

Trend Analysis: Niche Ports and Bulk Commodities

Trend Statement

Niche ports and bulk commodities are intrinsically linked. Commodities place specific demands on a port complex, and niche ports have either developed to serve a specific customer base or are typically agile enough to adapt their facilities to suit specific needs. However, because of their close connection to, and dependence on specific commodities, the economic well-being of these ports rises and falls along with the specific niche market they serve. Containerization of bulk materials may offer a method of diversifying their services and lessen the demand on key commodity-based sectors.

Background

Niche ports often specialize in specific goods movement operations that are not the focus of larger facilities that move containerized goods. Niche ports may specialize in agricultural products, automobiles, machinery, bulk materials, and other products that do not fit within the containerization model. Based on their physical characteristics, location, facilities and equipment, niche ports focus on specific cargo and make strategic decisions to invest in assets that will support and suit their targeted markets. Of the 11 California ports that operate publicly, eight are considered smaller ports with a niche focus. These include the ports of: Hueneme, Humboldt Bay, Redwood City, Richmond, West Sacramento, San Diego, San Francisco, and Stockton.¹ With specialization of port activities comes a substantial level of risk. When the industry that is being served suffers a decline in business, demand for port services declines, causing a reduction in the need for labor and lower levels of revenue generated by the ports themselves. Niche ports are forced to employ innovative business models and constantly alter their practices to account for ever-changing economic conditions (Logistics Management 2009; White 2009).

Freight System Implications

Niche ports provide vital services to industry and the national economy. The Port of South Louisiana handles approximately 50 percent of bulk grains produced in the entire United States (U.S.) Midwest for export and 15 percent of total U.S. exports (by volume).² Its importance to the Nation was never more apparent than when the port was closed in 2005 by Hurricane Katrina. Due to the specialized nature of its facilities and the inability to quickly transfer its services to another port, an entire industry could have suffered significant losses and left product stranded had the port not opened in time for fall harvest. Another example of this trend was the slowdown in vehicle purchases that occurred in 2008 and 2009, which dramatically slowed growth rates at the Port of Hueneme in Ventura County. Hueneme lost \$1 million in revenue in 2009 after realizing profits of \$1.3 million the year before (White 2009).

¹ <http://www.dot.ca.gov/hq/tpp/offices/ogm/seaports.html>

² <http://www.portsl.com/overview.htm>

The various risks for niche ports include:

- Commodities often flow through niche ports because of dedicated infrastructure.
 - Entire industries can depend upon one niche port complex; therefore, efforts to protect the livelihood of the industry will also maintain the port's viability.
 - Alternatively, a declining niche industry creates financial stress for niche ports.
- Detrimental economic implications are magnified at niche ports because of their lack of a diverse client base.
- Urban encroachment through land use variances limits the development options of all ports, however small ports may be particularly vulnerable. They have an already limited market share that cannot be broadened through expansion if encroachment occurs.
 - The ports of Redwood City and San Diego have faced development pressures in recent years. In San Diego, the Tenth Avenue Marine Terminal was the focus of multi-use development plans that included a new stadium, an arena, and a bay front park.³ Encroachment of residential housing⁴ threatens a working waterfront.

Planning Considerations

If the demand for bulk commodities continues to rise, the ports that focus on such goods movement activities will need investments to stay competitive (Burnson 2011). Access to rail is a main concern for many of these locations. Containerization of bulk commodities is increasingly an option but demands logistics efforts devoted to repositioning and maximizing container locations, updating loading techniques and equipment (containerized bulk products often work best in containers that are stored vertically, avoiding leakage at door seams) and a re-working of concepts related to weight distribution and standardization of container size so that bulk materials do not have to be transloaded. Transloading is a process involving the transfer of goods from marine containers into larger, domestic containers.

- Bulk materials are often transported via train; therefore niche ports (or any port with a dedicated focus on bulk materials movement) generally need reliable heavy rail access to remain competitive (Burnson 2011).
- Containerization of commodities may lead to the expansion of bulk movements into more varied markets because containers can be offloaded at ports that do not have specific bulk commodity facilities.⁵
 - However, this may also lead to slightly diminished use of typical bulk materials movement strategies as containerization increases in popularity, ease of use, and reliability.

³ http://aapa.files.cms-plus.com/SeminarPresentations/07_Comm_Dodge_Dick.pdf;
<http://www.workingwaterfrontgroup.org/wwg-issues-back-off-no-stadium-at-the-terminal/>;
<http://www.workingwaterfrontgroup.org/wwg-issues-saving-san-diegos-marine-terminals/#>.

⁴ <http://www.utsandiego.com/news/2013/sep/11/tp-shipbuilders-see-grave-threat-from-zoning/all/?print>

⁵ <http://people.hofstra.edu/geotrans/eng/ch3en/appl3en/ch3a2en.html#>

- Not all goods, such as grain or iron ore, will fit within the containerization model. These could become the focus of future niche port operations if other commodities become increasingly containerized.
- Containerization of commodities warrants significantly more study. There is currently limited understanding of how to achieve the highest level of benefit from such techniques.
- Commodities containerization will be challenged by the seasonality of some goods, such as agricultural products, which may not warrant new investments in infrastructure.

Resources

American Association of Port Authorities: <http://www.aapa-ports.org/home.cfm>.

Burnson, Patrick (2011). State of Bulk and Breakbulk Ports: Back to Basics. *Logistics Management*. Volume 50, no. 7, pp. 60-64.

California Association of Ports Authorities Blog: <http://blog.californiaports.org>.

Logistics Management (2009). Shifting Tides. *Logistics Management*. May 2009, p. 49.

McSwain, Dan. (2013). Shipbuilder see grave threat from zoning. *Union Tribune* 11 September, 2013. <http://www.utsandiego.com/news/2013/sep/11/tp-shipbuilders-see-grave-threat-from-zoning/all/?print>

Rodrigue, J.P. and Notteboom, T. The Containerization of Commodities (ch. 3, The Geography of Transport Systems). <http://people.hofstra.edu/geotrans/eng/ch3en/app13en/ch3a2en.html#>
Seaports: <http://www.dot.ca.gov/hq/tpp/offices/ogm/seaports.html>.

White, Ronald D. (2009). A Perfect Storm Hits Tiny Port of Hueneme; The Niche Facility Suffers as Carmakers Struggle. *The Los Angeles Times*. 28 October, 2009, B1.

