

27 August 2020

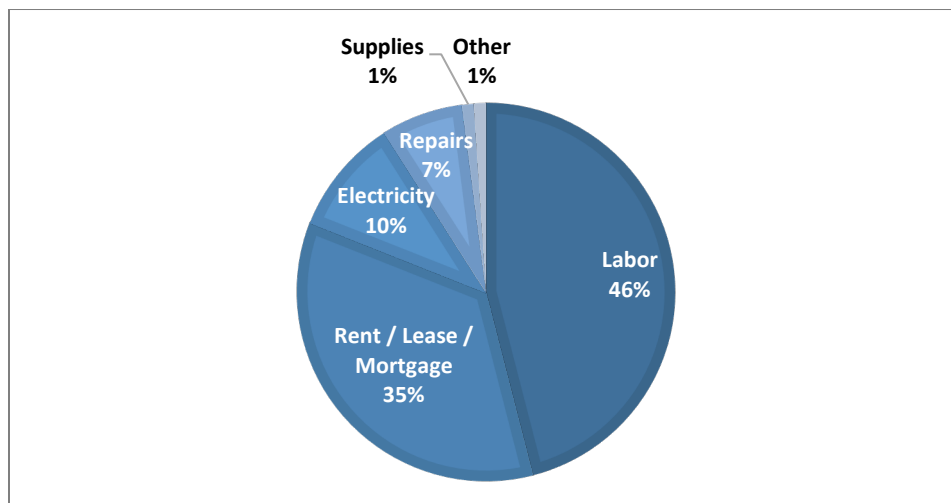
### Cold Chain Index: 2020 Quarter 2

In order to improve the economic information available to industry participants, the Global Cold Chain Alliance has commissioned a Cold Chain Index (CCI), reported since the end of 2018. The CCI tracks the growth rates of costs associated with cold storage using predominantly official sources of economic data. The CCI can be customized to the region and state where a warehouse facility operates.

The CCI includes five classes of expenses: labor, electric power, supplies, repairs, and rent; the cost shares typical of a North American refrigerated warehouse are shown in Figure 1. Labor was the largest share of expenses, at 46% of the total. Property rent or lease expenses represented nearly 35% of total expenses. Electric power accounted for 10% of total expenses. The “other” category included the leases on material handling equipment, expenses on utilities other than electric power, and un-specified other expenses. The cost shares have been updated for all 2020 releases based on the 2019 IARW Productivity and Benchmarking Survey results (FY2018).

In the current release, the CCI reports the growth rate in expenses in the second quarter of 2020 compared with the second quarter of 2019. Members of the Global Cold Chain Alliance and their customers may access a template to better understand the index and customize cost shares to the experience of their business, and to account for variation across geographic regions.<sup>1</sup>

Figure 1. Cost Shares of North American Refrigerated Warehouses, based on FY2018 IARW Productivity & Benchmarking Survey



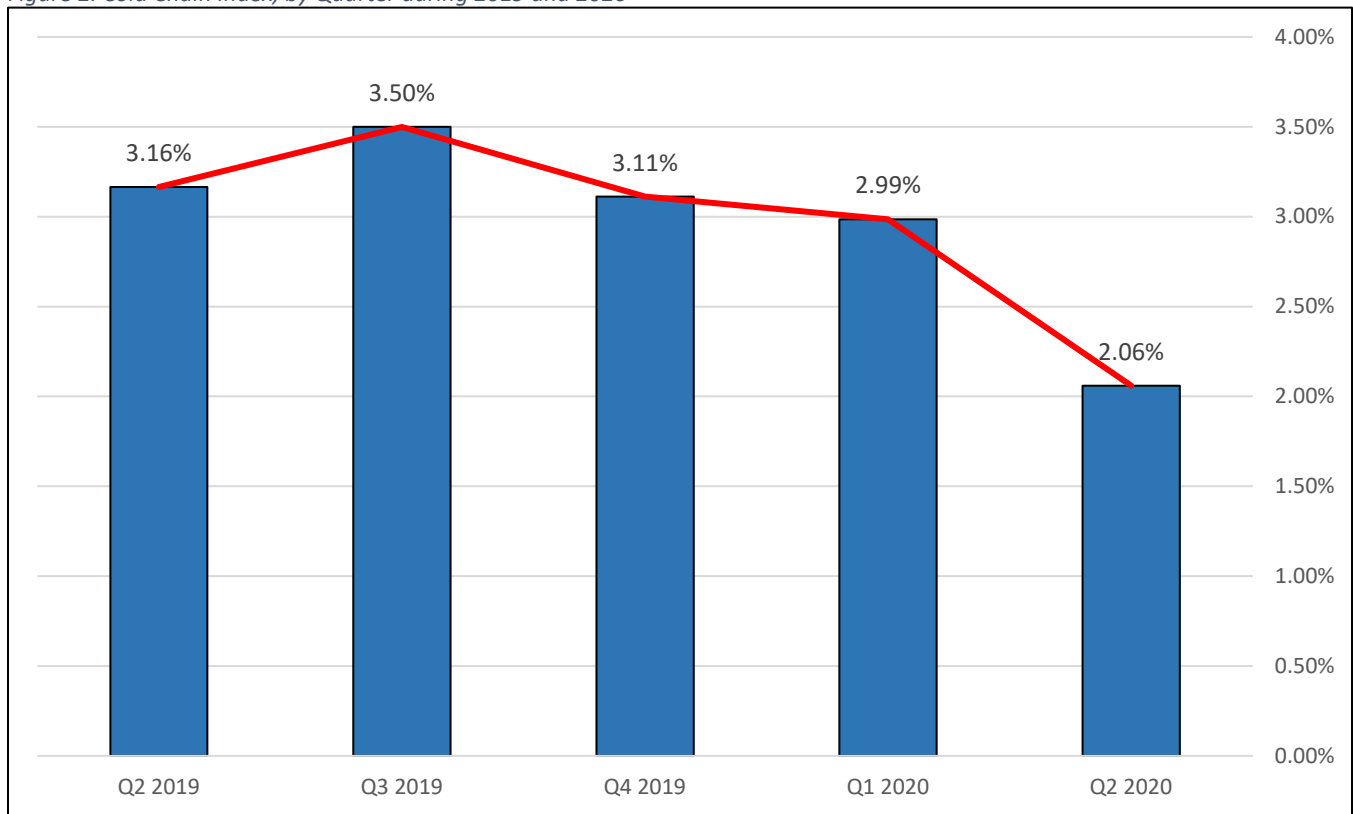
<sup>1</sup> The regions in the CCI are from the Bureau of Labor Statistics geographic information: **Mid-Atlantic** = New Jersey, New York, Pennsylvania. **New England** = Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. **South** = Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia. **Midwest** = Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin. **Pacific** = Alaska, California, Hawaii, Oregon, Washington. **Mountain** = Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.

## Results

Expenses for refrigerated warehouses rose by 2.06% in the second quarter of 2020 relative to the same period in 2019. The pace of cost escalation in Q2 was at its lowest point since the index began in Q4 of 2018 (Figure 2).

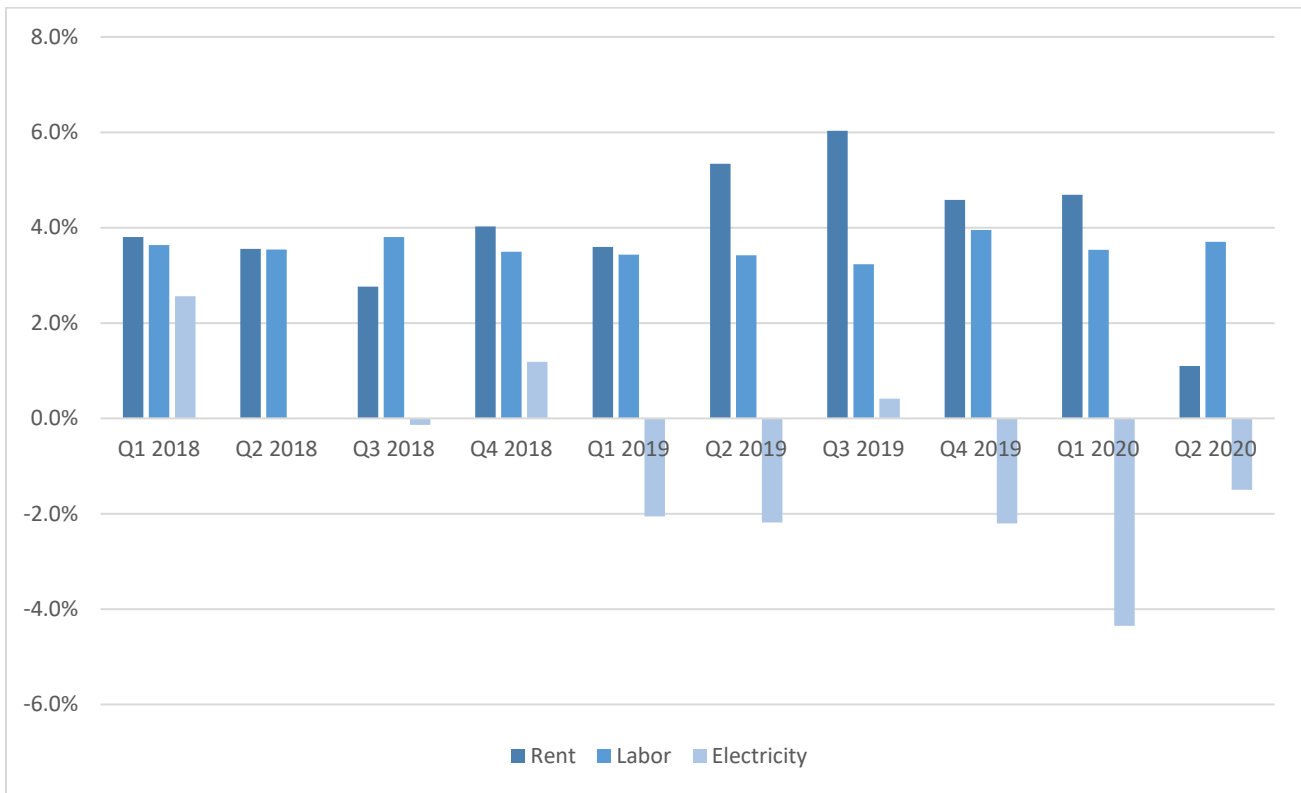
Among the types of expenses, labor costs grew at the fastest pace, at 3.7% year-over-year in Q2 (Figure 3). Across regions of the USA, the growth rate of labor costs ranged between 2.5% to 3.4%. The Mid-Atlantic experienced the slowest labor cost growth while the most rapid increase in labor cost was in the Pacific region. Occupancy costs ranked second, growing by 1.1% relative to Q2 last year. Electric power expenses in Q2 2020 were 1.5% lower, on the basis of national average. In 35 states, electricity costs declined. Michigan, California, and Wyoming were outliers, having electric cost increases of 13.0%, 8.7%, and 5.8% respectively, while the other twelve states' increases were less than 5.0%.

Figure 2. Cold Chain Index, by Quarter during 2019 and 2020



Note: The percentages in Figure 2 are growth rates in the quarter, relative to the same quarter in the previous year.

Figure 3. Main Drivers of the Cold Chain Index, by Quarter during 2019 and 2020



Note: The percentages in Figure 3 are growth rates in the quarter, relative to the same quarter in the previous year.

## Data and Methods

The following data sources were used to track changes in costs:

- Labor: The U.S. Bureau of Labor Statistics (BLS) Employment Cost Index (ECI) was used; specifically, the ECI for the private industry workers in the "Transportation and Warehousing" industry (Series ID CIU2014300000000I). The labor metric includes all worker classifications and includes both wages and benefits.
- Energy: The U.S. Energy Information Administration Electric Power Prices, by state, were used. The series is a retail electricity price for industrial customers. The data shown in this version are preliminary, using the average of monthly reported rates for July, August, and September (by state). The Energy Information Administration is expected to release a quarterly price estimate soon.
- Rent/Lease/Mortgage: The growth rate for occupancy cost was approximated with an inflation factor for new warehouse construction (BLS PPI industry data for new warehouse building construction, not seasonally adjusted, PCU236221236221). In addition, a surcharge for rental rate growth in selected high-cost markets was based on the 2018 Industrial-Logistics Prime Rents report by CBRE Group.
- Repair & Maintenance: To represent the growth in repair and maintenance cost, the index used the PPI for Nonresidential building maintenance & repair, not seasonally adjusted (PCU2381MR2381MR).
- Supplies and the "other" category were represented with the Producer Price index for core goods final demand (excluding food and energy), not seasonally adjusted.

## References

CBRE. 2018 Global Industrial and Logistics Prime Rents. <https://www.cbre.com/research-and-reports/Global-Industrial-and-Logistics-Prime-Rents-July-2018>

U.S. Energy Information Administration, Electric Power Monthly, Table 5.6.b Average Price of Electricity to Ultimate Customers. (Industrial). Accessed at

<https://www.eia.gov/electricity/data/browser/#/topic/7?agg=1,0&geo=g0fvvvvvvvvo&endsec=2&linechart=~&columnchart=ELEC.PRICE.US-IND.Q&map=ELEC.PRICE.US-IND.Q&freq=Q&start=200703&end=201901&chartindexed=1&ctype=linechart&ltype=pin&rtype=s&pin=&rse=0&motype=0>

U.S. Bureau of Labor Statistics. Data Finder for Employment Cost Index (NAICS). Accessed at:

<https://fred.stlouisfed.org/series/CIU2014300000000I> and for regional data <https://beta.bls.gov/dataQuery/find?st=0&r=20&more=0>