

Sample Report



Contractor's Cost Conundrum

(Association Location)

Construction Labor Research Council

Contractors in the construction industry are faced with a variety of challenging economic conditions, competing interests and conundrums. This report by the Construction Labor Research Council (CLRC) outlines two key economic challenges currently impacting contractors in (association location):

- I. The High Price and Rapid Cost Increase of Commodities Used in Construction (Section I)
- II. Variability and Unpredictability (Section II)

These two factors will be examined using established data on 1) the price of commodities commonly purchased by contractors in the construction industry, 2) spending on construction in (association location) and 3) construction employment in (association location).

A number of respected data sets and sources are used in this report. In order to make the information as relevant as possible, data cuts for the location and industry specific to (association name) are used whenever available. Below is a brief explanation of each data source.

Construction Commodities

This index is one of many provided by the Producer Price Index (PPI) program at the Bureau of Labor Statistics (BLS) in the Department of Labor. The PPI measures the average change over time in the selling prices received by domestic producers. Construction commodities is a special PPI index that aggregates various commodities used in construction. It provides a reliable and broad measure of the prices paid for commodities used in construction work.

Construction Spending

This data comes from the Census Bureau's Value of Construction Put in Place Survey (VIP) and provides monthly estimates of the total dollar value of construction work done in the U.S. This data provides a trusted overview of spending on construction projects, with data cuts for public and private work, at the national and state level and by industry.

Construction Employment

This data comes from The Quarterly Census of Employment and Wages (QCEW) program at BLS. The QCEW publishes a quarterly count of employment and wages reported by employers covering more than 95 percent of U.S. jobs, available at the county, MSA, state and national levels by industry.

Consumer Price Index (CPI)

The CPI is perhaps the best known and most respected economic indicator in the United States. It is published monthly by BLS. The CPI value shows the change in prices for goods and services (i.e., inflation) and provides a useful index of the cost of living. The specific CPI for the geographic region including (association location) is included in the report as a useful benchmark comparison, a familiar point of reference.

Copyright © 2022 Construction Labor Research Council

I. The High Price and Rapid Cost Increase of Commodities Used in Construction

The price of commodities (materials) constitutes a significant factor in overall construction costs, including competitive bids for new work. In **Exhibit 1.1**, the growth in two indexes for 2020, 2021 and 2022 are compared. The two indexes are:

- the CPI for (association location), which is an important benchmark tracking the cost of living for consumers
- the price of commodities used in construction

The exhibit shows the significant increase in the cost of living in (association location), and the even more dramatic increase in the price of commodities used in construction.

Specifically, in 2020 the increases in the cost of living in (association location) and in the price of construction commodities were similar—the CPI grew by 1.2% and construction commodities grew by 1.5%. However, in 2021 the average increase in prices paid for construction commodities jumped to 26.8% while the CPI increased to 4.7%. In 2022 the CPI continued to rise to a remarkably high 8.6%, yet this was far below the construction commodities index of 26.7%. Thus, although the CPI has been at its highest level since the early 1980's, the price for commodities purchased by contractors has increased significantly more, putting strong pressure on contractors' ability to be competitive, particularly with nonunion contractors.

Exhibit 1.1

The High Price and Rapid Cost Increase of Commodities Used in Construction Compared to Benchmark Data

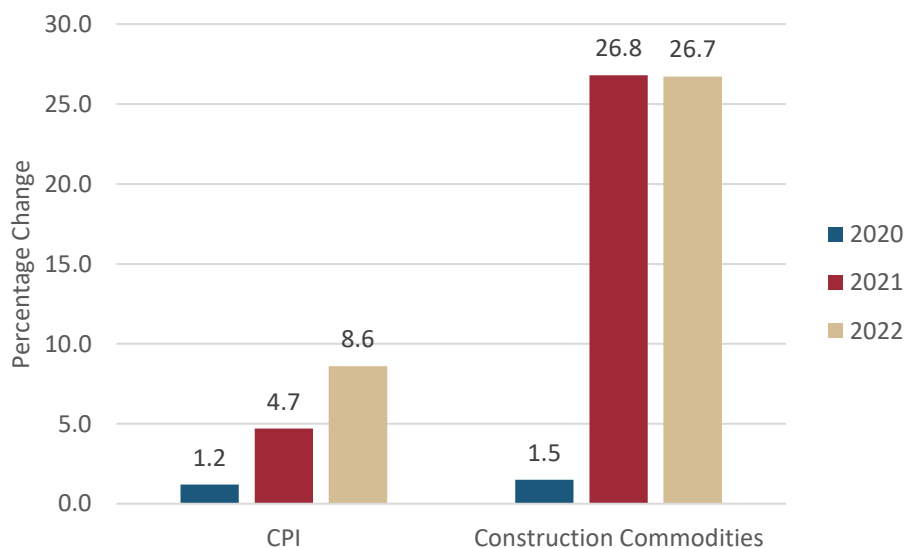


Exhibit 1.2 illustrates the modeled growth of \$100 from 2015 – 2022 based on the two indices in **Exhibit 1.1**. The exhibit conveys two findings.

First, the \$100 value was very stable and consistent from 2015 – 2020, with modest and similar growth for both indexes. The prices paid by consumers and contractors were growing at fairly similar rates. Second, the \$100 metric increased noticeably after 2020, but much more so for the construction commodities factor.

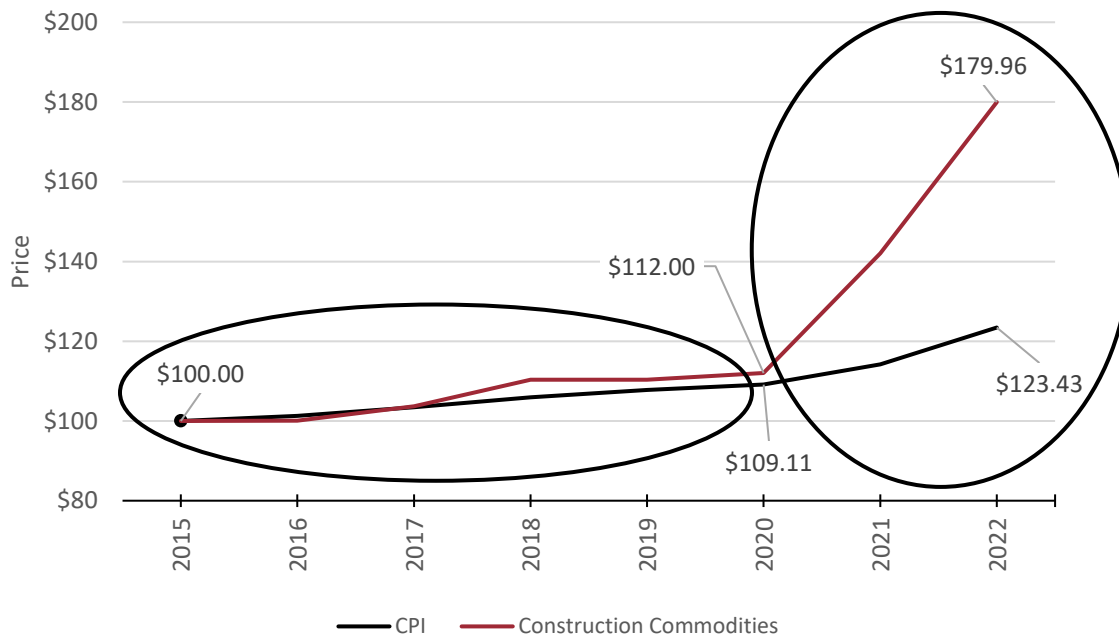
In 2020 the \$100 amount used in this analysis resulted in a price of \$109.11 using the CPI and \$112.00 using the construction commodities index. By 2022, two years later, there was a large divergence in the results. Consumers were paying \$123.43 for goods and services that cost \$100 in 2015, a noticeable increase; however, contractors were paying much more than that at \$179.96 for construction materials that cost \$100 in 2015.

Escalation of \$100 in 2015 based on two indices:

| Index | Price in 2020 | Price in 2022 |
|--------------------------|---------------|---------------|
| CPI | \$109.11 | \$123.43 |
| Construction Commodities | \$112.00 | \$179.96 |

Exhibit 1.2

Growth of \$100 Based on Indexes for Cost of Living and Construction Commodities



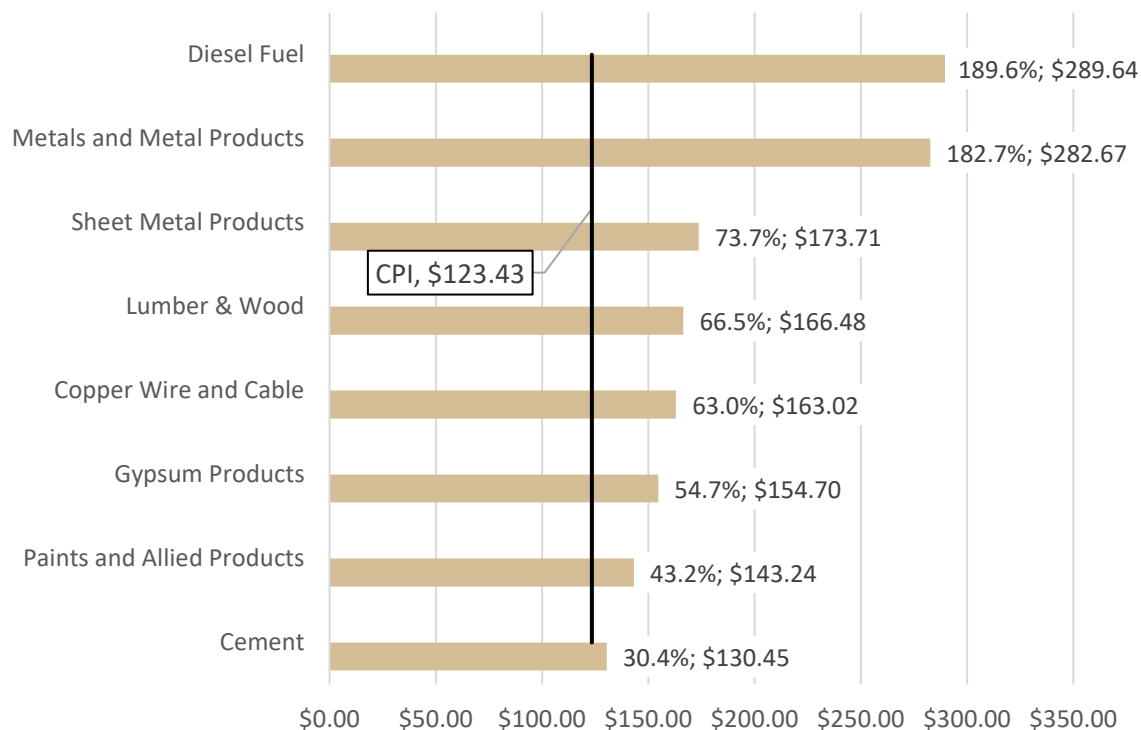
The cost growth for some of the most common specific commodities purchased by contractors is charted in **Exhibit 1.3**. The exhibit shows in descending order the price in 2022 of a \$100 unit of each commodity in 2015. The CPI is shown as a benchmark comparator.

The smallest increase was for cement, which grew to \$130.45 (30.4%) in 2022. The largest increase was for diesel fuel, which increased to \$289.64 (189.6%). In comparison, the cost of living escalated \$100 in 2015 to \$123.43 (23.4%) in 2022.

Consistent with **Exhibits 1.1 and 1.2**, this exhibit illustrates the exceptionally large price increases found with a wide variety of commodities that contractors need. And while the CPI has increased significantly, it pales in comparison to the growth of the price of materials contractors need to purchase to complete their projects.

Exhibit 1.3

Increase in the Price of \$100 of Commodities Purchased by Contractors 2015 – 2022



Note: **Exhibit 2.1** on the following page may look cluttered—it contains many erratic lines which can be hard to follow in detail. However, the purpose of the exhibit is to give a broad, visual overview of the extreme fluctuation in the price of commodities used in construction, not an exacting look at each data point. In other words, the reader is not expected to be able to track the detailed data shown by each line for each commodity, but rather to see the overall variability in construction commodity price trends.

II. Variability and Unpredictability

Another less obvious yet major challenge for contractors is the variability of business inputs that are critical to their successful operations. These inputs include, but are not limited to, at least three items:

- the price of commodities used in construction (**Exhibit 2.1**)
- spending on construction work (**Exhibit 2.2**)
- labor availability (**Exhibit 2.3**)

Variability really means unpredictability. And unpredictability is an unfortunate circumstance which makes planning difficult for contractors. Since contractors cannot predict what the future work environment looks like, they may need to plan with extra caution in order to be prepared for unfavorable large swings in commodity costs, erratic spending on construction and/or labor force shortages (or surpluses).

Exhibit 2.1 shows vividly the large fluctuation in commodity prices, something critically important to contractors. The average annual fluctuation from 2000 – 2022 for the eight commodities shown ranges from a low of 3.2% for paints and allied products to a high of 23.7% for diesel fuel. As an example of typical fluctuation, lumber and wood declined by 3.0% in 2019 and increased by 24.0% just two years later in 2021. Comparatively, the cost of living (CPI) changed by just 1.1% each year, on average. The CPI variability in the exhibit, even with recent large increases, looks small compared to the variability of the prices of construction commodities.

Exhibit 2.1
Extreme Variability in the Price of Commodities Commonly Used in Construction

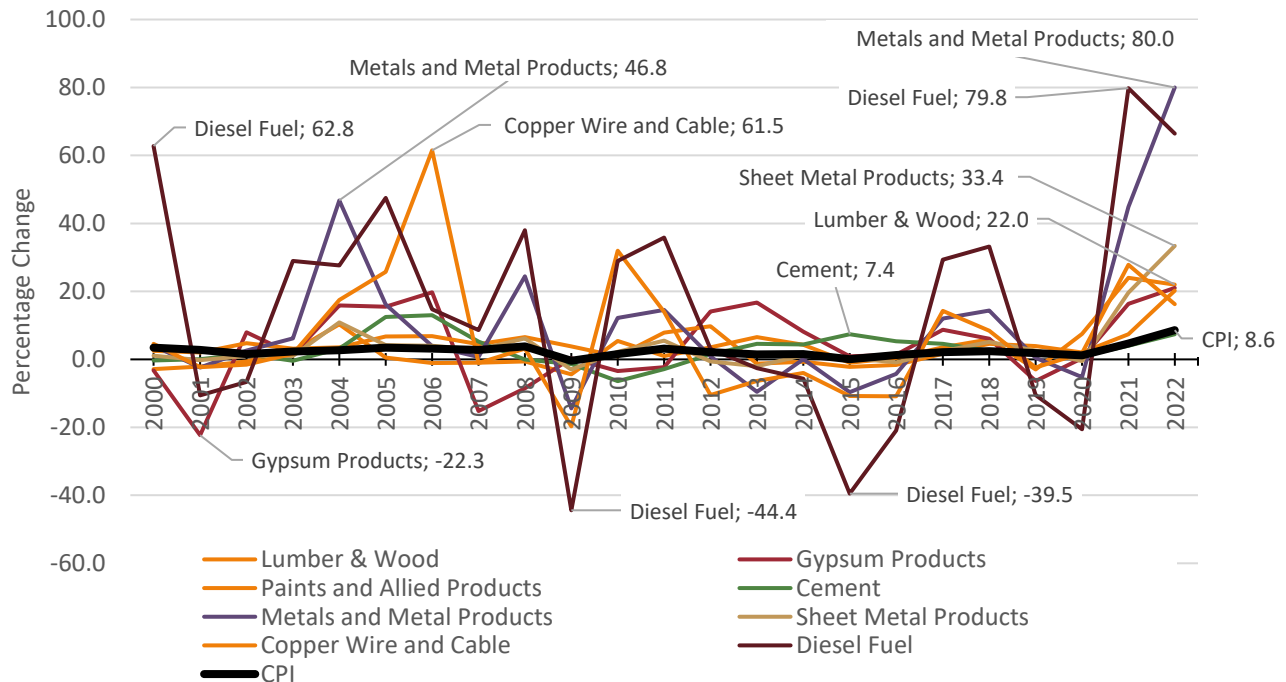


Exhibit 2.2 contains data for construction spending in (association location). There was a 66.4% swing in spending from 2009 to 2011—from a low of -33.7% in 2009 to a high of 32.7% in 2011. It should be noted that this exceptionally large swing expands the scale (y-axis) so much so that other large swings are (visually) minimized in comparison.

For example, more recently construction spending went from 14.8% in 2016 to 1.7% in 2017, yet this large fluctuation of 13.1% looks modest in the exhibit because other swings are extremely large. Similarly, the fluctuation of the CPI from 1.2% in 2020 to 8.6% in 2022 appears somewhat minor compared to the large variability in the construction spending data. Overall, there was an average variability of 10.9% each year for spending on construction compared to just 1.1% per year for the CPI.

The point regarding the data on construction spending is that the capital investment in construction projects can vary widely from year to year, much more than the cost of living. And the wide swings are often unpredictable, making the overall business environment for contractors in (association location) quite challenging.

Exhibit 2.2

Wide Variability in Construction Spending in (association location)

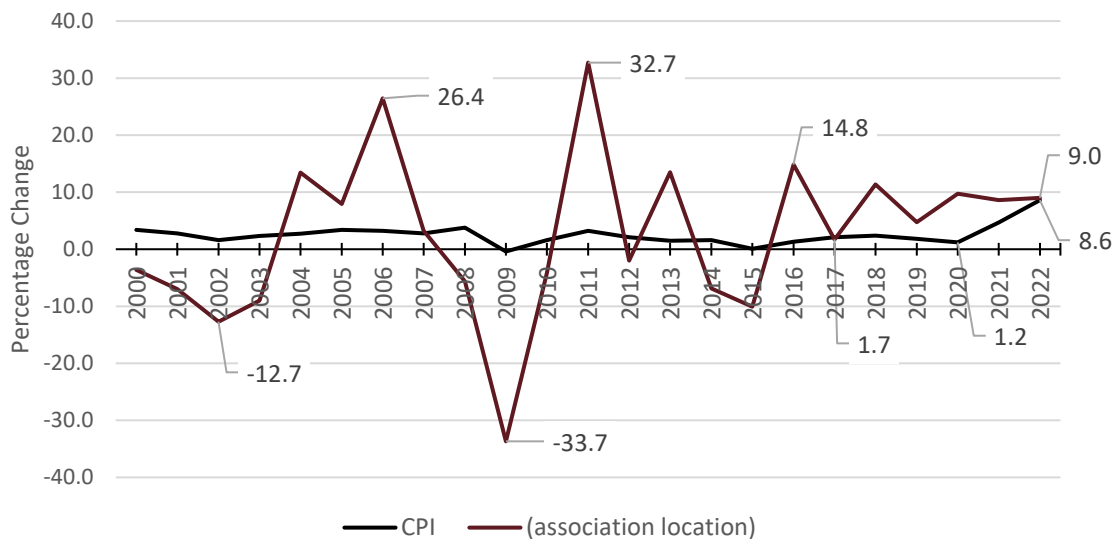
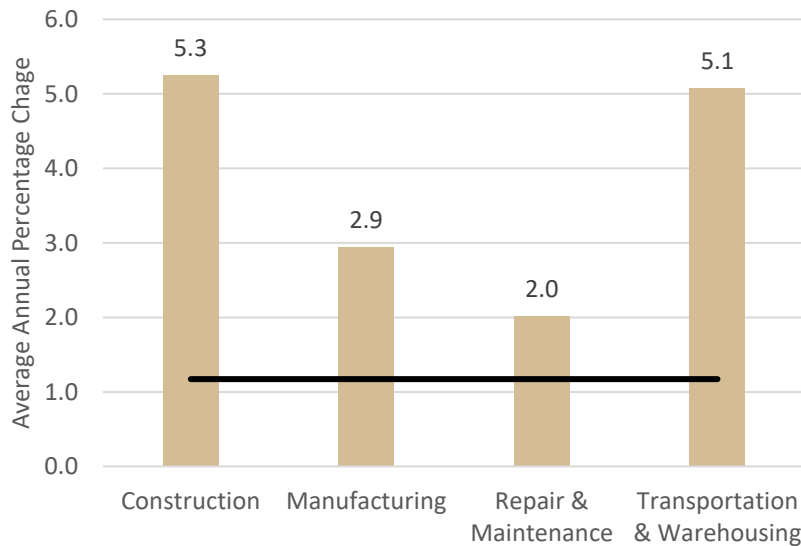


Exhibit 2.3 uses employment data in construction to further illustrate the variability of important business factors for contractors. The exhibit displays average change in construction employment in (association location) from 2006 – 2021 along with three relevant other industries—manufacturing, repair & maintenance and transportation & warehousing. The CPI is included as a point of reference, showing its lower variability.

The bars convey the greater variability in the construction employment than in the other industries. That is, there was an average change of 5.3% each year in employment in the construction industry. Transportation & warehousing was close at 5.1% while manufacturing and repair & maintenance were much less at 2.9% and 2.0%, respectively.

Exhibit 2.3

Variability in Employment in Construction in (association location)



Discussion

This report has outlined two issues or conundrums of primary concern facing contractors in the construction industry in (association location):

- I. The High Price and Rapid Cost Increase of Commodities Used in Construction (Section I)
- II. Variability and Unpredictability (Section II)

Throughout the report, the CPI for the geographic region encompassing (association location) has been included as a salient benchmark for comparison. The cost of living and inflation (i.e., the CPI) are universal topics, and an important consideration for both consumers and organizations as they manage their lives and businesses, respectively.

This report juxtaposes this important benchmark, which reflects the perspective of employees, with other key factors that represent data important to businesses in an effort to aid management and labor in decision making.

I. The High Price and Rapid Cost Increase of Commodities Used in Construction

While this report has focused on the price and price change of commodities used in construction, contractors must also manage other costs as well, such as labor, insurance, equipment and tools, training, travel, rent and taxes, to name a few. The unprecedented large rise in the price of construction commodities puts significant pressure on contractors to effectively manage all costs in order to remain competitive in a very challenging construction environment.

II. Variability and Unpredictability

Variability means unpredictability. The ability to plan is important for all businesses, including contractors, but planning becomes quite challenging when the business environment is unpredictable. In other words, the extreme variability in construction commodity prices, construction spending and construction employment has made planning an even more important, yet harder to accomplish, task for contractors. When the environment in which contractors find themselves is this variable or unpredictable, they must exercise especially prudent decision making.

This report has been prepared from information collected and maintained by CLRC. Reasonable efforts have been made to ensure the accuracy of the data, summaries, and analyses. However, accuracy cannot be guaranteed. CLRC disclaims any liability from damages of any kind which may result from the use of this report. Users of this report should obtain legal advice if planning to use it in collective bargaining situations.

Construction Labor Research Council
1250 Connecticut Avenue NW, Suite 700
Washington, DC 20036
202-347-8440
www.clrcconsulting.org

