Our Port System’s Mission and Background

- Founded by S.C. General Assembly in 1942:
  - Provide cost-competitive facilities
  - Facilitate Maritime Commerce
  - Work with customers, stakeholders
  - Remain self-sufficient
  - Authority structure gives notable flexibility

- Operates two (soon 3) public ports
- Charleston is 10th largest US seaport
  - $63 billion in cargo in 2012
  - 1.51 million shipping container units (TEUs) a year

- Economic impact of port operations
  - Statewide: $44.8 billion annually
  - Facilitates 260,800 jobs in diverse industries (1 in 11 jobs)
Port of Georgetown
South Carolina Inland Port

New rail service that lowers cost, lowers risk, and increases performance.

**Concept Details:**
- Full-service port terminal 212 miles inland from the Port of Charleston.
- Owned and operated by South Carolina Ports Authority.
- Service provided by Norfolk Southern.
- Chassis pool onsite.
- Grounding of containers to serve as short-term buffer.
- Import Loads: Estimated 6PM cut-off at NS Seven Mile Yard. Available at inland port the following morning.
- Export Loads: Estimated 6PM cut-off at inland port. Available at NS Seven Mile Yard the following morning.
- Planned opening late 2013.

**Benefits:**
- Lower inland cost exclusively offered via the Port of Charleston.
  - Lower transit cost.
  - Lower equipment cost.
  - Improved match-back service.
- Exceptional speed and reliability.
- Environmental benefit of increased freight tonnage moved/gallon of fuel.
- Ideal access for I-85 corridor plus southwest Virginia, western North Carolina, eastern Tennessee, and north Georgia.
- Ideal pivot point for clients serving the two largest markets in the region... Atlanta and Charlotte.
- Exporters in the region will find great value in an increased supply of centrally located empty containers.
- Importers will discover lower delivered cost and loaded matchbacks that optimize the supply chain.
94 Million Consumers

100 Mile Range
Population: 6,535,000
Key Cities: Asheville, Atlanta, Charlotte, Columbia, Knoxville, Spartanburg.

250 Mile Range
Population: 22,742,000
Key Additional Cities: Birmingham, Charleston (SC), Charleston (WV), Chattanooga, Greensboro, High Point, Lexington, Macon, Raleigh.

500 Mile Range
Population: 94,282,000
Key Additional Cities: Baltimore, Cincinnati, Cleveland, Columbus, Indianapolis, Louisville, Memphis, Pittsburgh, St. Louis, Tampa.
Driving Change: Bigger Ships

MSC Northern Justice
8,440 TEU / 1090’ LOA
At dock in Charleston / May 12, 2010

Maersk’s Triple-E
18,000 TEU/1,312’ LOA
Panama Canal is a Game Changer for the Port Industry

*Courtesy of Panama Canal Authority*
Panama Canal Expansion
Big ships are coming to Charleston today, as large as 9,500 TEU capacity to date. And the global fleet is upsizing.

<table>
<thead>
<tr>
<th>Vessel Size</th>
<th>Ship Counts at End of 2011</th>
<th>Ship Counts at End of 2015</th>
<th>Pct. change</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;10,000 TEU</td>
<td>118</td>
<td>280</td>
<td>137%</td>
</tr>
<tr>
<td>7,500-9,999 TEU</td>
<td>290</td>
<td>408</td>
<td>41%</td>
</tr>
<tr>
<td>5,100-7,499 TEU</td>
<td>463</td>
<td>504</td>
<td>9%</td>
</tr>
<tr>
<td>4,000-5,099 TEU</td>
<td>701</td>
<td>823</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Alphaliner
Soon To Be Calling USEC Ports

Vessels up to 14,000 TEU
1,300’ LOA
165’ Beam

BMW X5
Boeing 787
Yorktown Aircraft Carrier
9,000 TEU Vessel
14,000 TEU Vessel

70 Million
Pairs of adidas running shoes on a 14,000 TEU ship.
Charleston Harbor Post 45-Ft. Deepening Project
North American Emission Control Area (ECA)
Coal Conversion/Retirement

- SCE&G, Duke Power (Progress), Santee Cooper Converting or Closing 16 Units at 8 facilities.
- 3276 MW of Capacity Converted and/or Closed by 2018.
- Significant reductions in emissions
- Energy related CO2 emissions at a 19 year low, nationally.
EPA Tier 3 Vehicle Standards

- Proposed New Emissions Standards Phased in From 2017-2025
- Cars, Light, Medium, and Some Heavy Duty Passenger Vehicles
- 70% reduction in PM per vehicle
- 60% reduction in NOX per vehicle
- 2030 Cost of $3.4 B, Benefits of $23 B
Locomotive Fuel Standard

- From 500 ppm to 15 ppm, 97% SO2 reduction
Counties At Risk of Exceeding Ozone NAAQS if set at 70 ppb
(based on 2010-12 Design Values)

*These counties are part of a bi-state MSA/CSA. These SC monitors are not exceeding the standard but could be affected by being in the MSA/CSA.

Legend
- Ozone monitors
- Counties
- Counties at risk of exceedance

Note: The data represented on this map are subject to frequent changes. Although this map is believed to be fundamentally accurate, no guarantees as to its accuracy or completeness are expressed or implied. DHESC disclaims any liability with regards to this map.

Source: South Carolina Department of Health and Environmental Control Bureau of Air Quality

Date Saved: 4/4/2013 12:54:46 PM
Counties At Risk of Exceeding Ozone NAAQS if set at 65 ppb (based on 2010-12 Design Values)

Legend
- Counties
- Ozone monitors
- Counties at risk of exceedance

*These counties are part of a bi-state MSA/CSA. These SC monitors are not exceeding the standard but could be affected by being in the MSA/CSA.
Emerging Air Quality Issues

- Air Toxics
- EPA focus on Ports
- Mobile sources no longer get a pass
- The Air Quality Egg and personal monitoring
The Greenest Port in the SE

- First in the Southeast Clean Truck Program and Equipment Upgrades
- First in the Southeast Air Inventory
- Comprehensive Energy Audit
- Land Protection
- Oyster and Marsh Restoration
- Southeastern Wind Collaborative
- Southeastern Diesel Collaborative
- Coalition for Responsible Transportation
- Charleston Green Business Challenge