Sept. 23, 2024

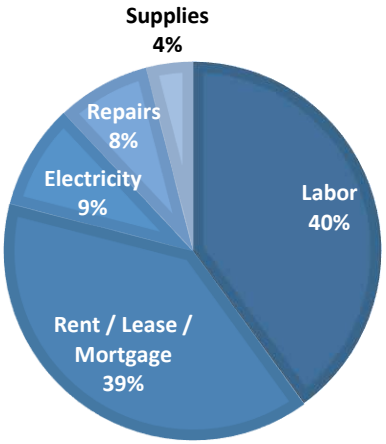
Cold Chain Index: 2024 Quarter 2

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 area 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 40% of the total. Rent/Lease represented 39% of total expenses. Electric power accounted for 9% of total expenses. The cost shares used in this year's release of the CCI are based on the 2022 IARW Productivity and Benchmarking Survey results (FY2022). Member companies may enter customized cost shares that reflect the situation of the facility instead of using these cost shares.

In the current release, the CCI reports the growth rate in expenses in the second quarter of 2024 compared with the second quarter of 2023. 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 FY2022 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 6.46% in the second quarter of 2024 relative to the same period in 2023 (Figure 2). Rents rose nationally by 7.06%, a more modest growth than has been seen over the past two years. Labor costs rose by 7.73% in Q2 2024 compared with the second quarter of 2023. Electricity costs rose by 2.54% on average nationwide.

National occupancy costs for warehouses and distribution properties grew by 7.06%, a more modest pace compared with the previous quarter. The relief in rental rates was notable in southern California markets (Inland Empire, Los Angeles, and Orange County) and in Phoenix. Asking rents fell by more than 10% in each of these metro markets. There was a continuation of rapidly rising rent in other parts of the nation, for example in Miami and smaller Northeastern cities. The data on occupancy cost growth is based on Cushman & Wakefield report on Quarterly Net Asking Warehouse Rents across 80 different metropolitan markets in the United States.

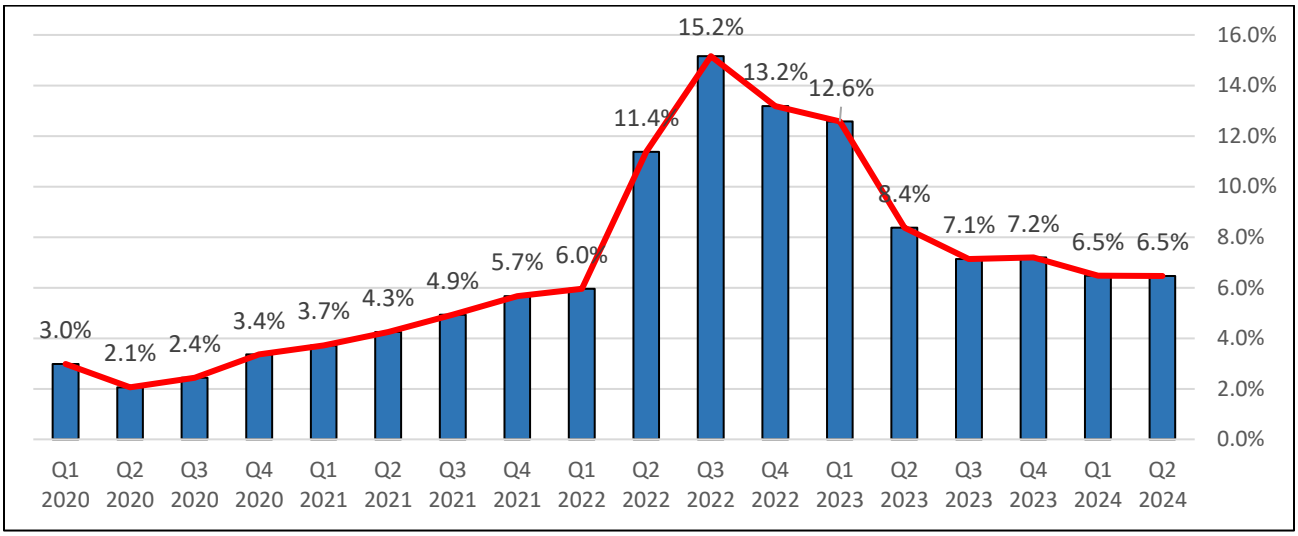
In Q2 2024, the national average cost of labor for the transportation and warehousing industry accelerated by 7.73% (Figure 3), higher than the rate of labor cost growth in the first quarter of the year. For the past three quarters, labor costs rose by higher than 5% annualized pace. Regional differences in employment costs were based on the employment cost index for all workers, while national trends were specific to the transportation and warehousing industry. In Q2 2024, the Pacific and Mountain regions had faster growth in labor costs than the national average.

Electric power expenses were volatile in the last four quarters. The national average cost of electric power for industrial users rose by 2.54% in Q2 2024 compared with Q2 2023. The recent rise reversed the trend from several preceding periods in which electricity rates declined. On a state-by state basis, only California and New York State experienced hikes in electricity cost by greater than 15% in Q2.

In the second quarter of 2024, the maintenance and repair cost index for non-residential buildings grew by 3.73, returning to the rate of growth seen in early 2022.

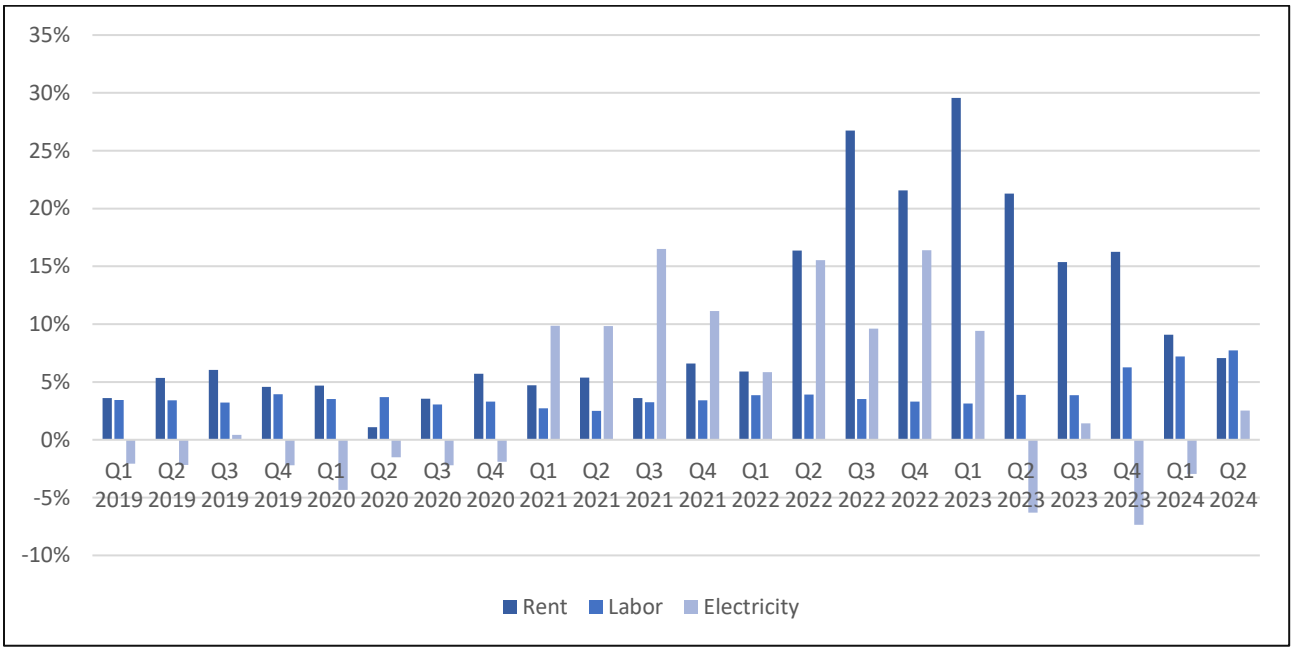
The cost of supplies is proxied by the producer price index (PPI) for final demand finished goods, excluding food and energy. This cost item grew by 2.25% in Q2 2024, which was a continuation of a moderating trend in supply cost inflation.

Figure 2. Cold Chain Index, by Quarter during 2020-2024



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 2019-2024



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 5.6.b. Beginning in 2022, EIA provided a quarterly estimate for each state. 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. Warehouse / Distribution category within Industrial Rents. Accessed at https://www.cushmanwakefield.com/en/united-states/insights/us-marketbeats/us-industrial-marketbeat
- 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.