



# Value-Added Warehousing: A New Dynamic for the Logistics Industry



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This White Paper is one in a series developed as part of the Tampa Bay Regional Goods Movement Study. The purpose of this series of White Papers is to provide background and information for the freight community in the Tampa Bay Region.

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### INTRODUCTION

This White Paper provides an overview and assessment of Value-Added Warehousing and its evolving role in the logistics industry. A discussion is also provided regarding current trends in the warehouse distribution industry, including potential opportunities in the Tampa Bay Region.

Specifically, the paper includes a discussion of:

- The Value-Added Warehousing concept and process;
- National trends in warehousing and distribution;
- Value-Added Warehousing examples at the national and state level; and
- Future opportunities for the Tampa Bay Region.



### BACKGROUND

Value-Added Warehousing is a relatively new concept in the logistics industry and is based in part on bridging the gap within the existing transportation and distribution process of shipping and assembling consumer products. In essence, Value-Added Warehousing services are those which complement and enhance freight transportation, warehousing, and logistics-based industries by assembling and customizing products moving through a distribution facility. They improve product flow to reduce and often eliminate storage, while enabling customization to fit the needs of customers. Logistics-based companies which utilize Value-Added Warehousing services are typically able to lower their inventory of finished goods until company or customer orders are actually received. Overall, this process enables a more cost-effective supply chain approach to distribution, providing more flexibility and cost savings.<sup>1</sup>

The value-added function of warehousing reflects a new role for many logistics companies to take on the final elements of the production process. Many economic development experts consider Value-Added Warehousing to be the new form of manufacturing jobs in the United States.<sup>2</sup> The primary services associated with Value-Added Warehousing include:

- Inventory Management: Overall management of products and their assemblage to keep supply chains moving efficiently
- Inspection/Testing: Quality control and testing of products prior to shipment



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<sup>1</sup> Nexus Value Added Logistics Services, Nexus Corporation (2008).

<sup>2</sup> Transportation Implications of Emerging Economic Development Trends, National Cooperative Highway Research Program, Transportation Research Board (August 2008).

- Transloading: Moving products from international loads to domestic loads
- Packing/Packaging: Packing, packaging (i.e. blister packaging), and repackaging of goods and products
- Labeling/Identification: Labels to products, electronic bar code identification, product samples
- Assembly/Customizing: Kitting of products, customized pallets, light assembly, final assembly
- Reverse Distribution: Return inspection and disposition, recycling of used and returned goods
- Specialized Storage: Storage and transport of perishable and distinctive products and cargo<sup>3</sup>

Overall, the Value-Added Warehousing process includes three general steps:

1. Transport of products from supplier at terminal (i.e., port, manufacturer) to the freight distribution warehouse;
2. Value-added services are administered to products (i.e. assemblage, packaging); and
3. Value-added products are shipped to logistics terminal for delivery to customer.<sup>4</sup>

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**Figure 1** provides a snapshot of the Value-Added Warehousing process performed at a typical freight distribution facility.

A prime example of a Value-Added Warehousing service involves combining (kitting) several imported components into a single product for shipment to the consumer. For example, the value-added process of making home theater kits involves combining the liquid-crystal display (LCD) panel, speakers and other parts that are all originally shipped separately to the warehouse. The home theater system is then assembled and transported as one final product for delivery to a company terminal center where it will then be shipped to individual stores and consumers. This process greatly increases efficiency, while also benefiting the consumer who pays for the finished package instead of individual components, which in most cases results in higher costs.<sup>5</sup>

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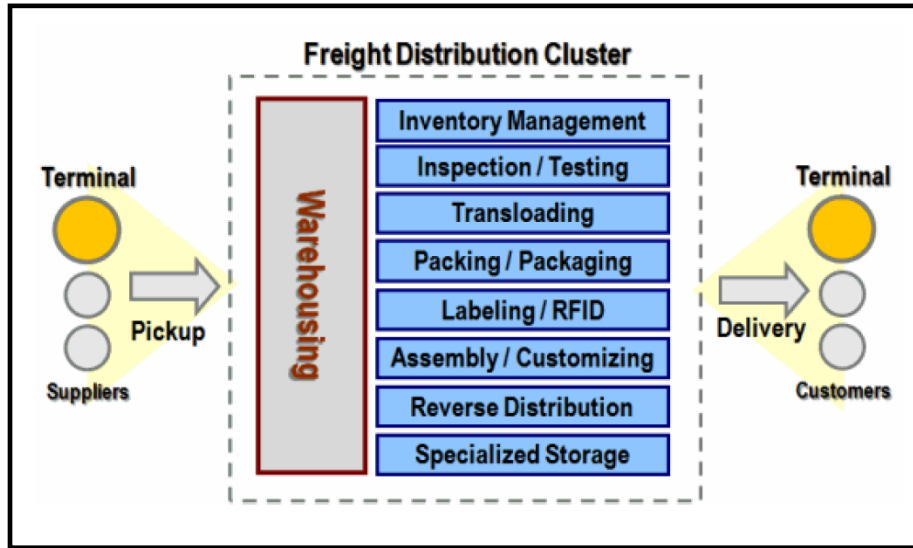
<sup>3</sup> The Geography of Transport Systems, Jean-Paul Rodrigue, Claude Comtois, Brian Slack (2006).

<sup>4</sup> Ibid.

<sup>5</sup> Logistics Providers Adapt Services to Shifting Demand, Jean V. Murphy, Supply Chainbrain.com (July 2006).



FIGURE 1: VALUE ADDED WAREHOUSING PROCESS



Source: The Geography of Transport Systems

## NATIONAL TRENDS

At the national level, the traditional role of warehouses and distribution centers has greatly changed from an exclusive storage and staging function to a focus on expediting the movement of goods through customization and value-added services. The three main objectives of modern warehousing and distribution centers are:

1. Velocity: moving goods through Just-in-time (JIT) logistics management;
2. Customer Service: ensuring products are consumer and shelf ready; and
3. Adding Value: Assembling and customizing products ready for consumption.

The elements of Value-Added Warehousing have become a major source of new jobs at distribution centers around the nation. The job creation aspects associated with Value-Added Warehousing could become significant for many parts of the nation, especially in regions which have lost traditional manufacturing jobs, but also for areas that have significant population growth and consumer demand, such as the Tampa Bay Region.<sup>6</sup> Goods are produced at the least-cost location (i.e., China), but final assembly and shelf-readiness are starting to occur more often at the point of consumption.<sup>7</sup>

<sup>6</sup> Transportation Implications of Emerging Economic Development Trends, National Cooperative Highway Research Program, Transportation Research Board (August 2008).

<sup>7</sup> Principals for a U.S. Public Freight Agenda in a Global Economy, Martin E. Robins, Anne Strauss-Wider, The Brookings Institution (January 2006).

There is also a growing demand for Value-Added Warehousing in the vicinity of major ports as a means to create a more integrated and efficient distribution process. Some ports are even modifying their warehousing functions to include value-added services when they expand or reshape their facilities. Both logistics companies and ports realize that value-added services are becoming a more important function to consider when developing their long-term business plans.<sup>8</sup>

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In addition to being a relatively new concept at the national level, Value-Added Warehousing is also considered to be an ever-evolving process. In an era of the globalization of supply chains, the logistics industry is not only moving towards expanded Value-Added Warehousing, but extending further by bringing all products from overseas to assemble at one central hub or regional facility. Since production typically takes place at the least-cost location with the need to complete final customization near the customer, there is increased international trade and a growing demand for distribution centers in the vicinity of major ports and border crossings. This development trend is creating many new economic development opportunities for regions with national and international ports, and along international borders.<sup>9</sup> As a result, a regional opportunity exists to create manufacturing jobs along transportation corridors linking to the Port of Tampa.

### State of New Jersey

The State of New Jersey has been one of the leading warehouse and distribution centers in the nation based on its location in one of the most concentrated and affluent consumer markets in the world. Due to the state's traditional manufacturing base, warehouses and distribution facilities have been located in close proximity to major interchanges and other vital transportation corridors. Specifically, the Port of New York and New Jersey has grown to one of the leading centers of maritime activity in the nation and has a vital international supply chain. Hence, as services such as JIT and Value-Added Warehousing have been added to warehouse functions, the distribution centers of the State have been at the forefront of the logistics industry to take on final assemblage and customization of products.<sup>10</sup>



<sup>8</sup> Commercial Development of Regional Ports as Logistics Centers, United Nations (2002).

<sup>9</sup> Transportation Implications of Emerging Economic Development Trends, National Cooperative Highway Research Program, Transportation Research Board (August 2008).

<sup>10</sup> Principals for a U.S. Public Freight Agenda in a Global Economy, Martin E. Robins, Anne Strauss-Wider, The Brookings Institution (January 2006).

## Value-Added Warehousing A New Dynamic for the Logistics Industry

The Lifetime Hoan Corporation serves as an excellent example of a value-added distribution business with a significant impact on regional goods movement and economic development in New Jersey. The company operates a warehousing facility which employs approximately 550 workers, and receives over 1,600 40- and 20-foot containers annually, mostly from overseas. All products are received in bulk, and

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consist of a range of household cutlery, kitchenware and bakeware products sold to markets across the United States. The workers break-down the containers, and make the products “shelf ready” at the facility per customer specifications. Products are packaged, bundled and ticketed and then shipped for delivery to the consumer market. The company recently relocated to a new 560,000 square-foot expanded facility, located adjacent to a major interchange on the New Jersey Turnpike, within 45 minutes of the Port.<sup>11</sup>

## STATE TRENDS

In central Florida, a significant number of distribution facilities have been expanded and constructed to serve major national retail chains throughout the state. The vast majority of these facilities are located in Polk County, with many serving as central hubs of Valued-Added Warehousing. Companies such as Rooms To Go, Publix, Best Buy, Home Depot, HHGregg, Wal-Mart, W.S. Badcock, Advanced Auto Parts, McKesson, Fed Ex, Saddle Creek Corporation, to name just a few, have become involved in providing value-added services to customized products directly shipped to stores and consumers in Florida’s major markets, including the Tampa Bay Region. The types of jobs associated with these services generally require a wide range of skills and on average pay \$4,000 more per year than traditional warehousing jobs. Over the next 15 years, over 4,000 acres and 22 million square feet of distribution facilities are planned for further expansion in Polk County, much of which will include value-added services and jobs. As the State continues to grow in population and consumer demand, the Value-Added Warehousing process will become a major component to the logistics-based industry.<sup>12</sup>



Within the Tampa Bay Region, there are a number of logistics companies serving “third party” (3PL) roles to other distribution centers in Florida, which include providing supply chain management and value-added services to customize a company or customer’s needs. These companies operate facilities which provide value-added products to consumer markets across the region. Three prime examples include:

- Laney and Duke Terminal Warehouse, Incorporated (Tampa)
- Le Saint Logistics, LLC (Tampa)
- Kuehne and Nagel (Plant City)

<sup>11</sup> Transportation Implications of Emerging Economic Development Trends, National Cooperative Highway Research Program, Transportation Research Board (August 2008).

<sup>12</sup> Interview, James DeGennaro, Senior Business Marketing Manager, Central Florida Development Council (October 2008).



All three companies provide a variety of valued-added services from bundling, packaging and labeling to kitting and bar code processing.

### **FUTURE OPPORTUNITIES, TAMPA BAY REGION**

As the Tampa Bay Region continues to grow, there will be an ever-increasing demand for consumer goods and products. The trend towards increased value-added services in the logistics-based industry will provide many opportunities for companies in the region to expand or develop Value-Added Warehousing facilities. In addition to improved flows of goods and products, many quality jobs could be created, thereby contributing significantly to economic development and growth in the region.

Since valued-added products travel from the supplier to the distribution facility to the consumer, the location of any future facilities will likely be directly linked to the freight transportation system. Future facilities will also be greatly influenced by the Port of Tampa and other regional freight terminals.

There are several existing and emerging freight activity centers in District Seven which could serve as potential opportunities for the addition of Value-Added Warehousing facilities. These activity centers are all strategically based on their location within the regional freight transportation system and connectivity to other major freight hubs such as the Port (**Figure 2**). Consequently, they would provide advantageous locations for value-added distribution facilities. They include:

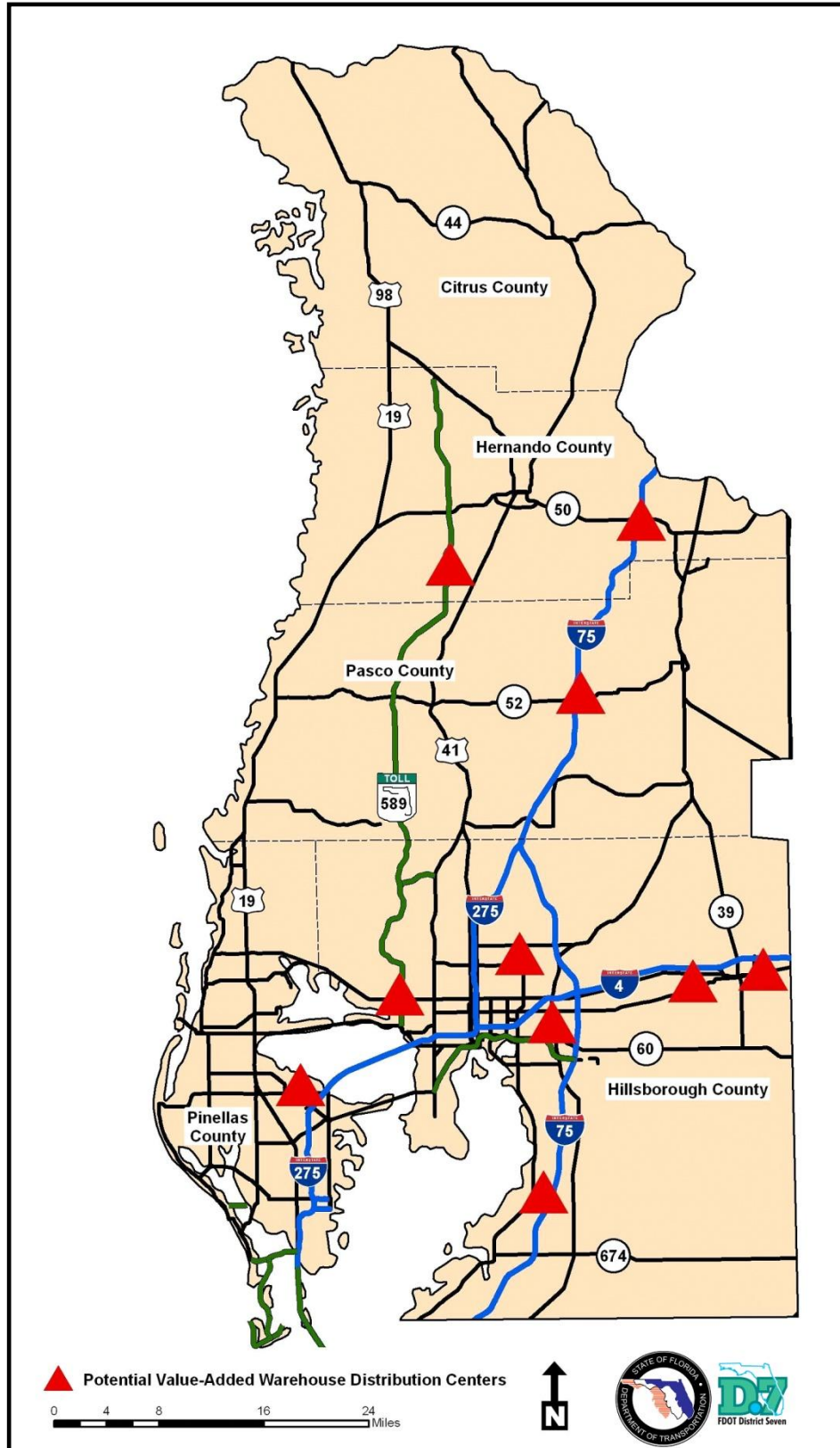
#### **Hernando County**

- I-75/SR 50 – Emerging Freight Activity Center adjacent to interchange
- Veterans/Suncoast Parkway/Airport Industrial Area – Emerging Freight Activity Center between Parkway and US 41

#### **Hillsborough County**

- I-4 Plant City – Freight Activity Center at Airport and Industrial Park area
- I-4 Plant City – Freight Activity Center at East Plant City Industrial area
- Veterans Expressway/I-275 – Freight Activity Center at Anderson Road Industrial Area/Tampa International Airport
- I-75/275 Area– Freight Activity Center at East Central Tampa Industrial area
- I-75 South – South I-75 Corridor Freight Activity Center
- I-75/Big Bend Road – Freight Activity Center near Big Bend/Port Red Wing facilities

FIGURE 2: POTENTIAL VALUE-ADDED WAREHOUSING DISTRIBUTION CENTERS



### Pasco County

- I-75/SR 52 – Freight Activity Center at One Pasco Center Industrial Area

### Pinellas County

- I-275/US 19 – St. Petersburg/Clearwater International Airport/Gateway Triangle Freight Activity Centers

## CONCLUSIONS

Value-Added Warehousing is a rapidly expanding concept in the logistics industry, and potentially represents an important part of the manufacturing sector of the United States economy. As this concept continues to evolve and consumer demand of the Tampa Bay Region grows, there will likely be significant opportunities for logistics companies to expand their operations to better serve the marketplace. The impacts to the region's freight transportation network, however, could potentially be significant. Therefore, future planning and coordination with freight stakeholders, economic development partners and jurisdictions should consider how to best improve connectivity of both truck and rail traffic between Value-Added warehouses and freight activity centers, including major hubs such as the Port of Tampa. The evolution of the supply chain aspects of the global economy, combined with population growth could provide an enormous opportunity for the Tampa Bay Region to embrace Value-Added Warehousing as an important part of the future.