid issues that have severely impacted other firms by sourcing project materials early, ensuring project budget adherence, and coordinating permits and approvals. Our process tackles these issues up-front, while defining the project vision with our architectural teams and clients.

## DESIGN-BUILD PROCESS:

### CONCEPTUAL DESIGN

Initial concepts take shape as LGE defines the project vision.

### BUDGET & COST CONTROL

With conceptual designs and proposal approval, LGE ensures adherence to budgets.

### PLAN & PERMIT APPROVAL

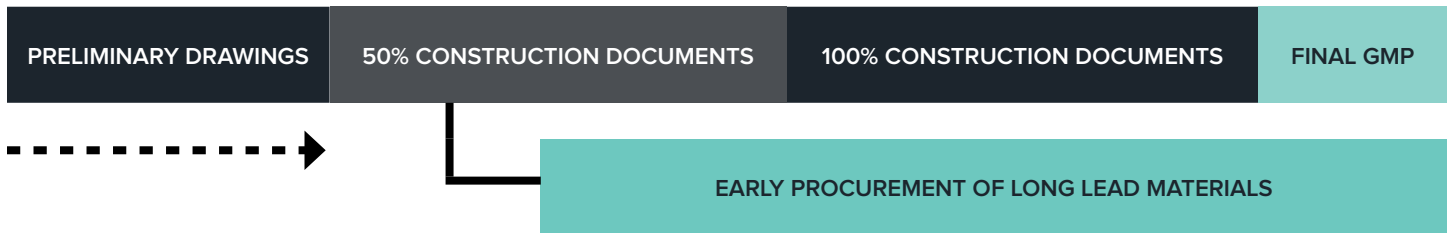
Coordinating required documents for permit approval prior to construction.

### CONSTRUCTION ADMINISTRATION

During construction, LGE manages tasks related to on-site activity.

Since 1994, our design-build process has been outperforming the traditional construction approach. Typically, our process saves clients 2-4 months and continues to deliver despite the many challenges found in the market.

### LGE DESIGN BUILD'S PROCESS:



## Final Thought

"As we begin 2024 LGE Design Build is poised to address the challenges discussed. With a focus on early collaboration, we aim to navigate issues by involving developers, engineers, architects, and subcontractors in daily interactions. Our proactive approach involves sourcing project materials early, ensuring budget adherence, and coordinating permits and approvals. By defining the project vision upfront with our architectural teams and clients, we position ourselves to successfully tackle the unique challenges in the construction and real estate landscapes of dynamic cities like Dallas and Phoenix."

– Grant Blunt, Vice President of Construction, LGE Design Build



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#### SOURCES:

- [https://mcusercontent.com/f3fd6f149a0c039fb3efbd70f/files/630c4c4a-2b06-2fdb-6d69-900e372ec187/CCORP23Q3\\_MarketOverview\\_v9.pdf](https://mcusercontent.com/f3fd6f149a0c039fb3efbd70f/files/630c4c4a-2b06-2fdb-6d69-900e372ec187/CCORP23Q3_MarketOverview_v9.pdf)
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