Warehousing

Big growth, big challenges

By John H. Boyd | From the *2017 Special Issue*

Macrotrends such as the growth of e-commerce and same-day delivery are placing costly new demands on warehouse operators. Here are four major problem areas affecting site-selection decisions this year.

In corporate site selection, there always seems to be an industry or sector "du jour" that is setting trends and dominating relocation and investment activity. No doubt about it, this year's "industry of the day" is logistics. This hot sector is commanding record-high industrial rents, experiencing vacancy rates hitting lows not seen since "the go-go 1990s," and establishing new rules of the road when it comes to site selection.

With this kind of growth and dynamism come a number of challenges that impact location and investment decisions. Here are some of our company's observations on the major issues affecting both the logistics sector and site-selection activities in 2017.

Spiking operating costs

Brisk consumer spending, white-hot e-commerce sales, and global trade developments are all fueling the growth of new warehousing and distribution center (DC) space. In particular, the push for next-day or even same-day delivery, driven by our "instant gratification economy," is leading companies to place large DCs in expensive, big-city locations. These "last mile"

dynamics, in fact, are putting virtually all the areas around large U.S. cities in play for new distribution facilities—something that in the pre-Amazon days had been rejected due to high costs (principally real estate and property taxes) in favor of lower-cost alternatives in the hinterland.

This is evident in ***Figure 1***, where we have identified a series of distribution center "hot spots" that are increasingly on the radar screens of our site-seeking clients. The DC "hot spots" listed in Figure 1 also show that companies are favoring sites that have well-developed transportation infrastructure, access to major seaport and intermodal facilities, and real estate cost and availability advantages, in addition to strength in other site-selection factors.

[FIGURE 1] DISTRIBUTION CENTER HOT SPOTS

(Total annual geographically variable operating cost rankings*)

Northeast	South Atlantic	Central	Mountain	West Coast	Canada
Stoughton, Mass.	Miramar, Fla.	Groveport, Ohio	North Las Vegas, Nev.	Tracy, Calif.	Westminster, British Columbia
$14,714,170	$11,586,727	$12,266,454	$11,935,594	$13,002,478	$10,506,345
Bordentown, N.J.	Indiantown, Fla.	Fishers, Ind.	Fernley, Nev.	Patterson, Calif.	Rocky View, Alberta
$13,873,638	$10,897,317	$11,775,796	$10,749,540	$12,625,949	$10,037,312
Newburgh, N.Y.	Chesterfield, Va.	Humble, Texas	Casa Grande, Ariz.	Victorville, Calif.	Napanee, Ontario
$12,937,683	$10,675,050	$11,495,195	$10,707,240	$12,389,071	$9,380,665
Pedricktown, N.J.	Rocky Mount, N.C.	Jeffersonville, Ind.	Idaho Falls, Idaho	Kent, Wash.	Terrebonne, Quebec
$12,486,274	$10,289,500	$10,964,385	$10,403,203	$12,336,616	$9,099,245
Bethlehem, Pa.	Pooler, Ga.	Liberty, Mo.	Kingman, Ariz.	Richland, Wash.	Rosser, Manitoba
$12,261,520	$10,085,500	$10,761,012	$10,176,597	$11,016,769	$8,724,018
York, Pa.	Cordele, Ga.	Catoosa, Okla.	Santa Teresa, N.M.	Hillsboro, Ore.	Moncton, New Brunswick
$11,593,469	$9,984,500	$9,781,875	$9,757,321	$10,921,336	$8,254,985

* 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., LOCATION CONSULTANTS]

Regardless of where they are located, comparative operating costs (such as labor, real estate, taxes, and utilities) continue to be important in most DC site-selection decisions given the uncertain U.S. economy and continued price pressures from offshore competitors. Improving the bottom line on the cost side of the ledger is the only choice for many DC operators.

While shipping rates have remained flat, helping to moderate overall logistics costs, there have been hefty increases in DC operating costs related to real estate, construction, and labor, which are up 5.5, 6.7, and 2.1 percent, respectively, from 2016. National average asking rents for DC space of around $5.75 per square foot (including taxes, utilities, and maintenance) are nearing decade highs. Rents are spiking even higher in many U.S. cities, especially those on the West and East coasts, where rents are approaching $10.00 per square foot in markets such as California and New York.

Labor costs are a particularly big concern for our DC clients. Many are increasingly outsourcing staffing and human resources (HR) functions to third-party agencies that specialize in the

logistics sector in order to keep inflationary labor-cost pressures in check, especially the spiraling costs for health-care and legal fees. Onerous and costly labor laws in litigious states like California, New Jersey, and New York also continue to plague the industry and fuel the flight to third-party HR providers. Additionally, labor unrest at the ports of Los Angeles and Long Beach is escalating as dray drivers feel that the brunt of new clean-air standards are falling too heavily on their shoulders and pocketbooks. This unrest is creating workflow uncertainties at DCs and is putting pressure on shippers to pay higher drayage rates.

Port and rail congestion

Our firm has monitored traffic congestion for years, mostly within the context of labor-force commuting patterns and practices. Now, however, congestion is becoming a broader issue and is greatly challenging the efficiency of our DC clients and their supply chains. In particular, congestion at our nation's seaports and inland infrastructure links is an increasingly severe risk factor handicapping our clients' ability to keep pace with their global competitors.

Congestion and delays are becoming increasingly common at major U.S. ports—a problem having a profound impact on the $900 billion worth of goods transported to and from the United States each year by container ships. Of the 10 busiest container seaports, at least seven are grappling regularly with congestion, according to the American Association of Port Authorities. Ports like Charleston are doubling down on capital investments to keep ahead of congestion, as seen in Charleston's new $700 million Hugh K. Leatherman Sr. Terminal, which will increase container capacity by 50 percent at the South Carolina port.

Those seeking to locate near seaports might want to consider what steps the ports are taking to alleviate congestion. Bayonne was the first terminal at the Port of New York and New Jersey to require appointments. A handful of other North American ports have adopted similar reservation systems to help mitigate congestion, including the West Coast ports of Los Angeles, Long Beach, and Oakland in California, and Vancouver in British Columbia.

This problem is not limited to our nation's busy seaports. Railroads and intermodal yards across the country continue to battle congestion. For example, Chicago handles about 25 percent of the country's rail freight traffic and is becoming overwhelmed by the volume; it can now take a train as much as 32 hours to pass through the city. Legendary railroad executive Hunter Harrison, now head of CSX, says that Chicago is "bursting at the seams," and that CSX is exploring alternatives to bypass the city. Train delays in the pivotal Chicago freight market can have a cascading effect, disrupting delivery schedules in DCs throughout the national supply chain.

Challenges in the cold chain

The DC sector showing the strongest growth in new starts in 2017 is the cold-storage and blast-freezing warehouse sector. Yet suitable cold chain space is in short supply nationally. Growing exports of U.S. agricultural and branded food products are a key driver behind the growth of demand for temperature-controlled facilities. As a result, many companies in the cold-storage field are implementing a "port-centric" investment strategy. Near the Port of Charleston, South

Carolina, for example, California-based Lineage Logistics recently broke ground on a new 340,000-square-foot cold-storage warehouse utilizing blast-freezing technology, which is required when exporting meats, fruits, and other perishable food products. Trident Seafoods, the nation's largest seafood company, just opened a convertible refrigerated/freezer warehouse near the Port of Tacoma, Washington, to meet growing export demands.

The Food Safety and Modernization Act (FSMA), the most extensive update of federal food-safety laws since 1938, adds expensive new compliance costs for the always hyper-cost-sensitive DC sector. FSMA requires warehouses and shippers to develop well-defined food-safety strategies that will ensure the integrity of their storage and transport operations. Compliance with the new regulations requires making upgrades to many existing cold-storage facilities, but this often is economically unfeasible due to those facilities' age and the expensive design and connectivity requirements of modern warehouses.

Cybersecurity threats

The banking industry has been under siege by cybercriminals for years now, losing billions of dollars to hackers and frauds—much of which transpires under the radar screen. Why rob banks? "It's where the money is," according to the infamous bank robber Willie Sutton. Why rob the supply chain? Well, "It's where the goods are," and therefore ripe for thievery, extortion, and ransom.

From the now almost daily reports of data breaches, identity theft, ransomware, and even hacking for political purposes, it's clear that cyberthreats are pervasive, affecting all sectors of the economy. It's also clear that they pose a most severe threat to the global supply chain. In June 2017, the NotPetya ransomware attack hit companies in at least 64 nations, including Russia, Germany, and the United States. A number of supply chain-related companies were directly affected. The world's largest shipping company, A.P. Møller-Maersk, was among the victims of the NotPetya attack, which caused outages in its computer systems around the world. Maersk-owned APM Terminals' facility at the Port of New York and New Jersey had to close temporarily due to the extent of the system attack. Another victim was FedEx's TNT subsidiary. Trade in FedEx stock was temporarily halted during the attack.

DCs and other logistics service providers will have to meet this new online threat, and their investments in cybersecurity will be soaring in the months and years ahead. For that reason, our firm's labor-market investigations for site-selection clients increasingly include special research into an area's ability to supply coveted information technology talent in cybersecurity. One of our benchmarks is the presence of a college or university that has full accreditation by the National Security Agency (NSA) for its programs in information assurance.

The NSA and the U.S. Department of Homeland Security (DHS) jointly sponsor the National Centers of Academic Excellence in Cyber Defense (CAE-CD) program. The goal of the program is to reduce vulnerability in our national information infrastructure by producing professionals with the latest in cyberdefense expertise. Such expertise is increasingly being sought by the human resources departments of our corporate site-seeking clients, both in and out of the

logistics industry. NSA-designated colleges run the gamut from Dakota State University in Madison, South Dakota (population: 7,425), to schools in major metro areas like Northeastern University in Boston (population: 4.6 million).

Finding the way

Based on our firm's five decades of site-selection experience within the dynamic and ever-evolving supply chain industry, I am fully confident these and other challenges will be met with great success by the industry's best and brightest. Those logistics companies that find their way through these challenges—and do so while keeping costs in check—will lead this sector to even greater heights in the years ahead.

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