THE PANAMA CANAL **EXPANSION**

A Sea Change in Transportation Routes & Logistics







You've done it! You pioneered your product, sold it to retailers, and manufactured it in Asia. Now, you need to get it to market – on time. But where to start? What's the fastest and most economical transportation route? And what's all this buzz about neo-Panamax ships? Let us help you navigate.

Manufacturing products in Asia has many benefits, from low costs to high outputs. But there's always been a major drawback: shipping. Overseas transportation time and costs are major factors in getting to market – and making a profit. And it's especially burdensome if you're a wholesaler, distributor, retailer, or manufacturer in the Northeast United States. Why? Blame geography—and a cumbersome and crowded transportation network. But with The Panama Canal Expansion, has everything changed?

First, let's look at your main overseas shipping options:

Air Freight — Sure, it's fast. But it's expensive – prohibitively so for many companies and situations. But if you need to ship minimal goods and have an extremely tight timeline, this method will get the job done much faster than anything else. That means extra time on the shelf, which might make business sense for crunch times like the holiday shopping season.

Intermodal — For large quantities, intermodal is the most common shipping option when receiving goods from Asia. To fully appreciate this method, we need to talk about cargo capacity, specifically the TEU (twenty-foot equivalent unit) and the FEU (forty-foot equivalent unit). These refer to the volume of standard 20-foot-long or 40-foot-long cargo containers. So, for example, one 20-foot-long container equals one TEU. More importantly, the standardization of container sizes allows cargo to be transferred across different modes of transportation, which is exactly how intermodal works.

From China or other Asian ports, your products are loaded into shipping containers and sent across the Pacific Ocean on cargo ships to the West Coast ports of the United States or Prince Rupert Port in British Columbia, Canada. Then your cargo is unloaded and sent via rail or truck to distribution points in the Midwest and the East Coast, which takes additional days. There are many factors that can speed up or slow down this process. However, as an

example, Prince Rupert Port Authority estimates that at an average speed of 20 knots, a ship from Shanghai will reach Prince Rupert in 9.7 days or Los Angeles in 12.1 days. From Prince Rupert, the average travel time via rail is 4.1 days to Chicago, from Los Angeles, it is 5 days to reach Chicago.

Suez Canal — Shipping cargo through the Suez Canal is an increasingly popular option for Northeast ports. The Suez Canal, a sea-level waterway, has no locks or backups that might further delay transportation. Additionally, it already has the capacity to take large vessels — with designs in the works for creating even more capacity: a "Suezmax" ship, which would be able to carry up to 18,000 TEUs. But travel times from Asia through the Suez Canal are slower to the East Coast than intermodal. In one example, a westbound service publishes that it takes 30 days to transport from Hong Kong to New York.

Panama Canal — Another shipping option is through the Panama Canal, which originally joined two oceans and saved valuable transportation time and cost. However, the canal, with its system of locks, soon became a victim of its success. It became packed with vessels waiting in line as the locks slowly filled. (The average wait time reached 13 hours.) But there was a bigger problem — or should we say smaller? Modern global demands called for bigger vessels with more cargo capacity that just couldn't fit in the narrow, shallow canal system.

But that's the old Panama Canal. Things have changed – big time.



The Panama Canal Expansion: Modernized for Today's Giant Global Trade

On June 26, 2016, The Panama Canal Expansion, seven years in the making, opened for business. The project widened and deepened existing lanes to allow for bigger ships to pass. These bigger vessels, called neo-Panamax ships, can hold 13,000 standard containers versus the 5,000 container-ships that used to pass. The calculation is simple: Since neo-Panamax vessels can carry three times as much cargo, that means fewer transits and more fuel savings. But can these savings really compete with other modes of transportation? More importantly, is the new Panama Canal right for you?

Reality Check – It's all about money.

To review, intermodal gets your products to the East Coast in the range of 15-20 days, beating both the Panama and Suez routes easily. Sounds great, right? The reality is the intermodal system is complex, labor-intensive, overloaded, and prone to major slowdowns due to congestion, labor strikes, and other factors. Even with the faster Prince Rupert Port route, which utilizes an efficient ship-to-rail terminal and dedicated land bridge to the Canadian mainland that branches into a network of rail and road connectivity into North America, unforeseen

slowdowns and cost increases do happen. In fact, when you factor in intermodal's total expenses, it costs, by some estimates, \$600 more per TEU than utilizing the new, streamlined, all-water Panama Canal. As for Suez, it's estimated that the new Panama Canal, with its much bigger ships, will save 23% on total transportation costs. That's why the Panama Canal has recently retaken its lead as the favorite ocean transit route between Asia and the US East Coast.

There's no other way to look at it. The new Panama Canal is a major cost-saver versus intermodal and the Suez Canal. The only downside is a longer travel time than intermodal, but that's when everything goes perfectly. When something goes wrong, intermodal's time "advantage" can turn into a disaster.