

## Remodeling the Panama Canal And Remodeling Shipping

The expansion of the Panama Canal is a massive undertaking and is set to change the face of shipping between Asia and the Americas; it also reflects a growing worldwide tendency towards larger container ships. Though the expansion was intended to be completed by the end of 2014, it's been delayed by roughly six months; currently, it's due to be completed in June, 2015. The canal already sees 5% of world trade pass through its gates<sup>1</sup>; the \$5.25 billion project, begun in 2006, is intended to double the Canal's shipping capacity and will allow the passage of so-called post-Panamax ships to pass.

These post-Panamax ships are, simply put, enormous. They're the length of an aircraft carrier, as tall as a 14-story building, and can carry up to 12,000 twenty-foot-equivalent (TEU) containers.<sup>2</sup> That's roughly two and a half times as many as the current Panamax vessels, which can carry up to 5,000 TEUs, though the Panama Canal can currently only accommodate 4,400 or less. Although right now they comprise only 16% of the world's containers fleets, post-Panamax ships carry a staggering 45% of its cargo. This is only set to expand; the Washington Post posits that by 2030 these ships will carry 60% of the world's cargo.<sup>3</sup>

The trend towards larger ships will have consequences for all of the Americas. Ports on the East coast of the United States are scrambling to prepare themselves in order to be the first to reap the potentially massive economic rewards. Currently, only the port of Norfolk, Virginia is deep enough to manage such large ships, but the port of Miami, Florida has been granted congressional approval to dredge the harbor to the 50 foot (15.24m) depth necessary. New York's harbor is currently deep enough, but the city faces a problem: the Bayonne Bridge is too low to allow the larger ships to pass. Consequently, the Port Authority of New York has been allocated more than \$1 billion to raise the bridge, though the project may take up to five years to complete.<sup>4</sup>

To be sure, there are other contenders. Savannah, Georgia is considering spending \$650 million to dredge its harbor. Baltimore is also a candidate, as it has one of the two deepest harbors on the east coast; unfortunately, its Howard Street Tunnel, through which trains laden with cargo from the port pass, is two feet too short to allow the new taller, more modern trains

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<sup>1</sup> <http://www.bloomberg.com/news/2013-01-17/panama-canal-handling-5-of-world-trade-sees-delayed-expansion.html>

<sup>2</sup> <http://www.ctl.ca/news/panama-canal-expansion-will-double-present-capacity/1002128171/>

<sup>3</sup> [http://articles.washingtonpost.com/2013-01-12/world/36312072\\_1\\_cargo-ships-deep-harbor-port-terminals/2](http://articles.washingtonpost.com/2013-01-12/world/36312072_1_cargo-ships-deep-harbor-port-terminals/2)

<sup>4</sup> <http://www.npr.org/2012/01/05/144737372/the-race-to-dig-deeper-ports-for-bigger-cargo-ships>

through. Due to complications arising from being square in the middle of a large city, the costs of replacing the current tunnel could run anywhere from \$1-3 billion.<sup>5</sup>

There's competition, however: there are already four post-Panamax ready ports on the West Coast of the States: namely Los Angeles, Long Beach, Oakland, and Seattle.<sup>6</sup> Currently, the ports of Los Angeles and Long Beach combined handle 40% of America's Asian imports, and would certainly like to keep their title as the nation's busiest ports; the increasing costs of trucking due to the rising price of fuel, however, may indeed lure more ships to the East Coast.

The United States is certainly not alone in its rush to expand its ports' capacities. Colombia is prepared to spend \$400 million over the next three years to overhaul its port in Cartagena; the Bahamas is already prepared to receive post-Panamax ships; and Jamaica has hatched a plan to invest a whopping \$8-10 billion to dredge and expand Kingston harbor in order to become a regional shipping hub.<sup>78</sup>

Even the United Kingdom is preparing for the gargantuan new ships. The Port of Liverpool, which can currently only accommodate vessels carrying up to 3,500 containers, will be expanded to include a post-Panamax terminal; the port will then be capable of receiving ships carrying up to 13,500 containers.<sup>9</sup> The European Investment Bank (EIB) has agreed to pay for almost half of the £300 million necessary to for the expansion.

There's a lot of money being thrown around in order to get ready; nations and investors alike seem to be anticipating an increase in the volume and efficiency of shipping. But in order for a ship to have a purpose, it needs goods to carry; what goods will be arriving at and leaving from these newly expanded ports?

The United States' export sector clearly stands to gain. American exports in general are already up: from September 2011 to September 2012 U.S. exports totaled \$2.1 trillion, 38% more than in 2009.<sup>10</sup> The U.S. is in the middle of a shale gas boom, and Asian nations are concurrently and consistently demanding more energy; undoubtedly, supply and demand will find each other. Already, the U.S. stands to become a net exporter of natural gas by 2017. Though currently there is only one liquefied natural gas export terminal, in Alaska, there may

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<sup>5</sup> [http://articles.washingtonpost.com/2012-03-28/local/35449595\\_1\\_port-deeper-channel-rail-or-truck](http://articles.washingtonpost.com/2012-03-28/local/35449595_1_port-deeper-channel-rail-or-truck)

<sup>6</sup> [http://www.colliers.com/en-us/~media/files/marketresearch/unitedstates/colliers\\_portreport\\_2012q2\\_final.ashx](http://www.colliers.com/en-us/~media/files/marketresearch/unitedstates/colliers_portreport_2012q2_final.ashx)

<sup>7</sup> <http://www.seatrade-global.com/news/americas/latin-american-ports-prepare-for-panama-canal-expansion.html>

<sup>8</sup> [http://www.miamiherald.com/2012/11/22/3108959\\_p2/as-panama-canal-expands-latin.html](http://www.miamiherald.com/2012/11/22/3108959_p2/as-panama-canal-expands-latin.html)

<sup>9</sup> <http://www.bbc.co.uk/news/uk-england-merseyside-19087591>

<sup>10</sup> <http://www.economist.com/news/finance-and-economics/21569729-what-big-american-port-says-about-shifting-trade-patterns-view-bridge>

be many more terminals created: Morgan Stanley predicts that the U.S. may boost its liquefied natural gas production to 50 million tons a year by the end of the decade.<sup>11</sup>

There are plenty of other goods that will be flowing towards Asia. Colombia, already the world's third largest producer of coal, will be able to compete with Australia for Chinese demand. Ships carrying 120,000 tons of agricultural goods will be able to pass through the newly widened channel in order to feed hungry mouths across the Pacific. Brazil will be eager to export more of its agricultural and mineral commodities.

Ships coming from Asia will likely be carrying the same consumer goods they are now, just in larger quantities, especially as many nations in Latin America climb out of poverty. Post-Panamax vessels can accommodate, in telling fashion, an astounding 1 million flat-screen televisions.

One can only expect the expansion of the Panama Canal and the increasing size of container ships to mean more international trade as well as more major national infrastructure investments. Investors and governments alike are putting up huge sums of cash, in what are cash-strapped cash times for many nations, to prepare for the changing patterns of trade, and no one in their right mind bets on what they perceive to be a losing deal. All we can know for certain is that the expansion of the Canal will change shipping, and many people seem to believe it will be for the better.

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<sup>11</sup> <http://www.bloomberg.com/news/2013-02-01/reshaping-panama-canal-trade-means-boom-in-u-s-gas-flow-to-asia.html>