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Inland ports: Solving the logistics puzzle of growth in global trade

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Inland ports: Solving the logistics puzzle of growth in global trade Editor's Note: Richard Allen is founder and CEO of the Allen Group. Among the notable projects in the group portfolio are the 6,000 acre Dallas Logistics Park and, in 2006, the company was chosen by BNSF as the master developer for the 1,000 acre Logistics Park Kansas City.

During the past 40 years, the United States has experienced an unprecedented growth in global trade volume with both established and emerging trade partners. This increase in the shipment of manufactured goods and raw materials has played a central role in the growth of international trade and economic globalization, forcing the United States to search for faster and more efficient ways to move goods throughout the country. One of the most promising solutions to the challenges posed by this growth in trade is the development of Inland Ports.

To understand how the concept of the Inland Port has emerged as a solution to this new logistics puzzle, one must first understand the magnitude of growth of global trade. In 1970, the total volume of US foreign trade was $84 billion for the entire year. In 2008, US foreign trade volume surpassed $84 billion by the 10th day of January.

In 2007, international trade accounted for nearly 25% of the gross domestic product (GDP) of the United States, with a total of nearly $3 trillion in goods and services. Conversely, domestic production of manufactured goods decreased from 24% of our GDP in 1969 to less than 10% by 2007. These statistics demonstrate how the increase in international trade can be attributed to the transformation of the United States into a service-based economy that sources products from countries where they can be produced more economically.

While Canada remains the United States' largest trading partner, the Pacific Rim region, whose countries offer inexpensive labor and goods, has become the number one source of US imports. More than $600 billion of the $ 1.9 trillion of total US imports is shipped from Asia, which represents a 91% increase over the past decade.

Growth in imports from these countries is projected to increase dramatically. Despite annual fluctuations in international trade and questions regarding the strength of the world's economy, the United Nations sees no indication of a major prolonged economic slowdown.

Increasing global economic interdependencies require more efficient logistical shipping and distribution processes. American businesses are looking for ways to maximize speed, minimize costs and increase flexibility.

Defining Inland Ports
The process involved in the sourcing, handling and transporting of goods between raw material suppliers, manufacturers, retailers and consumers across the world is remarkable in both its scale and sophistication.

According to a report produced by Heitman Real Estate Investment Management Firm, an Inland Port is characterized by seven key attributes:

- Access to major container seaport

- Intermodal facility serviced by a Class I railroad
- Minimum of 1,000 acres of total land
- Foreign Trade Zone status
- Strong local market access (e.g., near a major metropolitan area)
- Nearby access to north/ south and/or east/west interstate highways
- Access to a strong local labor pool.

Other organizations, such as the Texas Transportation Institute and the Center for Transportation Research at the University of Texas, have defined an Inland Port as any site meeting the above criteria, which is located away from traditional land, air and coastal borders.

Inland Ports facilitate and process international trade through strategic investment in multi-modal transportation assets and by promoting value-added services as goods move through the supply chain. Inland Ports facilitate the movement of large volumes of goods from congested seaports to major population centers. Over 65% of the containerized freight arriving at West Coast seaports is consumed by markets east of the Mississippi River. The Allen Group's vision and longrange planning efforts provide competitive advantages to those companies who are striving to achieve a flexible, efficient and well-organized supply chain.

Where do these imported goods actually enter the United States, and what are the already overloaded coastal ports doing to solve the growing dilemma of handling the overwhelming inflow?

Improving the Supply Chain Process
Most imported goods are processed upon entry into the United States at or near one of the major US shipping ports. The Ports of Los Angeles/Long Beach, combined, comprise the largest seaport facility in the United States, with more than $100 billion worth of goods moving through it every year.

As a result of the United States' increasingly heavy dependence upon imported goods from the Pacific Rim, traffic at the Port of Los Angeles/Long Beach has reached record levels. In 2007, container traffic amounted to 15.6 million twenty-foot equivalent units (teus), roughly three-and-a-half times the volume processed at the Ports of Seattle and Tacoma, which combined, comprise the second-largest pointy of entry on the West Coast.

Total cargo volumes are projected to triple over the next 20 years, and by 2020 every major US container port will see its total traffic volume double. Cargo traffic at all West Coast ports, which is projected to grow at an average rate of five to nine percent per year, is straining existing port infrastructure and creating serious bottlenecks in the flow of imported goods.

Because of this growth in imports, seaport facilities like L.A./Long Beach and their surrounding warehouse and logistics facilities have been heavily impacted, leaving limited room for future capacity. Add in the high costs of real estate, safety, pollution issues and increasing traffic congestion, it is apparent that imported goods no longer can be processed efficiently in the immediate vicinity of their port of entry. As a result, much of this freight is being transferred directly from ships to railcars at the docks and transported to Inland Port facilities for further processing.

The majority of containers arriving at the West Coast ports are bound for the Central and Eastern United States markets via double stack trains. With a focus on maximizing speed and minimizing costs, rail is the most fuel-efficient way to move goods to the major Inland Port facilities.

As the demand for imports overloads the capacity of US seaports, the country's leading industrial development companies are recognizing that a wider national solution for the future is urgently needed.

New Dawn for Rail Infrastructure
The US Class 1 railroads recognize the constraints facing the ports and are investing billions of dollars annually to increase significantly the capacity of the primary rail corridors. This additional volume expedites movement of containers from the seaports to the Inland Ports. As a result, import shipments can now make their way from crowded seaports to new state-of-the-art Inland Ports via dedicated

double stack trains moving along the main line rail corridors. From there, these newly developed Inland Ports facilitate the transfer of containers from rail to truck, which provides the final mile of delivery.

For example, let's compare two companies that are searching for the optimal location for a one million square foot distribution facility that receives 15,000 containers per year. Company A locates within an Inland Port adjacent to an existing intermodal facility, while Company B locates at a site 40 miles from the intermodal facility. Company A will spend $1.1 million in drayage costs per year vs. Company B. which will spend $2.6 million. Company A will save over $1.5 million in drayage costs alone. Ultimately, immediate adjacency to an intermodal facility is critical in the site selection process.

As the United States' demand for imported goods continues to increase and as advances and refinements are made in transportation, shipping and inventory control, the importance of all Inland Ports will continue to grow. This is especially true of locations situated at the intersection of multiple shipping routes with several modes of transportation, including high-density rail, intermodal facilities and Interstate highways.