

Update: Panama Canal

The new set of Panama Canal locks opened for business on June 26, 2016. There are no published official statistics on vessel transits through the new locks. In order to gain an appreciation for what has taken place, this analysis reviewed information published in trade journals and periodicals. Particular attention was given to information that directly relates to shipment activity at Texas ports.

It is important to understand that it is still too early to evaluate the economic impact on U.S. ports of the larger canal. Data for the amount of cargo processed at Gulf and East Coast ports since the canal's new locks opened are not yet publicly available in most cases.

There are two specific potential impacts that have been widely discussed both before and after the expansion:

- A shift of vessel traffic from the West Coast to the Gulf and East Coasts.
- An increase in traffic volume at Gulf and East Coast ports that may or may not be related to this shift.

There have also been two potential problem areas that have gained attention in the press:

- Safety issues.
- Draft issues.

Shift from West Coast to Gulf and East Coast

The general consensus is that there will not be a significant shift from the West Coast to the Gulf and East Coasts. Some have claimed that the vibrant economy in the Southeast may attract significant traffic to ports such as Savannah and Charleston, but this is not a widely accepted view. In fact, key international trade advisers predict that no more than 5 percent of the containerized imports currently routed through the West Coast will be diverted. For ports on the Gulf and East Coasts to experience a significant shift of West Coast trade to their ports, they would need to increase their penetration of markets in the U.S. interior—a market where West Coast ports clearly have the upper hand because of transit time advantages, established intermodal rail services, and the density of volumes already committed to those routes. It is important to keep in mind that the western railroads (key players in this equation) have pricing power and will not surrender market share without a fight. Furthermore, West Coast terminals and port communities are aggressively attacking congestion and throughput issues, spending billions of dollars in the process.

The larger Panama Canal, by itself, will not result in a significant shift of cargo from the West Coast to the East Coast. The fundamentals of supply chain economics will be a more important

determinant. Cost, consistency, and capacity will determine the gateways through which Asian imports enter the United States. The game changer will have to come in serving the manufacturing and distribution clusters that extend from Chicago and the Ohio Valley down through the mid-South and to Atlanta. Even Southern California, the second-largest U.S. population center, can generate enough cargo to fill only about 40 percent of each vessel. The remainder is shipped directly to the eastern half of the country or is transloaded into 53-foot domestic containers and shipped east by rail.

According to recent trade articles, there have not yet been noticeable Panama Canal–related increases (based on port commentary). Railroads that carry that intermodal freight inland are not reporting any noticeable shifts either.

Traffic Volume

The Panama Canal Authority reported that as of early September, 165 vessels of all types that were too large to use the old canal (Neopanamax vessels) had transited the new locks. Approximately 70 percent were container vessels. Other vessel types included liquefied petroleum gas carriers, oil tankers, dry bulkers, car carriers, and liquefied natural gas carriers. (Only three bulk carriers that are larger than Panamax have gone through the expanded canal.) These 165 ships paid close to \$80 million in tolls. On October 31, the authority reported that in the first three months, 238 Neopanamax vessels had used the new locks (about three per day); no breakdown of the transits was provided.

The new canal recently handled the largest car carrier ever built, the first Suez-Max tanker (the largest tanker to use the Suez Canal), and the first Cape-size bulk vessel. Oil tankers are not likely to use the Panama Canal to make deliveries but could use it in ballast position to complete around-the-world rotations to pick up their next load from the Middle East, according to Panama Canal Authority staff. Using the canal instead of rounding Cape Horn saves tankers 5,600 miles and more than 15 days of sailing time.

The most immediate and noticeable trend is that the number of vessels calling at U.S. ports is actually declining, with each vessel carrying more cargo than in the past. For example, Mediterranean Shipping Co. halved the number of vessels transiting the canal after the widening, with the average ship size increasing from 4,600 TEUs to 6,400 TEUs.¹ The number of service strings using the canal dropped from 16 to 13 during the first month. The largest container ships, which were the subject of much discussion prior to the opening, have hardly used it at all.

One market segment deserves further mention because of its importance to Texas. The promise that some oil traders and brokers saw for an expanded Panama Canal to become a new route for large tankers will take longer to realize than expected because many ships must first undergo retrofits to transit through the new locks. Many lack the minimum required mooring equipment for the expanded canal. The modifications to these bigger oil carriers—which mostly involve

¹ A TEU is a twenty-foot equivalent unit, the standard measure of container activity.

fittings such as chocks and bollards that secure the ship's dock and tow lines—are needed because the new locks use tug boats rather than locomotives to pull vessels. Shipping experts estimate that from half to more than three-quarters of the tankers that could use the canal in terms of dimensions would first require retrofits. The new parts only cost \$1,000 to \$3,000 per vessel, but additional charges associated with the work can cost \$100,000 to \$150,000.

A transit through the canal instead of around the tip of South America could save more than \$300,000 on a voyage from the Caribbean to the U.S. West Coast, according to brokers, but it will take time for new trade routes to become established.

Draft Issues

Even though the design allowable draft (the distance between the waterline and the bottom of the keel) in the new canal is 50 feet, a persistent lack of rainfall in Panama has forced the authority to restrict the draft of vessels using the canal. El Niño, a climate phenomenon resulting in periodic warming of the tropical Pacific Ocean, changed the rainfall pattern in Panama, triggering a drought in the canal watershed and causing water levels in Gatun and Alhajuela lakes to fall substantially below their average. The canal authority initially set the maximum draft at 39 feet in fresh water (the same as the old canal). The allowable draft has gradually been increased and as of October 20 stood at 45 feet. The water reservoirs are being refilled during the rainy season, and canal authority officials do not expect any long-term problems handling the largest vessels in the future.

Safety Issues

The International Transport Workers' Federation (ITF) has raised concerns about the safety of the Panama Canal's new locks, most recently at a press conference held in Panama City on October 21, 2016. The ITF claims that a certain amount of personnel, tugs, and other resources as well as training and operational procedures needed are lacking today. ITF further claims that the accidents that have occurred were predictable and avoidable. The authority has dismissed these claims and asserts that it has acquired the necessary equipment and invested in the training needed to make the operation safe.

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