

Sample Report



Contractor's Cost Conundrum

[Association Name]

[Geographic Location]

Construction Labor Research Council

Contractors in the construction industry are faced with a variety of challenging economic conditions and conundrums. This report by the Construction Labor Research Council (CLRC) outlines two key conundrums impacting contractors in the **[craft name]** industry in **[geographic location]**.

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

These two factors will be examined using established data on:

1. The price of commodities commonly purchased by **[craft name]** contractors in the construction industry
2. Spending on construction in **[geographic location]**
3. Construction employment in **[geographic location]**
4. The cost of living (CPI) for **[geographic location]**

Several respected data sets and sources are used in this report. To make the information as relevant as possible, data cuts for the geographic areas that include **[geographic location]**, and that include the **[craft name]**, are used whenever available. Below is a brief explanation of each data source.

Commodity Prices

The Producer Price Index (PPI) program at the Bureau of Labor Statistics (BLS) in the Department of Labor measures the average change over time in the selling prices received by domestic producers. It provides a reliable and broad measure of the prices paid for commodities (materials), including commodities purchased by contractors in the construction industry employing **[craft name]**.

Construction Spending

This data comes from the Census Bureau's Value of Construction Put in Place Survey and provides estimates of the total dollar value of construction work. 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.

Copyright © 2024 Construction Labor Research Council

Consumer Price Index (CPI)

The CPI is perhaps the best known and most respected economic indicator in the U.S. Published monthly by BLS, it shows the change in prices for goods and services (i.e., inflation) and provides a useful index of the cost of living. The CPI offers many data cuts and is included in this report as a key benchmark comparison, a familiar point of reference.

SAMPLE

I. The High Cost and Large Price Increases of Commodities Used in Construction

The price of commodities constitutes a significant factor in overall costs for contractors, including competitive bids for new work. In **Exhibit 1.1** (next page), the growth of three relevant indexes for 2020, 2021, 2022, and 2023 are compared. The indexes are:

- The CPI for the [**geographic location**] part of the U.S., which is an important benchmark for tracking the cost of living for consumers (CPI-West).
- The price of commodities used in construction (Construction Commodities).
- The price of commodities associated with new nonresidential building construction in the West (NewNonResBldg-West).

The exhibit shows the significant increase in the cost of living in 2021 and 2022 and the even more dramatic increases in the price of commodities purchased by contractors in 2021 and 2022 and new nonresidential building construction in 2021, 2022 and 2023. In 2023 all three indexes subsided significantly (Construction Commodities actually went negative), although new nonresidential building construction remained fairly high. Yet even with the reduction in the rate of growth, the legacy of the large increases remains. Smaller increases do not mean a drop in prices, just a slowing of the upward trend.

Specifically, in 2020 the increases in the three indexes were similar—the CPI-West was 1.7%, Construction Commodities was 1.5% and NewNonResBldg-West was 2.4%. In 2021, the average increase in prices paid for Construction Commodities jumped to 26.8%. NewNonResBldg-West grew more modestly, to 5.9%, and the CPI-West increased to 4.5%. In 2022 the CPI-West increased noticeably to 8.0%. However, this continued to be eclipsed by Construction Commodities, which was still high at 12.6%. Moreover, the NewNonResBldg-West index escalated quite significantly, to 20.3% in 2022.

The story changed dramatically in 2023, with the Construction Commodities index falling into negative territory (-2.8%) and the other two approaching their levels in 2021. Thus, all three indexes peaked in 2021 or 2022, and then landed back at lower levels in 2023.

Exhibit 1.1

The Large Price Increases of Commodities Used in Construction Compared to Benchmark Data

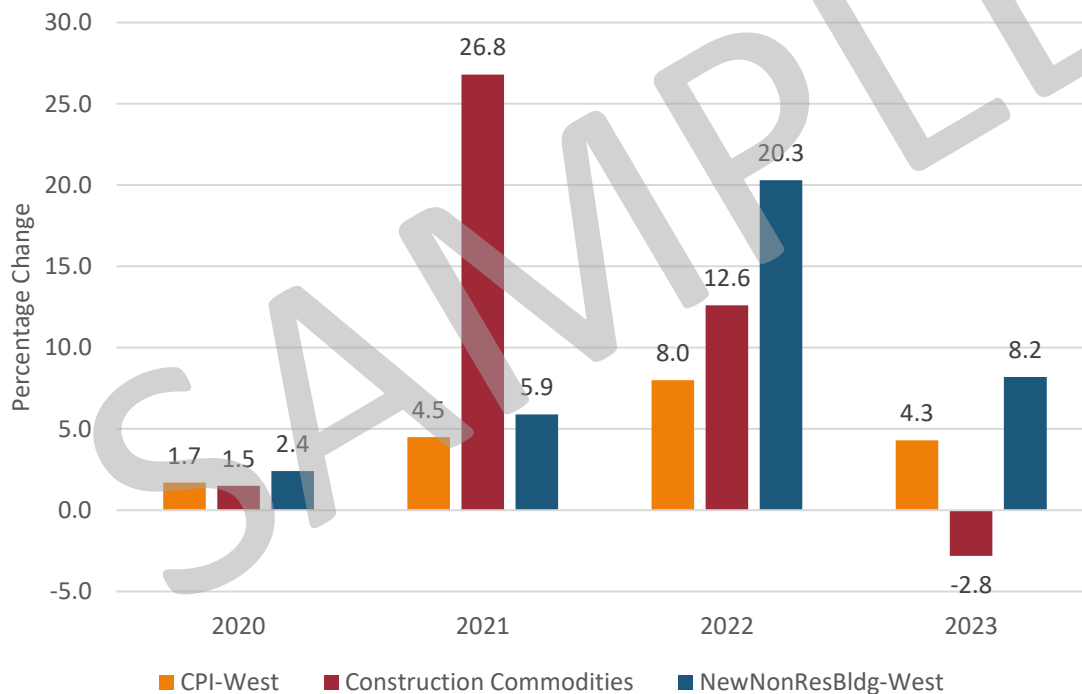


Exhibit 1.2 illustrates the modeled growth of \$100 from 2015 – 2023 based on the three indices in **Exhibit 1.1**. The exhibit conveys two findings.

First, the \$100 value was stable and consistent from 2015 – 2020, with modest and similar growth for all three indexes. The prices paid by consumers and contractors grew at fairly similar rates. Second, the \$100 metric increased noticeably after 2020, but much more so for the construction related commodities. **Moreover, even though cost increases subsided in 2023, a lasting effect of the huge increases in 2021 and 2022 remains. That is, a return to more normal increases does not erase the permanent cost jumps in 2021 and 2022.**

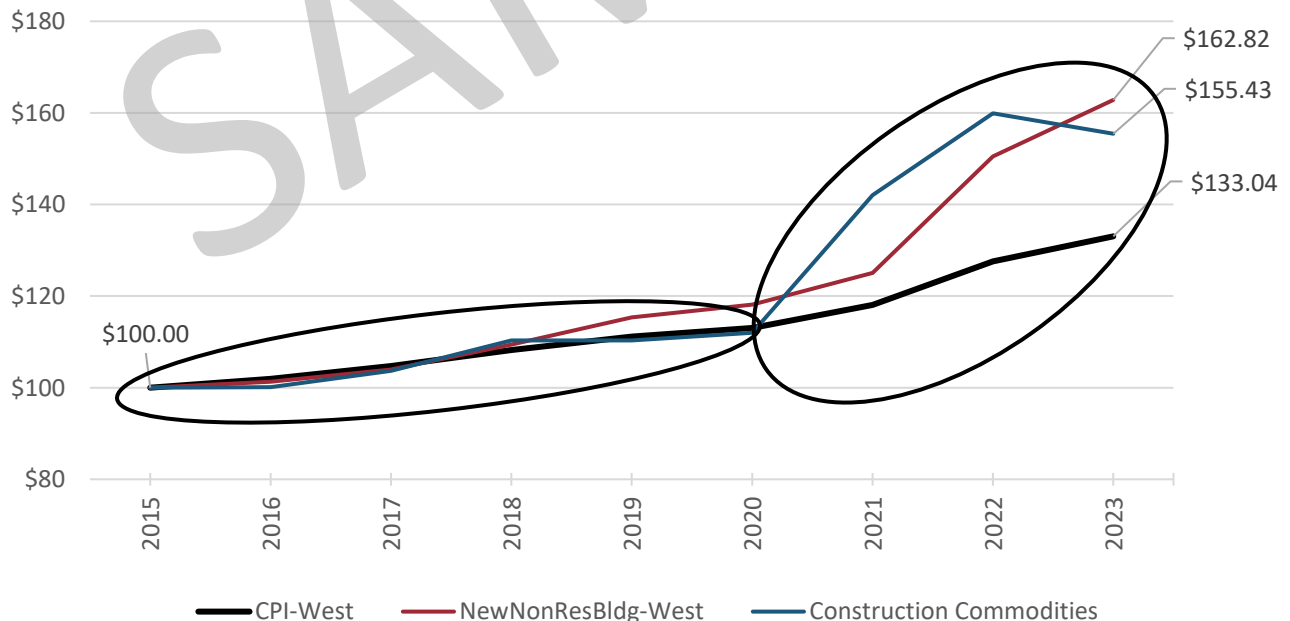
To illustrate, in 2020 the \$100 amount used in this analysis resulted in a price of \$113.02 using the CPI-West, \$112.00 using Construction Commodities and \$118.12 using NewNonResBldg-West. By 2023, even with the significant decline in the indexes, there was a large divergence in the results. Consumers were paying \$133.04 for goods and services that cost \$100 in 2015, a noticeable increase. **However, the cost of materials for contractors are still much higher in 2023 than the cost of living for consumers.**

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

Index	Price in 2020	Price in 2023
CPI-West	\$113.02	\$133.04
Construction Commodities	\$112.00	\$155.43
NewNonResBldg-West	\$118.12	\$162.82

Exhibit 1.2

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



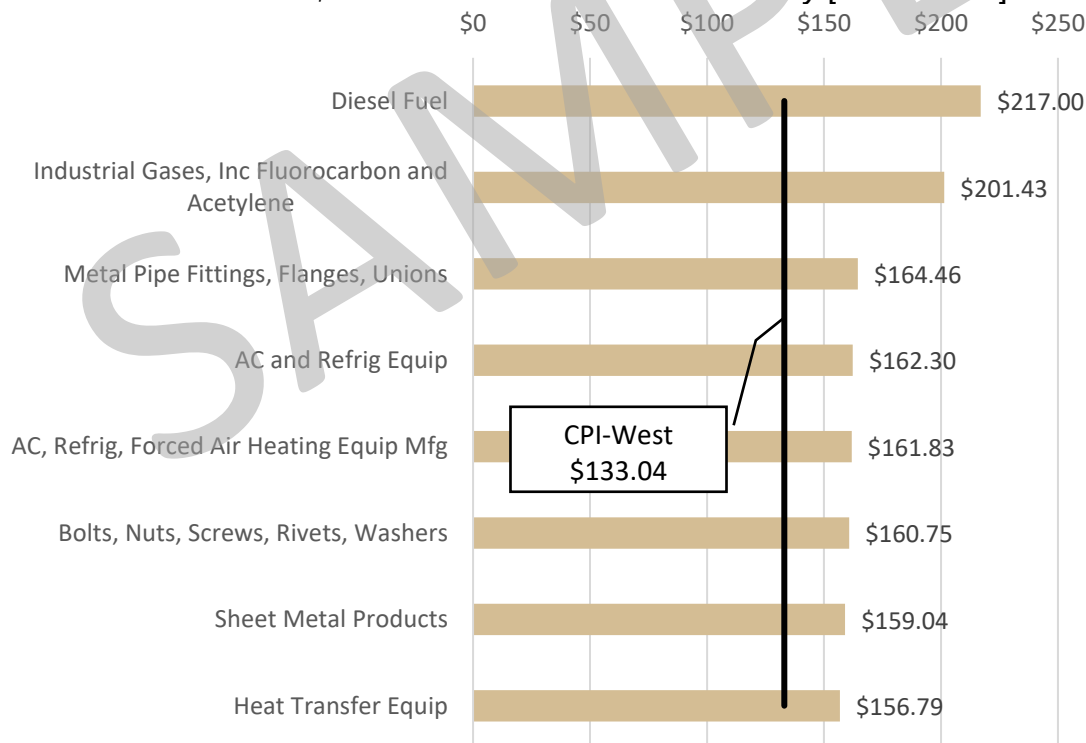
The cost growth for some of the most common specific commodities purchased by [craft name] contractors is charted in **Exhibit 1.3**. The exhibit shows the price in 2023 of a \$100 unit of each commodity in 2015. The CPI-West is shown as a benchmark comparator.

The smallest increase shown was for Heat Transfer Equipment, which grew to \$156.79 (56.8%) in 2023. This is \$23.75 more than the CPI-West benchmark indicator. The largest increase was for Diesel Fuel, which increased to \$217.00 (117.0%). In comparison, the cost of living escalated less—\$100 grew to \$133.04 (33.0%) by 2023.

Consistent with **Exhibits 1.1 and 1.2**, this exhibit illustrates the large price increases found with a wide variety of commodities that [craft name] contractors purchase. And while the CPI-West increased significantly, it was noticeably less in comparison to the price of materials [craft name] contractors need to purchase to complete their projects.

Exhibit 1.3

Increases in the Price of \$100 of Commodities Purchased by [craft name] Contractors



II. Variability and Unpredictability in Construction

Another less obvious yet major challenge for contractors employing [craft name] 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 by [craft name] contractors (**Exhibits 2.1a, 2.1b**)
- spending on construction work in [geographic location] (**Exhibit 2.2**)
- labor availability in [geographic location] (**Exhibit 2.3**)

Variability really means unpredictability. And unpredictability is an unfortunate circumstance which makes planning difficult for contractors employing [craft name] workers. Since contractors cannot predict what the future work environment looks like, they 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 2.1a vividly shows the large fluctuations over time in the price of the commodities used by [craft name] contractors shown in **Exhibit 1.3**. The average annual fluctuation from 2000 – 2023 for the seven commodities shown ranges from a low of 2.8% for AC and Refrigeration Equipment to a high of 7.2% for Industrial Gases, Including Fluorocarbon and Acetylene. The CPI-West benchmark average yearly deviation was much less at 1.1%. As an example of significant fluctuation, Sheet Metal Products went from 2.6% in 2019 down to -0.5% in 2020 and back up to 19.6% in 2021. The CPI-West variability in the exhibit, even with recent large increases, looks small compared to the variability of the prices of commodities purchased by contractors employing [craft name] workers.

Note: **Exhibit 2.1a** 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.

Exhibit 2.1a

Extreme Variability in the Price of Commodities Purchased by [craft name] Contractors

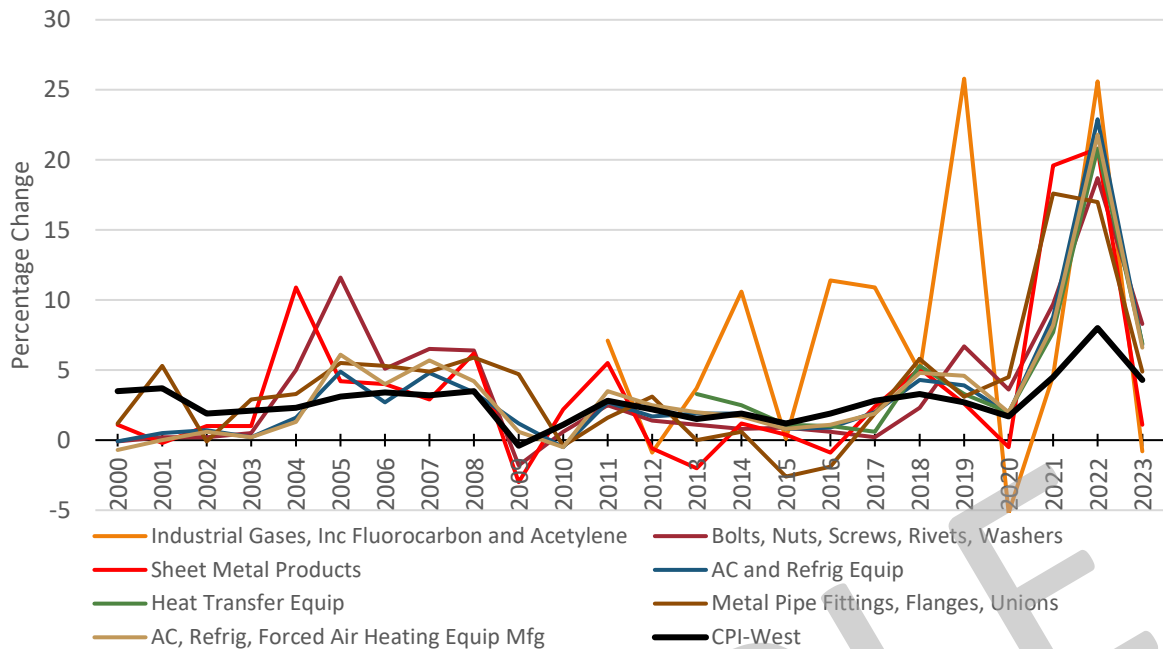


Exhibit 2.1b is really a subset of **Exhibit 2.1a**. However, since the cost fluctuation is so extreme for Diesel Fuel a separate chart is necessary because this commodity requires a much wider range in the vertical y-axis. The careful reader should note that the range in **Exhibit 2.1b** (-60.0% to 100.0%) dwarfs the range in **Exhibit 2.1a** (-5.0% to 30.0%); therefore, putting them in the same chart would inappropriately mitigate the significant fluctuation in **Exhibit 2.1a** by the extreme fluctuation in Diesel Fuel in **Exhibit 2.1b**.

Exhibit 2.1b

Extreme Variability in the Price of Diesel Fuel

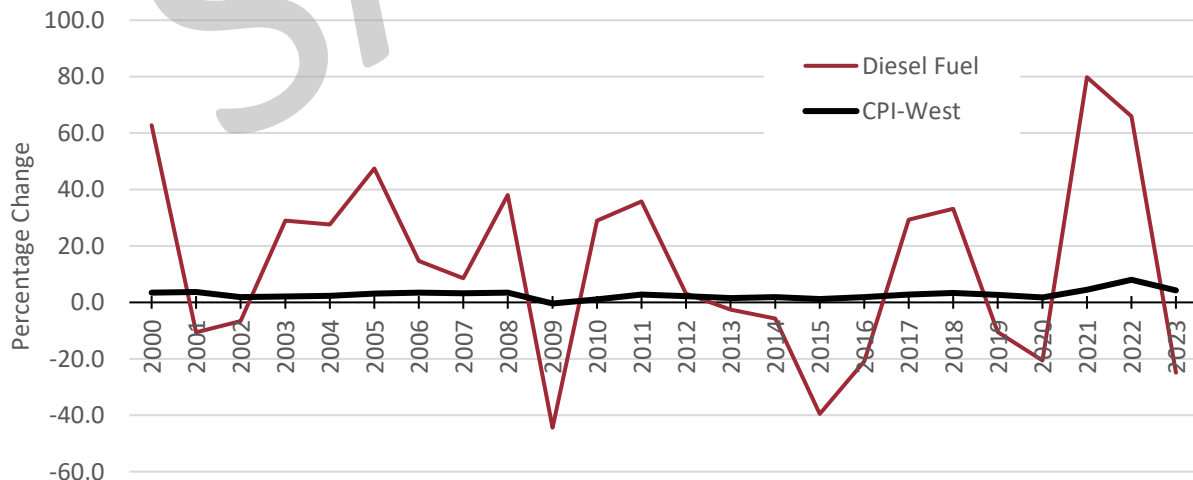


Exhibit 2.2 contains data for construction spending in [geographic location] alongside the CPI-West as a benchmark point of comparison. The average annual deviation for the CPI-West is 1.1%, whereas for construction spending in [geographic location] it is a large 33.5%. (Note, construction spending data only available through 2022 at time of publication.)

As an example for construction spending in [geographic location], there was a dramatic 194.1% swing in just a three-year span—from 169.2% in 2014 to -24.9% 2017. The CPI-West changed by just 1.5% during this time. It should be noted that, as is the case with **Exhibit 2.1b**, the exceptionally large swings in construction spending expand the scale (y-axis) so much so that the large swings in the CPI-West are greatly minimized (visually) in the exhibit.

The point regarding the data on construction spending is that the capital investment for 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 [geographic location] quite challenging.

Exhibit 2.2

Wide Variability in Construction Spending in [geographic location]

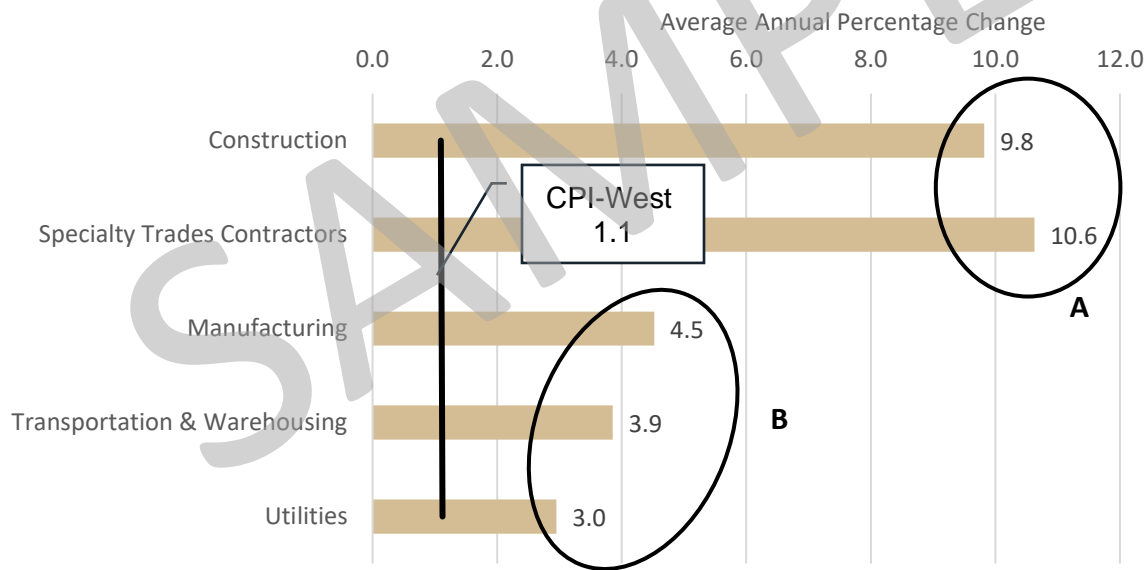


Exhibit 2.3 uses employment data for [geographic location] to further illustrate the variability of important business factors for contractors. The exhibits display average change in employment from 2002 – 2022 for the construction and specialty trades industries (includes [craft name]) along with other industries as comparators.

Oval A encompasses construction and specialty trades work—these include the [craft name] trade; **Oval B** highlights other industries for comparison. Of interest here is that the industries with the greatest variability (A) are where [craft name] work resides. The industries with less variance (B) are non-construction industries such as Manufacturing. The average variance for **Oval A** is 10.2% while the average for **Oval B** is much less at 3.8%.

Exhibit 2.3

Variability in Employment in the Construction and Specialty Trades Industries (Includes [craft name] Work)



Discussion

This report has outlined two issues or conundrums of primary concern facing contractors employing [craft name] workers in [geographic location]:

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

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

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

I. The High Cost and Large Price Increases of Commodities Used in Construction

While this report has focused on the price and price change of commodities used in construction, [craft name] 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 and the lingering effects put significant pressure on contractors to effectively manage all costs in order to remain competitive in a very challenging construction environment.

II. Variability and Unpredictability in Construction

Variability means unpredictability. The ability to plan is important for all contractors, including contractors employing [craft name] workers, 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 volatile 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

