

2021: The Year of “Once in a Lifetime Industry Challenges”

By Andy Speck, Preconstruction Director
Bobbitt

It's hard to imagine anyone not being personally affected in some way by the unprecedented economic issues of 2021. For example, I ordered furniture for my home four months ago and still don't know when it will be delivered. Inflation hit a 40-year high of 7.5 % in January, ships have been anchored offshore waiting to unload their cargo and restaurants can't hire enough staff to operate their normal hours. Those same three issues: volatile material prices, material/product lead times and labor shortages, have produced “once in a lifetime industry challenges” for general contractors.

Material Pricing

The Producer Price Index (PPI) for construction goods and services, published by the Bureau of Labor Statistics (BLS), increased 19.6 % between December 2020 and December 2021. The PPI does not include the contractor input costs such as labor, fuel and equipment which also contributes to rising construction prices.

Table 1. Year over Year PPI Indices

Construction Materials	2020 PPI	2021 PPI
Steel Mill Products	5.2 %	127 %
Plastic Construction Products	5.4 %	34 %
Aluminum Mill Shapes	-1.7 %	30 %
Copper & Brass Shapes	24 %	23 %
Gypsum Products	3.6 %	21 %
Lumber and Plywood	37 %	18 %
Input Costs	2020 PPI	2021 PPI
Diesel Fuel	-2.8 %	55 %
Truck Transport Freight	2.2 %	18 %
Construction Machinery & Equipment	1.1 %	10 %

Source: BSL, PPI Indexes

Labor

The construction industry lost 1.1 million employees between Feb 2020 and April 2020. Employment rebounded slightly in May 2020, however it remained stagnant for the next year forcing thousands of employees to leave the industry or the workforce entirely. Construction employment rebounded in the final few months of 2021 adding 220,000 employees in December 2021 alone. However, the rate of job openings accelerated adding 273,000 openings on top of the 220,000 new hires. The implication is that wages will rise as construction companies try to attract talent to fill their open positions.

Lead Times

The calculation that determines lead times is often unique to the product or material. For example, most of the US companies that produce resin for plastic products, PVC pipe for example, had their production facilities impacted by the deep freeze in Texas in February 2021 and were later shut down by power outages from Hurricane Ida the following summer. Of course, demand for PVC pipe exploded in Texas due to freeze damage from the extreme February cold snap. What a vicious cycle of events!

Table 2. Average Material Lead Times *Bobbitt Construction, Inc.

PolyISO Insulation	11-12 months
TPO Roofing	11-12 months
Bar Joists	4-5 Months
Mechanical Units	3-6 Months
Wood Trusses	2-3 Months
Architectural Storefront	2-4 Months (from time of opening measurement)

Outlook for 2022

“There is too much available money pursuing too few resources” is a great way to sum up the current US economy. Unless there is a drastic economic or geopolitical shift, conditions in 2022 are not expected to change. Lead times are expected to be more stable than in 2021 and may even soften a bit, but will remain abnormally extended. Prices are expected to continue to rise in 2022 as demand continues to remain high and construction positions continue to remain unfulfilled.

What Can Owners Do?

First and foremost, owners need to understand the widespread challenges of the current environment in terms of price and lead times. It's important to adjust expectations to our current climate before embarking on a project. Second, choosing a project delivery method that promotes teamwork and collaboration between their design and construction partners such as Design-Build or CM-at-Risk (CMAR) will allow owners to leverage the expertise of the entire project delivery team in all phases of the project. Third, owners should choose well qualified construction partners like Bobbitt who has expertise in the referenced delivery methods, but works for the client's best interest in a totally transparent manner.

What is Bobbitt Doing?

Bobbitt provides the full spectrum of design and construction expertise to find the solutions that allow successful project delivery for our clients in these challenging times. Full design and construction schedules are developed early and leveraged against known lead times and contingency allowances are used strategically on those materials most likely to see price fluctuation. Doing this strategically protects our clients from large global contingencies that only add to overall cost, and it may also give clients the opportunity to share in cost savings.

Much of what Bobbitt employees do daily differentiates us from the competition and puts us in a good position to address the currently ongoing market conditions. We take great pride in the frequency and quality of our communication with our clients. A result of our long history of building in the southeast we have great relationships with subcontractors and manufacturers which we leverage to our client's benefit. We collaborate with our project delivery partners and work hard to find creative solutions for our clients. After all, it is the close relationships that Bobbitt employees develop with our clients that drive us to successfully deliver design and construction services on their behalf.