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# IE WAREHOUSES

by Joan Hanson SC'26

Over the past few decades, warehouses have taken over the Inland Empire landscape. The popularization of online shopping in the 1990s, coupled with the more recent spike in demand for home-delivered goods during the Covid-19 pandemic, have led to a massive surge in commercial warehouse construction in the region. The *Los Angeles Times* reports that roughly 40% of the nation's goods in 2022 traveled through the Inland Empire at some point during transit from domestic manufacture or foreign import through final destination.

A few key factors help to explain why many companies such as Amazon, the Inland Empire's largest private employer according to the *Los Angeles Times*, have selected the region as a place to set up shop. From a geographical perspective, the Inland Empire is home to a vast amount of open, flat land that has been considered "dirt cheap" for decades. Additionally, the region's proximity to both Los Angeles and Long Beach, home to two of the nation's largest ports, makes it an ideal choice for large-scale warehouse placement. The Port of Los Angeles accounted for 14% of the market share of U.S. trade in 2023, making it the most valuable seaport in the United States. The Port of Long Beach accounted for roughly 5% of the market share in 2023, putting it in sixth place on the national ranking.

## Top 10 Seaports in the U.S. by Value (2023)

Seaport	% of U.S. Trade	Value (in billions)
Port of Los Angeles, CA	14.0%	\$292
Port of Houston, TX	11.0%	\$226
Port of Newark, NJ	9.4%	\$199
Port of Savannah, GA	6.0%	\$128
Port of Virginia, VA	5.1%	\$108
Port of Long Beach, CA	5.1%	\$108
Port of Charleston, SC	4.5%	\$95
Port of Corpus Christi, TX	4.0%	\$86
Port of Baltimore, MD	3.8%	\$81
Port of New Orleans, LA	2.9%	\$61

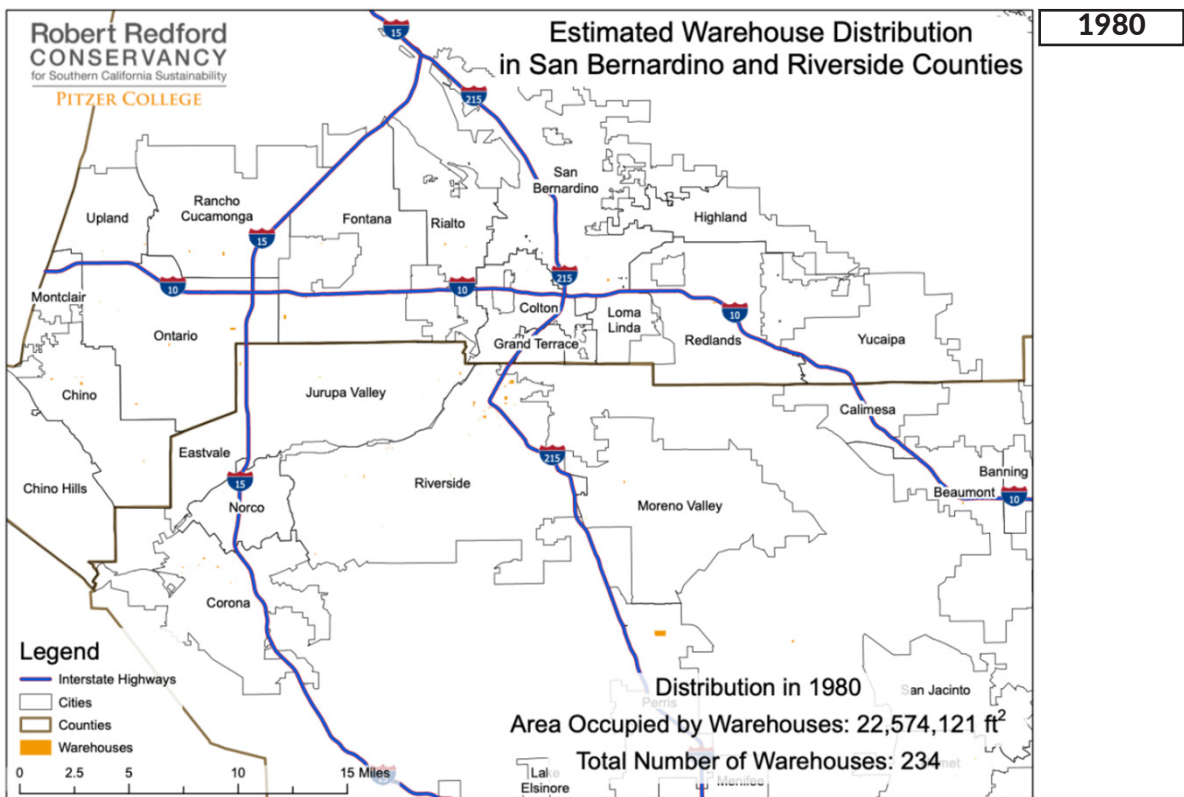
Sources: Port of Los Angeles, <https://ustradenumbers.com/port/port-of-los-angeles/>.

Susan Phillips, director of Pitzer College’s Robert Redford Conservancy, argues that the relatively low educational attainment of Inland Empire residents also makes the region an attractive place for employers looking to minimize labor costs. According to the Bureau of Labor Statistics, the Inland Empire’s average hourly pay of \$27.99 is roughly \$10 below the California average of \$37.44. The map below displays the variance in average weekly wages by county in California in the fourth quarter of 2022. The statewide average was \$1,679 and the national average was \$1,385. Both Inland Empire counties had average wages significantly lower than the California and national figures. The Riverside County average was \$1,098 and San Bernadino County was \$1,149.

The Robert Redford Conservancy, in collaboration with Radical Research, LLC, has created a comprehensive database tracking the growth of warehouses in the Inland Empire since the mid-1970s. They produced maps to display the estimated warehouse distribution in both San Bernardino and Riverside Counties in 1980, 2000, and 2021. In 1980, San Bernardino and Riverside Counties together had approximately 230 warehouses, spanning 22,574,121 square feet. By 2000, this number had increased to roughly 970 warehouses spanning over 168,559,472 square feet. Their most recent update in 2021 shows the number of warehouses skyrocketing to over 4,000, with a combined square footage of over 1 million square feet.

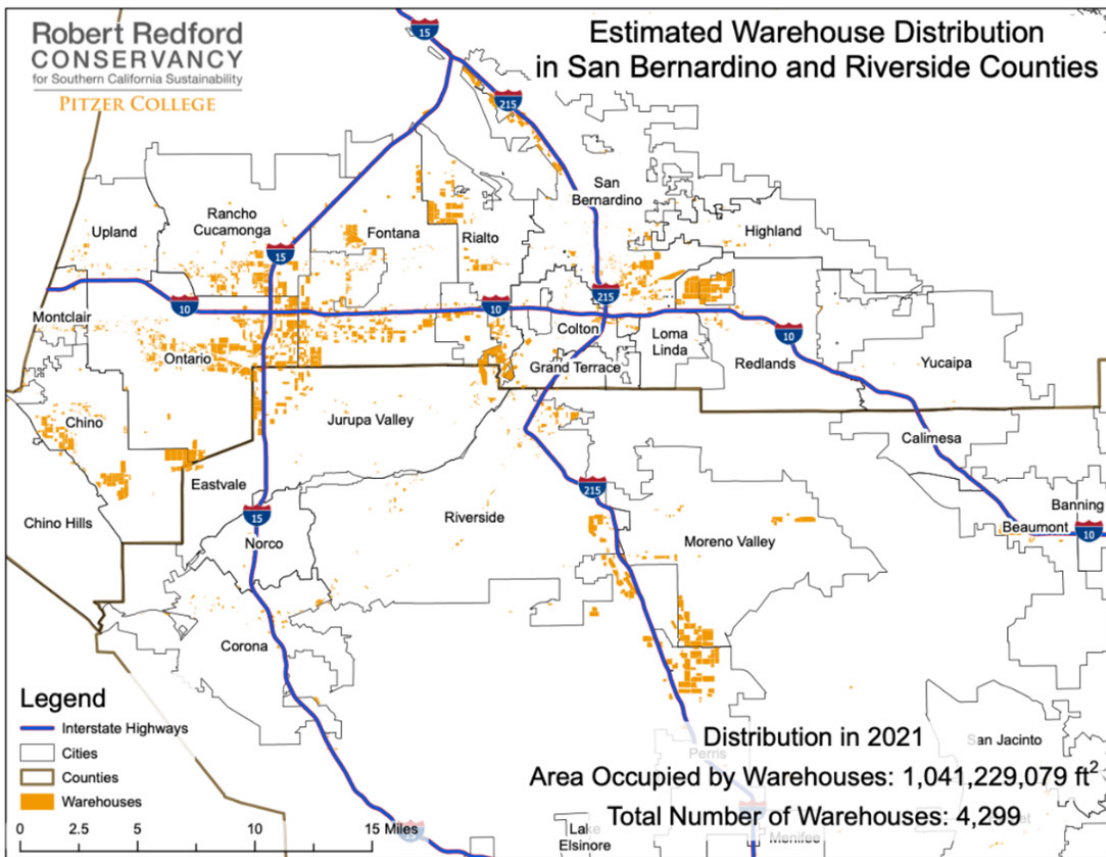
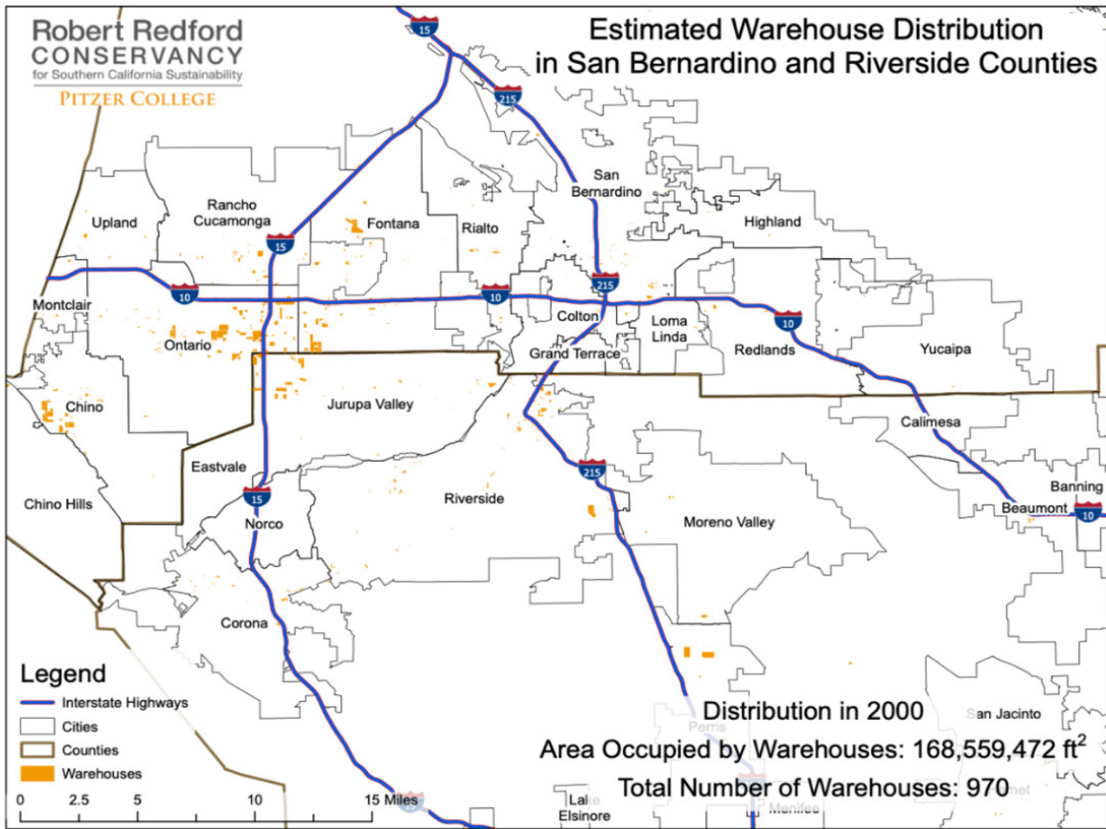


Source: United States Department of Labor Statistics, [https://www.bls.gov/regions/west/news-release/countyemploymentandwages\\_california.htm#table2](https://www.bls.gov/regions/west/news-release/countyemploymentandwages_california.htm#table2)



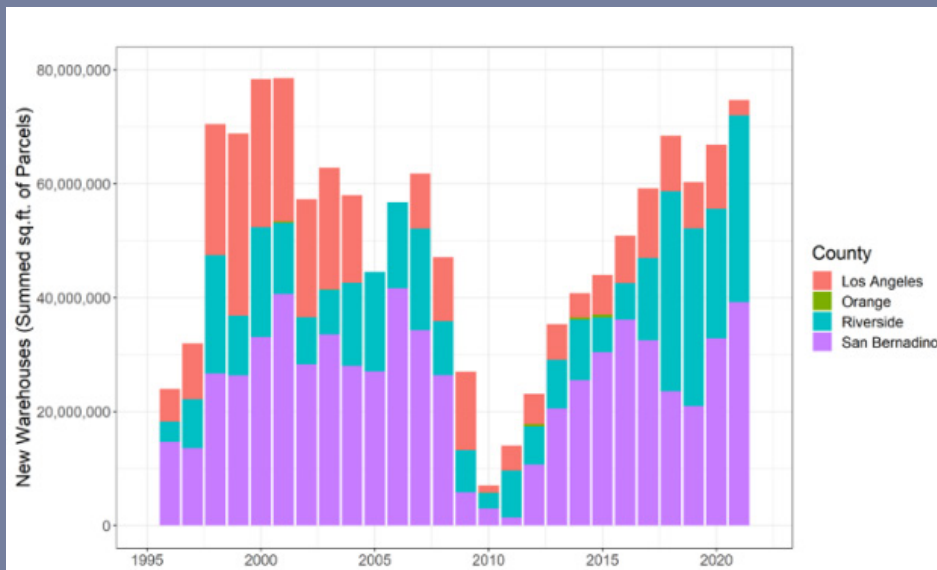
Source: Warehouse and Air Quality Mapping, Robert Redford Conservancy for Southern California Sustainability, <https://www.pitzer.edu/redfordconservancy/mapping-data-visualization/>





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## New Warehouses in Southern California by County



Source: Amparo Muñoz, et. al., Letter to Governor Newsom, <https://calmatters.org/wp-content/uploads/2022/06/State-of-Emergency-Public-Health-Request.pdf>

The warehouse boom has been an economic engine for the Inland Empire. Johannes Moenius, a professor of economics at the University of Redlands, wrote in the *San Bernardino Sun* last year that “as warehouses grew in size, disproportionately more workers worked in the industry – from 1990 to 2020, worker growth in the industry was almost double as fast as the increase in warehouses, and even size adjusted there are now almost twice as many workers in each comparable warehouse space than 30 years ago.” As a result of this vast employment opportunity, “both Riverside and San Bernardino counties returned earlier than California and the nation to pre-pandemic employment levels and labor force levels.” Some experts, however, are concerned that automation poses an imminent threat to this expanding labor market. One study conducted by the University of Redlands’ Institute of Spatial Economic Analysis indicated that as many as 63% of jobs in the Riverside-San Bernardino-Ontario area were at risk of automation by the year 2035.

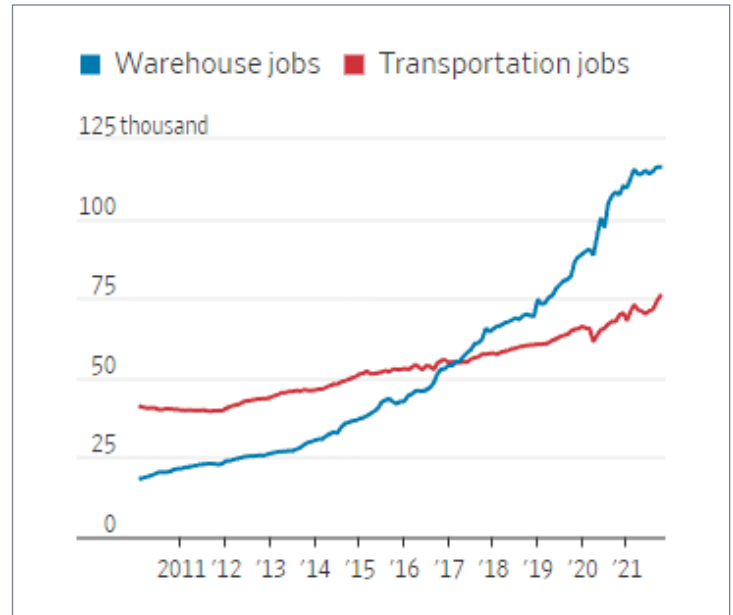
The massive uptick in warehouses has caught the attention of various local environmental and labor advocacy groups who are concerned about its potential negative impacts on human health. Phillips of the Robert Redford Conservancy is one prominent opponent of continued warehouse expansion in the region. Along with sixty advocacy groups, Phillips wrote an open letter in January of 2023 addressed to Governor Gavin Newsom, which included a detailed report, urging Newsom to pass a moratorium on commercial warehousing in the Inland Empire. One of the many issues raised in the report is a concern for the increasing amount of air pollution produced by the warehouse growth. According to the American Lung Association, as of 2023, the two counties that make up the Inland Empire had the highest concentration of ozone pollution in the United States, and they ranked

seventh and eighth in year-round particular pollution. Phillips and her colleagues contend that this is a direct result of warehouse expansion. They say this explains why “cancer risk is in the 95th percentile near the Ontario warehouse gigacluster.” The close proximity of many of these warehouses to residential neighborhoods and schools is also highlighted in the report. At the time it was written, more than 300 warehouses were within 1,000 feet of 139 schools. Furthermore, the authors of the report argue that the current warehouse growth is an instance of environmental injustice. Since warehouses are being built in places where land is plentiful and relatively cheap, it is less well-off communities that both benefit and suffer from the consequences. According to the *Los Angeles Times*, a spokesperson for Governor Newsom did not comment on whether or not he would support a regional moratorium, “but pointed to Newsom’s order that heavy-duty truck manufacturers transition to zero-emission vehicles by 2045.” In addition to calling for a moratorium, many environmental advocacy groups argue that warehouse infrastructure should make better use of solar and electric power, both within the warehouses themselves as well as in the vehicles used to transport goods.

Besides the corporations that use and operate warehouses, other proponents of warehouse expansion include local elected officials and economists who argue that the development provides essential economic growth and employment opportunities. In a *San Bernardino Sun* article published last year, Fernando Lozano, a professor of economics at Pomona College, notes that “the broad industry category ‘Transportation and Warehousing’ has generated 1 of every 4 new jobs in the Inland Empire.” According to Lozano, “altogether this sector accounts for almost \$1 billion a month of total wages paid, equivalent to 15% of all wages in the region.”

Looking towards the future, there is some debate about whether or not the warehousing industry in the Inland Empire will continue to expand and to provide increasing employment opportunities. Economists such as Professor Moenius argue that automation will radically transform the warehousing industry and sizably reduce the number of available jobs. According to an article recently published in the *Los Angeles Times*, in the past year, “Warehousing and storage jobs in the Inland Empire shrank for the first time in more than two decades.” However, optimism remains among some industry leaders as to the future of the industry. In the article, Hamid Moghadam, chief executive of Prologis, a logistics real estate company prominent in the Inland Empire, says, “The logistics business in Southern California is getting back on its feet after the pandemic.” The article states that Moghadam and other developers are “bullish on the future.” Also featured in the article, Iddo Benzeevi, another real estate developer involved in a logistics center project in the Inland Empire, says, “key drivers of growth remain intact – e-commerce, global trade, demand for larger, more efficient distribution centers.” Despite this difference of opinion, the experts generally agree that the warehousing industry needs to continue to implement environmentally friendly, innovative technologies as they become available. ♦

### Jobs in Warehousing and Transportation in the IE



Source: Wall Street Journal, <https://www.wsj.com/articles/logistics-hiring-surge-in-californias-inland-empire-cant-satisfy-demand-11640205600>.



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