

# 01 2024 Morkot

Market Conditions Report





# Contents



Industry Insights





# Managed Supply Chain

Impacts, material prices, mitigation strategies



### Resource Materials

Sourcing and additional reading



# Click # to jump ahead in the document

Use Adobe Acrobat Reader for optimized experience

On the cover: UC San Diego | Hillcrest Medical Campus Redevelopment Phase 1 | San Diego, CA





#### Click to return

to the table of contents from any page in the document.

5





# In This Section

AI & ML in Construction Forecasting

AI Isn't Magic



# Go Slow Before We Can Go Fast



# Industry Insights



**Phil Bartkowski** National Preconstruction Leader

# 2024 Forecast is Strong

What will 2024 hold? Despite many economic forecasts by experts over the last few years predicting an economic dip, from our perspective, 2024 is looking very positive in the building industry.

Across markets, we continue to see a significant number of opportunities. In the advanced technology, manufacturing, and life science sectors, we see new projects popping up across the country. We are also tracking some newer and significant healthcare projects on the West Coast and expect to see a spike in projects across the Central and Southwest regions in the commercial market.

4 Market Conditions Report Q1 2024 DPR Construction

# Passing the Sniff Test





# What about AI & ML in Construction Forecasting?

Overall, a lot to look forward to in 2024, from our perspective. With so much in the news about the advancements and investments in Artificial Intelligence (AI) and Machine Learning (ML) these days, we have taken a curious, yet cautious, approach to how AI and ML can play a role in construction processes. Are these chatbots and AI models truly a reliable source to gain real decisionmaking insights? The answer is a resounding "no."

As is true with most things, be careful who you listen to and what you believe. Al, in theory, is exciting and has a huge potential to do many amazing things, but one thing we are not relying on right now is a machine to make construction industry predictions.

#### **LET'S CHAT**

Chatbots return generic responses to very complicated questions and ultimately state: "Make sure you don't rely on this information to make any decisions and reach out to a true professional when seeking advice."

Even asking basic questions about what to look out for in the construction industry for 2024, you'll get a nonspecific response that sustainability and advancements in technology are important and that labor shortages and skill gaps are a challenge. **Not wrong, but** insightful? Not really.

Good news for us humans, we are still needed! It doesn't take much to see that AI can provide us with a broad understanding of critical topics that are important for planning our projects and considering potential impacts. But it essentially points us back to the experts because real-time data and expertise is irreplaceable.

#### WAIT, WHAT'S THE DIFFERENCE?

Artificial Intelligence (AI) is a broad field that refers to the use of technologies to build machines and computers that have the ability to mimic cognitive functions associated with human intelligence, such as being able to see, understand, and respond to spoken or written language, analyze data, make recommendations, and more<sup>1</sup>. On the other hand, Machine Learning (ML) is a subset of AI that enables a machine or system to learn and improve from experience without being explicitly programmed<sup>2</sup>. In other words, AI is the broader concept of enabling a machine or system to sense, reason, act, or adapt like a human, while ML is an application of AI that allows machines to extract knowledge from data and learn from it autonomously.

1 https://cloud.google.com/learn/artificial-intelligence-vs-machine-learning 2 https://www.coursera.org/articles/machine-learning-vs-ai



## AI isn't Magic

As with just about anything—especially on the Internet we have to be cautious about how and what we use to inform ourselves. The crowd-sourced data these chatbots use for responses is so vast, even they agree that we should neither use them to make business decisions, nor rely on them to predict the future.

It's no question that the construction industry is buzzing with this topic. You can hardly open an industry news source or investigate a construction/design technology without seeing the letters "AI." The opportunity to leverage data is great, it's also a vast topic that is challenging on many levels.

**Projects that we build are often extremely** different than one another, which presents a host of challenges when it comes to leveraging data for the purposes of AI and ML. Buildings with the same end-use will be designed by different architects

and engineers, in a different part of the country and with different client specific needs. This is an industry-wide challenge we are all faced with.

A good portion of our client-base that have large portfolios of building projects on the horizon have begun to implement standardization to ensure the results they expect are more reliable and predictable. Locking down certain specifications—design-styles and engineering standards—is certainty more attainable versus treating each project as its own bespoke creation.

Without a doubt, the industry is laser-focused on this topic and the momentum is there. The promise of what's to come is very exciting with AI and ML already being leveraged in tangible ways.

Within DPR, we have several dedicated initiatives to work with our own data to make even more reliable predictions and drive more certainty into our planning efforts.

# **Go Slow Before** We Can Go Fast

What if we could harness our past experiences and data to achieve predictable outcomes?

Al and ML apps and tools have the potential to guide us toward this goal, providing assistance and direction in interpreting our historical data for more reliable and proactive decision-making. AI can accelerate our decision-making by providing suggestions that can lead to faster actions.

We talked about chatbots earlier. By this time, we all have tried ChatGPT. Generative AI has huge potential in construction in terms of how we can plan, manage and

### HOW CAN WE USE AI TODAY?

new projects.

We have built algorithms on top of our structured data for thousands of past projects and can surface relevant data for our teams on their next project. We do the heavy lifting narrowing expansive fields of information by project size, location, duration, building type, core market and other similar project factors, allowing teams to see a side-by-side comparison with the current team they've assembled. They review projections of specific roles that were deployed on past projects, a headcount per role and total hours by role on the project with High-Medium-Low information to achieve certainty in their plan.

#### We are leveraging past DPR project team data to assist and predict the preconstruction and construction staffing needs for



execute projects. Apps and chatbots powered by GPT and other Large Language Models (LLM) that are trained on construction data can be game changers in information retrieval and knowledge management for construction.

"At DPR, we are developing applications powered by Generative Al, designed to revolutionize how questions about projects, data, and documents are addressed," explains Hrishi Maha, DPR's Al and Data Leader. "Our aim is to significantly **enhance the speed** and efficiency of information retrieval and analysis. By harnessing the capabilities of Generative AI, these applications can rapidly parse through vast amounts of data and documents, delivering precise, contextually relevant answers in a fraction of the time it would take using traditional methods. This not only streamlines workflows but also empowers decision-makers with quick access to critical information, facilitating faster, more informed decision-making processes."

> As we are building AI and Generative AI powered tools and apps, one aspect we are really focusing on is governance and responsible AI. A responsible AI framework is necessary to ensure that artificial intelligence technologies are used ethically, safely, and effectively while protecting client data and peoples privacy.

> With the rapid evolution of AI, including breakthroughs in Generative AI and Large Language Models (LLMs), the role of technology in the construction industry is becoming increasingly sophisticated and impactful.

> However, it's crucial to acknowledge that our people remain at the heart of decision-making processes. While AI technologies offer valuable insights and can significantly expedite decision-making by presenting well

informed suggestions, the final judgment still firmly rests in human hands.

Currently, AI is not at a stage where it can autonomously make decisions in the complex and nuanced realm of construction. Our skilled professionals can leverage AI as a powerful tool to enhance their expertise, ensuring that every decision is backed by both advanced technology and human wisdom.

#### WHAT IS GENERATIVE AI, LLM'S AND GPT?

Generative AI, Large Language Models (LLMs), and GPT (Generative Pretrained Transformer) are interconnected concepts within the field of artificial intelligence:

**Generative AI:** This is a type of artificial intelligence focused on generating new content. It can produce a wide range of outputs, such as text, images depending on its training and application.

Large Language Models (LLMs): These are a specific type of generative AI that specializes in understanding and generating human language. GPT from Open AI, LLaMA from Meta are examples of LLMs.

**GPT (Generative Pretrained Transformer):** 

GPT is a specific series of large language models developed by OpenAI.





# Passing the Sniff Test

This is what we are really cautious about. We want data to validate our plan, to inform it, not replace it. **This industry is built on experience and that's hard to program into an algorithm**—it requires teams that know how to communicate the reality of business problems with those who understand the details of technical solutions.

This example is just one of many of what AI and ML can open up for us as a company, let alone the industry. Embracing AI-powered decision-making is a transformative step towards achieving truly data-driven decision-making in our processes.

By harnessing the power of AI in our decision-making framework, we are not just utilizing data; we are empowering it to guide us towards smarter, more effective outcomes. The industry is heading that way and so are we.

# "We want data to validate our plan, to inform it, not replace it."





<sup>8</sup> Market Conditions Report Q1 2024 DPR Construction



Impacts, material prices, mitigation strategies



# In This **Section**



# Supply Chain



Tim Jed DPR Supply Chain Leader

# Cheeseburger with Extra Cheese and a Beer!

In January, Swensons restaurant in Ohio announced the return of its original cheese after a taste-altering cheese was adopted during COVID. Labor shortages made it difficult to allocate time for the more labor-intensive process of cutting the preferred cheese from the larger blocks from which it is made<sup>1</sup>. Disgruntled "Swenatics" were no doubt thrilled to return to their original cheeseburger. And have no fear, Michel Doukeris CEO of AB InBevmaker of Budweiser-reported that its locally sourced materials will ensure that there is no danger of supply chain disruptions for its beers<sup>2</sup>.

Companies are seeing supply chain disruptions ease, or are adapting to past delays. In late December, The Federal Reserve Bank of New York noted supply chain pressures are trending down from its high of 4.33 in December of 2021, citing the Global Supply Chain Pressure Index, but warned that problems may persist<sup>3</sup>.

Contractors are seeing pressures ease on our end as well, with continued lead time issues in certain mechanical, electrical, and insulation materials. But we're also hearing continued concerns, like the report from Delta Air Lines, which cut its 2024 profit outlook because of delays of new planes, which is driving up maintenance and repair costs on older planes, up 23% in 2023 compared with 2022<sup>5</sup>, due to increased costs from the persistent supply chain challenges on parts.



- ar-AA1ncsxi 2



1 https://www.msn.com/en-us/money/companies/swensons-drive-in-bringsback-original-cheese-ketchup-and-butter-after-supply-chain-issues/

Beer market isolated from supply chain woes, CEO of Budweiser-maker AB InBev says

NY Fed says global supply chain pressures eased in December | Reuters 4 Global Supply Chain Pressure Index (GSCPI) - FEDERAL RESERVE BANK of NEW YORK

(newyorkfed.org)

5 Delta Air Lines cuts 2024 profit outlook on supply chain, economic risks (msn.com)



Supply chain pressures have been a big factor in inflation, as disruptions have been constraining availability of products, which has pushed material prices higher, fueling the inflation that struck during **the pandemic.** Conversely, the easing of supply chain pressures has improved the availability of product, which has eased price increases, although many products have not returned to pre-pandemic prices.

This is good news, and we continue to hear news reports of a "soft landing," with the Fed announcing that it will cease rate increases and may lower rates in 2024. It held that "several participants assessed that healing in supply chains and labor supply was largely complete," but added that "continued progress in reducing inflation may need to come mainly from further softening in product and labor demand, with restrictive monetary policy continuing to play a central role."

Economists explain it this way: some of the reduced inflation was as a result of significant reduction in freight demand year over year from 2022 to 2023 by 8.5%<sup>6</sup>, which has driven freight prices down. With the softening in billings in the Architectural Billings Index the second half of 2023<sup>7</sup>, rate cuts would be welcome news, and could have a positive impact on construction volume.<sup>8,9</sup>



### Where's My Stuff?

Geopolitical conflict, now in Ukraine, the Middle East, and the Red Sea, is a factor in the supply chain. A senior U.S. official reported that as of early January, there had been 25 Houthi attacks on Merchant vessels in the Red Sea since November 18. The Red Sea is a major trade artery, making up almost one-third of global container traffic and around 12% of global goods trade.<sup>11</sup> In response, shipping companies are rerouting their loads from the Suez Canal, and instead navigating around the southern tip of Africa, around the Cape of Good Hope. This is increasing shipping time by two-plus weeks, delaying deliveries, constraining shipping supply, and increasing costs.

The Panama Canal drought has reduced ship crossings by 36% and could cost \$700 Million.<sup>12</sup> It has continued to cause shipping delays from Asia to the East Coast of the U.S., so carriers are rerouting ships from the trans-Pacific route to the trans-Atlantic route via the Suez Canal. But as we just noted, ships are now being rerouted from the Suez Canal around the Cape of Good hope, further increasing transit times.<sup>13</sup>

12 The drop in Panama Canal traffic due to a severe drought could cost up to \$700 million (msn.com)



The quiet reason America fixed its supply chain crisis | Semafor 6

<sup>7</sup> ABI November 2023: Business conditions remain soft at architecture firms (aia.org)

<sup>8 4</sup>Q Cost Report: Easing Interest Rates Expected to Spur Construction in 2024 | Engineering News-Record (enr.com)

<sup>9</sup> The Fed Will Lower Interest Rates But By Less Than What Bondholders Expect (forbes.com)

<sup>10</sup> The quiet reason America fixed its supply chain crisis | Semafor

<sup>11</sup> Shipping costs rise by up to 250% due to Red Sea attacks (thenationalnews.com)

<sup>13</sup> Red Sea, Panama Canal Send Container Freight Costs Soaring – What It Means For Global Economy And Wall Street | IBTimes

Maersk plans on using rail transport to avoid the droughthit Panama Canal to improve shipping times.<sup>14</sup> What's the bottom line? In mid-January the price premium for ocean freight as compared to the same period last year is an increase of 59%.

We are hearing mixed messages on ocean freight,

with Xeneta, a shipping data company, suggesting that 2024 may be an even more difficult year for carriers in the ocean freight shipping market due to shipping contracts being renegotiated at lower rates,<sup>15</sup> versus reports from companies like Honour Lane Shipping Ltd., estimating that the Houthi attacks in the Red Sea could last from six months to a year,<sup>16</sup> versus Maersk CEO Vincent Clerc's message to the Reuters Global Markets Forum January 17 that Red Sea-related disruptions should be expected for only for a few more months.<sup>17</sup>

The silver lining is that unused excess vessel capacity could help offset these challenges. In addition, in planning for the Chinese New Year which occurs throughout February, vessel capacity typically declines due to a decrease in demand. This reduction in demand is created by ocean carriers bringing in containers early, usually starting the previous October, ahead of the manufacturing plants closing in honor of the holiday.



In trucking, national flatbed rates between January 2023 through January 2024 have decreased 11%,<sup>18</sup> and we are seeing a commitment to electric vehicles. The largest makers of engines and trucks, U.S. diesel engine maker Cummins, and the truck builders Daimler Truck and Paccar, are planning a joint venture to build a \$2 billion battery factory in Mississippi to produce batteries for commercial trucks, expected to begin production by 2027.<sup>19</sup> There are a lot of follow-on considerations for this, which have been highlighted in prior DPR Market Conditions reports, including the need to upgrade grid capacity and add charging stations. The resulting impact could be constrained supply on certain electrical products including transformers and copper, increasing price and lead times on these materials.

As of mid-January 2024, ocean freight costs have increased 59% over the same period last year.



<sup>14</sup> Maersk to bypass Panama Canal amid drought (msn.com)

<sup>15</sup> https://gcaptain.com/container-shipping-market-faces-brutal-2024-xeneta-says

<sup>16</sup> Red Sea attacks already bigger issue for supply chain than pandemic, maritime advisory warns (msn.com)

<sup>17</sup> Maersk CEO: Red Sea Disruptions Could Linger 'A Few Months, At Least' (vahoo.com)

<sup>18</sup> DAT Trendlines January 2024 – accessed at https://www.dat.com/trendlines/flatbed/national-rates

<sup>19</sup> The Multibillion-Dollar Bet That Truckers Will Ditch Diesel for Electricity (msn.com)

### What to Watch

In planning for 2024, it's important to lean in, and to watch for cues of potential issues so we can adapt, adjust, and overcome.

Everstream Analytics has projected its top five supply chain impacts due to logistics.<sup>20</sup> They are:

#### **EXTREME WEATHER**



In the 1980's the U.S. experienced a billion-dollar weather event every four months. It is now expected to be every three weeks. That's a 4.33-fold increase.



#### ESG (ENVIRONMENTAL, SOCIAL, AND GOVERNANCE) POLICY PRESSURE

There has been a 38-fold increase in environmental laws from 1972-2019, led by net-zero emissions and energy policies.



#### EXPORT CONTROLS AND SANCTIONS

Particularly between the U.S. and China.



#### **CHINA / TAIWAN UNEASE**

Continued geopolitical tensions between the two countries, which could include export restrictions and blockades if China were to attempt an invasion. This could disrupt the Taiwan Strait shipping lane, affecting about 50% of the world's container ships.



#### **COMMODITY SHORTAGES**

Including rubber, which is in many building materials, will likely be a problem this year, due to raw material and labor costs, increased regulation, and extreme weather.

Although there are no specific outcomes yet, the U.S. Transportation and Infrastructure Committee is trying to tackle the potential issues and looking for solutions across **freight sectors**. In a hearing on January 17, Rep. David Rouzer led his caucus' call for the administration to work to guarantee the safe arrival of goods at U.S. ports. He added, "And closer to home, the migrant crisis at our southern border has led to repeated closures of rail border crossings. As a result, rail operations were suspended halting the movement of critical goods between the United States and Mexico in order to process the influx of migrant crossings."<sup>21</sup>

**In steel**, we have seen some easing of pricing. Structural shapes and plate have remained flat and are expected to continue to be flat through Q1. Much of the past price fluctuations have been a result of decreased construction starts and output of constriction by mills, to maintain strong market pricing power. The steel market is very large with relatively few players. In most cases, this gives mills the ability to control pricing through reduced production outputs. With the sensitivity to global economics throughout world markets, including wars, natural disasters, and other unforeseen events, this can have major supply and pricing impacts.

**In insulation**, we have seen a continued increase in lead times with new lead times reaching 8-10 months for mineral wool and fiberglass back on allocation. This is predominantly driven by plants down for maintenance, labor strike in Canada (already resolved), and strong backlog with limited production capacity.

**In MEP**, we've seen improvements to overall lead times across most equipment, but some remain long like generators, AHUs, transformers, etc... We've also seen strong pressure to continue price escalations from manufacturers.

*Weather Disruption (msn.com)* | Transport Topics (ttnews.com)



<sup>20</sup> Supply Chain's Biggest Threat in 2024? Extreme Weather Disruption (msn.com)

<sup>21</sup> House GOP Urges Biden to Protect Supply Chain | Transport Topics (ttnews.com)

## Hold the Chips, I'll Have Pretzels Instead

TSMC's (Taiwan Semiconductor Manufacturing Co.), the world's largest chipmaker, and producer for about 90% of the world's advanced chips, outlined global expansion plans, driving its stock price higher in mid-January, noting that the supply chain should be rebalanced by the end of 2024, with the possibility for significant improvement in 2025.<sup>22</sup> The chipmaker projected a bright outlook for 2024, citing Al demand, with the company expecting revenues to grow by up to 25%, with new factories planned in Japan and Germany, and expansion in Taiwan and Arizona.<sup>23</sup>

TSMC's news is juxtaposed with news of delays of the \$12 billion plant being built in Arizona, citing a shortage of skilled workers in the U.S., and a struggle to adapt to the United States' culture and labor force. TSMC is planning a 2nd plant in Arizona, which was scheduled to start production in 2026 is now projected for 2027 or 2028, up to two years late.<sup>24</sup> In August 2022, The U.S. "CHIPS and Science Act" was put in place to help boost domestic research and manufacturing of semiconductors, but Jensen Huang, the CEO of U.S. chipmaker Nvidia, said: "We are somewhere between a decade and two decades away from supply chain independence."<sup>25</sup>

We are uncertain how these factors, and the geopolitical issues between China and Taiwan, might complicate the Taiwanese chipmaker's plans. Chinese leaders consider Taiwan a breakaway province, but Taiwan has maintained independence—as TSMC, located in Taiwan and being the key chip producer to the world, has provided Taiwan a defense (sometimes referred to as the "silicon shield"). This has been critical in keeping Taiwan sovereign and maintaining continued U.S. support.

Will increasing U.S. domestic production potentially soften U.S. support for Taiwan and weaken its position in maintaining independence? Time will tell, but it seems clear that **the semiconductor issues are not yet over.** 

### Where Can We Help?

It is imperative to understand market dynamics to better forecast opportunistic times to buy. At DPR, we do extensive research and are tracking the markets constantly to help us provide predictable project schedules. Our partnerships, collaborative approach, and our supply chain program, can help us to deliver high quality projects delivered on time to be your Builder of Choice.

ipmaking Giant 'More Likely To Beat essinsider.com) despite a fall in profit | Semafor ond Arizona fab | Ars Technica



<sup>22</sup> TSMC Stock Set For 18% Upside? Analyst Says Chipmaking Giant 'More Likely To Beat And Raise In An Upcycle' | Markets Insider (businessinsider.com)

<sup>23</sup> The world's biggest chipmaker is bullish on 2024 despite a fall in profit | Semafor

<sup>24</sup> TSMC predicts delays, less advanced chips at second Arizona fab | Ars Technica

<sup>25</sup> Chipmaker TSMC pushes global expansion as supply chain battle heats up (yahoo.com)

# Impacts & Mitigation

# Biggest Impacts since last Quarter

These impacts are based on actual communications received from our suppliers and distributors, and may be different than the Market Conditions Dashboard, as this information is based on specific products compared to the general data in the Market Conditions Dashboard.



LOGISTICS SUMMARY	CAUSE	ACTION
Domestic Trucking	Spot market rates continue to decrease as capacity exceeds demand. National Flatbed rates is currently	Continue to look at the spot market to bid the best rates for loads.
Increase of 0% to 1%	\$2.45 per mile.	
1 week lead time		
Ocean Freight / Containers	Red Sea uncertainty, Panama Canal drought, and	Continue to look at the spot market
-	inflationary pressures. However, rates are significantly	to bid the best rates for ocean
Increase of 59%	lower than last year.	freight.
as of January 16, 2024	<ul> <li>Asia-U.S. West Coast prices (FBX01 Weekly)</li> </ul>	
(a \$1,260 increase from	increased 60% to \$2,713/FEU. This rate is 94%	
Jan 19, 2023).	higher than the same time last year.	
	<ul> <li>Asia-U.S. East Coast prices (FBX03 Weekly) rose</li> </ul>	
	58% to \$3,980/FEU. This rate is 39% higher than	
	the same time last year.	

IMPACTED TRADES	CAUSE	ACTION
ACT and Related Accessories Increase 15 -30%, Further increases are anticipated in 2024	Increase in material cost, sustained labor and energy cost, strong demand and backlog.	Early planning and procurement.
Light Fixtures and Accessories Increase 8 - 10%	Rise in import cost, sustained labor cost, delays in logistics.	Early planning and procurement.





Past data reflects the movement of PPI indices, as provided by the U.S. Bureau of Labor and Statistics and is captured and updated monthly.

### MARKET **CONDITIONS** DASHBOARD

#### Scan the QR code or click to view the current market conditions dashboard

https://www.dpr.com/company/market-conditions

Future forecast data is gathered through DPR's Supplier Relationship Management Program in coordination with leading industry manufacturers and suppliers. Forecasted data is captured and modeled quarterly as an average of several surveys to multiple suppliers within the trade.



IMPACTED TRADES	CAUSE	ACTION
<b>Gypsum</b> Increase 10 - 20%	High demand, sustained high labor, and energy costs.	Plan projects accordingly and carry escalation for long duration jobs.
AHUs & Chillers Increase 4% – 8%	High demand, increased raw material costs.	Early planning and procurement based on vendor provided lead times.
Wool Insulation 8 - 10 months	Plant maintenance, labor strike, and high demand.	Early planning and procurement, and ensure scheduled materials are meeting promised dates through disciplined follow-up.
(Select) Medium Voltage Electrical Equipment Delays from published lead times an additional 15 - 20 weeks; expect further delays throughout 2024	Continued high demand, labor strike, and raw material shortages.	Early planning and procurement, consider alternate manufacturers, and ensure scheduled equipment is meeting promised dates through disciplined follow-up.
<b>Steel</b> Increase 20% - 25% on flat steel, expected easing as we approach Q2	UAW strike ending caused unused inventory levels to drop, thereby driving pricing up, combined with opportunistic increases, plus, a west coast rolling mill of flat gauge material is expected to close in 2024.	Time steel commitments with market, anticipated to be lowering by Q1 end.



Mitigation Strategies Implemented on Recent Projects DPR has been actively working to control our destiny and prepare for the future in managing our supply chain. Our aim is to ensure a reliable supply chain that keeps our projects on track, hitting critical milestones, and minimizing the effects of outside events.

#### **STRATEGIC SOURCING**

We recently secured a national agreement with a hydro and air vac excavation service provider. This agreement further strengthens our relationship with the provider to deploy a tailored process with synergies that improve our pricing and service reliability. Our teams will benefit from increased access to this safer method when working with existing underground utilities.

**WHY THIS MATTERS:** Keeping projects on schedule and on budget are two of our core focus areas. Partnerships like these help us maintain great execution of our projects.



#### **SOURCING DATA**

Our steel experts are evaluating the steel markets on a real-time basis. Our project teams leverage this knowledge as they procure steel for projects, helping them understand price swings between the bid and current dates.

**WHY THIS MATTERS:** Without this level of expertise and knowledge, we run the risk of getting erroneous increase requests which escalates project costs. This data helps ensure we are paying the right price based on the market and timing.



#### **EXPANDED LOGISTICS PROGRAM**

By supporting project procurement with warehousing and storage options, DPR is able to offer owners to bring long lead time equipment in early—and store near the site—to reduce supply chain disruptions and reduce wait times on critical build components.

**WHY THIS MATTERS:** Supply chain disruptions continue to create long lead times on critical equipment which creates building delays, affecting owner turnover and occupancy.





#### **INNOVATING FOR QUALITY & EFFICIENCY**

DPR's supply chain material quality program is evolving into Material Supplier Quality Management and Purchased Material Quality Management. The Material Supplier Quality Management purpose is to ensure that the material suppliers have the capability to consistently meet expectations and requirements, while the Purchased Material Quality Management is to ensure that purchased material is 100% compliant to intended applicable requirements.

**WHY THIS MATTERS:** By developing this discipline based on a risk-based and datadriven approach, DPR is enabling better sourcing and fulfillment options, limiting risk through actionable mitigation plans, and fostering long term partnerships with the material suppliers.



#### **LEVERAGING SUPPLIER RELATIONSHIPS**

A project in the Southeast needed 18MW of generators to meet their aggressive schedule. Our supply chain experts worked with the project team and client to successfully locate generators meeting the scheduled dates through our strategic suppliers, who reallocated existing orders over to this earlier completion date project.

**WHY THIS MATTERS:** We partner with strategic suppliers—part of our supplier relationship network—enabling DPR to develop unique and tailored solutions to address critical project challenges.



#### **COLLABORATIVE PROCUREMENT**

DPR continues to grow our group of procurement subject matter experts for owned equipment product lines through <u>OES Equipment</u>. The OES Formwork Team has positioned itself strategically, leveraging both owned assets and re-rental assets to support projects in an agile manner.

**WHY THIS MATTERS:** With owned equipment located in the Central and Southwest regions, the formwork team can forecast upcoming demand for our owned equipment, ensuring that the material arrives on site at the time needed with controlled project costs for our customers, ultimately leading to predictable outcomes for our project teams and owners.





# **Resource Materials**

Information in this report is compiled from third-party reporting that is available to the public. It is not owned by DPR Construction.

United States Census Bureau <a href="https://www.census.gov/">https://www.census.gov/</a>

United States Department of Labor https://www.dol.gov/

United States Energy Information Administration <a href="https://www.eia.gov/">https://www.eia.gov/</a>

United States Chamber of Commerce <a href="https://www.uschamber.com/">https://www.uschamber.com/</a>

United States Bureau of Labor Statistics https://www.bls.gov/ Engineering News Record https://www.enr.com/

American Institute of Architects https://www.aia.org/

Cumming Corporation
https://cumming-group.com/



Ð