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Warehousing No sign of slowing down

As real estate prices continue to climb, warehouse and logistics managers must keep a close eye on comparative costs as well as new market challenges.

Distribution warehousing continues to be one of the hottest sectors of the supply chain—indeed one of the hottest sectors of our national economy. With this growth, however, has come increased costs and a series of new challenges that logistics and distribution professionals must juggle.

When it comes to deciding where to locate a warehouse facility, comparative operating costs have always played a key role. But due to uncertainties over trade and tariffs, slim margins within the booming e-commerce space, and soaring real estate prices, our clients are focusing on the bottom line more than ever before.



In hot warehousing markets, double-digit percentage increases in land prices are the rule, not the exception. In the northern and central New Jersey warehousing market, for example, the average price for a large parcel of prime warehouse land has hit the \$2-million-per-acre mark, up 16% from last year.

[Figure 1] Warehousing hot spots: Total annual geographically variable operating costs

[FIGURE 1] WAREHOUSING HOT SPOTS: TOTAL ANNUAL GEOGRAPHICALLY VARIABLE OPERATING COSTS*

Northeast		South Atlantic		Central		Mountain		West Coast		Canada	
Dedham, Ma.	\$15,744,162	Hialeah Gardens, Fla.	\$12,397,798	Columbus, Ohio	\$13,125,106	Henderson, Nev.	\$12,771,086	Newark, Calif.	\$13,912,651	Richmond, British Columbia	\$11,241,789
Robbinsville, N.J.	\$14,844,793	Deerfield Beach, Fla.	\$11,660,129	Noblesville, Ind.	\$12,600,102	Fernley, Nev.	\$11,502,008	Tracy, Calif.	\$13,509,765	Calgary, Alberta	\$10,739,924
New Windsor, N.Y.	\$13,843,321	Chesterfield, Va.	\$11,422,304	Lake Houston, Texas	\$12,299,859	Casa Grande, Ariz.	\$11,456,747	Victorville, Calif.	\$13,256,306	Trenton, Ontario	\$10,037,312
Oldmans Twp., N.J.	\$13,360,313	Rocky Mount, N.C.	\$11,009,765	Jeffersonville, Ind.	\$11,731,892	Burley, Idaho	\$11,131,427	Redlands, Calif.	\$13,200,179	Terrebone, Québec	\$9,736,192
Bethlehem, Pa.	\$13,119,826	Greer, S.C.	\$10,791,485	North Kansas City, Mo.	\$11,514,283	Kingman, Ariz.	\$10,888,959	Yakima, Wash.	\$11,787,943	Rosser, Manitoba	\$9,334,699
Pittston, Pa.	\$12,405,012	St. George, S.C.	\$10,683,415	Midlothian, Texas	\$10,466,606	Santa Teresa, N.M.	\$10,440,333	Ritzville, Wash.	\$11,685,830	Moncton, New Brunswick	\$8,832,834

*Based on a newly constructed 500,000-square-foot distribution center employing 125 hourly workers. Includes labor, taxes, real estate, construction, and utilities. All costs are in U.S. dollars.

[SOURCE: BIZCOSTS, A REGISTERED TRADEMARK OF THE BOYD CO. INC., 2019]

In California's popular Inland Empire, land prices are also soaring, up over 20% from last year, easily reaching \$1 million per acre. The Lehigh Valley in Pennsylvania is up 18% to \$206,000 per acre; North Las Vegas, Nevada, is up 16% to \$260,000 per acre; Chicago, Illinois, is up 19% to \$327,000 per acre; Atlanta, Georgia, is up 17% to \$145,000 per acre; and Houston, Texas, is up 14% to \$228,000 per acre.

These same warehousing markets are also experiencing strong gains in lease rates, as demand continues to outpace the supply of prime warehouse space. Lease rates over \$10 per square feet are now common in many hot coastal markets in the Northeast, California, and the Pacific Northwest.

These inflationary cost pressures are not expected to moderate anytime soon. We are forecasting overall warehousing costs to increase by 9.2% in 2019, even allowing for a year-over-year moderation in fuel and truckload rates.

Given these high costs, it is important for warehouse owners and renters to keep a close eye on variations among different locations. The comparative cost of operating a warehouse (accounting for labor, land, warehouse construction, power, and taxes) can vary dramatically, even within the same geographic region of the country.

Figure 1 compares the cost of operating a typical 500,000-square-foot warehouse in a series of cities increasingly on our company's relocation radar screen. In the Northeast, for example, annual operating costs in Dedham, Massachusetts, are 26% higher than in Pittston, Pennsylvania—a hotbed of new warehousing activity in northeastern Pennsylvania between Wilkes-Barre and Scranton. In the Southeast, annual operating costs range from a high of \$12.3 million in Hialeah Gardens, Florida—just outside Miami—to a low of \$10.6 million in St. George, South Carolina—near Charleston—a differential of 16%.

Bigger, taller, more urban

The increased focus on comparative cost is not the only major trend that we are seeing in the market. Today, our warehousing clients are constructing facilities that are larger than ever before. Our average building requirement over the past year has been over 700,000 square feet, with a number of projects calling for more than 1 million square feet. Our e-commerce clients, in particular, are in need of two to three times the space of traditional warehouses due to the wide range of products that they need to have under one roof and the labor requirements for picking, packing, order fulfillment, and customer servicing.

Ceiling heights have also nearly doubled to 40 feet clear, as our clients seek to accommodate mezzanines, new cranes, robotic systems, and even drones. The higher ceilings also improve ventilation and create a better work environment. (Think of how claustrophobic workers would feel in a million-square-foot warehouse with only a 20-foot ceiling.)

In addition, we are siting more warehouses closer to major urban population centers. Some of the hottest real estate markets in the country are being fueled by warehousing demand, such as in and around New York City, New York.; Los Angeles, California; Chicago, Illinois; Miami, Florida; and the Bay Area in California. By locating their warehouses close to these and other major markets, our clients are better equipped to meet the demand for same-day and next-day deliveries, especially for products with a short shelf life.

The cold chain heats up

Demand is also growing for cold storage facilities. The United States' instant gratification mentality has already impacted the supply chain for most consumer goods and how they are warehoused and fast-tracked to consumers. Look for the next growth spurt to come from the online grocery sector, which our firm's BizCosts® unit is forecasting to grow fourfold over the next six years. We estimate that online grocery retailing will generate another \$100 billion of online food sales and create the need for 100 million square feet of new cold storage warehouse space.

While the food and beverage sector is fueling most of the new demand for cold storage space, another major driver is coming from pharmaceutical companies with products like vaccines and blood plasma that need to be maintained at specific temperatures throughout the supply chain. Third-party logistics supplier DHL is investing some \$150 million in new warehouse facilities in

major areas for pharmaceutical and medical devices production, including Raleigh, North Carolina; suburban Philadelphia, Pennsylvania; Indianapolis, Indiana; and Memphis, Tennessee.

These trends will make it even more difficult to find suitable cold storage space. Our warehousing clients are already experiencing severe shortages of existing cold storage space—especially freezer—in major food-processing states like California, Oregon, and Washington in the West and Iowa, Illinois, and Wisconsin in the U.S. Heartland. The shortage is most pronounced in the high-growth states of Texas and Florida.

Severe labor shortages

Cold storage space is not the only thing in high demand. With unemployment rates at historic lows, our warehousing clients are facing labor shortages not seen in decades. While many industries are affected by these tight labor markets, the warehousing field—especially the more labor-intensive fulfillment sector—is especially hard hit.

A chief reason is that warehouses and fulfillment centers tend to cluster in certain cities and in certain industrial parks because of their common need for zoning; major highway and/or rail access; and level, buildable, and affordable real estate. In addition to the record low unemployment rates, our warehousing clients are also facing the continuing wave of retirements among the baby boomer generation.

The challenge to our clients' human resources departments is coming from both ends of the hiring spectrum. They are having trouble finding qualified people not only for warehouse operations (such as for warehouse workers, pickers, packers, and material handlers) but also for high-tech support jobs in fields like data analysis, robotics, cyber security, and artificial intelligence.

As a result, our warehousing clients are increasingly interested in labor-market characteristics such as the ability to hire ex-military personnel, access to public transportation in order to tap inner city labor pools, the availability of leading-edge skills in cyber security, and the tenor of labor-management relations in the area. At the end of the day, the labor factor is playing a greater role in warehouse site selection than ever before.

A new day

In spite of these challenges, however, it is an exciting time to be in warehousing and logistics. We are entering a new era and are witnessing new, technology-fueled opportunities that were not even imaginable a few years ago. Our industry is seeing innovations like drone and autonomous delivery techniques and new, green-friendly energy intelligence systems that curb power consumption within the warehouse.

With the industry now accounting for almost 12% of U.S. gross domestic product, it has even generated enough attention to be recognized with an official "day" on the U.S. National Day Calendar. June 28, 2019 was the first National Logistics Day. Let's circle our calendars now and plan to toast this great industry on June 28, 2020.

John H. Boyd is principal and founder of The Boyd Company Inc. Founded in 1975 in Princeton, New Jersey, the firm provides independent site selection counsel to U.S. and overseas corporations, both in and out of the logistics industry.