The MSC Carolina at the Port of Charleston. Photo courtesy of the South Carolina State Port Authority.
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Front cover: Louis Vest, “Ship Portrait - ‘Star Geiranger’,” June 21, 2008, via Flickr, Creative Commons Attribution (top right); Louis Vest, “Before,” September 18, 2006, via Flickr, Creative Commons Attribution (top left); Carla Welsh, The Port of Virginia, “NIT_South,” April 7, 2010, attachment in e-mail message to author (bottom right); and Port of Houston Authority, “Barbours Cut cranes at dusk,” July 25, 2007 (bottom center).


Back cover: Port of Houston Authority, “Woodhouse - 24,” July 25, 2007 (left); Port of Houston Authority, “Ship (d),” March 18, 2004 (top); and Carla Welsh, Port of Virginia, “64Express,” April 7, 2010, attachment in e-mail message to author (bottom).
Introduction

The more than 360 commercial sea and river ports dotted across every state remain a critical cog in the vast and complex transportation machinery encompassing our nation. Not only do these ports effectively connect the individual states, they are a crucial link between the United States and the rest of the world. In this era of increasing globalization, the decisive roles played by ports as the gateways to both domestic and international trade cannot be overemphasized. The role of exports in spurring economic growth in every state has been a striking feature for some decades, and exports currently account for 13 percent of U.S. gross domestic product (GDP) and added nearly 1.5 percent to GDP growth in 2009. The U.S. economy has gone through five-year spurts during which exports have almost doubled, most recently from 2002 to 2007, when a depreciated dollar gave American products and services a competitive edge. President Barack Obama has made export-led growth a key plank in his overall strategy to boost economic growth in the aftermath of the Great Recession and, during the 2009 State of the Union, announced that his administration will seek to double U.S. exports over the next five years. The president followed up on this announcement with a number of specific measures in early March 2010, including $2 billion in new export financing through the Export-Import Bank, the financial entity that helps U.S. companies finance overseas sales.

This SLC Special Series Report reviews how this renewed focus on export growth and increased international trade dovetails with the ongoing expansion of the Panama Canal. Vessels loaded with cargo traveling through the Panama Canal remain a critical component in overall U.S. trade and, consequently, the ongoing expansion of the Canal will impact, albeit disproportionately, the various U.S. ports from the West Coast to the East Coast to the Gulf Coast. Given these divergent impacts, the particular effects on the SLC ports remain of great interest to policymakers, port officials, corporate/industry executives and interested others in the region.

Methodology

In order to obtain details on plans being enacted by the SLC ports, in late 2009, the SLC forwarded a survey to 52 ports in the SLC member states (See Appendix I). Responses were received from 23 of these 52 ports and this information, along with additional research and analysis, is presented in this SLC Special Series Report. It should also be noted that in late 2009, when the survey was sent to port officials in the SLC states, Maryland was a member of the SLC. In January 2010, Maryland opted to join the Eastern Regional Conference (ERC) of The Council of State Governments. Since Maryland was one of the first states to respond to the SLC survey and the Port of Baltimore is an important player in U.S. shipping circles, Maryland’s response has been included as Appendix IV.

In terms of the format of the report, it is divided into two parts. Part I contains background information including details on ports in the nation’s economic calculations, renewed emphasis on export-led growth, Panama Canal and the nation’s trade patterns, factors propelling the Panama Canal’s expansion effort, challenges faced at the West Coast ports and the emergence of the all-water route, China’s emerging role in U.S. trade, Fourth Revolution and the restructuring of worldwide shipping patterns, battle of the ports (West Coast vs. East Coast) and, finally, the contrarian view on the all-water route between Asia and the East Coast via the Panama Canal. Part II contains the responses from the ports to the SLC survey sent out in late 2009 and divides the survey responses into three sub-sections: Atlantic Coast ports, Gulf Coast ports and Inland ports. It also should be noted that the survey responses are not presented verbatim, as the SLC took editorial license to maintain content uniformity.
THE PANAMA CANAL EXPANSION AND SLC STATE PORTS

Part I

Ports in the Nation’s Economic Calculations

Streamlined, efficient and effective transportation networks rank among the most important elements essential to the success of this renewed endeavor to boost exports and promote trade linkages. In this connection, ports are a pivotal component of this overall effort. In terms of total economic impact, the contribution made by ports remains truly monumental. According to 2008 figures, cumulatively, U.S. ports generated 13.3 million direct and indirect jobs, $649 billion in personal income and more than $3.15 trillion in marine cargo-related spending. According to the American Association of Port Authorities (AAPA), at a national level, U.S. ports and waterways handle more than 2 billion tons of domestic and import/export cargo annually. In another 10 years, by 2020, the AAPA estimates that the total volume of cargo shipped via water will be double the volume shipped in 2001. The AAPA documents that basic commodities and finished products (such as certain fruits and vegetables, wastepaper, lumber, iron ore, steel, scrap steel, phosphate, plastics, film, machinery, and modular homes) are shipped by water and that about two-thirds of all U.S. wheat and wheat flour, one-third of soybean and rice production and almost two-fifths of U.S. cotton production are exported via U.S. ports. A major reason U.S.-produced coal, grain and forest products compete so well in international markets is the efficiency of the nation’s transportation system, particularly its ports. Automobile exports and imports, another major contributor to the economy, rely extensively on deep-draft seaports and, in 2008, the latest year available, ports handled more than 4 million passenger cars, vans, SUVs and light trucks. Similarly, the cruise industry is another major contributor to the nation’s economic strength and, again, in 2008, nearly 9 million cruise embarkations took place in the United States. (Globally, there were 13 million embarkations.)

At a regional level, the SLC state ports remain extremely important in overall national calculations. According to the latest (February 2010) U.S. port rankings by the volume of cargo transported, in calendar year 2008, 57 percent of the total trade at the nation’s top 149 ports involved 51 ports located in the 15 SLC states. Even in terms of container traffic, the dominance of the SLC ports is apparent by the fact that in 2009, 7 of the top 17 U.S. container ports in the country, were Southern ports, with the ports of Savannah, Houston and Hampton Roads ranking in the top 10. From the 656,805 automobiles shipped through the Port of Jacksonville, Florida, in fiscal year 2008, to the 13.8 million short tons of crude oil that traveled through the Port of South Louisiana just in the fourth quarter of 2009, to the 4.1 million passengers that transited through the Port of Miami, the “Cruise Capital of the World,” during fiscal year 2009, to the immense amount of cargo that moved through the Port of New Orleans (the leading U.S. Port for imported steel, natural rubber and coffee), the role played by these SLC ports in the national economy is prodigious.

Renewed Emphasis on Export-Led Growth

While the meteoric rise in international trade in the last two decades alongside the increasingly intertwined nature of the global economy is an accepted fact, inevitably, the Great Recession of 2007 has adversely impacted both of these developments. As an example, according to the U.S. Department of Commerce, in 2009, the nation’s goods

*The short ton is a unit of weight equal to 2,000 pounds.*
exported to the top 30 markets declined by a whopping 17.6 percent compared to the prior year while, in 2008, U.S. goods exported to the top 30 markets actually increased by 10.8 percent compared to 2007. Cumulatively, U.S. exports to the rest of the globe stood at $901.1 billion in 2005, increased to $1.1 trillion in 2007 (a jump of 27 percent) and then to $1.3 trillion in 2008 (an increase of 12 percent), before dipping to $1.1 trillion in 2009 (a decline of 18 percent). Even on the import front, in 2009, U.S. imports from its 30 top markets declined by 25.6 percent compared to the prior year while, in 2008, American imports actually increased by 7.3 percent from 2007 figures. Cumulatively, U.S. imports from the rest of the globe stood at $1.7 trillion in 2005, increased to $2 trillion in 2007 (an increase of 17 percent) and then to $2.1 trillion in 2008 (an increase of 7 percent), before descending to $1.6 trillion in 2009 (a decline of 26 percent). Table 1 and Figure 1 provide further details into the international trade developments at the national level, while Table 2 provides the percentage changes of these components on the international trade front.

These representations allow a clear illustration of how the U.S. trade balance fared over a period of nearly two

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**Table 1**  
**U.S. Trade Balance with the World 1990 to 2009 (In Thousands US$)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>392,975,794</td>
<td>495,259,644</td>
<td>-102,283,850</td>
</tr>
<tr>
<td>1995</td>
<td>584,742,005</td>
<td>743,542,779</td>
<td>-158,800,773</td>
</tr>
<tr>
<td>2000</td>
<td>781,917,667</td>
<td>1,218,022,033</td>
<td>-436,104,366</td>
</tr>
<tr>
<td>2005</td>
<td>901,081,813</td>
<td>1,673,454,521</td>
<td>-772,372,708</td>
</tr>
<tr>
<td>2007</td>
<td>1,148,198,722</td>
<td>1,956,961,843</td>
<td>-808,763,121</td>
</tr>
<tr>
<td>2008</td>
<td>1,287,441,997</td>
<td>2,103,640,711</td>
<td>-816,198,714</td>
</tr>
<tr>
<td>2009</td>
<td>1,056,931,976</td>
<td>1,557,876,206</td>
<td>-500,944,230</td>
</tr>
</tbody>
</table>


**Table 2**  
**Percentage Change in U.S. Trade Balance 1990 to 2009**

<table>
<thead>
<tr>
<th>Year</th>
<th>% change 1990 to 1995</th>
<th>% change 1995 to 2000</th>
<th>% change 2000 to 2005</th>
<th>% change 2005 to 2007</th>
<th>% change 2007 to 2008</th>
<th>% change 2008 to 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>49%</td>
<td>34%</td>
<td>15%</td>
<td>27%</td>
<td>12%</td>
<td>-18%</td>
</tr>
<tr>
<td>Imports</td>
<td>50%</td>
<td>64%</td>
<td>37%</td>
<td>17%</td>
<td>7%</td>
<td>-26%</td>
</tr>
<tr>
<td>Balance</td>
<td>55%</td>
<td>175%</td>
<td>77%</td>
<td>5%</td>
<td>1%</td>
<td>-39%</td>
</tr>
</tbody>
</table>

decades, 1990 to 2009. As evident from the information contained in the U.S. Department of Commerce data, between 1990 and 2009, U.S. exports exploded from $392.9 billion to over $1 trillion; in 2008, U.S. exports were even higher and reached a record $1.3 trillion, the highest level in history. On the import side, the explosive growth was even more pronounced, with U.S. imports rising from $495.3 billion in 1990 to an overwhelming $1.6 trillion in 2009. Given the rigors of the Great Recession, import levels actually declined a staggering $545.8 billion between 2009 and 2008. Consequently, the nation's overall trade balance actually improved during that time, dropping to -$500.9 billion from the record-setting -$816.2 billion.

Beyond the review of the raw numbers, the percentage changes involving U.S. international trade between 1990 and 2009 facilitates several conclusions. In general, for the period featured, imports into the United States grew at a faster clip than U.S. exports until 2005, when the U.S. economy began sputtering. In fact, only during two of the six periods featured in Table 2—2005 to 2007 and 2007 to 2008—did export growth exceed import growth (27 percent versus 17 percent and 12 percent versus 7 percent, respectively). Between 2008 and 2009, when the full repercussions of the Great Recession were affecting practically every part of the country, U.S. exports actually shrunk 18 percent, while U.S. imports declined by an even larger amount (-26 percent), a development that helped the overall U.S. trade balance. Consequently, the U.S. trade balance receded 39 percent between 2008 and 2009, a clear reflection of the Great Recession sapping the purchasing power of every segment of the American society.

Further exploration of export trends related to the SLC, presented in Table 3, demonstrates strikingly similar trends. Cumulatively, in the initial years of the review period and in response to the 2001 recession, SLC exports dipped between 2000 and 2002, from $246 billion to $235 billion, a trend also apparent at the national level. However, in each of the subsequent years presented, SLC exports increased steadily to $290 billion in 2004, $364 billion in 2006, and $475 billion in 2008. However, once again, as a result of the economy's contraction during the Great Recession, SLC exports shrank to $401 billion in 2009. As expected, given the enormity of its economy, Texas was the SLC state with the largest export base in the entire review period. Between 2000 and 2009, Texas' share of total SLC exports ranged between 40 percent and 42 percent, a sizable proportion. Florida ranked second on this list.

### Table 3

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</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>7,317,040</td>
<td>8,256,625</td>
<td>9,062,923</td>
<td>10,498,646</td>
<td>11,406,677</td>
<td>12,352,190</td>
<td>13,522,190</td>
</tr>
<tr>
<td>Arkansas</td>
<td>2,599,268</td>
<td>2,807,924</td>
<td>3,481,939</td>
<td>4,264,380</td>
<td>4,886,845</td>
<td>5,775,977</td>
<td>6,527,049</td>
</tr>
<tr>
<td>Florida</td>
<td>26,542,976</td>
<td>24,461,848</td>
<td>29,042,755</td>
<td>38,557,546</td>
<td>44,858,050</td>
<td>54,238,240</td>
<td>64,919,556</td>
</tr>
<tr>
<td>Georgia</td>
<td>14,925,063</td>
<td>14,424,428</td>
<td>19,720,454</td>
<td>20,113,252</td>
<td>23,365,865</td>
<td>27,513,962</td>
<td>28,682,218</td>
</tr>
<tr>
<td>Kentucky</td>
<td>9,612,209</td>
<td>10,680,139</td>
<td>13,055,048</td>
<td>17,254,378</td>
<td>19,652,096</td>
<td>21,120,586</td>
<td>22,682,952</td>
</tr>
<tr>
<td>Louisiana</td>
<td>16,814,289</td>
<td>17,583,094</td>
<td>19,920,267</td>
<td>23,476,818</td>
<td>30,318,911</td>
<td>34,908,136</td>
<td>35,784,979</td>
</tr>
<tr>
<td>Mississippi</td>
<td>2,725,551</td>
<td>3,064,865</td>
<td>3,178,692</td>
<td>4,484,274</td>
<td>5,184,421</td>
<td>6,307,993</td>
<td>6,307,993</td>
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<tr>
<td>Missouri</td>
<td>6,497,147</td>
<td>6,786,748</td>
<td>9,021,331</td>
<td>12,781,365</td>
<td>13,483,588</td>
<td>15,852,324</td>
<td>18,507,801</td>
</tr>
<tr>
<td>North Carolina</td>
<td>17,945,940</td>
<td>14,727,665</td>
<td>18,155,669</td>
<td>21,286,290</td>
<td>23,355,818</td>
<td>25,090,543</td>
<td>27,189,312</td>
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<tr>
<td>Oklahoma</td>
<td>3,072,177</td>
<td>2,445,438</td>
<td>3,186,053</td>
<td>4,394,666</td>
<td>4,579,068</td>
<td>5,076,531</td>
<td>4,415,124</td>
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<tr>
<td>South Carolina</td>
<td>8,565,126</td>
<td>9,649,661</td>
<td>13,430,749</td>
<td>16,319,870</td>
<td>18,575,456</td>
<td>19,852,521</td>
<td>16,515,607</td>
</tr>
<tr>
<td>Tennessee</td>
<td>11,591,574</td>
<td>11,628,712</td>
<td>16,159,165</td>
<td>21,647,640</td>
<td>22,874,789</td>
<td>23,237,725</td>
<td>20,461,098</td>
</tr>
<tr>
<td>Texas</td>
<td>103,865,689</td>
<td>95,427,206</td>
<td>117,403,604</td>
<td>150,890,068</td>
<td>168,228,620</td>
<td>192,221,781</td>
<td>163,046,235</td>
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<tr>
<td>Virginia</td>
<td>11,698,059</td>
<td>10,809,147</td>
<td>11,672,298</td>
<td>14,154,943</td>
<td>16,864,470</td>
<td>18,941,609</td>
<td>15,045,245</td>
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<tr>
<td>West Virginia</td>
<td>2,219,278</td>
<td>2,246,458</td>
<td>3,253,569</td>
<td>3,240,059</td>
<td>3,987,021</td>
<td>5,643,487</td>
<td>4,822,106</td>
</tr>
<tr>
<td>SLC Total</td>
<td>245,991,386</td>
<td>234,999,958</td>
<td>289,744,516</td>
<td>364,064,195</td>
<td>411,611,695</td>
<td>474,675,939</td>
<td>400,641,283</td>
</tr>
<tr>
<td>U.S. Total</td>
<td>781,917,667</td>
<td>693,103,192</td>
<td>814,874,654</td>
<td>1,025,967,497</td>
<td>1,148,198,722</td>
<td>1,287,441,997</td>
<td>1,056,931,976</td>
</tr>
</tbody>
</table>

securing between 10 percent and 12 percent of the total SLC export base.

Percentage changes in terms of the specific SLC state export amounts during the review period, presented in Table 4, afford several conclusions. For instance, the decline of 16 percent experienced in the SLC region between 2008 and 2009 corresponded to the national decline in exports. Among the SLC states, Missouri experienced the steepest decline between these two years, with exports dwindling by 26 percent. Alabama and Louisiana also saw their exports shrink by 22 percent in this period. It also is relevant to note that after exports from the SLC increased by 27 percent between 2006 and 2007, the rate of growth slowed to 12 percent between 2007 and 2008, further indication of the already faltering economy.

| Table 4 Percentage Change in SLC State Exports to the World 2000 to 2009 |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Alabama                         | 49%            | 28%            | 4%            | 10%          | -22%          |
| Arkansas                        | 49%            | 10%            | 15%           | 18%          | -9%           |
| Florida                         | 26%            | 15%            | 16%           | 21%          | -13%          |
| Georgia                         | 38%            | -3%            | 16%           | 18%          | -13%          |
| Kentucky                        | 56%            | 15%            | 14%           | -3%          | -8%           |
| Louisiana                       | 15%            | 21%            | 29%           | 38%          | -22%          |
| Mississippi                     | 48%            | 12%            | 16%           | 41%          | -14%          |
| Missouri                        | 62%            | 22%            | 5%            | -5%          | -26%          |
| North Carolina                  | 9%             | 9%             | 10%           | 7%           | -13%          |
| Oklahoma                        | 41%            | 2%             | 4%            | 11%          | -13%          |
| South Carolina                  | 63%            | -2%            | 22%           | 20%          | -17%          |
| Tennessee                       | 65%            | 13%            | 1%            | 6%           | -12%          |
| Texas                           | 25%            | 17%            | 11%           | 14%          | -15%          |
| Virginia                        | 5%             | 16%            | 19%           | 12%          | -21%          |
| West Virginia                   | 42%            | 2%             | 23%           | 42%          | -15%          |
| SLC Total                       | 30%            | 14%            | 13%           | 15%          | -16%          |
| U.S. Total                      | 15%            | 14%            | 27%           | 12%          | -18%          |


Notwithstanding these steep declines in global trade in the aftermath of the Great Recession, export and import statistics released in a number of major countries (including the United States and China) in early 2010 indicate that world trade is beginning to recover from the devastating worldwide financial crisis. Global Port Tracker, a publication compiled by the Washington, D.C.-based National Retail Federation and Ben Hackett Associates, forecasts a steady growth in containerized imports through the summer of 2010. In fact, the publication predicts that import cargo volume at the nation’s major retail container ports will be a full 25 percent higher during the first half of 2010 compared with the same period a year ago. According to this report, containerized imports began to pick up late in 2009, with imports in February 2010 appreciable 20 percent more than what they were in the very low month of February 2009; the increase in February 2010 also marked the third straight month in which imports were higher than the same period last year. These increases were much sought after since imports had dropped for 28 consecutive months in relation to the same month the previous year.) In terms of projections, Global Port Tracker forecasts that containerized imports in March 2010 will be 6 percent higher than in March 2009, 8 percent higher in April 2010 compared to the previous year, 7 percent higher in May 2010, 17 percent in June 2010, 12 percent in July 2010 and 15 percent in August 2010 compared to the same months during the previous year.

Figure 2 from Global Port Tracker provides a graphical representation of the North American Trade Outlook as of February 2010 for ports on the West and East Coasts, including the actual numbers for 2008 and 2009 (partial) along with projections for the period December 2009 through June 2010.

These trends confirm information released during the throes of the Great Recession (in late 2008 and early 2009) that overall global trade was projected to increase in the coming years. For instance, the U.S. Army Corps of Engineers (USACE) estimated in December 2008 that global cargo volumes are expected to increase by about 3 percent per year for the next 15 years, doubling the 2005 tonnage by 2025. The USACE also estimated that container trade over the next 20 years will grow at an annualized rate of 6.9 percent, though the December 2008 estimates cautioned that both these numbers might have to be revised downward due to the ongoing economic con-
traction. IHS/Global Insight, an economic consulting firm based in Lexington, Massachusetts, also reported that total world seaborne trade tonnage declined in 2009 compared to 2008 by about 1 percent, but predicted an increase of 2 percent to 3 percent each year for the period 2010 through 2014. While these percentage increases stand in marked contrast to the more than 12 percent annual growth rate in total world seaborne tonnage trade experienced in 2004, the trajectory still remains in positive territory. A March 2010 report from the World Trade Organization (WTO) forecasted that global trade was set to expand by 9.5 percent in 2010, after a dismal 2009, when world trade volumes contracted by 12.2 percent, the sharpest decline in more than 70 years. WTO officials also are confident that if global trade volumes continue to expand at their current pace, in another year, trade volumes would surpass the peak levels they reached in 2008. Finally, the U.S. Department of Transportation projects that, compared to 2001, total freight moved through U.S. ports will increase by more than 50 percent by 2020, and the volume of international container traffic will more than double.

Panama Canal and the Nation’s Trade Patterns

These background trends remain important in understanding the role that the Panama Canal plays, not only as a trade route moving goods to and from the United States, but also in overall global trade. When the Panama Canal officially opened in 1914, the newfound ability of ships to travel with relative ease between the Pacific and Atlantic Oceans signaled a major boost to global trade and shipping routes. While President Teddy Roosevelt was the dominant American force behind the completion of the Panama Canal, the nearly 50 mile-long Canal bisecting the nation of Panama involved thousands of workers engaged in often grueling, back-breaking work under the most trying conditions. Even though it had taken 34 years and $639 million to complete by the time of its opening in 1914, as early as the 1930s proposals for an expansion of the Canal with the introduction of an additional set of locks gathered momentum. However, for a variety of reasons, there occurred no real movement on this front for the next six or seven decades. The Carter-Torrijos Treaty, signed by President Jimmy Carter in 1977, set the stage for the Panama Canal and all related properties to be transferred back to the Republic of Panama from the United States before the end of the century. The transfer occurred peacefully in 1999.

The period leading up to and following Panama’s complete control over the Canal coincided with a tremendous rise in globalization and the increasingly influential role played by China in global trade. The ever-expanding number of vessels traveling through the Panama Canal (most often laden with goods from China), alongside the increasing gridlocks, blockages and delays experienced by these vessels, revived the calls for an expansion of the Canal. In fact, delays were so extensive that it was not
uncommon for vessels to be forced to wait up to 10 days during high season—at a cost of tens of thousands of dollars per day—to transit the Canal. Hence, the decision to move expeditiously toward an expansion was supported by the government of Panama and subsequently, in a referendum in late October 2006, by an overwhelming majority of the Panamanian people. Based on this vote, in September 2007, preliminary work on the expansion project, with an original cost estimate of $5.25 billion, though a subsequent recalculation indicates that it would be closer to $10 billion) was initiated.

In essence, the expansion of the Panama Canal includes the following key elements:

- Creating a new lane of traffic along the Canal by constructing two lock complexes—one on the Atlantic side and another on the Pacific side—each with three chambers, including three water-saving basins;
- Excavating new access channels to the new locks and widening the existing navigational channels; and
- Deepening the navigation channels and elevating Gatun Lake’s maximum operating level.

Factors Propelling the Panama Canal’s Expansion Effort

Beyond the expected surge in global trade anticipated in the coming years, there were several additional factors driving the expansion of the Panama Canal. These included the following:

- The Panamanian goal of using the expanded Canal (and the expected increase in vessel traffic) as the primary mechanism for securing high rates of internal economic growth and generating sufficient wealth to propel Panama into the ranks of advanced economies.
- The intense focus in the shipbuilding industry to build increasingly larger vessels— to create substantial economies of scale—a trend that will continue through the current decade despite the temporary slowdown in global trade on account of the Great Recession. The maximum size of the vessel able to traverse in the

Gatun Lake is the large artificial lake that was created during the building of the Canal; traveling across the Gatun Lake is a major segment of the route taken by ships transiting the Canal (nearly 20 miles).
Panama Canal is defined in the industry as a Panamax vessel. As a point of comparison, the current crop of Panamax vessels can transport approximately 4,500 TEUs.** While a larger class of vessel now in use, i.e., Post-Panamax, has the capacity to move between 5,000 and 8,000 TEUs, an even larger class of vessel, Super Post-Panamax, has the capacity to move more than 9,000 TEUs. Figure 3 illustrates the dimensions of Panamax and Post-Panamax container vessels. The Emma Maersk, owned by the Danish A. P. Moller-Maersk Group, launched in 2006, ranks among the largest container ships ever built, with the capacity to move in excess of 11,000 TEUs. Hence, an expansion in the Canal was a prerequisite to accommodate these behemoths traveling the oceans with goods from all parts of the globe.

The fact that a majority of the vessels transiting the Panama Canal transport goods to and from the United States, indisputably the largest and most dynamic economy in the world, was another motivating reason for the expansion effort. In recent years, while about 14,000 vessels loaded with more than 275 million tons of cargo traveled through the Canal, some 70 percent of the Canal’s estimated $100 billion of containerized cargo was either destined for or originated in the United States. Hence, as is the case in a number of instances, the array of corporations involved in manufacturing and shipping these millions of tons of cargo initiated measures to enhance the efficiencies related to moving the freight in and out of the United States. One of these measures related to promoting the expansion of the Canal as a means to transport goods to and from the United States, both faster and cheaper.

Challenges Faced at the U.S. West Coast Ports and the Emergence of the All-Water Route

For a number of decades now, the ports on the U.S. West Coast (particularly the Ports of Los Angeles and Long Beach, the nation’s two busiest ports) have served as the

** TEU (or Twenty-foot Equivalent Unit) refers to 20-foot-long intermodal containers and serves as an inexact unit of measurement for cargo capacity often used to describe the volume of container ships.

The Emma Maersk, the first of eight Maersk E Series sister ships, built at the Odense Steel Shipyard in Denmark. Photo courtesy of Peter Stinson, “M/V EMMA MAERSK,” August 23, 2006, via Flickr, Creative Commons Attribution.
major entry points for vessels loaded with cargo coming to the United States, particularly those from Asia. By the 1990s, cargo from Asia, especially China, burgeoned to unprecedented levels and quickly emerged as the major supply source for an assortment of goods arriving to the United States. (See Tables 5 and 6 for details on how exports from China to the United States and the SLC have exploded from 2000 to 2009.) After the cargo arrived at West Coast ports, it was then shipped across the country to the Midwest and East Coast via the U.S. “land bridge,” using rail and truck, sometimes on double-stacked container rigs. Hence, it was imperative that West Coast ports quickly processed the cargo so that it could be moved across the country in the timeliest manner possible.

However, during the early years of this decade, there was a spate of labor disputes at a number of West Coast ports, with strikes, lockouts, work stoppages, “go-slow”s and various other forms of labor protests resulting in serious disruptions to the flow of commerce. For instance, importers, retailers and consumers were acutely affected by the 2002 strike when 7,000 members of the International Longshoremen and Warehouse Union walked off the job and over a dozen West Coast ports from Seattle to San Diego were shuttered for more than a week. In total, the strike is estimated to have cost the U.S. economy about $16 billion. In subsequent years (2004, 2007, 2008), labor-management disputes at a number of West Coast ports—precipitated by a variety of reasons—cropped up again, either resulting in an actual shutdown (albeit for a shorter period than in 2002) or raising the specter of another strike. Prompted by the need to devise an alternate strategy to deal with potential shutdowns or closures in the future, an alliance of disparate entities (ranging from importers to retailers to warehouse distributors to shipping companies to state port authorities) coalesced around combining their energies to reconfigure a number of East Coast and Gulf Coast ports as alternate trade routes for vessels. A critical component of this move to devise alternatives to the West Coast ports involved the expansion of the Panama Canal, a move expected to grant quicker access to the heavily-populated U.S. Midwest, Gulf Coast and East Coast markets.

Another factor cited by experts in the move toward the East Coast and Gulf Coast ports involves the limited land available around many of the 29 major West Coast ports. It became increasingly apparent to port professionals and corporate executives that the congestion and the limited availability of land to construct warehouses and distribution centers in the near vicinity of West Coast ports required an alternate port strategy. During this time period, energized by the potential for growth, a number of major manufacturers and retailers, from Wal-Mart to The Home Depot to Target to IKEA, worked with states and state port authorities to construct massive, state-of-the-art warehouse facilities in the vicinity of a number of East Coast and Gulf Coast ports, including Houston, Savannah, Jacksonville, Charleston and Norfolk. While there might be a shortage of land right on the premises of some of these East Coast and Gulf Coast ports, there was an abundant supply of land in the near vicinity, quite appropriate for port-related activities. This situation stood in stark contrast to a number of West Coast ports, such as Los Angeles, Tacoma and Seattle, where opportunities for warehouse construction, expansion and industrial vacancies remain extremely limited.

### China’s Emerging Role in U.S. Trade

China’s enormously important role in U.S. exports and imports in recent years, particularly in the last decade, has been documented extensively in both academic and non-academic circles. As mentioned, by the 1990s, the quantities of exports and imports between the United States and China were experiencing sizable increases.
Tables 5 and 6 detail how exports from China to the United States and the SLC, specifically, have exploded, particularly between 2000 and 2009.

The explosive growth in exports to China during the review period, exemplified most vividly by the expansion between 2000 and 2005, a growth rate of 155 percent, is quickly apparent in a review of Table 5. While this growth rate tapered off in recent years to 17 percent between 2006 and 2007, and then 11 percent between 2007 and 2008, in 2009, when the impact of the Great Recession sapped export markets across the globe, exports to China actually declined (-0.2 percent). Another marked development in this important bilateral relationship is the relative magnitude of exports to China rising at impressive rates. From a mere 1 percent of total exports in 1990, U.S. exports to China rose to 5 percent by 2005 and continued to climb to 7 percent in 2009.

In SLC states, the role of exports to China also rose by noteworthy levels. This information is presented in Table 6. Once again, several interesting conclusions may be gleaned from the data, which documents different aspects of SLC state exports to China in the 2000 to 2009 period. For instance, SLC state exports to China as a percent of total exports grew from 2 percent in 2000 to 6 percent in 2009. Every SLC state experienced this increase, with Louisiana demonstrating the highest expansion, from 6 percent of total exports in 2000 to 17 percent in 2009. Missouri (1 percent to 7 percent), North Carolina and Virginia (both increases from 2 percent to 8 percent) were the three SLC states that saw the next highest levels of expansion. In terms of year-over-year growth rates, between 2000 and 2005, the SLC states on average experienced a 197 percent growth spurt, a level that tailed off to 53 percent between 2005 and 2007, and slowed further to an increase of 18 percent between 2007 and 2009. Both in 2005 and 2007, there were numerous

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<td>1,017,541</td>
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<td>979,588</td>
<td>200%</td>
<td>1,599,694</td>
<td>63%</td>
<td>1,772,968</td>
<td>11%</td>
<td>32,714,797</td>
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<td>Kentucky</td>
<td>63,865</td>
<td>9,612,209</td>
<td>1%</td>
<td>392,800</td>
<td>392%</td>
<td>578,311</td>
<td>47%</td>
<td>730,754</td>
<td>26%</td>
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<td>Louisiana</td>
<td>1,064,073</td>
<td>16,814,289</td>
<td>6%</td>
<td>1,950,150</td>
<td>83%</td>
<td>2,652,979</td>
<td>36%</td>
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<td>Mississippi</td>
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<td>622,384</td>
<td>390%</td>
<td>623,535</td>
<td>0%</td>
<td>868,892</td>
<td>-32%</td>
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<td>North Carolina</td>
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<td>776,284</td>
<td>122%</td>
<td>1,769,008</td>
<td>128%</td>
<td>1,790,933</td>
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<td>21,789,312</td>
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<td>41,541</td>
<td>3,072,177</td>
<td>1%</td>
<td>94,509</td>
<td>128%</td>
<td>122,155</td>
<td>29%</td>
<td>136,568</td>
<td>12%</td>
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<td>South Carolina</td>
<td>127,140</td>
<td>8,565,126</td>
<td>1%</td>
<td>622,384</td>
<td>390%</td>
<td>623,535</td>
<td>0%</td>
<td>868,892</td>
<td>-32%</td>
<td>16,515,607</td>
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<td>Tennessee</td>
<td>156,558</td>
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<td>1%</td>
<td>1,418,831</td>
<td>806%</td>
<td>1,135,299</td>
<td>-20%</td>
<td>1,294,949</td>
<td>14%</td>
<td>20,461,098</td>
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<td>Texas</td>
<td>1,452,319</td>
<td>103,865,689</td>
<td>1%</td>
<td>1,494,881</td>
<td>240%</td>
<td>8,278,006</td>
<td>67%</td>
<td>8,907,696</td>
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<td>163,046,235</td>
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<td>Virginia</td>
<td>197,763</td>
<td>11,698,059</td>
<td>2%</td>
<td>721,829</td>
<td>265%</td>
<td>1,103,749</td>
<td>53%</td>
<td>1,180,562</td>
<td>7%</td>
<td>15,045,245</td>
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<td>West Virginia</td>
<td>35,617</td>
<td>2,219,278</td>
<td>2%</td>
<td>135,476</td>
<td>280%</td>
<td>254,710</td>
<td>88%</td>
<td>295,983</td>
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<td>SLC</td>
<td>4,724,820</td>
<td>245,991,386</td>
<td>2%</td>
<td>14,044,075</td>
<td>197%</td>
<td>21,540,020</td>
<td>53%</td>
<td>25,454,974</td>
<td>18%</td>
<td>400,641,283</td>
<td>6%</td>
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</tbody>
</table>

SLC states that saw triple-digit expansion rates: Arkansas (392 percent and 113 percent), Mississippi (124 percent and 111 percent) and North Carolina (122 percent and 128 percent). By 2009, given the rigors of the Great Recession, four SLC states (Alabama, Arkansas, Mississippi and Missouri) actually saw a decline in their exports to China from 2007. Yet, several states experienced a notable increase in their exports, especially Kentucky, Louisiana and South Carolina.

The Fourth Revolution and the Restructuring of Worldwide Shipping Patterns

The Fourth Revolution, as outlined by Asaf Ashar in the United Kingdom-based industry publication *Containerisation International*, which involves a worldwide restructuring of shipping service patterns and the creation of a global grid, has been gathering steam in shipping circles. Under this format, global liner shipping is transformed into an integrated network of east/west and north/south services with the Panama Canal serving as the linchpin of the entire movement. Ashar maintains that the first three revolutions (containerization, a trend that transformed ship-to-shore links; intermodalism and the full panoply of ship-to-rail links; transshipment and the increasing dominance of ship-to-ship transshipments) now have given away to the latest, or Fourth Revolution. Based on his expertise, he asserts that “the future primary east/west service pattern will be an across-Panama, bi-directional (counter-rotating), equatorial round the world (ERTW) route, becoming the ‘ring road’ of global trade.” Ashar asserts that these “ERTW shipping companies will employ the largest and most efficient ships with the highest service frequency” and that the Fourth Revolution will include “the development of very large container terminals/ports, which will be dedicated to providing transshipment services, so-called pure transshipment ports (PTP).” He adds that “ERTW services will call at a maximum of six or seven PTPs, these hubs being located at the intersections of the ERTW and principal north/south routes.” Most notably, Ashar notes that the ongoing expansion of the Panama Canal to accommodate more services and the deployment of increasingly larger ships is now “seen as the catalyst for the Fourth Revolution.”

In this connection, Ashar presents four possible service routes propelled by the movement away from the traditional vessel entry at the West Coast and the movement toward transporting goods to and from the East Coast through the all-water Panama (AWP) link. They are:

**TRADITIONAL**
This routing—after vessels transit the Panama Canal—involves a single service that covers the entire Atlantic region with stops at a port in the Caribbean and then on to Miami, Charleston, Norfolk and New York or a direct service to New York with a stop in the Caribbean.

**DIRECT**
This routing—once again, after vessels transit the Panama Canal—involves three separate services, each focusing on a specific region of the East Coast. The South
Atlantic/Gulf Region, after a layover in the Caribbean, will service Miami, Tampa, New Orleans and Houston. It also will include the option of a direct line between Miami and Houston. A stopover at the Port of Mobile also is a real possibility given the expansion efforts underway there. The Central Atlantic Region, also after a layover in the Caribbean, will include stops in Jacksonville, Charleston (and possibly the Port of Savannah, given all its infrastructure enhancements), Wilmington and Norfolk. Finally, the third region, the North Atlantic Region after a layover in the Caribbean will include stops in New York, Boston and Halifax. A direct service from the Caribbean to Halifax also is a possibility.

**HUB-AND-SPOKE**

This service route is very similar to the Direct route outlined above but will involve three short regional feeder loops that will collect cargo at the Caribbean port (after vessels transit the Panama Canal) and then move them to ports in the South Atlantic/Gulf Region (Miami, Tampa, [and possibly Mobile], New Orleans and Houston); Central Atlantic (Jacksonville, [and possibly Savannah], Charleston, Wilmington and Norfolk); and North Atlantic (New York, Boston and Halifax).

**FOURTH REVOLUTION OR THE GLOBAL GRID**

This routing would entail counter-rotating ERTW services, handling cargo from both Asia and the Mediterranean Basin sectors. As evident in the graphic, after transiting the Panama Canal vessels would dock in the Caribbean and then proceed to ports on the East Coast or on to ports in the Mediterranean Basin and Europe.

**West Coast vs. East Coast: The Battle of the Ports**

A principal feature of trade statistics relating to U.S. ports in the last two decades or so has been the increasing dominance of a number of Southern ports. In anticipation of the expanded Panama Canal, this feature has become even more pronounced, with a number of East Coast and Gulf Coast ports initiating an assortment of specific measures to wrest away a greater portion of the cargo (primarily from Asia) delivered to West Coast ports. The Ports of Los Angeles and Long Beach have played an influential role in national cargo trends (some 40 percent of all container cargo traffic into the United States still arrives at these two ports) for decades now, and until quite recently, the strategy was to clear the goods off arriving vessels at these ports and then move the goods by truck and rail to their final destinations across the country.

In recent years, there has been a transformation of this decades-long strategy, precipitated by several factors, including: the labor unrest at the West Coast ports; the move by shipping companies and distributors to explore lower cost alternatives; the lack of land for expansion at West Coast ports; and rail capacity that is significantly lower at these ports. Consequently, there has been a drop in cargo volume arriving at West Coast ports. In fact, analysis by the San Francisco-based AMB Property Corporation, a commercial real estate investment company, maintains that “much of the drop in West Coast cargo volume is explained by a shift to more goods now going all-water through the Panama Canal to the East Coast (lower cost, slightly slower service levels), rather than being trans-loaded through one of the West Coast ports.” In addition, an extensive June 2009 study released by the international management consulting outfit, Booz Allen Hamilton, entitled *Strategy to Optimize the International Trade Potential of Southeast Louisiana*, concluded that the “Panama Canal will drive increased volume to the East Coast and Gulf Coast” and that “[the Port of] New Orleans must prepare to take a share of this market.”

Other assessments, such as the one from the London-based Drewry Supply Chain Consultants, a maritime industry research firm, maintains that even when global trade returns to its “formerly robust pace, any new trade will probably pass the West Coast. Volumes are unlikely to decline but the days of strong growth on the Pacific Coast are behind us.” Drewry and other maritime experts also forecast that “future economic conditions will shine a more favorable light on the all-water route to East Coast and Gulf Coast ports by way of the Panama Canal and the Suez Canal.” Drewry projects that the West Coast ports will see increased competition from the post-expansion Panama Canal and noted that the East Coast and Gulf Coast ports could seize up to 25 percent of the traffic coming into the West Coast. Finally, Drewry estimates that rising Chinese labor costs will push some manufacturing back to Mexico and South America, further enhancing the potential for increased traffic transiting the Panama Canal.

Another related development involves the actions initiated by shipping lines to prepare for the movement away
from West Coast ports and switch to the all-water route for delivering and collecting goods to and from the eastern seaboard and mid-western portions of the United States. For instance, in late 2008, A.P. Moller Maersk, the world’s biggest shipping line, reduced its business from Asia to the West Coast in favor of stronger Asia-to-Europe trade. Also, in late 2008, the Danish shipping colossus announced that it would align with the world’s third largest shipping line, France’s CMA CGM, cut back its direct Asia-to-U.S. business by an additional 8 percent and pursue new routes through the Panama Canal and Suez Canal. Once again, this raises the stakes for East Coast and Gulf Coast ports to be proactive in seeking to capture a greater portion of the expected increases in trade.

Based on these projections, the emerging consensus is that the expansion of the Panama Canal will further facilitate the movement away from West Coast ports, especially given the increasingly larger vessels that now will be able to operate through the Canal and call at select East Coast and Gulf Coast ports. Consequently, East Coast and Gulf Coast ports have seized the opportunity to work aggressively to secure a greater proportion of the cargo volumes entering and departing the United States.

A striking example of this trend is the record of the Port of Savannah in Georgia. In less than a decade, the Port of Savannah has climbed up the ladder to rank among the busiest ports in the nation (fourth busiest in terms of container traffic in the latest national ranking from 2009) and, since 2000, has been termed the fastest growing port in the country. In 2007 and 2008, more than 2.6 million TEUs transited through the Port. Even though this number dropped in 2009 to 2.4 million TEUs due to the crippling blow delivered to global trade by the Great Recession, this is still an impressive figure. In a bid to ensure that the Port is prepared for future growth, most recently, in fiscal year 2009, the Port purchased four new Super Post-Panamax ship-to-shore cranes, 11 new gantry cranes and 10 electrically refrigerated container racks. The expansions at the Port’s two modern, deep-water terminals (Garden City Terminal and Ocean Terminal, the largest single-terminal container facility of its kind in North America) also will ensure that Savannah is positioned to clear a projected capacity of 6.5 million TEUs by 2020. Another element being developed at the Port is the Savannah Harbor Expansion Project, a deepening of the Savannah River by up to six feet, thereby accommodating the larger cargo vessels that will be transiting through after the expansion of the Panama Canal in 2014. In sum, undergirding this entire growth phase at the Port of Savannah (and the other Georgia Port Authority locations) is the calculated projection that the expansion of the Panama Canal will lead to a surge in vessel traffic and cargo volumes at the Port.

The Port of Mobile in Alabama is another facility that has made significant infrastructure investments to ease congestion and prepare for the anticipated increase in trade in the aftermath of the Panama Canal expansion. Specifically, the completed Phase 1 of the container terminal expansion program provides capacity for 350,000 TEUs on 95 acres and two Post-Panamax cranes. After Phase 2, currently in progress, there will be capacity for 800,000 TEUs on 40 acres alongside six Post-Panamax cranes. Deploying both federal and private funding, the Intermodal Container Transfer Facility (ICTF) will facilitate infrastructure improvements, thereby reducing the number of trucks on highways, lowering congestion and reducing emissions in the vicinity of the Port. In addition, the Port is working on a channel deepening effort to allow passage for the larger vessels that will emerge with the expansion of the Panama Canal. The Port’s latest turning basin

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“Georgia’s ports in Savannah and Brunswick are critical economic engines, driving job creation and development along the coast and throughout the state. We, at the Georgia Department of Transportation (DOT), want to be ready when the Panama Canal is opened for operation because much of Georgia’s future growth is dependent upon our ability to handle this increase of cargo to our state. The Southern Legislative Conference has been instrumental in assisting Georgia and our surrounding states in developing the necessary transportation network to maximize economic growth. This partnership is essential to us and our neighbors.”

~ Vance C. Smith, Jr.,
Commissioner, Georgia DOT
Former Chair, SLC Economic Development, Transportation and Cultural Affairs Committee
ports cumulatively expect to finish about $10.2 billion in development projects before the completion of the Panama Canal expansion in 2014 (Table 7).

In addition to the infrastructure investments detailed above, a number of ports, including several in the SLC, have established formal alliances with the Panama Canal Authority, the legal entity responsible for administering operations related to the Canal. These alliances encompass memorandums of understanding (MOU) between the Authority and over a dozen ports. In some instances, an MOU was signed by the chief executive of the port with the governor of the state in attendance. For instance, in September 2009, Georgia Governor Sonny Perdue traveled to Panama to tour the Canal and also witness the signing of an MOU between the Georgia Ports Authority and the Panama Canal Authority “to establish an alliance of cooperation aimed at generating new business by promoting the all-water route between Asia and the Port of Savannah via the Panama Canal.” As part of this MOU, the two entities agreed to undertake joint activities relating to marketing, data interchange, market studies, modernization and improvements, training and technological interchange. While the objectives outlined in an MOU certainly are an important consideration propelling the agreements, both the Panama Canal Authority and the individual ports also are seeking to ensure that the substantial infrastructure investments they are initiating will lead to increased vessel traffic and cargo volumes of a magnitude that will prove to be mutually beneficial from an economic perspective. The ports also are competing among themselves for a larger share of the enhanced trade opportunities, and activating an MOU is one of the effective ways to accomplish this goal. Table 8 provides a listing of some of the U.S.-based ports that have entered into alliances with the Panama Canal Authority.

**Contrarian View regarding the All-Water Route between Asia and the East Coast via the Panama Canal**

While the general consensus points toward a tremendous increase in trade flowing to the East Coast and Gulf Coast ports and away from the West Coast ports as a result of the expansion of the Panama Canal, it is important to note that there is a contrarian perspective bobbing around in shipping lanes. A 2005 report by

<table>
<thead>
<tr>
<th>Table 7 Estimated Port Investments</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston, TX</td>
<td>$4.6 Billion</td>
</tr>
<tr>
<td>Tampa, FL</td>
<td>$1.6 Billion</td>
</tr>
<tr>
<td>Charleston, SC</td>
<td>$857 Million</td>
</tr>
<tr>
<td>Virginia Port Authority, VA</td>
<td>$701 Million</td>
</tr>
<tr>
<td>Everglades, FL</td>
<td>$572 Million</td>
</tr>
<tr>
<td>Savannah, GA and Charleston, SC (Joint Project)</td>
<td>$500 Million</td>
</tr>
<tr>
<td>Gulfport, MS</td>
<td>$300 Million</td>
</tr>
<tr>
<td>Mobile, AL</td>
<td>$300 Million</td>
</tr>
<tr>
<td>Miami, FL</td>
<td>$254.5 Million</td>
</tr>
<tr>
<td>Jacksonville, FL</td>
<td>$200 Million</td>
</tr>
<tr>
<td>Wilmington, NC</td>
<td>$143 Million</td>
</tr>
<tr>
<td>Savannah, GA</td>
<td>$100 Million</td>
</tr>
</tbody>
</table>

the aforementioned Drewry Supply Chain Consultants speculates that even 10 years after the expansion of the Panama Canal, most East Coast ports will not have the capacity or the depths to accommodate Post-Panamax vessels. The report maintains that these East Coast ports already are struggling to handle containerships carrying 6,000 TEUs and that they likely will be ill-equipped to deal with vessels with the capacity to carry in excess of 8,000 TEUs. The overall point is that East Coast ports may be unable to meet the requirements of the larger vessels that will loom on the horizon, such as terminals with “longer docks, more storage area, deeper water at the dock, and a capacity to move containers from the terminal to truck or rail.”

Along similar lines, a report published by the Tioga Group, an entity that provides freight transportation consulting services based in Philadelphia, Pennsylvania, maintains that projections forecasting the movement to East Coast and Gulf Coast ports away from West Coast ports, “underestimates the importance of transit time and reliability in shipper routing choices to move from the West Coast and the role of the local Southern Californian market.” The report also points out the “substantial investments being made in Southern California to increase port and intermodal capacity.” The U.S. Army Corps of Engineer’s Institute for Water Resources also documents that, despite all the congestion, the Ports of Los Angeles and Long Beach have “always managed to accommodate ever more volumes of cargo through productivity improvements, optimizing terminal space, acquiring new landfills” and other strategies. In fact, the Port of Long Beach’s master plan projects that, if trade volumes in 2020 reach the high end of their forecast, it is prepared to acquire 450 acres of landfill in order to facilitate additional cargo handling facilities.

Notwithstanding these opposing perspectives, it remains indisputable that many ports on the East Coast and Gulf Coast of the United States have initiated a number of concrete measures to prepare for the flurry of large containerships that will emerge in their waters after the expansion of the Panama Canal. These ports are competing aggressively and proactively with each other and West Coast ports to extract a larger share of the trade projected to appear in coming years. While West Coast ports appear to have the “inside track” on trade from Asia, in recent years, East Coast and Gulf Coast ports have established a number of competitive advantages over the West Coast ports. These ports will continue to work on consolidating these competitive edges in an effort to attract more vessel traffic that will potentially lead to sustained, broad-based economic growth within their jurisdictions.

**Conclusion**

The lingering effects of the Great Recession that began in December 2007 continue to adversely impact practically every state in the country and will do so for the next few fiscal years. On the global level, the wrenching consequences of the Great Recession negatively impacted different countries to varying degrees, though there is growing optimism that economic growth in some countries has picked up and that the potential for growth in many other countries also is on the rise. An important development related to the status of future economic performance in the United States is that the economy will undergo one of its most striking transformations in decades as a result of the effects of the Great Recession.
Experts forecast this transfer will involve a fundamental macroeconomic shift away from debt and consumption to saving and exports, a development that entails fundamental changes at the microeconomic level as well.

The connection of this expected transformation in the U.S. economy to the expansion of the Panama Canal and ports in the SLC involves the critical ingredient of exports. Earlier on, this report detailed the expectations regarding U.S. exports and how they are expected to play an increasingly important role in the growth trajectory of the country. Importantly, as noted recently in *The Economist*, while the cheaper dollar will rejuvenate some industries in the commodities markets, the main beneficiaries of the expected export boom will be companies that already are formidable exporters. America’s dominance in high-end services and highly skilled manufacturing, such as medical devices, pharmaceuticals, software and engineering, as well as creative services like film, architecture and advertising, will ensure that these companies become a vital part of the growing export sector. Notwithstanding the expected prominence of the high-end services and highly skilled manufacturing in future exports, agricultural commodities also will play an important role in the export sector, just as they have done for decades. Confirming this improved forecast for exports was a March 2010 report from the WTO that predicts global trade will expand by 9.5 percent in 2010 after a dismal 2009, when world trade volumes contracted by 12.2 percent, the sharpest decline in more than 70 years. Officials with the WTO also are confident that if global trade volumes continue to expand at their current pace, in another year, trade volumes would surpass the peak levels reached in 2008. In terms of the United States., experts maintain that even if President Obama’s ambitious target of doubling U.S. exports within five years (by 2015) does not occur, exports will be by far the most important and sustained source of demand for many U.S. businesses in the coming years.

Another factor propelling the role of exports forward in the U.S. economy: the rise in living standards in many developing countries such as China, India and Brazil. In fact, it is widely expected that the rest of the world will relieve the pressure on the United States to be the consumer of the world; for instance, a forecast from JPMorgan Chase indicates that America and emerging markets will account for about 27 percent and 34 percent, respectively, of global consumption this year, almost the reverse of their relative shares of consumption during the recovery after the 2001 recession. These trends reinforce the fact that that exports will continue to be a key factor in America’s economic plans in upcoming years, a development that likely will result in increasing volumes of cargo transiting through the nation’s ports.

The importance of the Panama Canal to overall U.S. economic performance has been critical in the almost century since the Canal opened in 1914. Since that year, access to the United States through the Canal has facilitated the swift and more efficient transportation of goods, thereby boosting both U.S. and global trade. In recent years, expanding the Canal emerged as an important goal for the government and people of Panama and a number of private sector partners prompted by multiple objectives: advancing Panama’s economic potential; promising global trade forecasts in the future; accommodating the increasingly large vessels currently sailing the oceans and under construction; and ensuring that goods being transported to Panama’s largest trading partner, the United States, proceed speedily, efficiently and cost effectively. Aligned with this push toward expanding the Panama Canal were a number of challenges at several U.S. West Coast ports involving labor issues and space limitations that severely crimped global trade and the movement of goods from these ports to destinations across the United States.

All these factors, combined with the explosion in trade from China to the United States, fostered the concept of moving goods to and from the U.S. East and Gulf Coasts via an expanded Panama Canal deploying an all-water route. (Previously, the trend had been to move goods arriving at U.S. West Coast ports, largely from Asia, via truck and rail to residents in the Midwest and East Coast.) In fact, the emerging consensus is that the expansion of the Panama Canal will further facilitate the movement away from West Coast ports due to the increasingly larger vessels that will be able to operate through the Canal and call at select East Coast and Gulf Coast ports. An important development here was a schematic designed by Asaf Ashar titled *The Fourth Revolution: A Worldwide Restructuring of Shipping Service Patterns and the Creation of a Global Grid*. Under all the scenarios envisioned by Ashar in a post-Panama Canal expansion world, many of the SLC ports stand out as major beneficiaries.
SOUTHERN PORTS’ PREPARATIONS

How are the SLC ports preparing for this transformation in global shipping patterns? Many of them have initiated a number of specific measures, in some instances even before the expansion work at the Panama Canal actually began, to enhance their infrastructure and multimodal capabilities. These East Coast and Gulf Coast ports have seized the opportunity to work aggressively to secure a greater proportion of the cargo volumes currently entering and departing the United States. For example, in a relatively short period, the Port of Savannah has catapulted into the ranks of the nation’s busiest ports and continues to expand at a phenomenal rate. Similarly, the South Carolina State Ports Authority announced double-digit volume increases in March 2010 compared to the same month last year at the Port of Charleston, along with the addition of a new service between Charleston, Northern China and South Korea.

Notwithstanding these advancements in so many East Coast and Gulf Coast ports to secure a greater share of global trade to and from the United States, particularly trade arriving and departing ports on the West Coast, there is a contrarian viewpoint bobbing around. The underlying point of this perspective is that East Coast ports likely will face challenges in meeting the infrastructure specifications for the increasingly large vessels now navigating the oceans. However, the current and planned infrastructure developments at East and Gulf Coast ports present a strong counterargument to this view.

The responses to the SLC survey contained a wealth of information in terms of the preparatory efforts initiated by a number of Southern ports for the expansion in the Panama Canal. For instance, in cities with large, deep-water ports (Mobile, Miami, Savannah, South Louisiana, New Orleans, Gulfport, Wilmington, Charleston, Corpus Christi, Houston and Virginia), the responding ports indicated their confidence in the significant impact of the expansion of the Panama Canal on East and Gulf Coast ports. The Port of Houston was the most confident in terms of seeing benefits from the expansion in the Canal and noted that it “will be the most positively impacted U.S. Port following the completion of the Panama Canal expansion in 2014.” The Port of Miami noted that on account of its location as “the closest major United States container seaport to the Panama Canal,” it anticipates “serving as the first port of call for Post-Panamax vessels.” Smaller ports (Little Rock, Palm Beach, Fort Pierce, Kansas City, Pascagoula, Memphis, Beaumont and Huntington) indicated that they also would be impacted, but at much lesser and varying degrees.

In terms of the role that the surveyed ports expected to play after the completion of the expansion project, a majority of the ports (17 of the 19 with featured responses) noted that they expected to see a similar expansion of their operations and cargo volumes with regard to the global maritime trade economy. Several of these ports cited the infrastructure and multimodal enhancements they have installed and expect to continue installing to manage the increasing number of larger vessels expected to call in the aftermath of the expansion. For instance, the Port of Mobile indicated that the “new intermodal and Port infrastructure investments coupled with growth in regional manufacturing and distribution,” along with “an inland transportation network comprised of two interstate systems and five Class I railroads,” would heighten the Port’s ability to attract more Trans-Pacific trade in the post-expansion phase. Even some of the smaller ports (Port of Palm Beach, Port of Kansas City and Port of Memphis) expressed confidence that the additional container vessel traffic to the region would result in greater business opportunities.

In response to the question on specific measures initiated by the ports to accommodate the expected increase in cargo traffic and vessels as a result of the Panama Canal’s expansion, an overwhelming majority of the responding ports offered details. Almost all of the ports cited their work on deepening navigational channel depths along with a plethora of details on other infrastructure and multimodal improvements. For instance, the Georgia Ports Authority (GPA) noted its work with federal and state officials to deepen the Port of Savannah up to 48 feet mean low water (MLW). The GPA declared that “at 48 feet, the Port of Savannah will be able to more efficiently serve the demands of United States commerce and remain a valuable asset in the national marine transportation system.” The Port of Houston, the port many analysts expect to be most positively impacted by the expansion of the Canal, indicated that it “is in the process of expanding container handling capabilities at both the Barbour’s Cut Container Terminal (technology and efficiency enhancements) and at the Bayport
Container Terminal (infrastructure expansion).” The Port of Houston also elaborated on its extensive efforts to enhance multimodal capacities with ongoing work in expanding its rail and roadway capabilities. Even an inland port like the Port of Kansas City has enacted measures by developing its multimodal capacities, specifically, “the conversion of the former Richards-Gebaur Air Force Base into an intermodal freight process and distribution operation,” including “the installation of rail siding on the 10,000-foot main runway.”

Given the tight fiscal environment, the survey queried the ports on the source of funding for the multi-faceted upgrading projects in process. A majority of the ports provided details on current and future funding sources and a number of ports indicated an expectation of funds from the federal government. Included in this category were the ports in Mobile, Palm Beach, Miami, Savannah, South Louisiana, New Orleans, Kansas City, Gulfport, Pascagoula, Corpus Christi, Houston and Huntington. A number of ports (Port of South Louisiana, Port of New Orleans, Port of Wilmington and Port of Huntington) specifically listed the pursuit of public-private partnerships (P3) as an ongoing and future funding source. In particular, the Port of Wilmington documented that the North Carolina International Terminal will be developed as a P3 with “the total cost of project development, including terminal development, channel dredging, roads and rail improvement” reaching approximately $2 billion. Port officials did note that its “P3 will be structured so that the North Carolina State Ports Authority will retain all real property rights and the private partner will only have the right to operate the terminal as a tenant in a lease or concession.” Of note, the North Carolina State Ports Authority indicated that it did “not anticipate requesting state funding for the construction of the terminal,” the South Carolina State Ports Authority stated that it would fund the cost of the terminal being constructed under its $550 million Phase I project and, finally, the Virginia Port Authority noted that it would “raise the funds necessary for the expansion, [with capital improvements costing an estimated $2.96 billion], by issuing bonds that are backed by terminal revenue.” In a similar vein, the Port of Houston emphasized that “the most significant source of funds for expansion projects” would flow “from operation revenues.”

Nine of the ports (Port of Mobile, Port of Savannah, Port of South Louisiana, Port of New Orleans, Port of Gulfport, Port of Pascagoula, Port of Charleston, Port
of Beaumont and Port of Huntington) indicated that the legislatures in their states had enacted specific pieces of legislation to promote their expansion efforts. While some of these legislative initiatives took the form of broad economic development efforts (for example, in the Port of Savannah), the remaining were geared specifically toward the ports. One such initiative was in Alabama, where earlier in this decade, "the Alabama Legislature enacted legislation that authorized an amendment to the state's constitution to allocate a portion of the state's oil and gas capital payments to fund port improvements." This amendment, which "won approval in a statewide vote, provided $100 million to the Alabama State Port Authority to fund capital improvements at the state docks facilities."

The severity of the Great Recession has impacted (and continues to impact) almost every state in the United States and almost every corner of the globe. Hence, one of the survey questions inquired whether the recession and the resultant steep drop in world cargo traffic forced a change in port preparations for the Panama Canal's expansion. Most salient about the responses received was the fact that an overwhelming majority of the ports indicated that plans already underway or about to be initiated would continue on pace regardless of the global recession. The Port of Savannah's response encapsulates the general sentiment most eloquently: "While current economic challenges demand consideration, this has not been a time to retreat from the planning and construction that has driven so much prosperity. In fact, this is precisely the time to secure additional capacity and, in so doing, create additional economic opportunity and sustainable growth for generations to come. Our goal is to strengthen our advantages and achieve even greater success moving forward."

The question related to the major obstacles and challenges faced by the ports' expansion efforts elicited a broad range of responses. The responses spanned the spectrum from funding concerns (Port of Mobile, Port of Little Rock, Port of Palm Beach, Port of Miami, Port of New Orleans, Port of Kansas City, Port of Gulfport, Port of Pascagoula, Port of Memphis, Port of Beaumont, Port of Corpus Christi and Port of Huntington) to expanding boundaries (Port of Palm Beach) to increasing navigational channel depths (Port of Little Rock and Port of Savannah) to slow-moving regulatory agencies on permitting issues (Port of South Louisiana, Port of Gulfport and Port of Corpus Christi) to rising legal hurdles from environmental groups (Port of Charleston). The Port of Houston commented on the importance of "speed to market to meet customer demands" and stressed that if a port does not devise strategies to meet this essential customer demand, an alternate route to market—bypassing the port—would be found. Hence, the Port of Houston emphasized "infrastructure expansion" and "technology enhancements" as crucial challenges. Officials at the Port of Virginia pointed out that they did not face any major obstacles to expansion.

Reflecting a trend apparent in many shipping circles around the world, several SLC ports have entered into an MOU with the Panama Canal Authority in preparation for the completion of the expansion in 2014. While the specifics of each port's MOU with the Authority vary, they generally include some aspect of the following: joint marketing efforts, exchange of data, training and sharing of information from market studies, technical, information, modernization and best practices. Based on the survey responses, the Port of Mobile, Port of Palm Beach, Port of Miami, Port of Savannah, Port of New Orleans, Port of Charleston, Port of Houston and Port of Virginia had signed MOUs while the Port of Gulfport indicated that it was in the planning phase. The Port of Houston also has a 'Sister Port Agreement' with the Panama Canal Authority.

In closing, notwithstanding the hit taken by global trade during the Great Recession, particularly in 2009, economic forecasters call for significantly increased trade in 2010 and beyond. Coinciding with this expected uptick in trade is the ongoing expansion of the Panama Canal, a critical link in the transportation of goods to and from the United States, scheduled for completion in 2014. The potential for increased cargo being ferried to U.S. East and Gulf Coast ports and away from West Coast ports has resulted in a flurry of activity in a number of the SLC ports as they prepare for both the increase in cargo volume and vessel size. Policymakers at every level of government realize the tremendous economic opportunities not only in the manufacturing of export items, but also in the activities of the ports and related multimodal transportation solutions. As a result, important infrastructure enhancements are underway in a number of SLC ports given the increased anticipation that an even greater portion of future U.S. exports and imports will transit through a Southern port.
Part II

Results of the SLC Survey of Southern Ports

In order to secure the most accurate information on the preparations being initiated by SLC ports on account of the expansion of the Panama Canal, a survey comprising 10 questions was forwarded to a total of 52 ports in the 15 SLC states. Responses were received from 23 ports and they are presented in the following sections. To ensure ease of comparison, the responses to the SLC survey are split into the following subsections: Atlantic Coast ports, Gulf Coast ports and Inland ports. In some instances, the response from the port is provided verbatim — after editing for consistency — while in other instances, the responses are paraphrased. Finally, it also should be noted that some ports did not respond to every question in the survey.

At the outset, the following details on the responses of three ports remain important. First, the Port of Helena, Arkansas, indicated that it does not expect to be impacted by the Panama Canal’s expansion given the fact that it is “a small port.” The St. Louis County Port Authority in Missouri indicated that it “does not operate a cargo port on the Mississippi River” and, consequently, noted that “the survey questions are largely inapplicable to the St. Louis County Port Authority.” In similar fashion, the Port of Texas City, Texas, provided the following response: “[T]he commodities handled at the Port of Texas City are all petroleum based and bulk liquid and there is no facility in the Port of Texas City that receives ships with containers, breakbulk, Roll-on/Roll-off (RO/RO). The expansion of the Panama Canal will have little or no impact on the overall commerce at the Port of Texas City.”

Atlantic Ports

Question 1: In what ways, if at all, does your port anticipate being impacted by the expansion of the Panama Canal?

FLORIDA

Port of Palm Beach – Since the Port cannot accommodate the size of vessels that usually transit the Panama Canal, the Port of Palm Beach expects opportunities for increased traffic from vessels that call at the Freeport Container Terminal in the Grand Bahama Island (GBI). Once the large vessels arrive at Freeport, GBI, after transiting the Panama Canal, the cargo they are carrying can be loaded onto smaller vessels operated by Tropical Shipping, a shipping company in container and ocean transport services offering service between the Bahamas and the Caribbean, for delivery at the Port of Palm Beach. The Port of Palm Beach has daily service into Freeport, GBI. The Port of Palm Beach also expressed confidence that the state’s Inland Logistics Center (ILC) project would promote cargo distribution at several South Florida ports, including the Port of Palm Beach, Port of Miami and Everglades Port.

Port of Miami – “The Panama Canal Expansion Project, slated for completion in 2014, is the greatest expansion project in the Panama Canal’s history. The Project will enhance the Panama Canal’s logistical and transportation capabilities by attracting a larger share of Asian con-
tainerized cargo destined for the U.S. East Coast. The United States’ trade with East Asia (China, in particular) is expected to increase and shift from Pacific seaports to Atlantic seaports. Due to the Port of Miami’s location as the closest major United States container seaport to the Panama Canal, it is anticipated that the Port will be the first port of call for Post-Panamax vessels.

Fort Pierce Port – The Fort Pierce Port is one of the designated 14 deep-water ports in the state of Florida, but is limited in capacity by a 28-foot authorized water depth in the inlet channel. That means the Port is essentially a niche market port operation, serving primarily the Bahamas and Caribbean Islands. There is no way for the Port to compete in Post-Panamax size traffic, and Port authorities do not see significant opportunities other than serving as a possible feeder service to and from Freeport, GBI, that may be generated from expanding the Panama Canal.

GEORGIA

Georgia Port Authority – “With the expansion of the Panama Canal scheduled for completion in 2014, much larger container ships will soon have access to East Coast ports. These newer Super Post-Panamax ships will have twice the capacity of current Panamax vessels and will offer dramatically greater economies of scale alongside smaller environmental footprints. They are the future of ocean commerce, and it is critical that East Coast ports be prepared to accommodate them.”

NORTH CAROLINA

Port of Wilmington – The North Carolina State Ports Authority is preparing for the expansion of the Panama Canal by enhancing the North Carolina International Terminal, the container facility at the Port of Wilmington in the Wilmington Harbor. It will be located on a 600-acre undeveloped industrial tract on the west bank of the Cape Fear River in Brunswick County, about four miles from the mouth of the Cape Fear River. This site is a short distance from the Atlantic Ocean and is one of very few locations along the East and Gulf Coasts suitable for the development of a new deep-water terminal.

SOUTH CAROLINA

Port of Charleston – “The Port expects even larger Post-Panamax ships on the U.S. East Coast, and in Charleston, even before 2014, with greater frequency. The South Carolina State Ports Authority’s (SCSPA) new chief executive officer, Jim Newsome, predicts that 8,000 TEU ships will call at U.S. East Coast ports within the next year or two. Charleston has already accommodated ships drawing 47-48 feet of water and capable of carrying 6,700 TEUs.” (SCSPA also forwarded supplemental information along with responses to the SLC survey, included within this report as Appendix II).

VIRGINIA

Port of Virginia – “Following the expansion of the Panama Canal, the Port of Virginia will experience increased container traffic throughput due to the higher number of larger, Post-Panamax vessels calling at our terminals. The Port of Virginia can already handle
the Post-Panamax vessels given its channel depths of 50 feet (and authorized to 55 feet) and ship-to-shore gantry cranes, which are the largest in the world, reaching 26 containers across. With rail improvements at the expanded Central Rail Yard terminal and rail projects off-terminal like the Norfolk Southern Heartland Corridor and CSX’s proposed National Gateway, containers will seamlessly be transported beyond the Port to contiguous states and other inland markets. Industry experts have consistently predicted that 20 percent to 25 percent of the West Coast container business will be shifted to the East Coast once the Panama Canal is expanded in 2014. The Port of Virginia anticipates receiving as much as 20 percent of the additional cargo arriving at the U.S. East Coast.”

**Question 2: What role do you anticipate your port will play after this expansion project is completed?**

**FLORIDA**

*Port of Palm Beach* – The Port of Palm Beach anticipates that its Inland Logistics Center (ILC) project would assist in accommodating the increased cargo moving in and out of South Florida ports. “With the development of the ILC, the Port is confident that the South Florida region will be prepared to handle the growth expected in South Florida in the aftermath of the Canal’s expansion.”

*Port of Miami* – As indicated in its response to Question 1, the Port of Miami expects its “location as the closest major United States container seaport to the Panama Canal” to be critical in being selected as “the first port of call for Post-Panamax vessels.”

*Fort Pierce Port* – “Very insignificant.”

**GEORGIA**

*Georgia Port Authority* – “As larger vessels begin calling on the East Coast, the future growth and economic development of the region will depend on the successful deepening of the Savannah River. Without the increased channel depth, the new Super Post-Panamax ships will be denied access to the Port of Savannah,” [a development that would] “hurt exporters, importers, consumers and the entire Southeast economy. That is why harbor deepening is so very important to the entire region.”

**NORTH CAROLINA**

*Port of Wilmington* – “Successful development of the North Carolina International Terminal on the existing footprint could result in a terminal that could handle as many as 2 million to 3 million TEUs a year (which is equivalent to the capacity currently handled by container terminals such as those in Charleston, South Carolina, and Savannah, Georgia) and will serve larger vessels that are expected to call on the East Coast resulting from the expansion of the Panama Canal.”

**SOUTH CAROLINA**

*Port of Charleston* – “There is a big market upside. There is an expanding population base in the Southeast combined with a significant manufacturing sector that produces exports. That’s a strong combination. Right now, about 70 percent of the [United States] population is east of the Mississippi, but only [about] 30 percent of [U.S.]-Asia trade moves across East Coast ports.”

**VIRGINIA**

*Port of Virginia* – “After the Panama Canal expansion is complete, the Port of Virginia anticipates advancing its position on the U.S. East Coast as a Mid-Atlantic hub for container business via the Port’s intermodal connections.”

**Question 3: Has your port initiated efforts to accommodate the expected increase in cargo traffic and number of vessels on account of the Panama Canal’s expansion? If so, would you please provide details on this expansion effort, including information such as new container facilities and equipment, deepening efforts, channel maintenance efforts and any other relevant features?**

**FLORIDA**

*Port of Palm Beach* – “Currently, the Port of Palm Beach, along with our two sister ports to the south, the Port of Miami and Port Everglades, is working on the Intermodal Logistic Center (ILC) project, which is in the site selection stage. This regional project is on schedule and will assist with the increased cargo traffic through the Panama
Canal after 2014. The ILC project includes future warehouse facilities for “big box” companies and an intermodal interchange (rail and truck) for the cargo related to these warehouses. Job creation is the main objective of the project along with the relocation of cargo traffic (rail and truck) off congested coastal area roadways.

The U.S. Army Corps of Engineers (USACE) is responsible for the maintenance of the Lake Worth Harbor. While the Lake Worth inlet’s advertised depth is 33 feet, the Port of Palm Beach has been under draft restrictions by the Harbor’s pilots since December 2008. As a result, the Port is currently working with the USACE on the dredging issue and has scheduled two dredging events for 2010.

The Port of Palm Beach is the local sponsor and partner with the USACE to carry out a feasibility study to deepen and widen the Lake Worth Harbor. The deepening and widening would allow the Port of Palm Beach Harbor pilots to bring in a vessel up to 700 feet in length and fully loaded. At this time, the study is approximately 50 percent to 60 percent complete.”

Port of Miami – The Port of Miami’s three major infrastructure enhancement projects are the following:

» A Dredging Project (Phase III) that commenced in April 2009 and is scheduled to be completed in August 2014. The design phase is expected to be completed in summer 2011 and project work will commence shortly thereafter.

» The Port of Miami Tunnel Project that commenced in November 2008 with a scheduled completion date of December 2015.

» The Intermodal and Distribution Network Project that commenced in October 2009 with a scheduled completed date of December 2015.

Port Pierce Port – “No such plans.”

GEORGIA

Georgia Port Authority – “For Georgia to adequately accommodate larger, modern vessels holding more cargo and requiring greater drafts, Savannah’s navigational channel must be deepened. The Georgia Ports Authority (GPA) has been working diligently with federal and state officials on the project to deepen its harbor up to 48 feet mean low water (MLW). At 48 feet, the GPA will be able to more efficiently serve the demands of United States commerce and remain a valuable asset in the national marine transportation system.

This new depth will open the Port of Savannah to the significantly deeper draft vessels calling at East Coast ports following the Panama Canal expansion and will eliminate constraints to the fleet of vessels currently calling at the Port. These ships carry exponentially more cargo than their predecessors, generating significant benefits to American producers and consumers and substantial economic impacts for the ports capable of accommodating them.”

NORTH CAROLINA

Port of Wilmington – Along with the information provided in responses to Questions 1 and 2, the North Carolina State Ports Authority also indicated that provisions in the federal budget involved funding for expanding channel infrastructure. Specifically, “the FY 2009 omnibus spending bill included a U.S. Army Corp of Engineers (USACE) Reconnaissance Study to evaluate federal interest in dredging the channel to a 50-foot draft. An approved Reconnaissance Study would be followed by a Feasibility Study by the USACE.”

SOUTH CAROLINA

Port of Charleston – “Demand projections for the Port of Charleston and the new Navy Base Terminal were updated to include the impact of the Panama Canal project. The new terminal will increase capacity by 50 percent when completed; Phase I of this effort is scheduled for completion in late 2016.”

VIRGINIA

Port of Virginia – “The following projects and improvements have been initiated to accommodate the expected increase in cargo traffic and the number of vessels on account of the Panama Canal expansion:

» The Port of Virginia’s obstruction-free channels, already at 50 feet, have been approved to be dredged to 55 feet to accommodate larger vessels;

» In the capital improvement program, $450 million has been dedicated to the reconstruction of Norfolk International Terminals, including acquiring container cranes and straddle carriers, dredging the berth

Mean Low Water (MLW) refers to a figure representing the average low tide of a region.
depth to 50 feet, restructuring the container yard and extending the wharf. Reconstruction of Norfolk International Terminals will be complete in 2010;

» The full build-out of Craney Island Marine Terminal will provide an additional 5 million TEU capacity and the Port-wide capacity will double to 10 million TEUs. The White House approved $28.5 million in the federal budget to fund the Craney Island project;

» The new 285-acre A.P. Moller terminal in Portsmouth, Virginia, opened in August 2007. This new state-of-the-art terminal has introduced an additional 1.5 million TEU capacity. Upon completion of the second phase, this terminal will boast a capacity of 2.1 million TEUs;

» Scheduled to be completed in 2010, Norfolk Southern’s Heartland Corridor project will increase the efficiency of intermodal rail service between the Port of Virginia and the Midwest markets. In addition to adding double-stack capabilities, the project will enable a two-day transit from Virginia to Chicago;

» The National Gateway project, a $700 million public-private infrastructure initiative sponsored by CSX, plans to create a highly efficient double-stack intermodal link between Virginia and the Midwest; and

» In March 2009, the Virginia Port Authority opened the first phase of a new $17 million Central Rail Yard, an on-dock rail facility. Scheduled to be completed in 2010, this new facility will add 12,000 feet of new track and improve the efficiency of rail operations."

Question 4: If your port has initiated expansion efforts, what is the expected cost of this project? How will your port raise the funds necessary for the expansion? Please specify the breakdown of federal, state, local and private funds.

**FLORIDA**

**Port of Palm Beach** – “While specific funding sources required to meet these future demands have not, as of yet, been identified or secured, it is clear that depending on the effort undertaken, a combination of multiple funding sources will be needed. The cost to deepen the channel will need to be primarily, if not entirely, funded through the use of federal grants, including resources provided by the U.S. Army Corps of Engineers. The refurbishment/redesign of the Port’s slips will be a combination of Port funds, state grants and private partnerships, where possible. The reconfiguration of the land contained within the Port’s boundaries will be funded primarily through the use of public-private partnerships. Finally, the Port will work closely with its tenants to provide them the opportunity to further invest in logistical improvements by supplementing their funding amounts with state grants, where possible.”

**Port of Miami** – The financial details of the Port’s enhancement projects are the following:

» The Dredging Project (Phase III) has a combined cost of approximately $180.5 million. The design phase is expected to be completed in summer 2011 at a cost of approximately $3.89 million. The total appropriated federal funding is expected to be approximately $2.9 million, with approximately $1 million remaining divided equally between the Port of Miami and the Florida Department of Transportation. The construction phase of the project is expected to commence in spring 2012. Based on the latest cost estimate received from the U.S. Army Corps of Engineers, the total construction cost for the project is approximately $150 million. Federal appropriations are expected to be about $73 million, with the balance being funded by the Port of Miami. The Port of Miami will work with the state of Florida to “cost share” this balance.

» The Port of Miami Tunnel Project has a total cost of approximately $915 million. The Project will be constructed with funding from the Florida Department of Transportation (50 percent) and local government funding (50 percent).

» The Intermodal and Distribution Network Project has a cumulative cost of approximately $55 million. The Project will be constructed primarily via federal government grants.

**Fort Pierce Port** – Not applicable.

**GEORGIA**

**Georgia Port Authority** – “In order to ensure that the Port of Savannah can handle the increased volume of projected cargo, the GPA has authorized funding for more than $1.3 billion in capital projects with the intention of improving terminal operations and efficiencies, as demonstrated in Table 9. These projects will not only more than double the Port of Savannah’s capacity to 6.5 million TEUs, but it will increase the Port’s economic impact on the state and ensure Savannah’s continued dominant position in Southeastern U.S. shipping trade. Funding for the Savannah Harbor Deepening Project is dependent upon U.S. Army Corps of Engineers’
(USACE) rules regarding harbor deepening project cost-share requirements. Since USACE has not yet established a depth for this project, the overall cost and the breakdown of state and federal funds is unknown. The remainder of the projects listed will be paid for via GPA revenues and general obligation bonds issued by the state of Georgia.”

**NORTH CAROLINA**

**Port of Wilmington** – “The North Carolina International Terminal will be developed as a public-private partnership (P3). The P3 will be structured so that the Authority will retain all real property rights, and the private partner will have the right to operate the terminal as a tenant in a lease or concession. The North Carolina State Ports Authority does not anticipate requesting state funding for the construction of the terminal. The total cost of the project development, including terminal development, channel dredging, roads and rail improvements is approximately $2 billion.”

**SOUTH CAROLINA**

**Port of Charleston** – “Phase I is $550 million – the terminal will be funded by the South Carolina State Ports Authority. The state provided partial funding for the access road.”

**VIRGINIA**

**Port of Virginia** – “Planned capital improvements will cost an estimated $2.96 billion between the current fiscal year and 2040. Of that, $2.2 billion is earmarked for the construction of Craney Island, and the remaining funds are for renovation and improvement of the existing terminals. The Port of Virginia can raise the funds necessary for the expansion by issuing bonds that are backed by terminal revenue.”

**Question 5: Has the legislature in your state initiated any legislation to propel this expansion process forward and, if so, would you please list the specifics related to the legislation?**

**FLORIDA**

**Port of Palm Beach** – “The Florida Legislature has not passed any legislation specifically related to the Port of Palm Beach District’s Intermodal Logistics Center (ILC) project. Instead, the ILC project has been enhanced by the inclusion of specific line items in the state’s budget earmarked for the project. For instance, Florida’s fiscal year 2010 budget – reinforcing the state’s strong sup-

<table>
<thead>
<tr>
<th><strong>GEORGIA PORT AUTHORITY</strong></th>
<th><strong>STATEWIDE ECONOMIC IMPACT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>$55.8 billion (8% of Georgia’s total sales)</td>
</tr>
<tr>
<td><strong>Gross State Product (GSP)</strong></td>
<td>$24.8 billion (6% of Georgia’s total GSP)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>$14.9 billion (5% of Georgia’s total personal income)</td>
</tr>
<tr>
<td><strong>State and Local Taxes</strong></td>
<td>$2.8 billion</td>
</tr>
<tr>
<td><strong>Federal Taxes</strong></td>
<td>$3.5 billion</td>
</tr>
<tr>
<td><strong>Statewide Employment</strong></td>
<td>286,476 (7% of Georgia’s total employment)</td>
</tr>
<tr>
<td><strong>Latest Statistic</strong></td>
<td>In April 2010, the Georgia Ports Authority experienced 25.6 percent container growth and recorded their fifth consecutive month of double-digit growth.</td>
</tr>
</tbody>
</table>


**Table 9: Projects of the Georgia Port Authority**

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harbor Deepening</td>
<td>$588,000,000</td>
</tr>
<tr>
<td>Berth Upgrades</td>
<td>$35,210,000</td>
</tr>
<tr>
<td>Container Storage</td>
<td>$181,149,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$321,876,000</td>
</tr>
<tr>
<td>Intermodal and Gate Projects</td>
<td>$53,906,000</td>
</tr>
<tr>
<td>Support Projects</td>
<td>$27,881,000</td>
</tr>
<tr>
<td>“Last Mile” Support</td>
<td>$10,876,000</td>
</tr>
<tr>
<td>Other</td>
<td>$145,574,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,364,472,000</td>
</tr>
</tbody>
</table>

Report for the ILC project – included funding for the following specific items:

» $1 million in Florida Department of Transportation (FDOT) funds will be used for the ongoing planning of the Intermodal Logistics Center;
» The Governor’s Office of Tourism, Trade and Economic Development and Enterprise Florida will consult with FDOT on this project;

The $1 million dollars was allocated as follows:

» $150,000 for costs associated with issuing a public-private partnership (P3) request for proposal;
» $375,000 for costs associated with an application for a $100 million federal government grant for a rail line along the state route (SR) 7 corridor;
» $250,000 for completing an environmental impact study; and
» $225,000 for freight movement analysis and initial marketing.”

Port of Miami – “Currently, the Port of Miami is unaware of any (passed or pending) Florida legislation regarding the Panama Canal Expansion Project.”

Port Pierce Port – The Port is not aware of any legislation that will affect it, particularly.

GEORGIA
Georgia Port Authority – “Georgia’s leaders have laid the foundation for an economic rebound through wise investments in Georgia’s deep-water ports. These ports connect the state’s economy to diverse world markets, providing opportunities overseas for retailers, manufacturers and agribusiness, even as the domestic business climate remains stagnant. The Georgia General Assembly’s support for GPA’s expansion efforts have been demonstrated in the state’s budget. Legislative support has come primarily in the form of tax incentives via Georgia’s BEST legislation.” (Georgia’s “Business Expansion Support” Act, or BEST, is a major force in expanding business in Georgia. BEST provides attractive, state-supported incentives to create jobs and help businesses realize high returns on investment.)

NORTH CAROLINA
Port of Wilmington – None.

SOUTH CAROLINA
Port of Charleston – “Senate Bill 351 passed during the 2009 legislative session (Act 73) supports development of the new Navy Base Terminal.”

VIRGINIA
Port of Virginia – “The Virginia General Assembly has not initiated any legislation to propel the expansion process forward nor has it established any legislation to inhibit the Port’s ability to expand or improve the Port’s facilities.”

Question 6: What preparations has your port initiated in terms of multimodal (rail, truck) transportation solutions?

PORTSMOUTH – “The Port of Virginia is undergoing some of the most comprehensive infrastructure upgrades since its inception more than 100 years ago. More than $1 billion in infrastructure enhancements will be coming online within the next five years, timed with the Panama Canal’s 2014 expansion completion. For example, the Port of Virginia will be undertaking three significant capital improvement projects. First, the Port will dredge its cargo harbor to a 50-foot depth (Dredging Phase III Project), making it one of only three U.S. seaports on the East Coast that can accommodate the world’s largest container vessels. Second, the Port is moving forward with the Port of Virginia Tunnel Project, giving trucks direct highway access. As a result, the Port expects to double its cargo capacity in less than 15 years because of this dedicated roadway between the Port of Virginia, the MacArthur Causeway Bridge and I-395. Finally, the

* A TWIC badge refers to an identification card provided after a series of security screenings by the Transportation Security Administration of the U.S. Department of Homeland Security.
Port is building an intermodal distribution network in cooperation with strategic partners like the Florida East Coast Railway, which operates 351 miles of mainline track along the east coast of Florida. Combined with other significant investments in its terminal yards, gantry cranes, gate complexes, and roadway systems, the Port of Miami will be ready for the trade opportunities resulting from the expansion of the Panama Canal."

Fort Pierce Port – “Nothing new.”

GEORGIA

Georgia Port Authority – “GPA’s ambitious and well-thought-out strategic development plan has positioned its ports as the most accessible, efficient and best equipped in the nation. Several projects, such as the recently opened Chatham Intermodal Container Transfer Facility (ICTF), improvements to the existing Mason ICTF and additional rail projects outside of port property, have increased rail efficiency and access to Georgia’s two deep-water ports in Savannah and Brunswick. The GPA continues to work with the state’s Department of Transportation officials to improve last-mile connectivity to the ports. Several key projects have been targeted and work has begun on each. These projects include the Jimmy Deloach Connector, Brampton Road Connector, an overpass on Highway 307 and the expansion of Grange Road.”

NORTH CAROLINA

Port of Wilmington – The North Carolina State Ports Authority offered the following details:

» Road Infrastructure: The North Carolina Department of Transportation recently initiated a transportation feasibility study related to the development of the North Carolina International Terminal. The study will examine alternatives and costs associated with constructing a connector to link the Port terminal to the larger transportation system, as well as examine a dedicated four-lane limited access transportation corridor to link the connector to the interstate highway system. The study is expected to be completed in 2011.

» Rail Infrastructure: In May of 2008, CSX launched the National Gateway project, a $700 million public-private infrastructure project to create a freight transportation link between Mid-Atlantic ports and the Midwest. Currently, the North Carolina State Ports Authority offered the following details:

The New York Express, a 4,890 TEU vessel, docking at the Norfolk International Terminal. Photo courtesy of The Port of Virginia.
Authority is working closely with CSX and the North Carolina Department of Transportation to create double-stack clearances beneath public overpasses along the railroad to allow rail carriers to stack intermodal containers atop each other. This will enable each train to carry about twice as many cargo boxes. This project will significantly benefit the North Carolina International Terminal project.

**SOUTH CAROLINA**

*Port of Charleston* – “The State Rail Plan was released last year by S.C. Public Railways.” [The South Carolina Commerce Department and its for-profit division, S.C. Public Railways, are lobbying to allow trains to run through the north end of the former Naval Base.]

**VIRGINIA**

*Port of Virginia* – “Some multimodal transportation solutions initiated by the Port of Virginia include:

» The Norfolk Southern Heartland Corridor Project
» The CSX National Gateway
» The Central Rail yard

In addition, the Virginia Port Authority initiated the expansion of the median on I-164 and raised the height of overpasses to accommodate a double-stack rail route.”

**FLORIDA**

*Port of Palm Beach* – “The global economic recession has had a significant impact on the Port’s ability to generate funding for capital investments. Like most other entities, both public and private, the business downturn has resulted in an emphasis on cash conservation. As the economy rebounds, the ability of the Port to provide capital funds will return to normal levels. However, the magnitude of the investment required will be such that a significant reliance on external funding in the form of grants or private investment will be essential well into the foreseeable future.”

*Port of Miami* – “Despite the current recession, the Port of Miami (by deploying its aggressive 25-year Master Plan) is moving forward with capital improvement projects to position the Port for additional growth once the global economy begins to rebound.”

**Fort Pierce Port** – “Not related to the Panama Canal expansion.”

**GEORGIA**

*Port of Savannah* – “While current economic challenges demand consideration, this has not been a time to retreat from the planning and construction that has driven so much prosperity. In fact, this is precisely the time to secure additional capacity and, in so doing, create additional economic opportunities and sustainable growth for generations to come. Our goal is to strengthen our advantages and achieve even greater success moving forward.”

**SOUTH CAROLINA**

*Port of Charleston* – “The timeline for development is broken into phases: the first phase of the project is anticipated to be operational in 2017 with full build-out expected by 2030. Changes in the global economic recession at some point may minimally delay the construction timeline and provide more time for planning.”

**NORTH CAROLINA**

*Port of Wilmington* – “The decline in global trade has definitely caused most, if not all, ports to adjust their demand forecasts. Three to five years of growth have been lost.”

**VIRGINIA**

*Port of Virginia* – “Port plans regarding preparing for the Panama Canal expansion are still moving forward.”

**Question 8: What would you identify as the major obstacles or challenges to your port’s expansion efforts?**

**FLORIDA**

*Port of Palm Beach* – “The obstacles facing the Port are both financial and logistical. The financial challenges have been addressed above in detail. The logistical challenge relates to the Port’s inability to expand its boundaries contiguously. Urban development and local agreements combine to prevent this type of geographical expansion. The Intermodal Logistics Complex is the most viable solution to providing the Port with the ability to meet the potential throughput demands resulting from the expansion of the Panama Canal.”
THE PANAMA CANAL EXPANSION AND SLC STATE PORTS

THE PANAMA CANAL EXPANSION AND SLC STATE PORTS

Port of Miami – “Identifying and securing funding sources for the Port of Miami’s capital improvement projects.”

Port Pierce Port – “Water depths imposed by the [Port’s] Master Plan.”

GEORGIA

Georgia Port Authority – “Without the increased channel depth, these newer, larger vessels will be denied access to the Port of Savannah – hurting importers, exporters, consumers and the entire Southeastern economy. The livelihoods of hundreds of thousands of families depend upon the project being planned and completed on schedule.”

NORTH CAROLINA

Port of Wilmington – Not applicable.

SOUTH CAROLINA

Port of Charleston – “Legal challenges from an activist environmental group. State and federal challenges remain, but the Port is confident that it will be successful. Construction is well underway and a federal judge in November 2009 declined a motion for a preliminary injunction.” [U.S. District Court Judge C. Weston Houck denied a request filed on behalf of the Coastal Conservation League to halt construction of the new container terminal in North Charleston. The League is challenging the permits issued by the U.S. Army Corps of Engineers allowing for construction of the new terminal due to concerns about traffic congestion and pollution. During the hearing, Judge Houck expressed his desire to put “all the cards on the table” to consider all of the transportation and rail issues facing the Port.]

VIRGINIA

Port of Virginia – “The Port does not face any major obstacles to expansion, though it does favor increased federal focus on national freight corridors and international gateways, leading to a national transportation policy that supports efficient planning and proper

PORT OF CHARLESTON

In fiscal year 2009, the South Carolina State Ports Authority (SPA) served 1,802 ships and barges at its seaport terminals in Charleston and Georgetown. In the Port of Charleston, the SPA handled 1.37 million TEUs. The SPA’s Charleston breakbulk cargo totaled 549,008 tons. Top commodities across Charleston docks include agricultural products, consumer goods, machinery, metals, vehicles, chemicals and clay products.

The Port of Charleston is one of the busiest container ports along the Southeast and Gulf Coasts and is recognized as one of the nation’s most efficient and productive ports. The Charleston Customs district ranks as the nation’s eighth largest in dollar value of international shipments, with cargo valued at more than $62 billion annually.

In addition to the 700 South Carolina companies from every county in the state that regularly ship through the SPA, there are hundreds of transportation companies that facilitate trade. These businesses include the SPA and its 600 employees; 36 steamship lines; five stevedores and hundreds of longshoremen; 149 truck lines; two Class I railroads; two tug companies; 52 customs house brokers and freight forwarders; and hundreds of other firms.

Source: http://www.port-of-charleston.com/

“South Carolina’s two major ports at Charleston and Georgetown are tremendous economic engines for the state, with port operations facilitating 260,800 jobs across the state and generating nearly $45 billion in economic activity each year. The expansion of the Panama Canal offers tremendous opportunities, particularly for the port of Charleston, since it already has some of the deepest waters in the South Atlantic along with the necessary capacity, infrastructure and cranes at the dock to handle the fleet of mega-ships that will surface after 2014. As the 2009/2010 chair of the Southern Legislative Conference (SLC), I am very pleased that the SLC’s Economic Development, Transportation and Cultural Affairs Committee has chosen to review the potential impacts of the Panama Canal’s expansion on our Southern state ports. The cross-state comparisons will prove extremely valuable to all states in the SLC as we prepare for the increased trade, cargo volume and vessel traffic that will surely come our way after 2014.”

~ Speaker Bobby Harrell, South Carolina House of Representatives

Chair, Southern Legislative Conference (SLC)
funding of transportation projects that ensure U.S. competitiveness.”

**Question 9:** Has your port entered into an agreement or memorandum of understanding (MOU) with the Panama Canal Authority and, if so, what would you categorize as the main elements of this agreement?

**FLORIDA**

*Port of Palm Beach* – “The Port of Palm Beach signed a joint Memorandum of Understanding (MOU) with the Panama Canal in December 2009. The primary elements of the MOU include joint marketing efforts, exchanging data, training and sharing information from market studies, technical, information, modernization and improvements to best practices.”

*Port of Miami* – “In July 2003, the Port of Miami and the Panama Canal Authority signed a Memorandum of Understanding (MOU) to facilitate an alliance of cooperation to generate new business by promoting the all-water route between Asia and the North America East Coast via the Panama Canal and the Port of Miami. Pursuant to Section 1 of the MOU, the Port of Miami and the Panama Canal Authority agree to undertake joint initiatives, subject to their respective regulations, to satisfy the MOU’s stated objectives which include:

- **Joint Marketing Activities** – As convenient, the parties may elect to undertake joint marketing efforts to generate new shipping business. These joint marketing efforts may include, but are not limited to, joint advertising activities aimed at promoting the all-water route; joint exhibitor booths at maritime events; joint press conferences; editorial placement and other public relations materials or activities of mutual interest.
- **Data Interchange** – The parties may elect to share data that may be helpful in forecasting future trade flows, developing marketing strategies and obtaining additional knowledge about the shipping market. The parties may also elect to exchange information that may include, but is not limited to, transit information, types of commodities, cargo tonnage, future plans and liner services.
- **Market Studies** – The parties may elect to exchange information contained in studies performed by them or by their consultants or representatives that may be of interest to the other party. The information contained in the studies shall be treated in a confidential manner. The parties may also elect to perform joint studies that address their areas of respective interest.
- **Modernization and Improvements** – The parties may elect to share information regarding improvements and/or modernization efforts being undertaken and which may have as a purpose, the need of satisfying an increase in demand or improved customer services.
- **Training** – The parties may elect to share information on training programs and may develop joint training seminars as well as cross-training activities.
- **Technological Interchange** – The parties may elect to share their technological capabilities and programs as well as the information contained in them.

*Fort Pierce Port* – No.

**GEORGIA**

*Port of Savannah* – “To stimulate increased collaboration and promote trade, the GPA has had an extended partnership with the Panama Canal Authority (ACP). The GPA and ACP first signed a Memorandum of Understanding in June 2003, establishing strong ties between the two entities and providing economic benefits to both regions. Areas of cooperation between the ACP and the GPA include, among others, joint marketing efforts, exchange of data, market studies, expansion plans, training and technology.”

**NORTH CAROLINA**

*Port of Wilmington* – “Not at this time.”

**SOUTH CAROLINA**

*Port of Charleston* – “Promotional and information exchanges are the main elements.”

**VIRGINIA**

*Port of Virginia* – “The Port of Virginia has entered into a Memorandum of Understanding with the Panama Canal Authority with the main element being marketing efforts.”

**Question 10:** Are there any other details or related information you would like to emphasize in light of the expansion of the Panama Canal?

**FLORIDA**

*Port of Palm Beach* – No.

*Port of Miami* – “Not applicable.”
Fort Pierce Port – No.

GEORGIA
Georgia Port Authority – “The Georgia Port Authority’s Garden City Terminal is the largest single container facility in the United States in terms of area, capacity and container volume. As the fourth largest container port in America, ensuring the Port of Savannah’s continued success is crucial to the region’s ability to emerge from the global recession.”

NORTH CAROLINA
Port of Wilmington – The North Carolina State Ports Authority listed a number of related developments:

» Terminal Design – Conceptual designs for the North Carolina International Terminal call for a high-density, automated container terminal capable of serving 12,000-TEU vessels with at least a 50-foot draft (the existing navigation channel serving the Port of Wilmington in the Wilmington Harbor has a dredge depth of 42 (+/-) feet).

» Economic Impacts – Initial economic impact studies indicate that 16,534 new jobs will be created in North Carolina related to the terminal, with over 477,000 jobs supported statewide. Additionally, more than $114 million in new state and local taxes will be generated, with over $1.2 billion Port user-related state and local taxes. The total annual direct business revenue of the project is expected to exceed $1.6 billion at full build-out.

» Security – Recently, the North Carolina State Ports Authority completed an areawide Vulnerability Assessment performed under a federal Transportation Security Administration Port Security Grant. The objective of Vulnerability Assessment was to bring selected stakeholders together to begin working together for mutual benefit on security issues. Participants included officials from the North Carolina State Ports Authority; U.S. Coast Guard; Military Ocean Terminal at Sunny Point, North Carolina, the largest ammunition port in the nation and the U.S. Army’s primary East Coast deep-water port; Progress Energy’s Brunswick Nuclear Plant; Primary Energy; Archer Daniels Midland; North Carolina Ferry Division; and Brunswick County Emergency Services. Security planning will help to understand the integrated security requirements needed for the region, in particular a coordinated response plan, hurricane evacuation and other security concerns for the region.

» Environmental Sustainability – Recent environmental sustainability efforts include the creation of a new position to oversee environmental sustainability in order to help the North Carolina State Ports Authority develop and implement environmental sustainability to address energy and water conservation practices, environmentally friendly procurement and contracting procedures, recycling, air quality, training and public outreach. Additionally, another initiative, Project Energy, was created in October 2007 with the twin objectives of energy efficiency and a cleaner, greener operation.

SOUTH CAROLINA
Port of Charleston – None provided.

VIRGINIA
Port of Virginia – “Due to visionary leadership and advance planning, the Port of Virginia and its intermodal partners will have the terminal and inland connection projects completed in time to handle the increases in container volume that the Panama Canal expansion will bring.”

Gulf Coast Ports

Question 1: In what ways, if at all, does your port anticipate being impacted by the expansion of the Panama Canal?

ALABAMA
Port of Mobile – As a result of the Panama Canal’s expansion, the Alabama State Port Authority’s Port of Mobile anticipates growth in its Far East trade. Consequently, the Authority has initiated new port investments in container, intermodal infrastructure and ship channel improvements. Currently, Asian trade represents roughly 50 percent of the containerized freight currently moving through the Port of Mobile. There also are opportunities for the Port of Mobile with U.S./Trans-Pacific trade in steel.

LOUISIANA
Port of South Louisiana – The Port of South Louisiana noted that the river ports along the Mississippi River will be impacted by the expansion of the Panama Canal, but only if they take action in preparing their facilities and expanding their infrastructure to allow the ports to handle this additional traffic. If they do not prepare, the Port of South Louisiana’s response opined that the cargo
and increase in traffic flow will “go elsewhere to those who have prepared.”

**Port of New Orleans** – “Like most deep-water ports, the Port of New Orleans is expecting more and larger ships transiting an expanded Panama Canal. These increases apply to breakbulk, container and bulk vessels. We believe the impact on ports will vary depending on the role they play as a container port, breakbulk port or combination of the two.”

**MISSISSIPPI**

**Port of Gulfport** – The Port expects increased cargo opportunities.

**Port of Pascagoula** – “The Port does not expect much impact on its operations directly from the Panama Canal expansion, since the expansion is primarily targeted at container vessels focused on the Far East-U.S. East Coast trade route, and the Port of Pascagoula is not geographically positioned to serve those markets. [However], the Port does expect increased cargo volumes in the Latin America-U.S. Gulf Coast trades, but that trade is not predicated on a Canal expansion.”

**TEXAS**

**Port of Beaumont** – “Major intermodal ports (container ports) on the Gulf and South Atlantic [Coasts] expect to see their container volumes increase. Since the Port of Beaumont is not a container port, it does not expect any direct increase in intermodal business, but hopes to serve as a feeder port for destinations such as the Ports of Houston and New Orleans for containerized cargo originating or destined for Southeast Texas.”

**Port of Corpus Christi** – “The Port of Corpus Christi anticipates a positive impact in numerous areas from the expansion of the Panama Canal. First, deeper draft vessels will be able to transit the Canal, a fact that entails existing liquid bulk and dry bulk vessels that currently call at the Port of Corpus Christi being able to take advantage of these deeper drafts, and to import and export a greater tonnage of the various products they carry. As the Panama Canal is widened, larger ships also will be able to call at the Port of Corpus Christi, enabling it to take advantage of economies of scale. Additionally, the Port of Corpus Christi is moving forward with the construction of its container terminal, La Quinta. The larger container ships that could not transit the Panama Canal will now be able to do so and call at container facilities such as La Quinta.”

**Port of Houston** – “The Port of Houston, which receives roughly 20 percent of its containerized cargo through the Panama Canal transit, anticipates that it will be the most positively impacted U.S. port following the completion of the Panama Canal expansion in 2014.”

**Question 2: What role do you anticipate your port will play after this expansion project is completed?**

**ALABAMA**

**Port of Mobile** – With new intermodal and port infrastructure investments coupled with growth in regional manufacturing/distribution and an inland transportation network comprising two interstate systems and five Class I railroads, the Port of Mobile anticipates attracting more Trans-Pacific trade.

**LOUISIANA**

**Port of South Louisiana** – “The Port of South Louisiana can play a major role in providing improved facilities related to off-loading, storage and value-added cargo processing that can offer added benefits to shippers, distribution centers and transportation companies that pure off-loading and transfer facilities cannot provide. This can be done [on account of the] fairly robust existing rail and road systems at and/or in the near vicinity of the Port. Additionally, the Port has several potential sites that can be transformed to offer large anchor-age areas, access to all Class I railroads, large swaths of land for the processing of cargo, unloading and reloading containers and access to all major state and federal highways. Through the Port of South Louisiana, containers-on-barge can reach 33 states and two Canadian Provinces via the Mississippi River.”

**Port of New Orleans** – The Port of New Orleans expects to see additional general cargo vessels – breakbulk and container vessels – and an increase in the dominance of larger vessels. The Port response noted that, “Certainly, there is the potential for adding valuable Asian services, expanding existing trade routes and new cargo opportunities.”

**MISSISSIPPI**

**Port of Gulfport** – The Port will seek to be a major load center in the U.S. Gulf Coast.
**Port of Pascagoula** – “[The Port currently has] a service that runs from Pascagoula to the West Coast of South America that utilizes the Panama Canal. [It does] not anticipate any changes in vessel types or frequency.”

**TEXAS**

**Port of Beaumont** – “Major intermodal ports (container ports) on the Gulf and South Atlantic Coasts expect to see their container volumes increase. Since the Port of Beaumont is not a container port, [it does] not expect any direct increase in intermodal business, but hopes to serve as a feeder port for ports such as the Ports of Houston and New Orleans for containerized cargo originating or destined for Southeast Texas.”

**Port of Corpus Christi** – “The role the Port of Corpus Christi will play once the expansion of the Panama Canal is completed includes all of the following: With the widening and deepening of the Canal, there will be a greater number of container ships coming into the U.S. Gulf Coast that formerly only could call on either U.S. West Coast or U.S. East Coast ports. With the completion of the Port of Corpus Christi’s La Quinta container terminal, there will be a large increase in container traffic at the Port. The Port also will see wider and deeper draft liquid bulk tankers and dry bulk carriers calling. The tonnage of various types of dry bulk commodities, such as grain products, should increase significantly. Likewise, the volume of barrels of liquid bulk commodities, such as imported crude oil and refined petroleum products, moving through the Port also should increase.”

**Port of Houston** – “The Port of Houston will be in a better position to serve its expanding market reach, as far north as Chicago, Illinois, stopping at major distribution hubs (such as Dallas/Ft. Worth, Texas) along the way. To the south, the Port of Houston’s established trade route to Mexico also may experience an increased volume as a result of the expanded Canal.”

**Question 3: Has your port initiated efforts to accommodate the expected increase in cargo traffic and number of vessels on account of the Panama Canal’s expansion? If so, would you please provide details on this expansion effort, including information such as new container facilities and equipment, deepening efforts, channel maintenance efforts and any other relevant features?**

**ALABAMA**

**Port of Mobile** – The Alabama State Port Authority (ASPA) has spearheaded new investments nearing $500 million in marine terminals, cranes, yard equipment, and channel improvements to accommodate Post-Panamax sized ships at the Port of Mobile. The Port of Mobile has a new container terminal and a new steel terminal. Further, the Alabama State Port Authority is
investing in intermodal rail to support the new container terminal and extend its market reach. The U.S. Army Corps of Engineers and the ASPA (as the local federal project sponsor) currently are constructing a new turning basin and widening a portion of the Mobile Ship Channel at the lower harbor to accommodate larger (Post-Panamax) sized vessels that will soon transit the expanded Panama Canal and arrive at the new steel and container terminals.

LOUISIANA

Port of South Louisiana – “The Port of South Louisiana is currently working with various interested industries, other port authorities and other state and federal agencies through on-going studies to assess and begin improvements for container unloading, shipping and added-value processing facilities along the Mississippi River and within the Port’s jurisdiction. These efforts to date have identified potential sites for such facilities and the Port is in the process of evaluating these sites for available and anticipated capacity, cargo flows, throughputs and movements, shipping and transportation benefits, phasing, technical requirements, conceptual plans and cost estimates. Additionally, the Port is exploring its existing facilities to handle short-term increases in cargo through current on-going capital projects in anticipation of increased cargo handling, storage, processing and transportation due to the Panama Canal expansion.”

Port of New Orleans – “The Port of New Orleans is moving forward with plans to expand its container terminal’s capacity from about 700,000 TEUs to about 1.3 million TEUs with enhanced intermodal facilities and a minimum of 45-foot drafts. The Port has purchased two new gantry cranes for container operations, which will be delivered in July 2010 for this purpose. The new cranes, which represent an investment of more than $25 million, will bring the total number of gantry cranes in the terminal to six.”

MISSISSIPPI

Port of Gulfport – The Port has developed a strategy to ‘triple’ capacity, specifically in containerized cargo. The widening project already is under way and plans to deepen channel depth by 20 percent along with developing road and rail corridors also are in the works. This is all contained in Phase 1 of the Port’s expansion strategy, a 10-year project.

Port of Pascagoula – “The expansion and growth efforts are targeted to the Latin trades and Short-Sea/ Marine Highway initiatives’ rather than Panama Canal traffic. Working with the U.S. Army Corps of Engineers (USACE), we are widening the entrance channel and initiating a study to determine the feasibility of widening the Bayou Casotte portion of the channel to accommodate the vessels carrying Liquefied Natural Gas (LNG) that are expected to begin calling in 2012. This privately funded study is at a cost of $4.2 million.” The work at the Port of Pascagoula will explore the possibility of widening the channel by 50 to 150 feet from the current channel width of 350 feet. When widened, larger vessels will be able to travel to the Port safely, and there will be more local economic growth opportunities. Currently, about 400 ships a year use the Bayou Casotte channel.

TEXAS

Port of Beaumont – “We will develop additional container marshalling** and invest in handling equipment if the anticipated growth in feeder service occurs.”

Port of Corpus Christi – The Port of Corpus Christi has two priority projects underway that will accommodate the increase in traffic due to the Panama Canal expansion:

» Corpus Christi Ship Channel (CCSC) Improvement Project: The Project for navigation and ecosystem restoration was authorized by the U.S. Congress under Section 1001(40) of the Water Resources Development Act of 2007 (WRDA), after having all feasibility reports and environmental impact statements completed and approved in 2004. The Project includes the following navigation and ecosystem restoration elements:
  » Widening the CCSC to 530 feet from Port Aransas to the Harbor Bridge;

** Congested East Coast highways have led freight stakeholders to consider alternative modes of transportation such as ‘short-sea shipping’. Also called America’s Marine Highways, it involves moving commercial freight between ports over a small sea or through the use of inland and coastal waterways. Short-sea ships include small cargo ships, fast ferries and barges and carry containers, truck trailers, and coal. In 2000, short-sea shipping operations moved 6 percent of the nation’s freight tonnage.

** Containers carried into the terminal are stacked randomly in an area called a bay and a set of bays are called a yard. The rearrangement process conducted within a bay is called container marshalling.
Deepening the CCSC from 45 feet mean low tide (MLT) to 52 feet MLT;
Adding 200-foot wide barge shelves at 12 feet MLT across Corpus Christi Bay;
Constructing ecosystem restoration features to protect endangered species, wetlands and sea grass; and
Extending La Quinta Ship Channel approximately 1.4 miles at 39 feet MLT.

Widening the CCSC will allow for two-way traffic in the channel, increased safety and reduced vessel delays. Deepening will allow vessels with deeper draft to access Port facilities. Barge lanes will allow the smaller, slower barges to transit the Bay without the increased concern of collisions with larger ships, thereby reducing delays and increasing safety. The Project is estimated to generate over $24 million per year in net excess benefits over the life of the Project. Ecosystem restoration components will protect and enhance several important habitats including estuarine marsh, submerged aquatic vegetation, and endangered species habitat. In addition, the improvements include the construction of approximately 1,000 acres of shallow water habitat created by the beneficial use of dredged material. Extending the La Quinta Ship Channel will allow benefits to be achieved while enhancing the economy of the region by providing Channel access to a proposed container facility.

La Quinta Channel Extension: The La Quinta Channel Extension is scheduled to be the first navigational feature constructed for the Channel Improvement Project. The feature was fully designed prior to the Project being authorized in 2007, and is currently estimated to cost $70 million plus contingencies. The Extension will provide deep-water access to a container terminal site where operations are scheduled to begin in 2011. The initial phase of construction and operations will contribute to job creation and economic recovery in a region that recently experienced a severe decline in its economic condition due to the Base Closure and Realignment Commission closure of Naval Station Ingleside. The Project will create 2,500 highly skilled and high-wage jobs during the initial phase, providing some relief to the 7,000 jobs negatively affected by the base closure.

Question 4: If your port has initiated expansion efforts, what is the expected cost of this project? How will your port raise the funds necessary for the expansion? Please specify the breakdown of federal, state, local and private funds.

ALABAMA
Port of Mobile – The Alabama State Port Authority (ASPA) has funded these projects through ASPA cash, state and federal grants, and private investment.

Alabama State Port Authority - $230 million
State of Alabama - $80 million
Federal - $86 Million
Private - $100 Million

LOUISIANA
Port of South Louisiana – “The Port, although well into the conceptual plan phase for a container facility to handle anticipated increases in container traffic, does not currently have a final cost estimate. The process of compiling these figures is underway and it is anticipated that the funds necessary for expansion will be available through public-private partnerships. The Port currently is in discussions with several interested parties and...
hopes to move this effort forward in the next year. Additionally, state and federal government participation will be pursued.”

**Port of New Orleans** – “The total build-out of the Napoleon Avenue Container Terminal is estimated to cost $500 million. Of that, more than $25 million already has been invested toward the purchase of two new gantry cranes. The balance of the investment will come from a combination of self-generated funds, state capital outlay requests, applications for federal grants and through public-private partnerships. Currently, the Port has a $17.18 million capital outlay request through the state of Louisiana for improvements to the Napoleon Avenue Container Terminal that will expand container storage and handling capacities and increase operating efficiencies.”

**MISSISSIPPI**

**Port of Gulfport** – The Port has to secure a minimum commitment of $570 million from the U.S. Department of Housing and Urban Development. Federal Emergency Management Agency funds also are available along with state resources.

**Port of Pascagoula** – “In addition to the channel improvements, the Port has started to develop a 55-acre South Terminal site to support the Short Seas/America’s Marine Highways initiative of removing freight traffic from the interstate highway system and placing it on the water. The terminal will have a full complement of intermodal capabilities, including TOFC,* and is expected to cost about $30 million to complete. A $4 million development effort is in progress, with initial funding through a combination of state multimodal funds, intermodal connector improvement funds, Port revenues and FEMA alternate project funds.”

**TEXAS**

**Port of Beaumont** – Not applicable.

**Port of Corpus Christi** – Both priority projects listed in Question 3 require federal funding. The Port of Corpus Christi may also implement tariff increases to assist with costs. Cost estimates are as follows:

- Channel Improvement Project
  - Port - $109,200
  - Federal - $152,773
  - Total estimated costs - $261,973

*TOFC (trailer on flatcar) refers to transporting semi-trailers on railway flatcars or spine cars, an arrangement also referred to as ‘piggyback.’ TOFC stands in contrast to COFC or container on flatcar.

"Mississippi's ports play an integral part in the economic vitality of our state. The economic impact of our ports extends far beyond their immediate vicinity and generates substantial economic activity, jobs and revenue for our cities, state and the Gulf region. In my role as chair of the Mississippi House of Representatives’ Committee on Ports, Harbors and Airports, my Committee members and I have made a concerted effort to ensure that Mississippi's ports compete effectively with our regional competitors and focused on making the appropriate infrastructure enhancements to attract additional vessel traffic. The expansion of the Panama Canal in 2014 offers the potential for many of our East Coast and Gulf Coast ports to benefit tremendously, and as vice chair of the SLC’s Economic Development, Transportation and Cultural Affairs Committee, I am delighted that the SLC has carried out this study to gather more information on these possible impacts. Reports like this provide public officials with a wealth of knowledge about critical issues and guide us in our decision-making.”

~ Representative Billy Broomfield, Mississippi

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Chair, House of Representatives’ Committee on Ports, Harbors and Airports
Vice Chair, SLC Economic Development, Transportation and Cultural Affairs Committee
La Quinta Extension Project
Port - $22,623
Federal - $87,658
Total estimated costs - $110,281

Port of Houston – “In 2007, local voters approved the issuance of $250 million in general obligation bonds for a portion of the Bayport Container Terminal expansion project. The Port of Houston (PHA) has received, or is currently seeking, federal funds through grants, appropriations or other legislation for other infrastructure projects (for example, U.S. Department of Transportation discretionary grants, appropriations or federal transportation reauthorization legislation). However, the most significant source of funds for expansion projects is from operation revenues.”

Question 5: Has the legislature in your state initiated any legislation to propel this expansion process forward and, if so, would you please list the specifics related to the legislation?

ALABAMA

Port of Mobile – In 2000, the Alabama Legislature passed legislation (Act No. 2000-491) that authorized an amendment to the state’s Constitution to allocate a portion of the state’s oil and gas capital payments to fund Port improvements. The amendment, which won approval in a statewide vote, provided $100 million to the Alabama State Port Authority to fund capital improvements at the state docks facilities.

Louisiana

Port of South Louisiana – House Bill 215, or Act Number 474, was passed by the Louisiana Legislature in 2009 to establish the Ports of Louisiana Tax Credits and to authorize the issuance of tax credits for certain investments and import and export activity in ports in Louisiana. House Bill 215 also sought to encourage private investment in Louisiana ports.

Port of New Orleans – “The Louisiana Legislature allocated $24 million through a surplus spending bill during the state’s Second Extraordinary Session in 2008, which was used to cover the majority of the cost of the two new gantry cranes slated to be delivered in July of 2010.”

MISSISSIPPI

Port of Gulfport – Since the Port of Gulfport is a ‘state’ port, there is a variety of state initiatives and legislation aimed at fostering port activity.

Port of Pascagoula – The Mississippi Legislature created the Multimodal Fund and the state’s ports have access to 38 percent of this annually.

TEXAS

Port of Beaumont – “Texas has the mechanism to provide financial support for ports but has not funded the mechanism. In 2001, the Texas Legislature passed a bill to create ‘Funding of Port Security, Projects and Studies,’ within the Transportation Code (Chapter 55). This chapter has three main subjects: the Port Authority Advisory Committee, Port Access Account Fund and the Capital Program.”

Port of Corpus Christi – “None.”

Port of Houston – “No.”

Question 6: What preparations has your port initiated in terms of multimodal (rail, truck) transportation solutions?

ALABAMA

Port of Mobile – The Port of Mobile has initiated the engineering, design and initial construction of a $150 million intermodal rail transfer facility.

LOUISIANA

Port of South Louisiana – “The Port of South Louisiana is strategically located on the Mississippi River within close vicinity to major state highways and the federal interstate system. There are current ongoing studies, as well as planned and funded roadway improvement programs, at the Port’s Globalplex terminal to increase its ability to access these transportation routes more effectively as well as improve its internal circulation of traffic and cargo. Additionally, the Port currently is working with both adjacent Class I railroads at their facilities to improve service to Port warehouses, storage yards and processing facilities, and is further conducting a study at prospective sites that will have access to all Class I railroads, I-10 and other interstate systems, as well as all major state highways. The Port of South Louisiana also has entered into a cooperative agreement with the Parish..."
PORT OF SOUTH LOUISIANA
The Port of South Louisiana stretches 54 miles along the Mississippi River and is the largest tonnage port district in the Western Hemisphere.

The Port’s facilities within St. Charles, St. John the Baptist, and St. James parishes (counties) handled over 233 million short tons of cargo in 2008, brought to its terminals via vessels and barges.

Over 4,000 oceangoing vessels and 55,000 barges call at the Port of South Louisiana each year, making it the top ranked in the country for export tonnage and total tonnage.

With average exports of over 45 million short tons of cargo per year – more than any other port in North America - Port of South Louisiana cargo throughput accounts for 15 percent and 57 percent of total U.S. and Louisiana exports, respectively.

Source: http://www.portsl.com/

PORT OF NEW ORLEANS
More than 6,000 ocean vessels annually move through New Orleans on the Mississippi River.

More than 700,000 passengers sail through the Port of New Orleans each year.

According to a 2004 study conducted by Martin Associates, maritime activity within the Port of New Orleans is responsible for 160,498 jobs, $8 billion in earnings, $17 billion in spending and $800 million in taxes statewide.

The Port’s general cargo volume has averaged 8.6 million tons from 2003 through 2007.

The $100 million state-of-the-art Napoleon Container Terminal features four dockside gantry cranes and six rubber tire gantry cranes in the marshalling yard with an annual capacity 366,000 TEUs. (The 61-acre terminal (48-acre marshalling area) opened in the winter of 2004)

The Port of New Orleans is the only seaport in the U.S. served by six Class I railroads (Burlington Northern/Santa Fe, Canadian National, CSX, Kansas City Southern, Norfolk Southern, and Union Pacific).

The 2.01 mile long quay between Henry Clay Avenue and Milan Street terminals – the world’s longest wharf – can accommodate as many as 15 vessels simultaneously.

Source: http://www.portno.com/

of St. John to manage and operate the St. John Airport. The Port intends to acquire land to expand the existing runway an additional 1,000 feet, increasing the landing runway to 5,000 feet. This will allow for larger planes to land, thereby increasing the profitability of the airport (along with facilitating greater cargo movement between the Port and the airport.)”

Port of New Orleans – “The Port of New Orleans currently has a capital outlay request for $35.33 million to improve the Napoleon Avenue Intermodal Rail Yard, which would reconfigure and relocate the terminal. The project would take advantage of significant rail infrastructure at the Port: the only deep-water Port in the United States with six Class I railroads. The new yard would consist of 12.1 acres of infrastructure improvements with two working tracks about 2,000 feet long and one side loader, which would greatly enhance rail marine connectivity. The Port also continues to promote container-on-barge services to inland ports. Furthermore, in 1998, the Port built the Clarence Henry Truckway, a direct controlled-access highway to the interstate highway system.”

MISSISSIPPI

Port of Gulfport – The Port has engaged master plan consultants to address numerous intermodal challenges; it also is working with the railroad companies and the state Department of Transportation on this effort.

Port of Pascagoula – “In addition to the channel improvements, the Port has started to develop its 55-acre South Terminal site to support the Short Seas/America’s Marine Highways initiative of removing freight traffic from the interstate highway system and placing it on the water. The terminal will have a full complement of intermodal capabilities, including trailer on flat car and is expected to cost about $30 million to complete. Currently, $4 million in development funds is being deployed with initial funding through a combination of state multimodal funds, intermodal connector improvement funds, port revenues, and FEMA alternate project funds.”

TEXAS

Port of Beaumont – “The Port is in the process of improving rail and road infrastructure to meet anticipated growth in cargo.”

Port of Corpus Christi – “The proposed rail capacity expansion for the South Texas Region project will
greatly improve the rail infrastructure and transportation network in south Texas to and from the Port of Corpus Christi. This project has broad support from the Class I railroad carriers, Burlington Northern Santa Fe Railway, Kansas City Southern Railroad and Union Pacific, which all service the Port. The scope of the work is to construct approximately 45,000 feet of new rail capacity at two sites along the north and west side of the Port’s inner harbor in accordance with the Port of Corpus Christi Rail Master Plan. In addition, two aging Union Pacific railroad bridges, the Colorado and Gracitas Creek Rivers, would be upgraded from a 268,000-pound load rating to allow the greater capacity of 286,000 pound loads to be carried into and out of this region. The Port has requested a federal grant of $44.2 million for the initial start up of this $116.6 million project.”

**Port of Houston** – “The Port of Houston (PHA) is actively engaged in initiatives that serve to improve the regional network of rail and roadways. These efforts improve not only the multimodal infrastructure for the PHA, but for the greater Port of Houston, which includes PHA and 150 private businesses along the Houston Ship Channel. While these efforts will be critical in handling the anticipated increased cargo from the Panama Canal, importantly, they also are improvements that will benefit the Port generally.

The PHA was actively involved in the creation of the Gulf Coast Rail District. In fact, the PHA holds a seat on its board of directors. The purpose of the Rail District is to work collaboratively with public and private partners to develop and implement a systematic approach to improve the regional rail network. Priorities developed by the District will improve the movement of freight in addition to improving safety and overall mobility for trains, vehicles and pedestrians. The rail network in the Houston region, and its challenges, are significant. The current rail network serves approximately 2,200 trains per week over 800 miles of mainline track. There are approximately 21 miles of railroad bridges and nearly 1,200 at-grade roadway-railway crossings. For more information regarding the Gulf Coast Rail District, please visit [www.gcfrd.org](http://www.gcfrd.org).

With regard to roadways, the PHA is involved in several efforts to identify funding for priority projects and improve the overall network. This is beyond PHA’s efforts to construct and improve its own facilities, like the continued construction of the Bayport Container Terminal. A notable regional coalition of which PHA is a member is the Alliance for I-69 Texas. This group of local officials and industry stakeholders works to ensure the construction of I-69 as an international trade corridor connecting Mexico, the United States and Canada. This corridor is considered a critical artery in extending the Port’s reach into the Midwest. For more information regarding the I-69 Alliance, please visit [www.i69texas.org](http://www.i69texas.org).

**Question 7:** Has the ongoing global economic recession and the steep drop in world cargo traffic resulted in a change in your plans regarding preparing for the Panama Canal expansion?

**ALABAMA**

**Port of Mobile** – No.

**LOUISIANA**

**Port of South Louisiana** – “The Port continues to prepare for expansion of its facilities and stands prepared to move forward. The Port is still cautiously optimistic that current economic conditions will improve.”
**THE PANAMA CANAL EXPANSION AND SLC STATE PORTS**

Port of New Orleans – “Port officials believe volumes will grow and reach their historic levels.”

**MISSISSIPPI**

Port of Gulfport – “The current recession is temporary; Port plans will continue.”

Port of Pascagoula – “The global reduction in trade has led to a slowdown in implementation of Port plans. No relationship with Panama Canal expansion exists.”

**TEXAS**

Port of Beaumont – “Plans have not changed.”

Port of Corpus Christi – “The global economic recession and drop in cargo traffic has not changed the Port of Corpus Christi’s plans in preparing for the expansion of the Panama Canal. The completed expansion is still several years out and the global economy and shipping industry will have improved by then. Additionally, as the Port of Corpus Christi anticipates receiving a wide variety of commodities (cargo) including liquid bulk, dry bulk and containerized cargo due to the expansion of the Canal, while one type of commodity may be down, hopefully volumes for other types of cargo commodities will be up. Cargo commodity diversification is a key factor to lessening swings related to recessionary cargoes.”

Port of Houston – “The Port has been impacted by the recent global economic recession, but this has not impacted its long-term plans to meet the anticipated growth of cargo as a result of the Canal’s expansion.”

**ALABAMA**

Port of Mobile – Securing sufficient funding to complete all planned intermodal projects.

**LOUISIANA**

Port of South Louisiana – “The cooperation of the regulatory agencies in moving approvals for improvements at

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Scene from the Woodhouse Terminal, a multi-use facility that includes approximately 235,000 square-feet of warehouse space, 10 acres of open storage, intermodal (rail) capacity and three general cargo wharves. Photo courtesy of the Port of Houston Authority.
potential sites at a faster pace” remains crucial in preparing “for the impact of the Panama Canal’s expansion.”

**Port of New Orleans** – “Funding is the main issue, especially during these dire economic times. Also, selecting the right private sector partner if Port officials decide to enter into public-private partnerships moving forward is a challenge.”

**MISSISSIPPI**

**Port of Gulfport** – “Permitting issues; consistent federal funding being available.”

**Port of Pascagoula** – Funding for ‘inside the gate’ infrastructure. The federal programs that exist address waterways, roadways, and connectors, but none exist for wharves, docks, etc. The state Multimodal Fund is a funding source that can be used, but it does not have a dedicated source of revenue. This leads to instability in terms of multi-year projects; for instance, in 2009, the Fund had $3.8 million available but had $9 million in requests.

**TEXAS**

**Port of Beaumont** – “Obtaining funding for needed improvements.”

**Port of Corpus Christi** – “All permits, including environmental permits, are in place for our expansion projects. Funding restrictions (state, federal, grants) are the obstacles that prevent the Port of Corpus Christi from moving forward.”

**Port of Houston** – “Speed to market is essential to meet customer demands; if a port is not able to adequately meet customer needs, that customer will utilize an alternative route to markets. Thus, the Port of Houston’s ability to complete its infrastructure expansion and its technology enhancements in the time required by its customers are the most critical components of its expansion efforts.”

**Question 9:** Has your port entered into an agreement or memorandum of understanding (MOU) with the Panama Canal Authority and, if so, what would you categorize as the main elements of this agreement?

**ALABAMA**

**Port of Mobile** – The Alabama State Port Authority and the Panama Canal Authority currently are discuss-
that can handle more standard Panamax and barge type traffic with a larger volume of containers.

Port of New Orleans – None.

MISSISSIPPI

Port of Gulfport – “Opportunities will be available to the ports that are ‘prepared, not ‘preparing.”

Port of Pascagoula – None.

TEXAS

Port of Beaumont – No.

Port of Corpus Christi – “Due to the widening and deepening of the Panama Canal, U.S. ports located in the Gulf of Mexico will see an increase in trade volumes to the larger ships that will be able to transit the Panama Canal. Before the completed expansion of the Canal, due to their size, large container ships, tankers and dry bulk cargo ships cannot transit the Canal and will have to call on either a U.S. East Coast or U.S. West Coast port, bypassing the U.S. Gulf Coast altogether. While some ships that can fit through the current Canal do call on U.S. Gulf Coast ports, many are not able to do so due to the [previously-mentioned] limitations of the Canal. Port of Corpus Christi believes more vessels will enter ‘around the world service’ coming from the Pacific Rim via the expanded Canal into the U.S. Gulf Coast, then onto U.S. East Coast ports, Europe and vice versa. The expanded Canal also will assist with trade between U.S. Gulf Coast ports and ports located on the West Coast of South America.”

Port of Houston – “Please see attached (Appendix III) Panama Canal fact sheet developed by the Port of Houston Authority.”

Inland Ports

Question 1: In what ways, if at all, does your port anticipate being impacted by the expansion of the Panama Canal?

ARKANSAS

Little Rock Port Authority – The Little Rock Port Authority expects to be impacted “minimally, if at all.” The Authority adds that, “[I]f we were an ocean port, we might feel differently.”

MISSOURI

Port of Kansas City – “The inland Port of Kansas City, Missouri, is preparing to receive and process intermodal freight containers via rail, primarily the Kansas City Southern Railroad (KCS). The KCS serves the western Mexico Pacific Port of Lazero Cardenas as well as the Gulf Coast ports in New Orleans, Louisiana and Biloxi, Mississippi. In theory, cargo containers bound to Kansas City from Southeast Asia would enter at the Port of Lazero Cardenas and cargo from Europe/Africa would enter through the Gulf Coast ports mentioned above. The effect of the Panama Canal’s expansion would have minimal impact from that perspective. If the improved Panama Canal diverts traffic from the Port of Lazero Cardenas to other ports not served by KCS, then a negative impact may occur at the Port of Kansas City. The Port of Lazero Cardenas can handle the largest of the Post-Panamax cargo carriers (12,000 TEUs) and the Port’s capacity is expected to increase to 1.1 million TEUs [per year] by 2013.” However, any infrastructure improvement [at the other ports mentioned] which increases global trade from all sources would have a positive impact on activity at the Port of Kansas City.

TENNESSEE

Port of Memphis – The Port expects “that there will be some increase over time of containers loaded on barges both bound for export and from import. Most of the

Multimodal capacity at the Norfolk International Terminal. Photo courtesy of The Port of Virginia.
larger vessels that will be able to transit the Panama Canal, due to an increase in lock capacity, will be unable to call at many of the Gulf Coast ports due to draft restrictions. However, the somewhat smaller vessels that will be crowded out at some of their current ports of call will be looking for other ports on which to call. This may be the means of increasing cargoes handled at Gulf Coast ports now serving the inland waterways.”

**WEST VIRGINIA**

West Virginia Public Port Authority – “The Upper Ohio River System will be impacted by the Panama Canal expansion as the ability of the Gulf Coast ports with inland river system connectivity are able to expand their international container port capacity to handle the influx of trade as well as prepare for container-on-barge opportunities and extend their respective inland market penetration.”

**Question 2: What role do you anticipate your port will play after this expansion project is completed?**

**ARKANSAS**

Port of Little Rock – The Port does anticipate a significant difference.

**MISSOURI**

Port of Kansas City – “[The Port] anticipates a major role in freight distribution to the central United States regardless of the Canal’s status. This [has resulted in the] investment of infrastructure and facilities to handle cargo containers from all destinations, especially Asia via Mexico.”

**TENNESSEE**

Port of Memphis – “This business will develop over time and should improve the inland waterways’ capability to handle container-on-barge (COB). Thus, the Port of Memphis would look to improve COB handling capabilities with improved or new facilities. There are none currently under design but consideration for the prospect of new business has been discussed. The Port does not expect COB to travel much farther north than Memphis, possibly St. Louis, for distribution due to the locks and dams encountered on the Upper Mississippi and the Ohio Rivers. Both Memphis and St. Louis are transportation-oriented in that they have multiple Class I railroads and interstate highways.”

**Question 3: Has your port initiated efforts to accommodate the expected increase in cargo traffic and number of vessels on account of the Panama Canal’s expansion? If so, can you please provide details on this expansion effort, including information such as new container facilities and equipment, deepening efforts, channel maintenance efforts and any other relevant features?**

**ARKANSAS**

Port of Little Rock – No.

**MISSOURI**

Port of Kansas City – “The major emphasis [of the Port’s] effort is the conversion of the former Richards-Gebaur Air Force Base into an intermodal freight processing and distribution operation. Key to this effort is...”
the installation of rail siding on the 10,000-foot main runway, capable of holding a unit train for processing. Kansas City Southern Railroad has made that investment and is operating the facility at 200 lifts per day. As business increases, additional investment is planned to significantly expand the capacity. CenterPoint Properties, a Chicago-based land developer, also has prepared a 300-plus acre business park for the construction of up to 5,000,000 square feet of warehouse and distribution space.

TENNESSEE

Port of Memphis – “The inland waterway system above Baton Rouge, Louisiana, is maintained by the U.S. Army Corps of Engineers at an operating depth of nine feet, just under three meters. The chances of deepening that channel are pretty remote due to the environmental concerns of the U.S. Congress and the general public. While inland waterway transportation is environmentally friendly and economically practical, it is not seen as an area of growth. It is the easiest and most cost effective mode of transportation in terms of facilitating an increase in carrying capacity compared to the alternatives. If the channel depth was increased from nine feet to 12 feet, or by one-third, it would increase the barge capacity by three barges hauling what previously took four, so a one-third increase is pretty substantial.”

WEST VIRGINIA

West Virginia Public Port Authority – “The West Virginia Public Port Authority is actively engaged in the development of an Inland Container Transfer Facility that is a part of the Heartland Corridor Project* out of the Port of Virginia. This 60,000 unit lift facility will help provide critical global connectivity via the Heartland Corridor* and will enable the development of container-on-barge services throughout the Port of Huntington/Tri-State. Additionally, West Virginia is working in close cooperation with CSX Railroad to help develop the National Gateway Corridor, which would place the development of a 100,000-unit inland container transfer facility along the Northern stretch of the Upper Ohio River system to help facilitate container-on-barge activities as well.”

* The Heartland Corridor project is a three-year engineering effort to increase intermodal freight capacity by raising vertical clearances in 28 tunnels on a Norfolk Southern rail line between the Port in Hampton Roads, Virginia, and Chicago, Illinois, known as the Heartland Corridor.

Question 4: If your port has initiated expansion efforts, what is the expected cost of this project? How will your port raise the funds necessary for the expansion? Please specify the breakdown of federal, state, local and private funds.

ARKANSAS

Port of Little Rock – None.

MISSOURI

Port of Kansas City – “To date over $30 million has been invested in the redevelopment, primarily private funds from CenterPoint and Kansas City Southern Railroad. The investment includes land acquisition, structure demolition, site grading and preparation, road construction, utility installation and rail siding construction. Federal funds have been used to remediate environmental exposures through the Environmental Protection Agency’s Brownfield Cleanup grants. [Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETY-LU)] bond financing is also being considered for project funding.” [SAFETY-LU refers to the federal transportation legislation signed into law in 2005 that guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion.]

TENNESSEE

Port of Memphis – “There is no expansion or funding effort being initiated by the Port to accommodate the expansion of the Panama Canal.”

WEST VIRGINIA

West Virginia Public Port Authority – The Intermodal Terminal in Prichard, West Virginia, is a $30 million dollar project. The West Virginia Public Port Authority has actively sought public-private partnerships as well as applied for federal TIGER Stimulus Grants (under the American Recovery and Reconstruction Act) for this project.

Question 5: Has the legislature in your state initiated any legislation to propel this expansion process forward and, if so, would you please list the specifics related to the legislation?

ARKANSAS

Port of Little Rock – The Port is not aware of any such legislation.

MISSOURI

Port Kansas City – Not aware of any legislation regarding ports.
Question 6: What preparations has your port initiated in terms of multimodal (rail, truck) transportation solutions?

ARKANSAS

Port of Little Rock – “None, regarding multimodal. Traditional capacity for increased rail and barge traffic due to our growth is being added. But none of it is related to the Panama Canal.”

MISSOURI

Port of Kansas City – “Besides the Kansas City Southern Railroad and CenterPoint activities previously mentioned, the Port Authority is working with the Missouri Department of Transportation to improve area highway connections and is part of a coalition attempting to improve US-71 to interstate standards (I-49).”

TENNESSEE

Port of Memphis – “In terms of infrastructure, the Port of Memphis has looked at a variety of options that improve land access. A number of multimodal facilities either have been constructed or are under consideration for expansion by the five Class I railroads that serve Memphis. Between two railroad companies, Canadian National Railway Company and Burlington Northern Santa Fe Railway, there have been over $600 million in improvements made over the past five years in Memphis.”

WEST VIRGINIA

West Virginia Public Port Authority – “We are currently engaged in a long-range Strategic Port Plan for the state of West Virginia.”

TENNESSEE

Port of Memphis – “The Port is unaware of any effort by the Tennessee General Assembly to address Port expansion plans to accommodate the Panama Canal project.”

Question 7: Has the ongoing global economic recession and the steep drop in world cargo traffic resulted in a change in your plans regarding preparing for the Panama Canal expansion?

ARKANSAS

Port of Little Rock – No.

MISSOURI

Port of Kansas City – “CenterPoint and Kansas City Southern Railroad invested in their improvements prior to the recession. They are prepared to continue with new facility construction as soon as the capital markets are able to finance future projects.”

TENNESSEE

Port of Memphis – No.

WEST VIRGINIA

West Virginia Public Port Authority – No.

Question 8: What would you identify as the major obstacles or challenges to your port’s expansion efforts?

ARKANSAS

Port of Little Rock – “Lack of commitment by the U.S. Congress to fund the authorized project to provide the Arkansas River (McClelland Kerr Navigation System) with a 12-foot channel depth. Other obstacles are routine ones: attempting to find infrastructure funding for dock, crane and rail expansions.”

MISSOURI

Port of Kansas City – “Lack of investment capital to allow potential customers to finance building construction.”

TENNESSEE

Port of Memphis – “Federal, state and local funding sources and mechanisms.”

WEST VIRGINIA

West Virginia Public Port Authority – “The need for a dedicated federal funding program to assist in the development of multimodal and intermodal freight projects that impact both the maritime and rail networks.”
Question 9: Has your port entered into an agreement or memorandum of understanding (MOU) with the Panama Canal Authority and, if so, what would you categorize as the main elements of this agreement?

ARKANSAS
Port of Little Rock – “The Port never has been contacted and is unaware as to what the agreement might entail.”

MISSOURI
Port of Kansas City – No.

TENNESSEE
Port of Memphis – “Most trade with the Panama Canal Authority would be with ocean carriers rather than inland waterway ports.”

WEST VIRGINIA
West Virginia Public Port Authority – No.

Question 10: Are there any other details or related information you would like to emphasize in light of the expansion of the Panama Canal?

ARKANSAS
Port of Little Rock – “In the ‘old days’, prior to the Class I railroads implementing their intermodal service dealing with containers, a container landing on the West Coast was delivered in 14 days, via ‘manifest’ shipping, to companies in our Port at a cost of about $1,200. Following the implementation of the intermodal service, the same shipment was delivered, via the intermodal system, in four days at a total cost of about $1,200. This excludes the amount of time the container might have been on the ground on the West Coast between being offloaded from the ship and placed on the rail. But the key is four days at about $1,200.
The only ocean outlet for the Port is via New Orleans. Rail service in Arkansas is primarily ‘East/West’ and oriented to the West Coast, not to New Orleans; ‘North/South’ routes favor Houston significantly over New Orleans. The bulk of river traffic, coming via New Orleans, is inbound industrial goods (coils, ingots, steel bars, etc.), which do not lend themselves well to containers. A very high percentage of the items, likely in the 90 percent range, come from Europe or Russia and would not be affected by the Panama Canal. Alternatively, the vast majority of the Port’s container traffic, likely in the 90 percent range, comes from Asia, from the West Coast, via intermodal rail on the Union Pacific to Marion, Arkansas (Memphis), where it is then trucked back to Arkansan industries. Again, four days from the West Coast at about $1,200.

Thus, the only significant variable in the equation is the unknown amount of time between a container being offloaded from the ship to the ground and then cleared and put on the rail system for shipment to the Port of Little Rock. If that amount of time grows to become a significant factor, then the expansion in the Panama Canal could well be an asset and come into play. But until either that time becomes overly significant, or the Canal can deliver the container to our companies in Little Rock with a time and cost factor equal to or better than the ‘waiting time’ plus the shipping time (four days) at an equal ($1,200) or lesser cost, then there will not be a major impact forthcoming from the Canal.

With that said, one could argue that there is a market, via water and the Canal, for the loading and shipment of empty containers back to either the West Coast or Asia, given that a preponderance of these containers is inbound with no market or easy return method available. Last, to the extent that Asia, if ever, replaces Europe in the production of industrial goods, there well could be a market via the Canal for those goods that the Port now receives from Europe.”

**MISSOURI**

*Port of Kansas City –* The Port Authority of Kansas City would consider additional investment in river-based cargo handling facilities if the water level issues involved in the Missouri River dispute were resolved, and/or new technology (low draft barges) allowed the resumption of barge traffic on the Missouri River. This could substantially increase barge traffic originating in New Orleans and traveling to Kansas City and would result in direct repercussion in Kansas City given that the Panama Canal expansion will impact New Orleans.

**TENNESSEE**

*Port of Memphis –* “The Port maintains that the expansion of the Panama Canal is beneficial. It will take time for the change in routing to impact the central part of the United States’ inland waterways. In time, the flow of goods will arrive at destinations served by those inland waterways and shallow draft ports.”

**WEST VIRGINIA**

*West Virginia Public Port Authority –* “The U.S. Department of Transportation’s Maritime Administration’s attempts to establish marine highways is critical to the Ohio River system. If the Ohio River system is to fully leverage the economic benefits that the Panama Canal’s expansion will generate in the region, these marine highways will be an important component.”
Appendix I

THE COUNCIL OF STATE GOVERNMENTS’ SOUTHERN OFFICE,
SOUTHERN LEGISLATIVE CONFERENCE (SLC)
SURVEY ON PANAMA CANAL EXPANSION

In light of the new set of locks scheduled to open in the Panama Canal in 2014, ports across the Southern United States are devoting time and resources to prepare for the forecasted increase in the cargo capacity of ships passing through the canal and, consequently, larger ships that are expected to call on Southern ports. In order to provide an update to both legislative and executive branch officials in the South, the SLC is gathering information on the status of these preparations. The SLC has focused on Southern state ports for a number of years, in the form of in-depth reports, legislative testimony and presentations by senior port officials at SLC meetings. This focus stems from the fact that nearly two-thirds of all U.S. exports and imports transit through an SLC port.

The information gathered in this survey will be compiled in a report and forwarded to a range of policymakers, including legislators, legislative staff, governors, senior governors’ staff, economic development officials, port officials and interested others.

If you could forward your responses to the questions listed below by November 20, 2009, it will be much appreciated. Please contact me, Sujit CanagaRetna, at scanagaretta@csg.org, or Mikko Lindberg at mlindberg@csg.org, or 404/633-1866, if you have any questions or comments. You may also review the SLC’s prior research on ports in the South at http://www.slcatlanta.org/Publications/EconDev/Ports.html.

1. In what ways, if at all, does your port anticipate being impacted by the expansion of the Panama Canal?

2. What role do you anticipate your port will play after this expansion project is completed?
3. Has your port initiated efforts to accommodate the expected increase in cargo traffic and number of vessels on account of the Panama Canal's expansion? If so, can you please provide details on this expansion effort, including information such as new container facilities and equipment, deepening efforts, channel maintenance efforts and any other relevant features?

4. If your port has initiated expansion efforts, what is the expected cost of this project? How will your port raise the funds necessary for the expansion? Please specify the breakdown of federal, state, local and private funds.

5. Has the legislature in your state initiated any legislation to propel this expansion process forward and, if so, would you please list the specifics related to the legislation? For instance, a bill number?

6. What preparations has your port initiated in terms of multimodal (rail, truck) transportation solutions?

7. Has the ongoing global economic recession and the steep drop in world cargo traffic resulted in a change in your plans regarding preparing for the Panama Canal expansion?

8. What would you identify as the major obstacles or challenges to your port's expansion efforts?

9. Has your port entered into an agreement or memorandum of understanding with the Panama Canal Authority and, if so, what would you categorize as the main elements of this agreement?

10. Are there any other details or related information you would like to emphasize in light of the expansion of the Panama Canal?
The widening of the Panama Canal offers tremendous opportunity for South Carolina's port system. The new and expanded locks, slated to open in 2014, will allow much larger vessels to transit the Canal, so the Port of Charleston anticipates seeing deeper, wider ships coming to the U.S. East Coast from Asia.

The Port of Charleston is especially poised to benefit because it already has the deepest water in the South Atlantic along with the necessary capacity, infrastructure and cranes at the dock to handle these mega-ships. The Port of Charleston also is considered the most productive port operation in the country, with average crane moves topping 41 moves per hour per crane.

In addition to deep-water and efficient operations, the Port of Charleston also has the advantage of being able to grow – the South Carolina State Ports Authority is moving ahead with major expansion plans, and is able to finance its capital projects independently, even during a tough economic climate.

Several near-term projects have been completed at the Port of Charleston to boost capacity, including the opening of a new 25-acre refrigerated container yard.

Long term, the S.C. State Ports Authority is constructing a three-berth, 280-acre container terminal in North Charleston on the Cooper River. The terminal is located at the south end of the former Charleston Navy Base and is the only new container terminal that is permitted and under construction on the Atlantic Coast.
Additionally, more than 20 million square feet of distribution space is planned or already underway within 30 miles of the Port of Charleston’s terminals, which means that shippers will have no shortage of options for routing import cargo to their desired inland markets.

Recently, tire importer TBC Corp. announced that it would locate to a 1.1 million square-foot warehouse in the Charleston area.

Other industrial developers that have put down roots in South Carolina are a “who’s who” of national and international firms including Rockefeller Group Development, Johnson Development, Hillwood Properties, Trammel Crow, Pattillo Construction, Childress Klein Properties, Kirco Development and others. Also, Dubai-based EZW has announced a 1,300-acre initiative in South Carolina just 60 miles from the Port, the company’s first foray into the U.S. market.

These developers see in South Carolina an under-utilized gateway to U.S. consumption markets by way of the state’s network of major transportation corridors, including Interstate-26 and Interstate-95.
The Panama Canal is an important trade conduit to the United States from any perspective - the Gulf Coast, the Port of Houston Authority (PHA), and well beyond. In particular, the Panama Canal connects PHA with growing markets in the Pacific Rim (namely East Asia) and the west coast countries of South America as well as the southern ports of Central America. In fact, more than 20 percent of the containerized cargo handled by PHA transits the Panama Canal. Cargo along this specific transit route connecting the U.S. Gulf and East Coast with Pacific Rim markets for containerized cargo (mostly consumer goods) increased four-fold from 1997 to 2007.

The U.S. West Coast is the closest entry point for Asian cargoes, but congestion and other issues are compelling shippers to diversify their routes. Of this East Asia cargo received on the West Coast, approximately 70 percent is destined for markets east of the Rockies. This cargo is transported predominantly by rail to markets in the Central/Midwest United States. These dynamics have increased interest in bringing these cargoes to the Port of Houston, which is more centrally located.

The Port of Houston Authority is well-positioned for growth via the Panama Canal and likely will be the most positively impacted U.S. port as a result of the expansion. The Port of Houston is the most modern, efficient and fastest-growing container port on the U.S. Gulf Coast.

It is also the only port in the region presently capable of handling an influx of 1 million additional containers. Ultimately, the Panama Canal expansion will result in volumes many times more than this level of influx, so PHA is working toward this future through expansion plans.
KEY POINTS:

» PHA customers are already preparing and positioning for the changing logistics that will result from the Panama Canal expansion. For example, in 2002, PHA had limited East Asia containerized cargo that arrived via the Canal. Today, more than 16 percent of total cargo arrives via the Canal.

» East Asia trade is the fastest-growing market for PHA. Imports to PHA from Asia traversing the Panama Canal have increased 54 percent over the past three years (2005–2008), while total tonnage has increased 30 percent during the same period. West Coast South America, another key trade route utilizing the Panama Canal, showed 20 percent total trade growth during this same period.

» The deepening/widening of the Panama Canal will help to support an extension of the PHA market reach to other segments of the United States, specifically expansion into the U.S. Gulf Coast and I-35 Corridor. Population and consumer demand in these regions are anticipated to remain strong.

» The Port of Houston has been recognized as a premier import and export port, capable of serving the needs of the entire Midwest market area from Houston to Chicago without natural barriers represented by the Mississippi River and the Rocky Mountains. Because of this position, shipping lines are increasing their calls to Houston, trucking companies and rail lines are increasing their ability to serve the needs of the Port, and its markets and additional warehouse and distribution center space are under construction to accommodate the increased cargo.

» The anticipated increase in cargo resulting from the expansion of the Panama Canal likely will be containerized cargo (currently 30 percent of the Panama Canal transits). PHA is building new facilities to accommodate this demand. The completion of a significant portion of the Bayport Container Terminal at approximately the same time as the Panama Canal expansion will triple the container-handling capacity of PHA.

» As a result of different logistics and supply chains for various commodities, many Gulf Coast ports will complement each other and benefit from the Panama Canal expansion. The Port of Houston is poised to be a significant beneficiary as a result of several inherent strengths and advantages, including the following:
  • fourth largest market in the United States, growing at three times the national rate;
  • strong state economy that is the second largest in the United States and 12th largest single economy in the world, behind Brazil;
  • Top U.S. exporting state for six straight years;
  • In 2009, Texas hosted more Fortune 500 firms than any other state while Houston had more than any other city in Texas;
  • Largest container port on the Gulf Coast (seventh largest in the nation);
  • The greater Port of Houston is ranked:
    » First in the U.S. in foreign tonnage (13 consecutive years);
    » First in U.S. imports (18 consecutive years);
    » Second in total U.S. tonnage (18 consecutive years); and
    » Second in U.S. export tonnage.
INFORMATION PROVIDED BY THE MARYLAND PORT ADMINISTRATION

Question 1: In what ways, if at all, does your port anticipate being impacted by the expansion of the Panama Canal?

“The Port of Baltimore currently has a 50-foot deep navigation channel and, by 2014, anticipates the completion of a berth with a 50-foot draft to accommodate more container traffic. The Port of Baltimore is the closest port to the Midwest and, with the expansion of the Panama Canal, it is essential that it has the necessary arrangements for the increase in maritime commerce.”

Question 2: What role do you anticipate your port will play after this expansion project is completed?

“The Port expects to see more containers coming into the Port and, as mentioned in the above statement, is the closest port to the Midwest.”

Question 3: Has your port initiated efforts to accommodate the expected increase in cargo traffic and number of vessels on account of the Panama Canal’s expansion? If so, would you please provide details on this expansion effort, including information such as new container facilities and equipment, deepening efforts, channel maintenance efforts and any other relevant features?

“The Port is currently in negotiations with two businesses that have expressed interest in leasing its container terminal (Seagirt). Of the many requirements necessary to be chosen for this public-private partnership (P3) agreement and the lease, one is that the lessee will perform certain upgrades and maintain a vigorous upkeep program.”
Question 4. If your port has initiated expansion efforts, what is the expected cost of this project? How will your port raise the funds necessary for the expansion? Please specify the breakdown of federal, state, local and private funds.

“Currently, the anticipated cost of creating a new berth with a 50-foot draft is between $100 million and $120 million. The creation of the new berth and draft will be part of a P3 agreement, if an appropriate business meets our requirements.”

Question 5. Has the legislature in your state initiated any legislation to propel this expansion process forward and, if so, would you please list the specifics related to the legislation? For instance, a bill number?

“Any agreement with a company to lease the Seagirt Marine Terminal will have to be approved by Maryland Board of Public Works.”

Question 6. What preparations has your port initiated in terms of multimodal (rail, truck) transportation solutions?

“The state is supporting the National Gateway Project. This project will clear track for double-stack service on CSX from North Carolina to northwest Ohio.”

Question 7. Has the ongoing global economic recession and the steep drop in world cargo traffic resulted in a change in your plans regarding preparing for the Panama Canal expansion?

“No.”

Question 8. What would you identify as the major obstacles or challenges to your port’s expansion efforts?

“Obtaining the necessary funding for the creation of a new berth with a 50-foot draft.”

Question 9. Has your port entered into an agreement or memorandum of understanding with the Panama Canal Authority and, if so, what would you categorize as the main elements of this agreement?

“The Port has finalized a Memorandum of Understanding (MOU) agreement to increase economic growth, commercial activity and best practices between the two entities. The MOU will help spur trade, facilitate information sharing and promote the use of the all-water route.”

Question 10. Are there any other details or related information you would like to emphasize in light of the expansion of the Panama Canal?

“No.”
Bibliography


The Panama Canal Expansion and SLC State Ports

A SPECIAL SERIES REPORT

Sujit M. CanagaRetna
Senior Fiscal Analyst
Southern Legislative Conference

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