

August 29, 2021

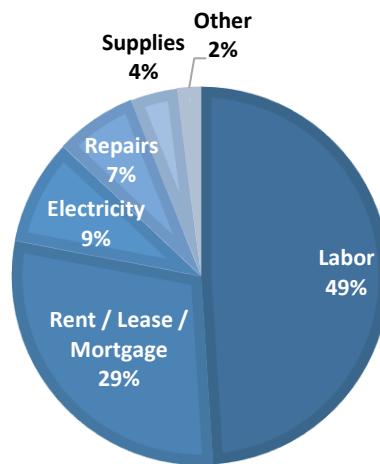
Cold Chain Index: 2021 Quarter 2

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, state, and metro 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 49% of the total. Property rent or lease expenses represented 29% of total expenses. Electric power accounted for 9% 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 used in all 2021 releases of the CCI are based on the 2020 IARW Productivity and Benchmarking Survey results (FY2019).

In the current release, the CCI reports the growth rate in expenses in the second quarter of 2021 compared with the second quarter of 2020. 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.¹

Figure 1. Cost Shares of North American Refrigerated Warehouses, based on FY2019 IARW Productivity & Benchmarking Survey



¹ 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 4.2% in the second quarter of 2021 relative to the same period in 2020. This is a continuation of the pattern of increasing costs that began in the second quarter of 2020 after the COVID-19 pandemic started in the country (Figure 2).

The upward trend in the cost of labor for the transportation and warehousing industry continued, but at a slower pace. The second quarter of 2021 marked the lowest growth in the employment cost index since the 4th quarter of 2015. The growth rate was 2.51% in Q2 2021. The Q2 2021 rate was slightly below the most recent quarter and more than one percentage point below the growth rate prevailing last year (3.7% for Q2 2020 (Figure 3)).

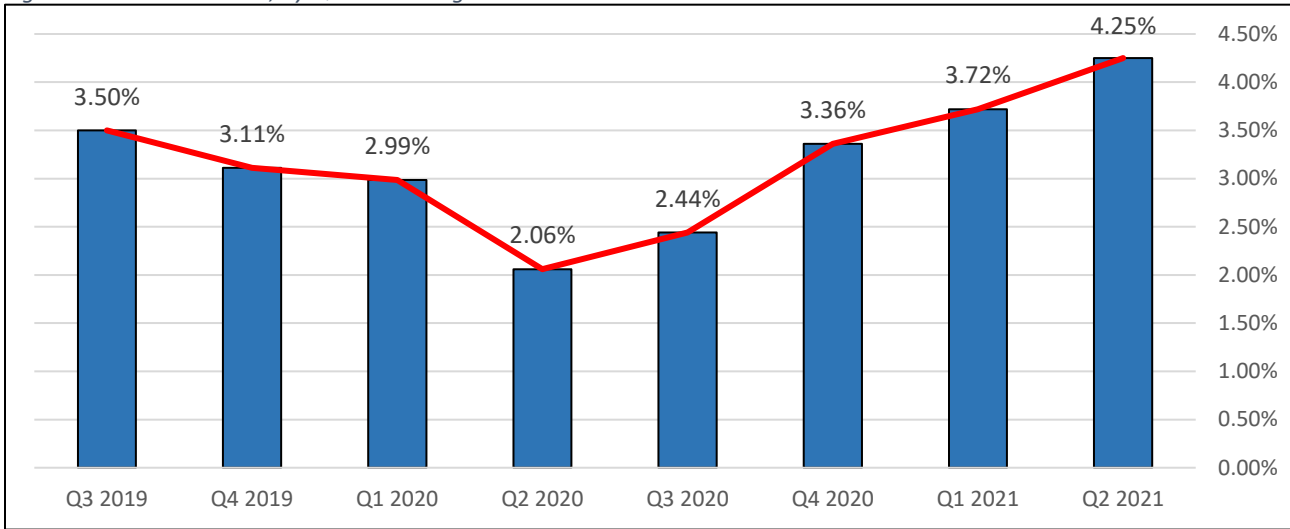
Regional differences in employment costs were based on the employment cost index for all workers, whereas the national trends were specific to the transportation and warehousing industry. The highest annual growth rate in labor cost was in the Mountain region, where the labor costs grew by 3.8%, which is 0.77 percentage points faster than the national average. Labor costs rose in the South and Mid-Atlantic regions rose faster than the national average but slightly slower than the pace in the same quarter in 2020. The Midwest and the Mid-Atlantic were the only regions where the growth rate of labor cost was below the national average.

Electricity costs rose for the second consecutive quarter, at 9.8% in Q2 2021 over the same quarter 2020. The average price of electric power for industrial sectors rose to 7.27 cents per Kilowatt-hour in Q2 2021, which is the highest price in the past 6 years. Only nine states reported lower prices for electric power in Q2 2021 compared with the same quarter of 2020, while 23 states recorded that electric power cost rose by more than 10%, six states by more than 20%, and in two states (Montana and Louisiana) electric power expenses increased by more than 30%.

The maintenance and repair cost index for the non-residential buildings in Q2 2020 increased by more than 5% which is the highest annual jump in the past 10 years.

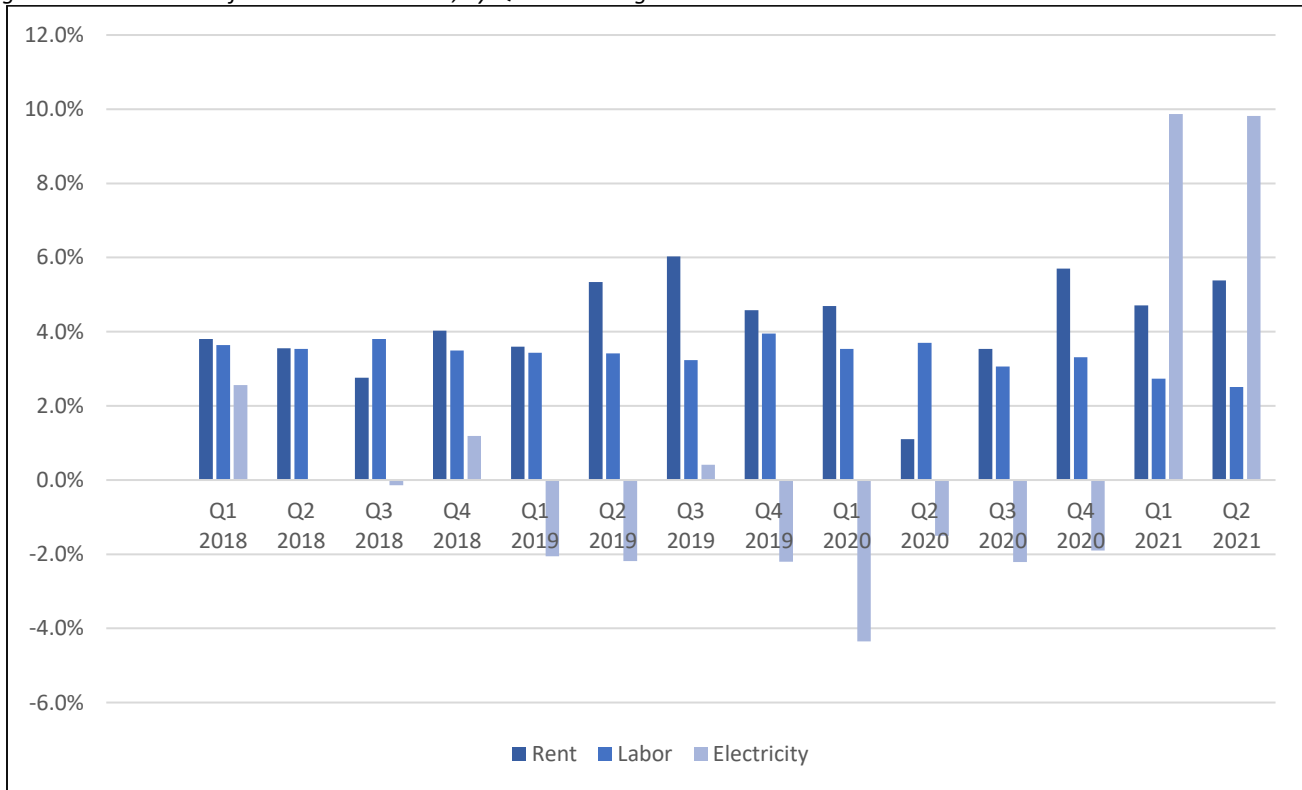
Finally, national occupancy costs for warehouses and distribution properties grew by 5.4% on a year-over-year basis in Q2 2021. This was an acceleration in rent growth compared with 4.7% in Q1 2021. Austin, Buffalo, Las Vegas, Minneapolis, Central New Jersey, Providence, Reno, and Sacramento are the metro areas in which rents grew by 20% or more, compared with same quarter in 2020. Occupancy cost growth was estimated from data on Quarterly Net Asking Warehouse Rents (dry and cold storage) collected by Cushman & Wakefield across 80 different metro markets in the United States.

Figure 2. Cold Chain Index, by Quarter during 2019-2021



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 2018-2021



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

Data References and Methods

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

- National 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. Accessed at <https://fred.stlouisfed.org/> using Series ID.
- Regional Labor: The U.S. Bureau of Labor Statistics (BLS) Employment Cost Index (ECI) was used; specifically, the ECI for the private industry workers in all industries and occupations (Series IDs CIU2010000000230I, CIU2010000000249I, CIU2010000000220I, CIU2010000000212I, CIU2010000000248I, CIU2010000000211I). The labor metric includes all worker classifications and includes both wages and benefits. Index is used to determine premium for each region relative to national baseline. Accessed at <https://fred.stlouisfed.org/> using Series ID.
- National and State Energy: The U.S. Energy Information Administration Electric Power Prices, by state, were used. The series is the Average Price of Electricity to Ultimate Customers. (Industrial) found in table a Table 5.6.a. The data used in the index is the average of monthly reported rates by state by taking three months of revenue and sales to generate quarterly data. Accessed at <https://www.eia.gov/electricity/monthly/>.
- National and Metro Rent/Lease/Mortgage: Cushman & Wakefield Quarterly Warehouse Net Asking Rents, were used. Overall U.S. rent is based on the average asking rents weighted by vacancy by market. In addition, a surcharge for rental rate growth in 80 selected metro markets was based on the same quarterly data provided by Cushman & Wakefield.
- National Supplies and “Other”: To represent the growth in supplies and also “other” warehouse expenses, the U.S. Bureau of Labor Statistics (BLS) Producer Price Index (PPI) was used; specifically Final Demand: finished goods less foods and energy (Series ID WPUFD4131). Accessed at <https://fred.stlouisfed.org/> using Series ID.
- National Maintenance: To represent the growth in repair and maintenance cost, the U.S. Bureau of Labor Statistics (BLS) Producer Price Index (PPI) by Industry was used; specifically Nonresidential building maintenance and repair (Series ID PCU2381MR2381MR). Accessed at <https://fred.stlouisfed.org/> using Series ID.