Panama Canal Expansion Has U.S. Ports Rushing

States are seeking to spend billions of dollars to build bigger ports to accommodate the massive ships that will soon be traveling through the canal. Can they move quickly enough?

BY: Ryan Holeywell | July 2012

A century ago in 1914, the Panama Canal opened to commercial shipping traffic. After 34 years of on-and-off construction and a price tag of $375 million -- more than $8 billion in today's dollars -- the canal became one of the biggest and most expensive infrastructure projects in human history. The opening of the canal created a tectonic shift for global trade and forever altered shipping routes for United States ports. Now, 100 years later, it's happening again. By the end of 2014, the Panama Canal is scheduled to have completed its greatest expansion, more than doubling its capacity and allowing it to handle the world's most massive ships.

And U.S. ports are scrambling. State governments and their port authorities all along the Gulf and East coasts are seeking to spend billions of dollars building bigger ports as quickly as possible, in a rush to accommodate the larger ships that will start traveling through the canal. (Ports on the West Coast, which are naturally deeper, can already handle the bigger vessels.) It's a high-stakes investment, and in a sense, they're all competing with one another. The ports that become the first go-to destinations for larger vessels will have a huge competitive advantage over their peers. "They'll be established as the destination to be," says South Carolina state Sen. Larry Grooms, an advocate for expanding the port in Charleston. "It will be hard for the other ports to take business away."

But port officials almost universally say they face an even bigger threat to their development than one another: the federal government. Byzantine regulatory hurdles and the overall lack of a clear federal ports strategy, they say, can leave expansion projects stuck in limbo for years. That threatens to keep the country from capitalizing on the work being done in Central America. "[If] Washington, D.C., and this administration don't step up," says South Carolina Gov. Nikki Haley, "we won't even have the luxury to compete."

If the U.S. doesn't act fast, port officials agree, it could find itself at a competitive disadvantage compared to other countries. If American ports expand, shipping processes could become more efficient, making American exports less expensive and more attractive. Additionally, failure to expand could facilitate a robust business of feeder ports in Canada, Mexico and the Caribbean. At those facilities, workers would ready goods so they're available for door-to-door shipping before being put on trains or smaller ships bound for the U.S. That would be bad news for American shipping and logistics companies, says Paul Anderson, CEO of the Jacksonville, Fla., Port Authority. "We don't want somebody else to do all that work if we're consuming it and we're paying for it."

It's worth noting that there are some observers who don't necessarily agree that the Panama expansion will have major stateside effects. The Southern office of The Council of State Governments, in a 2010 report, noted that one school of thought contends that East Coast ports are already struggling to handle loads from smaller ships and wouldn't be able to manage bigger ships even if the ports were technically deep enough. Others doubt that shipping routes would change that drastically, since many shippers would still place a premium on speed; typically, East Coast-bound goods arrive faster on trains from the West Coast than by being shipped across the canal. And many people have acknowledged that projections about the future of shipping can't accurately predict exactly how the shift will shake out. Port officials know this but believe that, even if the forecasts don't play out in the short term, they almost certainly will over time. "There's always this fear that you'll create overcapacity" in the short term, says

Jim Newsome, CEO of the South Carolina Ports Authority. “What people don’t realize is these are long-term assets. You’re building an asset for 30 or 40 years.”

This all started in 2006, when the citizens of Panama voted overwhelmingly to approve construction of a massive canal expansion, including two new sets of locks and wider, deeper navigation channels. The cost will exceed $5.2 billion, and the project will dramatically increase the size of the ships that can move through the canal. The maximum capacity of a cargo ship is described using a measure called TEU -- short for 20-foot equivalent units -- that’s based on the volume of a standard 20-foot-long metal shipping container. As it stands right now, the maximum capacity of a ship crossing the Panama Canal, known as a Panamax ship, is 4,800 TEUs. The improvements currently under way would allow for much, much bigger ships: 50 percent wider, 25 percent longer and with a volume of more than 12,000 TEUs. Bigger ships with more cargo are heavier and sit deeper in the water. In this case, ports are literally digging up the harbor floor to increase the minimum depth from 39.5 feet to 50 feet.

Ports at Baltimore, Charleston, Houston, Jacksonville, Miami and Savannah, among others, are at various stages of expanding to accommodate the larger vessels known as post-Panamax ships. A total of 17 port projects are being studied for improvements by the U.S. Army Corps of Engineers. Right now, though, there are few East Coast ports with the depths required to handle post-Panamax ships. Norfolk, Va., has long been able to accommodate such ships. The Port of New York and New Jersey can too, but its container terminals on Newark Bay have height restrictions due to the Bayonne Bridge. The port is planning to raise the bridge 64 feet, which will cost $1 billion and take five years. Baltimore has just completed its 50-foot dredging project.

And that’s about it. That means the rest of the East and Gulf coasts -- essentially everything from Virginia to Miami to Houston -- is up for grabs. That’s why these ports are competing so fiercely to go deeper. Industry experts say that nearly 80 percent of ships on order are post-Panamax size, and elected officials on the East and Gulf coasts are predicting that if they can expand their ports to accommodate these larger ships, they can capture much of the traffic that currently goes to West Coast ports and reaches the East Coast by rail.

Still, despite the energy and political will behind the rush to expand ports, the process isn’t going smoothly. Port-deepening projects generally are initiated by states, but require federal approval and funding from both entities. That means the fates of ports, which typically are state authorities, are dictated largely by the federal government. And the federal government, according to a growing chorus of governors, state legislators and port directors, isn’t equipped to handle their needs.

Federal policies addressing ports are a complicated web, and no single entity determines overarching strategy. The last federal Water Resources Development Act, which governs much of federal ports policy, was enacted by Congress nearly five years ago. A fee paid by shippers into a federal trust fund intended for harbor maintenance and dredging is projected to end the 2013 fiscal year with a balance of $8.1 billion under President Obama’s budget, while just 10 percent of that total will actually be spent on its intended purpose.

Jerry Bridges, chairman of the American Association of Port Authorities, says funding for dredging has been on the decline. Even the feds seem to realize they aren’t prepared to deal with the onslaught of projects. “There is a growing consensus that the existing budgeting process and budget levels are not adequate to meet the critical needs of future modernization,” the Army Corps of Engineers’ Institute for Water Resources wrote in an early draft of a report ordered by Congress.

Preparing to dredge a harbor is an enormously complicated process. Such projects must be authorized by Congress, but there’s no guarantee that any funds will be appropriated. Before construction can begin, a project must undergo two sets of impact studies. These studies, run by the Army Corps of Engineers, are major undertakings that can cost millions of dollars and take a decade or more to complete. One of the most egregious examples is Savannah, Ga., which is trying to deepen its port from 42 feet to 48 feet. Earlier this year, the corps released its final documentation for that project -- after 15 years of study. “This whole process of dredging is completely broken,” says Eugene Pentimonti, a former senior vice president of Maersk, one of the world’s largest shipping companies. “There’s virtually no way for a port to get their facilities dredged in a commercially acceptable time frame, to be able to compete, to use the opportunities it will provide them.”

Maryland Port Administration Executive Director James White is more blunt, calling the lengthy approval process “an embarrassment. We’re not reinventing the wheel,” White says. “We’re moving mud.”

The problem, say many in the ports community, is that the federal government has not acted quickly enough to prioritize port expansion. During a congressional hearing last year, Anderson, of the Jacksonville port, bemoaned the “stepchild status” of ports among both federal officials and the general public, speculating that most elected officials seem to have little interest in ports largely because voters don’t think about them.

Indeed, some in the transportation community believe the federal government was caught flat-footed by the Panama expansion and as a result doesn’t have a framework for addressing the rapid changes necessary. “They didn’t believe Panama would put the money together to be able to do it,” says Pentimonti, a board member at the Eno Center for Transportation, a think tank. “Nobody thought it would happen as quickly as it did.”

In Jacksonville, for example, the port completed a project in 2010 to deepen a channel from 38 feet to 40 feet. The project took nearly 15 years from start to finish. Now, the port is projecting a 50-foot deepening that will be finished in 2018, if all goes according to schedule. “Because our ports take so long compared to the rest of the world, we finished the project, and the world had changed,” says Anderson.

Despite the uncertainty regarding the federal government -- or perhaps more likely because of it -- states are ponying up more money themselves. Their logic: If they can’t make the feds speed up the approval process, they can at least ensure that the projects have the money to go forward once they do get the green light. “If ports want to get it done in a timely manner, ports are starting to see they’re going to have to come up with a larger portion of the cost share,” says Susan Monteverde, vice president of government relations at the American Association of Port Authorities. “The reason they’re doing that is to get the jobs more quickly.”

Indeed, mayors like Alvin Brown of Jacksonville and Joe Riley of Charleston have become cheerleaders for their projects largely by touting both the economic benefit they’ll have for their community and for the nation as a whole. “A deeper harbor produces more maritime activity,” says Riley. “It means larger ships can come in. It means it’s a more effective place to ship your goods from. It means suppliers and assemblers and manufacturers will be more advantageous in the state. It’s a very important economic generator.”

The Port of Baltimore just completed deepening a berth at one of its container terminals to 50 feet. The $105 million project, which includes four new cranes for ships that are two to three times larger than vessels currently calling on the port, was accomplished through a public-private partnership with a company called Ports America Chesapeake. Under the agreement, the company paid for the improvements as part of its 50-year lease to operate the terminal. Maryland officials viewed the project as a critical economic and jobs driver. Without the public-private arrangement, “we wouldn’t have been ready,” says White.

Last year, Florida Gov. Rick Scott decided to channel $77 million in state funds to cover part of the Port of Miami’s $180 million deepening. The state had initially wanted the feds to pay that sum, but Florida has decided to move forward with the hope that Washington may eventually reimburse some of the money.

In South Carolina, the Legislature is poised to allocate $180 million for a $300 million dredging project that’s still in the feasibility study phase, even though it won’t be completed for years. It may also be willing to borrow up to $120 million to fund the rest of the project if the feds don’t come up with their share of the cost. “The cost of dredging shouldn’t bother anyone,” says Grooms, the state senator. “We’ll be there. We’ll be at a post-50-foot harbor. The question is, how long will it take? And the big unknown is the harbor deepening study.”

There may be some good news for Charleston on the horizon: A year into its feasibility study, it appears the Charleston project is being put on a fast track -- certainly a relative term -- which would shorten the feasibility study from up to $20 million over eight years to less than $13 million over four years.

And the corps is implementing a new policy that may signal good news for other ports as well. Going forward, the corps says it will adhere to a “3x3x3” rule: Feasibility studies must be finished within three years, should cost no more than $3 million and must fit in a 3-inch binder. (Projects can still be exempted from the 3x3x3 process.) But a draft of a forthcoming corps report to Congress acknowledges that, without new ways of financing projects, those changes could just increase the backlog of work that’s authorized but not funded.

Tab Brown, chief of the planning and policy division of the corps, says the pace of feasibility studies is dictated largely by the federal funds available to pay for them each year and by the federal regulations the agency has to follow. “Give the corps enough money to be able to deal with the permit issues in a year,” urges former Mississippi Gov. Haley Barbour. That’s not an approach the federal government is likely to take. Obama’s fiscal 2013 budget reduces the corps’ overall civil works budget by 5.4 percent and cuts its budget for studies by 18 percent.

“We’re the only industrialized country on the planet that doesn’t have a comprehensive freight strategy,” says Robert Puentes, a senior fellow with the Brookings Institution. Will that change? Maybe. Port directors say the benefit of the Panama Canal expansion may be that it could finally force the federal government to create a plan for the future of American ports.

There’s no reason it couldn’t happen soon, says Gov. Nikki Haley. “It does not have to take a long time for this to happen. At any point, the administration and the leadership in Washington can say this is a priority, and we’ll all move forward together.”