



Warehousing

Follow the food and beverage leader

By John H. Boyd | From the Quarter 5 2015 issue

As the fastest growing segment of distribution warehousing, the food and beverage sector can provide insights into trends that could affect the entire industry.



In the opening scene of the 1960s Broadway musical *Oliver!*, workhouse boys, who are surviving only on thin gruel, sing the praises of "Food, Glorious Food." These same sentiments may be shared by many in today's site-selection and warehousing industries. Based on our firm's work with distributors, manufacturers, and retailers, we believe the food and beverage sector is currently the fastest growing and most dynamic segment of distribution warehousing.

One reason for this might be the basic, life-sustaining nature of the food and beverage sector and the challenges it faces as it tries to meet the needs of a growing population. The question of how many people the planet can feed and the supply chain can support is a long-standing one that only becomes more impassioned as the world's population keeps soaring.

But food warehousing is interesting for another reason besides our stake in it as consumers. Because it is the fastest growing segment, warehousing and site-selection trends in food and beverage tend to be more pronounced and can be viewed as a precursor for what lies ahead for other sectors.

The cold chain is hot

One of the key trends in the industry is a growing need for cold storage facilities. Our firm's trademarked BizCosts service—which provides forecasting and comparative cost-analysis reports for various industries—predicts that the global "cold chain" market will register an impressive compound annual growth rate of more than 13 percent during the period from 2015 to 2020. The food and beverage sector is fueling most of this growth, with some help from the pharmaceutical industry. Growing demand for frozen and processed food items such as meat, fish, frozen food products, and ready-to-eat meals and snacks are all major drivers here.

The Food Safety Modernization Act (FSMA) will only increase that demand, as it shifts the paradigm of the food industry from reacting to food-safety events to preventing them. While there are some 11,000 cold storage warehouses in the United States today, many will fall short of FSMA compliance standards. Retrofitting will often be economically unfeasible. Because of this, many site-seeking food processors and distributors are considering only new, modern, state-of-the-art refrigerated warehouses in their real estate searches.

Warehousing site selection in other sectors also could be affected by shifting state and federal regulations. For example, site-selection decisions may have to factor in such things as changes in groundwater-usage regulations in drought-stricken California; landmark U.S. Environmental Protection Agency regulations on ozone limitations and federal oversight of U.S. waterways; and National Labor Relations Board rulings on so-called "ambush" union elections (which may place a greater premium on sites in states that have "right-to-work" legislation).

Close to the sea

In addition to an increase in demand for cold storage facilities, our warehousing site-selection projects for the food and beverage industry often favor being located within a one-day round-trip drayage of a major U.S. port. This is because U.S. food producers want to be able to accommodate future export growth. China, in particular, is expected to be a high-growth market for food exports due to its growing population, increasing disposable income, and strong consumer preferences for American-branded products, especially food and beverages.

Take the dairy industry, for example. Milk and cheese are relatively new to the Chinese diet, but consumers' taste for them is growing. U.S. exports of dairy products to China are skyrocketing as 1.4 billion people migrate to cities, draw middle-class wages, and discover foods like ice cream, cheese pizza, and chocolate-flavored milk. Another reason for this fast growth is that China's domestic food and beverage industry has a dismal track record when it comes to meeting quality standards, and Chinese consumers have grown leery of domestically produced products after a history of contamination scares.

As international consumers' taste for American food and beverages grow, so has demand for refrigerated warehousing space located close to seaports. For example, refrigerated warehousing is in especially strong demand within one-day round-trip drayage of the ports of Los Angeles and Long Beach, as these ports are the nation's busiest and California is the country's leading food-producing state. This demand not only includes California's Inland Empire but also stretches into southern Nevada, which offers a superior tax climate for warehousing, a "right-to-work" labor regime, and the availability of low empty-backhaul rates associated with the consuming, not producing, economy of the Las Vegas area.

We believe this demand for warehousing space close to ports will only increase if the large trade pacts currently on the table are passed. If enacted, the Trans-Pacific Partnership (TPP) trade agreement will produce an even greater call for warehousing along the West Coast, both within and outside of the food sector. On the East Coast, we anticipate the same warehousing trends will play out once the Transatlantic Trade and Investment Partnership (TIPP) deal

between the U.S. and Europe is completed. This massive free trade pact will dwarf the TPP and even the North American Free Trade Agreement (NAFTA). These developments are triggering coast-to-coast opportunities to provide a new type of state-of-the-art, multiambient facility, as demand for U.S. food products—dry, refrigerated, and frozen—from buyers in Asia and Europe is expected to spike once these trade deals are approved.

More rail, less truck

Another food and beverage-related trend gaining steam is the rise in demand for warehousing near rail facilities. In general, our clients are strongly considering intermodal transportation due to a combination of the troubles facing the trucking industry, environmental concerns, and rail's potential cost savings. In particular, the intermodal network is providing more and more services to accommodate the special requirements of food shippers, one of the last sectors to fully get on board with the mode.

We believe the planned RailPort Intermodal Transloading Terminal (RITT) facility in southern Nevada provides a potential case study of the future of cold chain warehousing and the move to greater utilization of lower-cost and more environmentally friendly rail in the food supply chain. Named RailPort Las Vegas, it will be the first U.S. public storage facility that combines rail with highway cross-docking facilities at a single location. It is anchored by a 15-story, multitemperature automated storage and retrieval facility containing 150,000 pallet positions and will have a climate-controlled cross dock of 150 truck bays connected with six enclosed rail sidings. This futuristic, robotic warehouse is designed as a frozen, chill, and ambient "lights out" operation, meaning it requires minimal staffing.

The facility is designed to receive a large volume of palletized product by rail to serve the U.S. Southwest and Southern California, including the ports of Los Angeles and Long Beach, at an estimated transportation savings of more than 60 percent compared to current trucking costs. RITT will also be technologically advanced, blending data from cloud-based warehouse management systems, transportation management systems, enterprise resource planning systems, and yard management systems with custom software as well as truck geographic positioning systems (GPS) and drivers' mobile devices. Our firm views this facility as a prototype for other regional cold chain centers serving the varied interests of manufacturers, the railroads, wholesalers, and ultimately the end consumer.

Costs on the rise

The growing demand for warehousing space is also having the effect of pushing up costs. In the warehousing sector, our BizCosts projections point to overall costs increasing by 7.5 percent in 2016.

[FIGURE 1] TOTAL GEOGRAPHICALLY VARIABLE OPERATING COSTS BY CITY

Location	Total Annual Operating Costs
Boston, Massachusetts	\$27,815,246
Newark, New Jersey	\$27,361,783
Los Angeles/Long Beach, California	\$27,271,294
Sacramento, California	\$26,624,379
Purchase, New York	\$26,464,185
Philadelphia, Pennsylvania	\$26,361,379
Camden, New Jersey	\$26,149,817
Stockton, California	\$26,067,014
Minneapolis, Minnesota	\$25,816,126
Chicago, Illinois	\$25,588,967
San Bernardino, California	\$25,113,528
Lancaster, Pennsylvania	\$24,274,351
Atlanta, Georgia	\$24,114,210
St. Louis, Missouri	\$24,066,205
Dallas, Texas	\$23,805,148
Pittsburgh, Pennsylvania	\$23,760,788
Kansas City, Missouri	\$23,717,103
Cincinnati, Ohio	\$23,216,665
Omaha, Nebraska	\$22,589,454
Othello, Washington	\$22,546,557

[SOURCE: BIZCOSTS, A REGISTERED TRADEMARK OF THE BOYD CO. INC. LOCATION CONSULTANTS, 2015]

When it comes to selecting a site for their warehouse facilities, comparative economics is ruling the relocation process like never before. As a result, companies are even more attuned to finding the most cost-effective location for a new warehouse or distribution center. Costs can vary significantly from one region to another. This is evident in Figure 1, which shows the total annual operating costs for a representative light-industrial facility employing 300 workers for a series of leading food industry cities in the United States. Costs include hourly labor, benefits, land, construction, property taxes, utilities, and shipping.

Shipping costs play an important role in site

selection. For example, warehouse operators pay close attention to conditions in the trucking industry. That sector certainly bears watching, as generous increases in truck driver wages and benefits will propel truckload rates higher in 2016 and beyond, potentially pushing pricing up by double digits. Truckload rates may need to rise as much as 13 to 17 percent to pay for higher driver wages as the industry struggles with driver shortages and onerous, costly federal regulations. This is directly relevant because higher truckload rates will serve to further tighten profit margins for the highly cost-sensitive warehousing sector.

Challenges ahead

We believe that the food cold chain will continue to be at the forefront of trends within the distribution warehousing industry for many years to come. These will include such things as growth in specialized services and regulations as well as a greater need to be located close to ports and rail facilities.

At the same time, the food and beverage industry will continue to face challenges that are unique to this vital sector of the economy. On the one hand, it will be hard-pressed to supply

the growing consumption needs of a hungry and soaring global population. On the other hand, especially in the United States, it will have to deal with the fact that some 40 percent of food is never actually eaten, amounting to an estimated US \$165 million a year in waste. The food and beverage supply chain needs to respond by reducing that portion of food waste that occurs on its watch in warehouses and during shipment. From our experiences with this dynamic supply chain sector, we fully expect these challenges to be met with great success.

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