



INDUSTRIAL WHITE PAPER

NEW AGE OF TRADE (Part I)



A BROKERAGE PUBLICATION

JUNE 2006

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EXECUTIVE SUMMARY

Redefining business practices and warehousing in the United States

In the last ten years, the dramatic growth of international trade has had a profound impact on the US economy. Globalization and technology have triggered a domino effect that has redefined business priorities, challenged transportation and infrastructure systems, introduced new warehousing formats and given rise to new industrial markets. Almost every area of the economy has been affected.

In this new age of trade, business practices in the distribution sector are rapidly changing in reaction to the shift in the flow pattern of goods throughout the country. In a compressed period of time, there have been significant changes to the supply chain, including:

- The greater use of larger facilities;
- More transloading and crossdock facilities near ports;
- The return of rail as an increasingly important transportation medium;
- The push into ex-urban or rural locations in search of less expensive land, labor and less legislation.

Within the real estate industry, these changes are being felt at a local level in new and established warehouse/distribution markets across the nation, including those that are located thousands of miles away from major deepwater ports. The regions expected to benefit the most from increased international trade include:

- Coastal gateways or regions surrounding the nation's largest deepwater ports (i.e. Los Angeles/Long Beach, Seattle/Tacoma, New York/New Jersey, Houston);
- Inland hubs or regions within the interior that have proximity to large markets and superior connectivity to freeways and rail (i.e. Chicago, Atlanta, Dallas, Memphis); and,
- Some second tier gateways and hubs.

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INTRODUCTION: CHARTING THE NEW FRONTIERS OF GLOBAL TRADE

In September 2004, Americans were presented with news reports of bottlenecks at US ports, particularly in Southern California, which were said to be threatening the holiday season. We were told Santa was not going to come because of port congestion. Media footage of ships loaded with gift merchandise waiting weeks to unload signified the growth of imports and the increasing reliance on a few major shipping ports as conduits for dispersing these goods throughout the country.

With escalating speed in the last ten years, there has been a dramatic shift in the sources of goods consumed by American households and businesses. Increasingly, goods are being manufactured outside the country and then imported through the major ports of entry. As a result, the US distribution system is transitioning from a domestic, manufacturing-driven model to one where large flows of goods from other countries are transported into the US through a few major ports and distributed throughout the country. This shift has caused changes in business practices within the shipping and distribution industry with implications for real estate owners, developers and urban development.

This paper begins with an overview of the growing importance of trade into the US and the ports that are experiencing the largest increase in shipping volume. We then discuss the impact on imports within the US. Following this overview, we present the five major business practices that are being implemented because of these changes, including:

- Large vessels that can only be accommodated by a limited number of deep-water ports;
- Diversification of shipments away from the dominant ports of Los Angeles/Long Beach (LA/LB);
- The re-emergence of rail, which is having a significant influence on a number of inland markets;
- Mega-distribution centers that are serving larger and larger trade areas;
- Transloading and crossdock facilities, which are being developed near ports in order to expedite the distribution of goods.

In our review of each business practice, we focus on the real estate implications and the regional markets that stand to experience the most change. We conclude with an overview of the markets that are expected to benefit from the ever-increasing volume of goods flowing through the nation's ports.



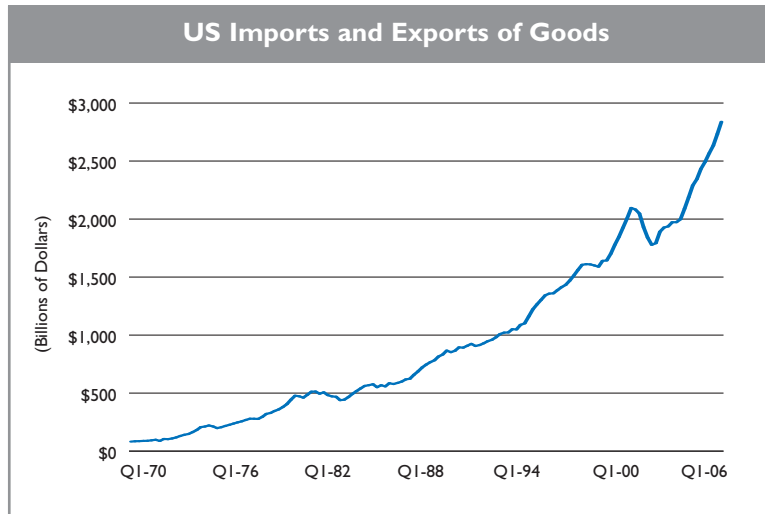
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TRADE REDEFINES US ECONOMY

Chart 1



Sources: US Bureau of Economic Analysis; Moody's; Economy.com

Globalization continues to challenge business and economies at every level. As the barriers to buying and selling goods anywhere and everywhere come tumbling down, many challenges have arisen as business and economies adjust to new competitive pressures. The dramatic increase in trade offers a clear illustration of how globalization has changed the US economy.

In 1970, the US imported a total of \$40 billion worth of goods into the country and exported \$44 billion, for a total two-way trade of \$84

billion. In 2005, total two-way goods trade reached \$84 billion less than two weeks into the year, and total value of goods traded during the year was \$2.6 trillion (see chart 1). The rapid growth in imports and exports far outpaced that of the economy as a whole, and trade has become an increasingly important part of the US economy. In 1970, total imports and exports were the equivalent of 8.2% of US gross domestic product (GDP); by 2005, they had reached a record high of 21% of GDP.

In 1970, trade was more of an afterthought for the US economy. Today, the US imports goods from all over the world, whether it is oil from the Middle East or manufactured goods from Asia, Latin America and Europe, and exports capital goods, consumer products and agricultural products to just as many countries and regions. The huge increase in trade, particularly over the past decade can be seen in Chart 1. At the end of 2005, the total of imports and exports had reached a record level and was soaring at an annual growth rate of nearly 20%.

The growth in imports in the past 35 years reflects a fundamental shift in the structure of the US economy away from manufacturing and toward services. In order to meet the demands of American consumers and businesses for low cost goods, US manufacturing companies have moved operations abroad and foreign-based manufacturers have increased their penetration of the US market. As more manufacturing has moved off shore, that sector's importance in the economy has declined. Today, manufacturing accounts for less of the total US GDP than at any time in the past 100 years. In 1969, manufacturing output accounted for 24% of total output, as of 2005, it accounts for less than 12%.



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There are no signs that this “new reality” of trade will change any time soon. US consumer and business demand for low-cost goods will remain strong, pressuring global corporations to move production to countries with low-cost labor and overhead. The US will still have a large and growing manufacturing sector, but its output will not increase as rapidly as the economy as a whole. As a result, domestic manufacturing, as a share of US GDP, will continue to decline and imports will take up the slack. Imports of goods into the US will continue to rise more rapidly than the total economy for the foreseeable future. *The result will be a continuing rapid increase in the flow of goods into US ports of at least 10 percent per year over the next ten years.*

MAJOR IMPORT REGIONS

Where do these goods come from today and where will they come from in the future? The top five regions from which the US imports goods are the Pacific Rim, North America, Europe, Latin America and OPEC. Ranking highlights include:

- The largest single regional source of US imports is the Pacific Rim. In 2005, this 14-country region accounted for \$551 billion of imports, or 33% of all US imported goods. In the past decade, imports from this region increased by 91%.
- The second largest area is North America, which in 2005 accounted for \$458 billion or about 27% of total imports. Imports from Canada and Mexico have increased 121% since 1995.
- Europe ranked third at \$355 billion (21% of all imports). Since 1995, imports from Europe are up 133%.
- Latin America (20 Republics) accounted for \$279 billion of imports in 2005, or 17% of the total for that year. Imports from this region increased by 177% in the past decade.
- Although imports from OPEC have increased strongly in value over the past two years, this sector still accounted for only \$125 billion or 7.5% of total imports in 2005 (As a sector versus a geography, OPEC overlaps with regions above).

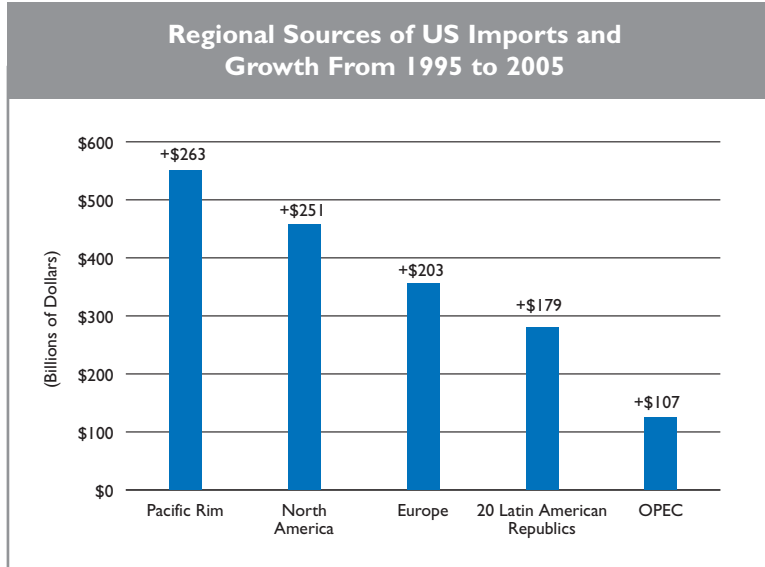
Within the Pacific Rim, there has been a major shift in trade flows as China has emerged with increasing force onto the global trade scene. In 2001, the main source of imports from this region was Japan, which accounted for 34% to China's 27%. By the end of 2001, China became a member of the World Trade Organization (WTO), and tariffs on Chinese goods entering the US market were reduced. As a result, US imports from China have climbed an average of 24% per year. China now accounts for 44% of the imports from the Pacific Rim while Japan accounts for 25%. China is now the second largest source of US imports behind Canada, and will likely replace Canada as the number one source of imports in 2007.



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Chart 2



Sources: US Census Bureau; Moody's; Economy.com

These trends are expected to continue for several years. Although there is growing political pressure in the US to reduce imports from China, the likelihood of any significant change in Chinese policy is small. There may be some modest revaluation of the Chinese Yuan over the next several years in response to US pressure, but this will not suffice to raise the prices of goods produced in China enough to slow the growth of imports from that country. US imports are driven more by growth in the economy than by changes in exchange rates, and the US economy is expected to continue growing by

at least 3% per year for several years, or about 5.0% assuming a 2.0% inflation rate. Over the past decade, US GDP increased by an average of 5.4% per year and US imports increased by 10.5% per year, or roughly double the rate of GDP growth. There is no reason to expect this relationship to change in the future given the trend towards the increasing globalization of trade. The strongest growth in unit terms will continue to come from the Pacific Rim as China increasingly dominates US trade flows. The second fastest growth will be from Latin America as manufacturers diversify their sources and seek to maintain sources that are closer to home.

While US exports have not increased as rapidly as imports in the past decade, leading to the sharp increase in the US trade deficit, the total value of exports is still large at about \$890 billion. The major markets for US exports in 2005 were North America (\$331 billion or 37% of all exports), the Pacific Rim (\$223 billion or 25%) and Europe (\$211 billion or 24%). The fastest growing regions for US trade are North America followed by Latin America and Europe.

TRADE FLOWS AND PRIORITY PORTS

The sources of US imports are reflected in the districts through which these products flow. The two US trade districts that receive the most imports in value terms are Los Angeles and New York. In 2005, Los Angeles received 12.9% of the value of all US imports and New York received 10.6%, followed in order of size, by Detroit, New Orleans, Houston, Laredo, Chicago, San Francisco and Seattle. (*Note*, a district consists of many ports. For example, the district of Los Angeles includes El Segundo, Los Angeles, Long Beach and Las Vegas, among others.)

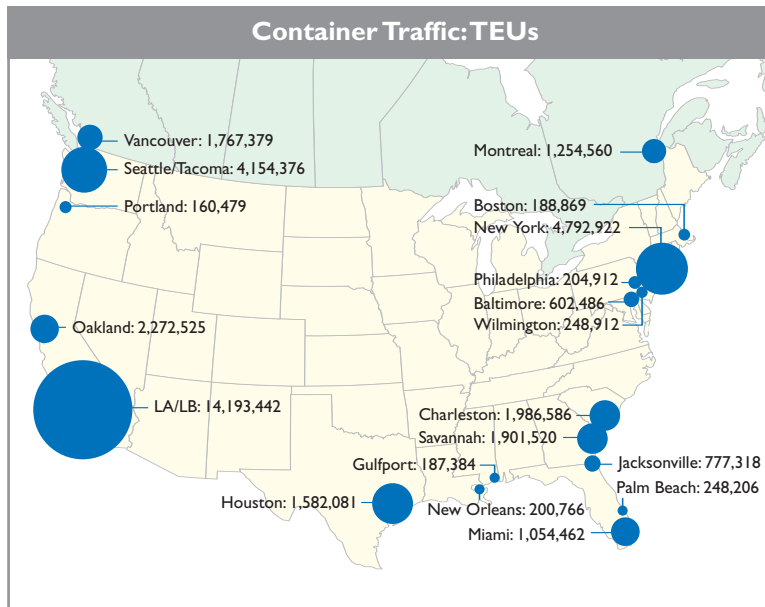


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For shipping and logistics, the key measure of port traffic is the number of containers that are shipped through a port. These containers are reported in 20-foot equivalent units (TEUs), which represent the number of 20-foot containers shipped through the port. In 2005, the ports with the largest number of TEUs were Los Angeles followed by Long Beach, New York and Oakland.



The US Government reports district traffic in metric tons. The district with the greatest volume of shipments by weight (excluding oil) in 2005 was Los Angeles with 52 million metric tons of goods imported, representing 16% of the volume of all goods excluding oil imported into the US. The second busiest district was New Orleans (13%), followed by Houston, New York, Tampa and Seattle. Imports into the US are growing most rapidly in Pacific and Southern ports, reflecting the importance of the Pacific Rim, Mexico and Latin America. In 2005, the districts

that had the largest increase from 2003 levels were Houston, New Orleans, Los Angeles and Seattle.

With import trade from the Pacific Rim and China in particular on the rise, the fastest growing ports in terms of container volume are expected to continue to be on the west coast. The second fastest growth region will be Latin America, leading to strong growth in southern ports, particularly Houston, New Orleans and Miami.

The districts with the largest volume of exports (excluding oil) in 2005 were: New Orleans (64 million metric tons or 26% of all non-oil exports), and Houston/Galveston (32 million metric tons or 13%) followed by Columbia/Snake (covering Portland Oregon, southern Washington and Idaho), Seattle, Los Angeles and New York. Together, these six districts accounted for 71% of all US exports in 2005. This underlines the importance of southern ports as conduits for goods from the central part of the country, which flow down the Mississippi River and out to Latin America and Europe.

The fastest growing districts for exports in volume terms were Seattle, Buffalo, Los Angeles, Houston and Detroit. In Buffalo and Detroit, trade is largely in auto-manufacturing facilities in Canada.



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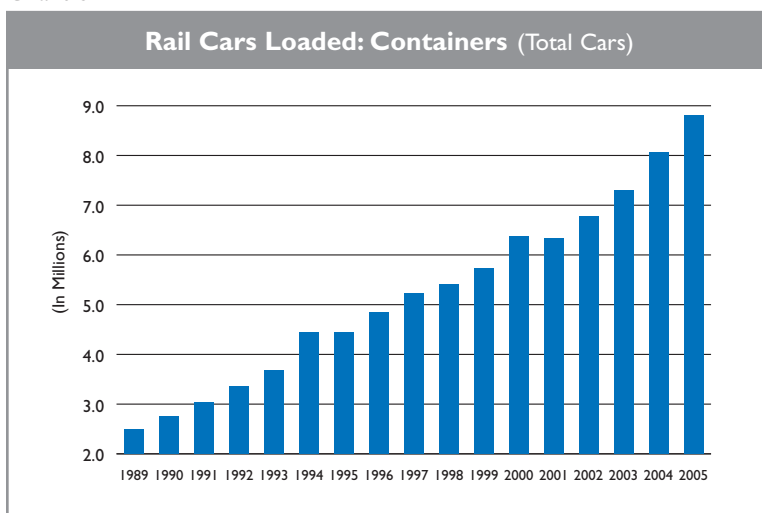
PORTS WITH THE GREATEST IMPORT GROWTH: 2003-2005

District	2003 Shipping Volume (Metric Tons)	2005 Shipping Volume (Metric Tons)	Change (Metric Tons)	Percent Change
Houston	25,774,180	35,818,255	10,044,075	39.0%
New Orleans	34,129,906	43,620,530	9,490,624	27.8%
Los Angeles	43,344,972	52,048,160	8,703,188	20.1%
Seattle	12,075,477	16,988,773	4,913,295	40.7%
New York City	24,870,042	28,731,609	3,861,567	15.5%
San Francisco	10,706,735	14,120,147	3,413,412	31.9%
Savannah	8,679,761	11,642,578	2,962,816	34.1%
Philadelphia	10,561,847	13,329,679	2,767,831	26.2%
Tampa	16,446,043	19,148,118	2,702,075	16.4%
Baltimore	12,926,071	14,622,770	1,696,699	13.1%
Miami	7,692,798	9,274,581	1,581,783	20.6%

TRANSPORTATION & COMMODITY FLOW

As strong trade growth has led to rapid expansion in the use of ports, there has been a similar increase in utilization of the US transportation infrastructure and growth in the volume of goods moving within the country. Truck and rail transportation have both seen significant increases in volume. In addition, the reliance on a few large ports for imports has led to an increase in the distance that goods travel. While trucks remain the dominant form of shipping, rail freight shipments have increased dramatically over the past decade.

Chart 3



Source: Association of American Railroads

According to the Department of Commerce 2002 Commodity Flow Survey, the volume of goods transported in the US increased 20.4% from 1993 to 2002 (the next survey will be conducted in 2007). Most goods travel within the US by truck, which accounted for 67% of the volume of goods transported in 2002, followed by rail (16%). Even as the volume of goods has increased, so has the distance that these goods travel. In 1993, 67% of all goods by weight traveled less than 100 miles; by 2002, that share had fallen to 64%.



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The strongest growth has been in shipments traveling 1,000 to 1,500 miles, a category that grew by more than 73% from 1993 to 2002.

Rail traffic has increased moderately over the past decade with the total volume of goods shipped up 21% since 1993. However, according to the Association of American Railroads, there has been a dramatic shift in the modes of rail transport. Container shipments are the fastest growing mode of rail transportation. While the number of rail cars of all kinds loaded in 2005 was 1.3% lower than the number in 1995, the number of containers shipped by rail increased by 98% (see chart on previous page). In 1995, 4.4 million containers were shipped by rail, compared to 8.8 million in 2005. In the first four months of 2006, containers shipped by rail rose 7.7% from the previous year.

Thus, although trucks will remain the dominant method of shipment in the US for the foreseeable future, the increased use of central ports and large distribution hubs has made rail a more attractive and efficient shipping method.

MEETING THE DEMANDS OF A SERVICE-BASED ECONOMY

The growing importance of imports to the economy is having a major impact on the supply chain and the way goods are moved across the world, which has subsequently led to profound changes in the design and siting of distribution facilities. Five major trends are:

- **Use of larger ships.** As the volume of goods purchased from overseas has increased, it has necessitated the use of ever-larger ships to carry them. The largest container ships in the 1980s could hold about 4,500 containers; today's behemoths can hold as many as 9,800 containers. This trend has increased the demand for deep water ports and reduced the viability of the Panama Canal, which cannot accommodate such large vessels.
- **Diversification away from LA/LB.** As noted, the Los Angeles district, which is dominated by the ports of Los Angeles and Long Beach, have become the largest in the US. However, they have been unable to accommodate the rapid growth in shipping volume, causing the delays and bottlenecks experienced in 2004. In order to avoid these kinds of problems, other ports are increasing their capacity and shippers are diversifying their port usage.
- **Increasing use of rail.** With the flow of goods becoming increasingly channeled through large ports and moved to large ex-urban distribution centers, there is a growing role for railroads that can haul containers more efficiently than trucks.
- **Emergence of large ex-urban distribution centers.** With lower land costs and less local opposition, these mega distribution centers are emerging as an important element of the national distribution system.
- **Shifting the load.** Breaking down and re-loading shipments for more efficient transportation from ports is becoming an important intermediate step that can improve distribution speed.



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These five trends have implications for real estate markets. They will benefit some regions at the expense of others and drive the size and design of new facilities. In the following section, we review each trend and its market implications in more detail. As well, we present case studies showing how Cushman & Wakefield services and solutions have enabled clients to take advantage of and profit from these trends.

LARGER SHIPS SHIFT THE BALANCE TO DEEP WATER PORTS

Shippers continue to push for larger and larger ships. First generation ships averaged around 1,000 20-foot equivalent units (TEUs) in the 1960s. They climbed to 4,500 TEUs in the late 1980s and to an astonishing high of 9,800 TEUs by 2006. Ships traveling through the Panama Canal are limited to 4,500 TEUs and are referred to as Panamax vessels, while larger ships are referred to as Post-Panamax vessels.

Part of the appeal of larger ships is in their added capacity and reduced per-slot operating costs at the port of entry. These vessels can, however, cause more congestion as only a limited number of ports can handle their draft requirements and, because of their enormous size, they stay in port two to four days longer because of the time it takes to unload the ships.

Only a limited number of ports have channels deep enough and equipment large enough to handle the largest Post-Panamax vessels. LA/LB is considered the best positioned to handle these ships and their massive loads. Other ports that can handle larger ships include Oakland, Seattle/Tacoma, and Hampton Roads, while Savannah, Charleston, and New York/New Jersey are racing to complete capital improvement programs that will boost their ability to accommodate these large ships.

LARGE SHIPS: REAL ESTATE IMPACT

Large ships will benefit the shipping lanes between Asia and the west coast. The major ports around LA/LB, Oakland and Tacoma will be impacted the most. Look for business strategies that call for the quick landbridging or offloading of the enormous amount of cargo on these ships to nearby inland locations. In Southern California, large tracts of land are being taken down for distribution center development in and around Ontario, California, about 50 miles inland from the ports. New locations north of L.A. and infill locations, primarily ex-military bases, are also being considered for this purpose. Washington State's Kent Valley submarket, southeast of Seattle, is experiencing explosive growth due to increased imports to both the Ports of Seattle and Tacoma. Large multi-functional facilities with crossdocks for quick turnaround of full-containers as well as storage space for longer-term inventory are becoming more common in the Kent Valley market.

The best positioned inland hubs will also benefit from increased container traffic, as much of the containerized cargo coming off the largest Post-Panamax ships at the west-coast ports is being loaded straight onto double-stacked rail cars destined for inland ports. Chicago, Memphis and Dallas have the most to gain, for each market has a combination of superior rail infrastructure, available land for development, large markets and access to multiple interstates.



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BENEFITS FOR SECOND TIER PORTS

Over the past four years, a lot of ink has been spilled about the impact of shipping delays on the ports of Los Angeles and Long Beach during the late summer and fall of 2004. These delays led to dramatic footage of massive container ships filled with Christmas goods languishing in harbor with nowhere to dock. Further, security issues surrounding ports and the federal government's response have also remained in the news, bringing the vulnerability of ports, whether real or perceived, into public view.

Many importers are looking for alternatives in order to hedge against labor problems, traffic congestion and security issues that might dramatically impact a single port. In order of magnitude, the west coast deep-water ports of Seattle/Tacoma, Oakland, and Portland have benefited the most from LA/LB diversification, though other Gulf and east coast ports (mainly Savannah, New York/New Jersey and Houston) have also made claims to higher traffic volumes due to shippers seeking more diversification.

In looking at the numbers, it is hard to tell if diversification has had a significant impact because shipping volumes are up dramatically across all of the nation's largest ports. LA/LB has quietly improved labor relations and increased efficiencies through investment and process improvement and has increased its traffic significantly in 2005, further muddling the impact of diversification.

DIVERSIFICATION: REAL ESTATE IMPACT

The prime beneficiaries of this trend are the other west coast deepwater ports of Seattle, Tacoma and Oakland. These ports have the channel depth and the infrastructure to handle the larger ships. On the east coast, the Port of Savannah has seen the most growth since 2004. Excellent channel depth and rail and highway connections to Atlanta (a major inland hub) have bolstered Savannah's growth considerably. Houston has also experienced above-average growth since 2004, though some of this traffic is related to imports being diverted from New Orleans after hurricane Katrina. Though the ports of New York and New Jersey have not experienced as much growth as some other ports, recent investments in channel deepening should pay off due to other competitive advantages enjoyed by these markets such as the large size of local markets, excellent inland rail links to Chicago, and interstate access up and down the eastern seaboard.

RAIL ENGINEERS MAKE A COMEBACK

The use of rail has been surging in recent years and has facilitated strong growth in the warehouse markets surrounding some of the nation's best positioned hubs such as Chicago, Memphis, Atlanta, and Dallas. Landbridging, or the process of putting shipping containers directly onto rail cars at port, has been facilitated by increased quantities of Asian sourced imports that are seeking the fastest route to the nation's interior. A container from China that is put on a train in L.A. can reach Chicago eight to nine days earlier as compared to routes going through the Panama Canal to a Gulf port or the Suez Canal to an east coast port.



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In the last decade, the increased demand for rail has been further enhanced by decreased costs. Higher volumes of goods being sourced from a limited number of origins (ports) to a limited number of destinations (super-sized distribution centers in a few regional hubs) is advantageous to rail, which can scale-up more cost effectively than trucks. Aware of this new advantage, rail companies are investing in systems, labor, and infrastructure in order to handle the escalating volume of goods. This investment has also resulted in shorter shipping times and higher rates of on-time deliveries.

Partnerships with trucking companies, who were blamed for rail's decline over the previous 20 years, have also improved rails' fortune, as trucks are key to moving products to stores and end-users. Trucking companies are also facing new problems of their own. Rising fuel prices hurt trucking more on a pound-per-pound basis. Trucking firms are also being limited by increased restrictions on diesel emissions, traffic congestion, a shortage of qualified workers to fill openings, higher insurance costs and new federal rules that limit the hours truckers can spend driving.

RAIL RESURGENCE: REAL ESTATE IMPACT

Chicago, Memphis, and Dallas-Fort Worth all stand to gain the most from rail's resurgence. These regions all have the ability to serve large markets and are located at the intersection of multiple rail lines and interstates. Intermodal transit is also capital intensive and all of these regions have players – local government, railroads, developers – who have been willing to make the investments that are necessary to keep growing. For example, the state of Illinois recently passed enabling legislation that allows local government to fund infrastructure improvements through tax increment financing that are specifically targeted to rail; Memphis has received more than \$100 million in investment by the Canadian National Railroad; and Dallas-Fort Worth has experienced large investments by developers in mega-projects like Alliance Dallas, which has fused together rail, air, and truck facilities on very large assemblages of land.

Second tier hubs like Phoenix, Denver, Kansas City, and Indianapolis are also benefiting from rail, though on a smaller scale. These markets all have superior rail and interstate connections and are strategically located between deepwater ports and the largest inland hubs. Often, these second-tier markets benefit from lower land and labor costs than many of the larger, more developed markets.

DISTRIBUTION CENTERS GET SUPER-SIZED

The proliferation of very large, million-square-foot distribution centers is a direct result of the increased importance of imports and container traffic on the supply chain. When more products were provided domestically, the sourcing of goods was more decentralized and called for smaller and more numerous warehouse facilities. Now that imports have a much bigger role, more goods are funneled through a limited number of ports, which are then distributed domestically by truck or rail.



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Strategically located distribution centers near ports or highways can lead to substantial savings by reducing two critical linkages – port to distribution center and distribution center to highway. This is especially true for larger retailers that have large volumes of goods from multiple vendors. In many cases, the efficiencies realized from super-sized centers result in a net cost savings even if an additional step is being added to the supply chain.

Warehouse technology, including electronic stock management systems and radio frequency identification technologies, have increased operational efficiencies and are easing inventory management in these behemoth facilities.

Very large facilities also allow for the deployment of multiple shipping strategies within one facility based on the needs of the retailer or end-user. Some goods are quickly being cross docked and shipped out immediately to regional distribution centers and stores; other goods are being transloaded, providing a mix of goods in single containers; while still other products are being stockpiled in order to ensure that seasonal demand can be met at critical times of the year. All of this can be accomplished if the facility is large enough and designed for these purposes with the proper clear-heights, door configurations, rail spurs and yard space.

LARGE DISTRIBUTION CENTERS: REAL ESTATE IMPACT

Super-sized million-plus-square foot distribution centers are most often found on the periphery of the nation's most populous regions. Ex-urban or rural locations are often a result of lower rates of public opposition, aggressive economic development incentives by rural communities, and lower land and labor costs. The nation's largest retailers (i.e. Wal-Mart, Target, Lowes Home Improvement, Home Depot) are the dominant users of the largest distribution centers. Third-party logistics companies and consumer-goods companies start frequenting the list as building sizes approach one million square feet. While many of these facilities are build-to-suits for large tenants, there has been a considerable escalation in speculative construction over the past 12 months.

These facilities are being located on the periphery of the coastal gateways and the inland hubs and are responsible for explosive growth in Southern California locations, Chicago, Memphis, Atlanta, Dallas, Houston and Northern New Jersey. The common thread among all of these markets is large market size along with proximity to a deepwater port or major rail center.



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TRANSLOADING DIVIDES AND CONQUERS SHIPPING PROBLEMS

Transloading facilities are becoming important links in the supply chain for companies looking for flexibility and cost savings near the port of entry. These facilities are most often used for transferring and repacking the contents of 20-foot marine containers into 53-foot domestic containers.

While transloading goes against traditional supply-chain strategies by adding a node and increasing facility costs, it can result in cost savings in other links of the supply chain. The contents of five marine containers can be packed into three larger domestic containers, resulting in lower shipping charges from the transloading site. Transloading also keeps marine containers closer inland, where the costs of returning them to the docks and back to the shipping lanes are lower. Higher priced steel has increased the incentive to keep these containers close to shore and has even led to incentives by carriers for the rapid return of their containers.

Transloading also gives importers a degree of flexibility that can help minimize inventories and carrying costs for goods in the pipeline or held as inventory in regional distribution centers. With transloading, an importer can wait to decide the final destination of a product one to two weeks before delivery, as the good has already completed its sea voyage. Without transloading, the importer has to commit to the destination of a container contents when it leaves the factory one to two months before delivery. Finally, transloading allows shippers to create a specific mix of goods for specific destinations.

Transloading is generally thought to be most beneficial when handling large volumes of high-value goods. Time delays and labor costs are the trade-off for the increased efficiencies of transloading, so this process is not for every type of product.

TRANSLOADING: REAL ESTATE IMPACT

Most transloading facilities must be as close as possible to the first-tier ports of entry. Southern California and Seattle/Tacoma have seen the most demand for this type of facility. These facilities are not being built very near the port of entry, as land costs and scarcity have pushed distribution centers further from the coast. In Southern California, Ontario, which is about 50 miles inland, is the biggest beneficiary of this strategy, followed by emerging submarkets north of Los Angeles. In Seattle, the Kent Valley, with its abundant supply of land has become the location of choice for these facilities.

Transloading operations can, however, put tremendous strains on the local infrastructure, as they often require a truck-trip from the port to the transloading facility. Port-related congestion is becoming so intense in Southern California that the state is thinking of container-related fees in order to pay for infrastructure improvements. These fees would have the most impact on lower valued cargo, which would probably be diverted away from LA/LB. Higher value cargo would be threatened by such fees only if the fees were spent on general transportation improvements and not on highly targeted, port-specific travel corridors.



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WHICH MARKETS WILL BENEFIT THE MOST?

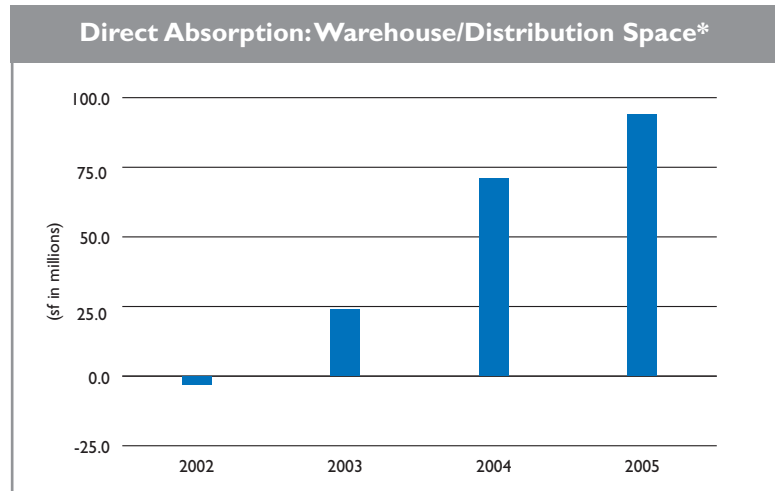
The demand for warehouse space has increased considerably over the past four years. Expanding industrial capacity and higher consumer confidence have led to more domestic production and consumption and buoyed the cyclical warehouse/distribution market substantially. Negative net demand of 2.0 msf in 2002 has grown to more than 70 msf in 2004 and above 90 msf in 2005.

Increased international trade and the substitution of domestic for foreign production is creating the most demand for warehouse/distribution space in the regions with major ports or those that act as a major inland hub.

A review of the markets with the most demand since 2004 shows the highest demand in Southern California, and Chicago, Illinois. Southern California's success is in large part a result of activity at the Port of Los Angeles and Long Beach (LA/LB). Severe supply constraints relating to available land, transportation infrastructure, and land-use regulations have pushed warehouse development in Southern California into the Inland Empire.

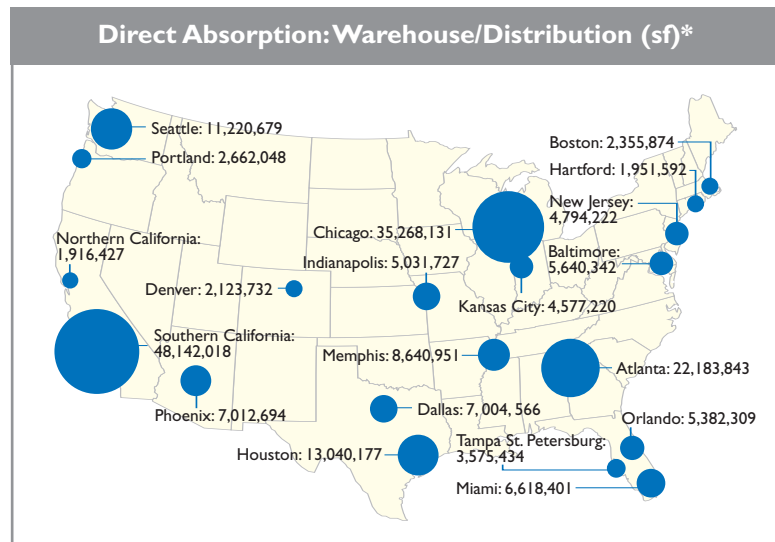
Chicago's growth can be directly attributed to intermodal rail bringing imports from the west coast to the market for distribution. The region's gateway status is a result of massive rail capacity, a large population base, and superior air-cargo capacity. With all six class-one railroads connecting to the region, Chicago is the nation's busiest rail hub and is the third largest intermodal center in the world. Dedicated rail and highway

Chart 4



* 32 C&W Markets

Chart 5



* January 2004 - April 2006



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land bridges are being developed by private investors with public incentives and are enabling the construction of very large distribution centers in ex-urban locations like Rochelle and Joliet.

Atlanta, which is considered to be the gateway to the south, benefits from three intersecting interstates, low business costs, aggressive economic development and few geographic and governmental restraints on development. Much of the intermodal traffic to Atlanta is a result of landbridging from the west coast. The connection between Atlanta and the ports of Savannah, Charleston, and Jacksonville are mostly served by truck. Large distribution centers in and around the Savannah area are also being constructed as a result of increased activity at the port.

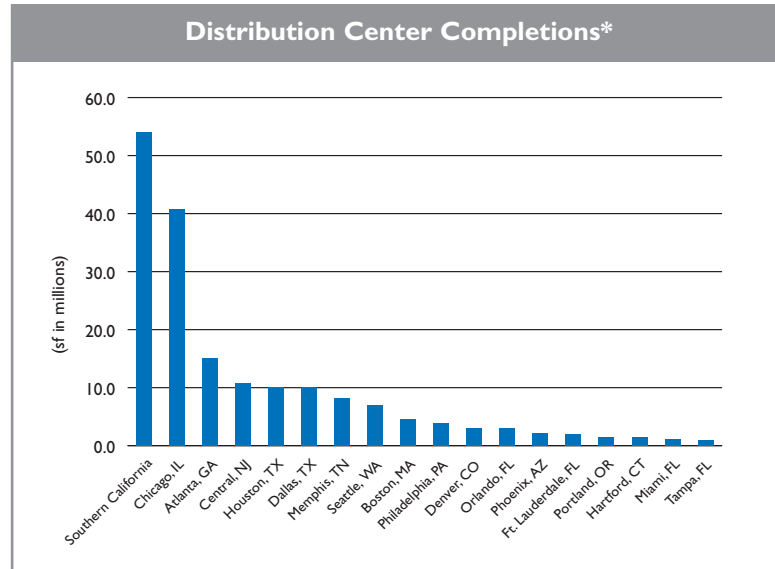
A large population base, available land, aggressive economic development and superior road, rail, and air-cargo connectivity makes Dallas a major inland hub. Alliance Dallas is a large land assemblage that took advantage of access to roads, rail, and air cargo. A push into South Dallas and a burgeoning agreement with the Port of Houston will keep Dallas in the first tier of growing warehouse markets for some time.

Memphis is well positioned to serve as an inland hub due to service from five of the major railroads and the convergence of four major interstates. Memphis' airport is also the busiest cargo airport in the world, further boosting its credentials as a major inland port. Memphis is also well served by increased activity at Canadian and Mexican ports, as it is well connected by current and planned interstates and rail.

New York/New Jersey should benefit from aggressive port investment, including a significant channel deepening. Fourteen brownfield locations for port uses have been designated and have attracted significant interest. These locations are meant to push distribution center activity closer to the port, increasing their usefulness to shippers looking to minimize the crucial port-to-distribution center link.

In Houston, the largest distribution centers are spread out over a large area, pushing into the regions exurbs. Local governments aggressively compete for distribution centers with generous incentives and infrastructure

Chart 6



* January 2004 to April 2006



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investments. The first phase of the Port of Houston's \$1.2 billion investment at the Bayport Container and Cruise terminal is expected to be completed by summer of 2006. A four million square-foot distribution center for Wal-Mart that was completed in 2005 cements Houston's reputation as a major distribution center.

The ports have been the largest driver of real estate conditions in Seattle, as a bulk of the activity comes from the logistics companies servicing them. The Kent Valley industrial market has outperformed other industrial markets in the Puget Sound region with its availability of affordable land and convenient location between the booming ports of Seattle and Tacoma. Nearly 85% of the warehouse space in the region is located here and this sector has witnessed the most dramatic shift in fundamentals. 2005 set a record for the level of positive absorption documented in the market's history and, despite a surge in development, vacancies remain at an all-time low.

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