Are ports ready for super vessel impact?

Daily Press; By Col. Paul Olsen; Jan. 4, 2014 http://bit.ly/1d9VZ4U

Post-Panamax vessels are coming.

These tremendous ships, which will begin to arrive when the Panama Canal expansion opens to commerce in 2015, are a harbinger of economic growth.

The recent report from the U.S. Army Engineer Institute for Water Resources, the U.S. Port and Inland Waterways Modernization: Preparing for Post-Panamax Vessels, contributes to the ongoing public discussion regarding how we can best prepare for influx of cargo as these vessels arrive at the Port of Virginia.

Post-Panamax vessels make up 16 percent of the world's container fleet, but account for 45 percent of the fleet's capacity.

The proliferation of post-Panamax vessels, with the ability to lower shipping costs, makes their East Coast domination inevitable: exporters are likely to save an average of 25 percent by shipping on post-Panamax vessels rather than the smaller Panamax ships.

Cargo Business News wrote that most ships navigating the Panama Canal today carry 3,200-4,500 TEUs, or 20-foot-long intermodal containers, but after 2015, experts predict post-Panamax will move an estimated 12,600 TEUs.

The IWR report states, "Population and trade growth, coupled with port capacity, have shown the nation's most critical capacity needs are along the southeast and gulf coasts."

These supersized vessels an infrastructure that will support them: railway, roads, 50-foot navigation channels, security - Hampton Roads' economic future hinges on funding the growing gap between the burgeoning vessels and the port infrastructure that can welcome them.

In a Sept. 6, 2013 letter to both the assistant secretary for civil works and the director of the office and management budget, Virginian senators Mark Warner and Tim Kaine underscored the importance of funding the Craney Island Eastward Expansion project in Portsmouth, Va.

The project would allow the Virginia Port Authority to nearly double its marine terminal capacity, enabling it to meet projected increases in international trade after the newly expanded Panama Canal is opened. New, larger vessels all but demand the expansion: Hofstra University reported that each time the size of a ship is doubled, its capacity tripled. In the private sector, more than 14,000 businesses from the contiguous 48 states move cargo through Virginia, all of which stand to benefit from the impending paradigm shift in shipping.

But we must balance the cost of a post-Panamax port: in this time of seemingly perpetual fiscal crises, we must realize that capital improvements cannot be realized at the cost of maintaining current levels of service. Channels require maintenance dredging, cranes require repair and servicing, aids to navigation continually require replacing, etc.

Moreover, turning basins, navigation jetties, dredge material placement facilities, berthing facilities and aids to navigation must all be made ready for the larger fleet of vessels. Other factors include storage area, stacking height rules, operating hours, cranes capable of loading and unloading the larger ships, and docks engineered to handle the new and bigger cranes.

Mike Darrow, Norfolk District's chief of Water Resources Division, underscores the importance of striking the right balance.

"We must continually weigh the needs of new capital improvements with an operations and maintenance budget that has remained flat for years and actually has lost critical buying power for required channel dredging maintenance due to inflation," Darrow said. "Unless the current budget paradigm changes, nationally we cannot afford to add new and improve existing infrastructure without also increasing the dollars available to maintain the improvements to the navigation system." But, in terms of post-Panamax-ready, did the report go far enough?

Many, including Capt. J. William "Bill" Cofer, president of the Virginian Pilot Association, contend that the 50-foot channel depth is insufficient for the post-Panamax vessels.

"Today, inland channels require 55-foot depths and offshore entry fairways require 60-foot depths," he said. "International shipping companies are now routinely building ships that, when deeply loaded, draw 48 feet to 52 feet."

Cofer said around the world, ports require at least 3 feet of under-keel clearance in their inner harbors, and 8 feet of under-keel clearance to safely transit off-shore waters surrounding the U.S. coastal shelf. "This isn't complicated ... it is simple math," he said. "Today, the new global shipping fleets currently transiting the world require inland channels dredged to 55 feet and offshore fairways with depths of at least 60 feet to move cargo in all weathers."

The Port of Virginia is the sole eastern seaboard port that is authorized to dredge to 55 feet. But, under Cofer's criteria, no East Coast ports are prepared.

Ultimately, the commonwealth, and locally, Hampton Roads must engage in the ongoing public discussion that will help inform current and future decisions on the maintenance and development of our ports, waterways and their related infrastructure.