Full Steam Ahead:
Southeast Ports Prepare for Panama Canal Expansion
In four years, the Panama Canal plans to mark its 100th anniversary with the completion of a $5.25 billion expansion project that will allow more and wider ships to move between the Pacific and Atlantic oceans. In anticipation of capturing a chunk of the transpacific Asian trade previously destined for West Coast ports, Southeast ports officials from New Orleans to Tampa on the Gulf Coast, and from Miami to Savannah on the East Coast are moving full steam ahead to dredge harbors and upgrade their infrastructure.

There’s something about a century mark that calls for a celebration. Cities observe their centennials with parades, proclamations, and pyrotechnics. Centenarians are honored with parties and newspaper feature stories. The year 2014 will bear witness to a Latin American centennial that could arguably have significant economic repercussions for the Southeast economy—indeed, for global commerce in general. The Panama Canal will mark its first 100 years with the completion of a $5.25 billion expansion project that will add a third set of locks to allow more and wider ships to pass. The largest container ships—so-called post-Panamax ships—will be able to pass through the canal to ports on the eastern side of North America, possibly diminishing the West Coast dominance of the transpacific Asian trade.

As the year of completion approaches, competition among East Coast and Gulf Coast ports to capture a larger share of the Asian market is intensifying. Many of the Southeast’s ports do not have adequate infrastructure to accommodate the volume of containers that the larger ships promise, nor do they have the water depth or channel width to allow the ships to navigate. Currently, a deepwater port has to have a minimum depth of 40 feet to accommodate Panamax ships, which is the largest ship that can now navigate the Panama Canal (hence the name Panamax). By this definition, the Southeast has seven deepwater ports. Four of them are on the Atlantic Coast: the Port of Savannah, Port Canaveral, Port Everglades, and the Port of Miami. The other three are on the Gulf Coast: the ports of Tampa, Mobile, and...
New Orleans. Once 2014 rolls around, however, and the Panama Canal opens to the post-Panamax ships, the definition of deep-water port will have to be altered. Fully loaded post-Panamax ships carrying over 10,000 TEUs require a channel depth of at least 50 feet. (TEU is short for “twenty-foot equivalent” and describes a ship’s cargo-carrying capacity. A standard 40-foot (40x8x8 feet) container equals two TEUs (20x8x8 feet).)

To accommodate the larger ships and the greater volume of containers, many U.S. ports on the Gulf and eastern seaboard are undertaking expansion projects of their own. Although the recent recession has created funding shortages and budget

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### Container Traffic 2009

<table>
<thead>
<tr>
<th>Southeast Ports</th>
<th>TEUs</th>
<th>Boxes</th>
<th>Containerized Cargo</th>
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<tr>
<td>Gulfport, MS (30/31)</td>
<td>198,900</td>
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<tr>
<td>Miami, FL (17/16)</td>
<td>807,069</td>
<td>451,706</td>
<td>6,197,533</td>
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<td>Mobile, AL —</td>
<td>112,270</td>
<td>—</td>
<td>1,497,929</td>
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<tr>
<td>New Orleans, LA —</td>
<td>229,067</td>
<td>153,537</td>
<td>2,882,587</td>
</tr>
<tr>
<td>Palm Beach, FL —</td>
<td>229,067</td>
<td>153,537</td>
<td>2,882,587</td>
</tr>
<tr>
<td>Port Everglades, FL (16/17)</td>
<td>796,160</td>
<td>—</td>
<td>4,721,162</td>
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<tr>
<td>Savannah, GA (4/4)</td>
<td>2,356,512</td>
<td>1,307,728</td>
<td>16,751,623</td>
</tr>
</tbody>
</table>

### The Largest U.S. Ports

| Long Beach, CA (2/2)          | 5,067,597| 2,811,116| 30,128,362         |
| Los Angeles, CA (1/1)         | 6,748,995| 3,744,710| —                  |
| New York/New Jersey (3/3)     | 4,561,527| 2,652,209| —                  |

Notes: Table includes top seven Southeast container ports. Long Beach, Los Angeles, and New York are included for comparison. TEUs=twenty-foot equivalent units (loaded and empty). Containerized cargo is the total containers regardless of length (loaded and empty). Numbers in parentheses next to port names indicate port’s ranking by TEUs for 2008 and 2009, respectively.

Source: American Association of Ports Authorities
challenges, many ports are forging ahead with their projects to dredge their access channels, install new post-Panamax cranes to offload the containers, and add and upgrade container facilities. They are also competing for private and federal dollars to fund the projects. As Alec L. Poitevint II, chairman of the board of directors of the Georgia Ports Authority (GPA), said, “The Port of Savannah continues to be committed to its long-term plans.” Despite the recession, he continued, the GPA has not changed its strategy, and the infrastructure improvement budget remains strong. Poitevint said that the Port of Savannah recently added four more super-post-Panamax cranes to its inventory, bringing the number of such ship-to-shore cranes to 23. At 425 feet long, standing 180 feet above the water, and weighing 1,369 tons, these cranes are the largest in the world, capable of handling super-post-Panamax ships the size of 22 containers wide. Since 2000, the Port of Savannah has been the fastest-growing U.S. port and is the fourth-largest container port in the United States in terms of volume (see chart 1 and the table).

Don Allee, chief executive of the Mississippi State Port Authority at Gulfport, said in a Feb. 2, 2010, USA Today article, “Those who are best prepared when the recession ends will have the best opportunity for rewards later.” Gulfport is currently undergoing a $570 million expansion not only to repair damage done by Hurricane Katrina and raise it 25 feet to better withstand future hurricanes but also to handle the increased container traffic that the ports authority is anticipating after the completion of the Panama Canal expansion.

The all-water route may not be all wet

According to the Panama Canal Authority (ACP), the large majority of traffic moving through the canal is between the East Coast of the United States and Asia. The second major trade route is between Europe and the west coast of the United States and Canada.

The Panama Canal has historically competed with the U.S. intermodal system in the Northeast Asia–to–U.S. East Coast route, according to the ACP’s 2006 expansion proposal. The ACP estimates that the Panama Canal has a 38 percent market share of this route, while the intermodal system has a 61 percent share of it, and the Suez Canal has a 1 percent share. Traditionally, shippers have largely found it more efficient to ship goods ultimately bound for East Coast destinations to the West Coast ports, where they are offloaded from the vessels and then moved by truck and rail to their final destinations in a complex system of transportation. (The ports of Los Angeles and Long Beach dominate the Asian trade; about 40 percent of all container cargo traffic entering the United States still arrives at these two ports.) This intermodal system route offers shippers shorter times for shipments to reach their destinations than the all-water route through the Panama Canal allows, but it also involves higher costs and some measure of unreliability in service. On the other hand, the all-water route to the East Coast through the Panama Canal is less expensive and arguably more reliable, but the cargo takes longer to reach its destination than it would by way of the intermodal system.

Even before the ACP announced its plan to expand the canal, West Coast ports had lost some of their transpacific business to Gulf and East Coast ports. Congestion and ongoing labor disputes over the past decade have seen to that. With more and larger ships able to pass through the Panama Canal, the all-water route from Asia through the canal and into the U.S. Gulf and East Coast ports promises to become an even more attractive option for shippers transporting containerized cargo. According to The Cunningham Report, a newsletter for the trade and transportation industry on the West Coast, almost 60 percent of Americans live east of the Mississippi River, which makes the Southeast ports closer to more consumers and businesses than are the West Coast ports. In addition, these ports are also seen as more business-friendly, more efficient, and cheaper than their competition in the West. This momentum is expected to continue in the near future. The May 2010 Global Port Tracker, a biannual publication of the National Retail Federation that provides a four-quarter rolling forecast of 12 major U.S. ports, predicts growth of 13.5 percent for West Coast ports and growth of 17.1 percent for ports on the East Coast.

However, a 2008 study of ports in relation to the impending canal expansion by the U.S. Army Corps of Engineers suggested that Southeast ports’ expectations of hugely increased container trade could be overly optimistic, for a couple of reasons. First, in 2008 shipping companies began cancelling orders for post-Panamax ships because of concerns about sluggish trade and credit tightening—which means that these ships will not be converging on the Panama Canal. Second, climate models

Chart 1
Import Volumes, Port of Savannah

Note: Data are in thousands of TEUs and are from second quarter 2005 through first quarter 2010. Source: Global Port Tracker: North America Trade Outlook, National Retail Federation, May 2010.
show that the Northwest Passage—a sea route across the Arctic Ocean—could actually be ice-free by 2030, opening up another route from Northeast Asia to the United States. In this case, the Corps of Engineers report said, container ships are likelier to call on Northeast ports as they head southward from the Arctic Circle, not on those in the Southeast.

Where there’s a will, there’s a waterway
Dreams of a maritime passageway through the narrowest part of Central America have been around since the Spaniards first arrived on this narrow strip of land in the early 16th century. However, it wasn’t until the end of the 19th century that technology had reached the point that such an enormous project was feasible. In the 1880s, the country of France began excavations but abandoned the project after yellow fever claimed the lives of more than 22,000 workers over five years. The United States then took over the project and completed the canal in 1914.

In designing the locks to allow passage of its largest warships, the United States accomplished its goal of shortening the transit of its warships from the West to the East Coast. Indeed, the trip was shortened by a full 8,000 nautical miles, or about 9,206 miles, and allowed the ships to avoid the treacherous and expensive route around South America’s Cape Horn.

The Panama Canal remained under full U.S. administration until 1977, when a treaty was signed to hand over control to Panama by 1999. That year, all responsibility for the canal was transferred to the government of Panama under the ACP, a semiautonomous agency of the Panamanian government. The United States reserved the perpetual right to military intervention to protect its economic interests in the key shipping route.

The Panama Canal gets bigger. The world gets smaller.
Dreams for the Panama Canal did not end when the first ship navigated the canal in 1914. According to the ACP, plans to expand it have been tossed around since the 1930s. In 1939, for example, the United States began building a third set of locks to allow the transit of commercial and warships whose size now exceeded the capacity of the existing locks. But with the outbreak of World War II, work on it was suspended.

With increased globalization and West Coast port congestion and labor instability over the past decade, many shippers have already opted for the all-water route that the Panama Canal offers, and the canal has gained a sizable share of container traffic headed to the U.S. East Coast. According to the U.S. Army Corps of Engineers, the Panama Canal sees more than 14,000 ships pass through it every year. About 70 percent of the canal’s $100 billion containerized cargo—about 275 tons—is heading for or coming from the United States.

However, post-Panamax ships currently don’t have the option to navigate the canal because of their size. The ships that are able to pass through often face expensive delays. It is not unusual for vessels to wait up to 10 days during peak season before they can transit the canal. This idle time can cost shippers as much as $40,000 to $50,000 a day and has bred at times fierce bidding system. In 2006, a British oil tanker paid a whopping $220,000 (not including transit fees) to steam ahead of 83 other ships, according to the U.S. Corps of Engineers.

In 2006, the Nicaraguan government announced its plan to build its own canal, a project with an estimated $18 billion price tag, more than three times the country’s GDP. The canal would connect the Atlantic and Pacific oceans, as does the Panama Canal, but it would allow passage of post-Panamax ships. Panamanians needed no further argument to realize that the Panama Canal was due for an overhaul. On Oct. 22, 2006, the citizens of Panama overwhelmingly approved a plan to expand the canal. Although movement on the Nicaraguan canal proposal seems to have submerged, news of Nicaraguan government officials meeting with foreign investors to finance the project occasionally surfaces.

In the Great Recession’s wake, Southeast plunges into port expansions
Southeast ports officials from New Orleans to Tampa on the Gulf Coast, and from Miami to Savannah on the East Coast are moving full steam ahead to expand and modernize their ports to capture their share of the anticipated traffic that the Panama Canal expansion will bring.

Funding these projects has been a challenging and occasionally even controversial prospect. During the height of the recession, when cargo volumes and revenues steeply dropped (see chart 2), some ports had their budgets cut and had to delay planned expansion projects. Other ports did not slow down at all. Despite the massive budget shortfalls that Georgia has experienced, the Port of Savannah has kept its expansion

Chart 2
Southeast Port Exports

Source: U.S. Department of Transportation, International Trade Administration

Note: Data are in U.S. $billions.
budget relatively intact. According to port director Poitevint, the port remains committed to its long-term strategy and to providing "service to the import and export business, and with the expectation that the Panama Canal will be finished in 2014."

Much of the funding that ports are vying for comes from a variety of federal programs, including a multiyear surface transportation reauthorization soon up for congressional approval as well as the Harbor Maintenance Tax (HMT), enacted in 1986 by Congress to recoup money from shippers according to the value of the cargo they are moving through ports. Many ports are banking on future federal stimulus spending as well as broader efforts, such as the current administration's National Export Initiative with its goal of doubling U.S. exports by 2015.

The U.S. Department of Transportation's fiscal year 2011 budget request, released in February, included $4 billion for creation of a National Infrastructure Innovation and Finance Fund.

In February 2010, $1.5 billion in federal funding became available under Title XII of the American Recovery and Reinvestment Act of 2009 (ARRA) for transportation improvements. However, only 8 percent of the Transportation Investment Generating Economic Recovery (TIGER) grants was made available for port enhancements, much to the chagrin of port leaders. Competition for these funds is fierce. Some U.S. ports have already received a TIGER grant. Gulfport, in partnership with the Kansas City Southern Railway (KCS), was awarded a $20 million grant to upgrade a 76.5-mile track link between the port and Hattiesburg, Miss., a $50 million project that promises to enhance the port's intermodal system and better connect the port to Chicago, New Orleans, Canada, and the U.S. East Coast. Currently, the track accommodates only 10-mph single-stack freight traffic. Port officials said that with the upgrade, the track will permit 49-mph double-stack standards.

In December 2009, another federal grants program was approved. Similar to the TIGER grants, TIGER II Discretionary Grants are administered by the U.S. Department of Transportation and used for infrastructure improvement. Ports are already jostling for their share. Gary LaGrange, president and chief executive officer of the Port of New Orleans, said his port is seeking a $35 million TIGER II grant to expand the port's dock size.

The Port of Gulfport is largely financing the first phase of its expansion project with $570 million in community development block grants that the U.S. Department of Housing and Urban Development (HUD) awarded Mississippi after Hurricane Katrina. Use of the HUD money for port expansion was not entirely without controversy, as some critics insisted that the money should finance housing while state officials said that port reconstruction was part of their federal funding request from the start. The port is moving ahead.

Regardless of the challenge of securing funds, the general consensus among port administrators is that the newly expanded Panama Canal in 2014 will significantly alter trade routes, and these ports simply cannot afford to miss the opportunity to bring major business to their regions.

This article was written by Nancy Condon, associate editor of EconSouth.

Left to right: The first ship passes through the Panama Canal, 1914; the Gatun Locks, on the Atlantic side of the Panama Canal; a Panamax container ship, currently the largest the canal can accommodate.