

Panama canal expansion

Life



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Expansion of the Panama Canal & Heartland Barge The Panama Canal enables the ships sailing from the Pacific Ocean to the Atlantic Ocean (and vice versa) to save time and fuel by avoiding the travel around the tip of South America. The savings in time equal half of the time previously taken by ships to do the same. The size of ships that are used in shipping containers has drastically increased due to the container revolution.

To enable the new and bigger ships such as Maersk Triple E Class to pass through and to increase the toll that is collected on every ship, the Panama Canal Authority has decided to undertake the expansion of the Panama canal. This event has impacted world trade and companies all over the world. As of now, the New Panamax ships with drafts of 45 ft delivering containers from Asia to the east coast of the US cannot pass through the Panama canal and therefore dock at the ports of Los Angeles and Seattle on the west coast and transfer their containers to railroad companies to transport the goods to the east coast.

But when the expected expansion commences in 2015, some of these ships would be using the canal to directly reach the east coast of the US To get a piece of this action, several ports on the east coast have undergone upgrade and increased their depth to at least 50 ft to allow the New Panamax ships to reach their container port facilities. Although the U. S. Army Corps of Engineers (USACE) itself has indicated that deepening isn't expected to increase the volume of container traffic coming through ports, the reality is that not deepening could cost the port a significant amount of volume, relegating it to “ lower tier” port status.

New Panamax vessels today make up 16% of the world's container fleet, but account for 45% of the fleet's capacity," By 2030, new Panamax vessels will account for 62% of the capacity of the world's container fleet. The potential transportation cost saving of using new Panamax size vessels to ship agricultural products to Asia, through the Panama Canal may lead to an increase in grain traffic on the Mississippi River for export at Gulf ports. The shipping draft on the lower Mississippi River has enabled operations to 45 feet.

However, this requires constant monitoring due to seasonal changes in siltation loads from flooding and deposits. This prompts the need for maintenance dredging to attain operational drafts. But the limitations on the USACE's federal allocated resources is limiting their capacity to properly maintain the 12, 000 miles of waterways and 240 locks in the US. Heartland Barge (HB) highly values the ability to match the volume of goods flowing upstream of the Mississippi river system, with the volume of goods flowing downstream, thereby minimizing empty back haul movements.

The goods moving downstream are grains mostly Soybean and Corn headed for China and other Asian countries. The goods moving upstream are fertilizers, petroleum products, aggregates namely stone and sand, and road salt for the Midwest coming from salt mines on an island in Louisiana that is not accessible by truck or rail. With the new Panamax vessels, the opportunities for HB will be varied, such as increased loadings per vessel, the potential for larger vessel sizes to be used, decreased canal transit time, and the potential for lower transport costs overall.

HB owns 275 covered and open hopper barges, most of them manufactured post 2004 making its fleet relatively younger than the average barge in the US, and has three lines of business. Investment in newer and bigger barges will give HB a competitive advantage in its Barge line services business. Most barges in the US are above 25 years old and therefore the potential demand for new barge is high. The return on barge investment is 10-12% and has considerable tax benefits, making it an attractive investment option for individuals and companies, where they buy barges as an asset and let HB take care of the Barge Management.

The Leasing and Sales division would benefit from the sales of new barges and helping investors buy or lease the barges. The Marine Consulting division will see a rise in business as more businesses would want to take advantage of HB's end to end solutions for barge transport. Hiring MBAs as consultants and training them would give HB leverage when the demand for HB's consulting division increases in the near future. Railroads cannot economically compete with barges on many counts.

Barge transport costs 40-80 cents a bushel of grain whereas railroads cost an average of \$1. 2 a bushel. The rail system does not have unlimited capacity on the network, which results in competitive pressure to operate over finite capacity. Because grain moves are more seasonal, railroads prefer to move consistently transported goods to better allocate resources. The heavier rail cars for transporting big sized containers can often operate over the lighter capacity rails but only at significantly slower speeds.

The threat of transit tolls in the Panama canal increasing 47% over the toll structure of the past 5 years can be countered by loading a vessel to a 45 ft

draft, compared to the 39.5 ft draft of the current Panamax vessels. The river navigation system is old and aging, and for improvement projects that have been authorized, funding has not been appropriated. Improvements needed include dredging, highly efficient cranes, improving barge loading berths, automated gates, applied tracking of equipment through optical character recognition and GPS.

Waterways Council Inc. is an organization lobbying the government for these reforms through the WRDA - Water Resource Development and RIVER - Reinvest in Vital Economic Rivers and Water bodies Acts. HB should support this organization in its efforts. References: <http://waterwayscouncil.org/key-issues/improve-system-reliability-through-infrastructure-maintenance/>
<http://waterwayscouncil.org/latest-news/improve-reliability-news/harbor-deepening-what-happens-now/> <http://www.usace.army.mil/Media/NewsReleases/tabid/203/Article/2000/us-army-corps-of-engineers-releases-the-us-port-and-inland-waterways-modernizat.aspx>
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