Overview of State Logistics Initiatives

- Governor’s Logistics Task Force (GLTF)
- Seven Portals Study
- North Carolina Maritime Strategy
- Logistics Coordinating Council (LCC)
- Reorganization/Transfer efforts
Top Location Selection Factors

1) Transportation Infrastructure
2) Existing work force skills
3) State & local tax scheme
4) Utility infrastructure
5) Land/building prices & supply
6) Ease of permitting and regulatory procedures
7) Flexibility of incentives programs
8) Access to higher education resources
9) Availability of incentives
10) State economic development strategy
House Bill 1005
Session Law 2007–551

Instructed the North Carolina Office Of State Budget and Management to
Develop a statewide logistics plan that addresses the State’s long-term economic, mobility, and infrastructure needs.
Governor’s Logistics Task Force

- Established by Executive Order 32 (Dec 2009)
- Extended via Executive Order 111—current sunset is March 31, 2012
- Task Force has completed its regional outreach efforts and are working to develop its final recommendations
- *Seven Portals Study* has been completed
The mission of the task force is to *strategically create jobs and recruit industry* by developing an efficient and cost effective vision plan for the seamless movement of *people, goods and information* throughout the state of North Carolina.
STATEWIDE LOGISTICS PLAN FOR N.C.

Governor’s Logistics Task Force Reports

• August 2010 Report to Governor
• January 2011 Report to the General Assembly
• February 2011 Report to the Governor
• November 2011 Report to the Governor—Request for an extension of the Task Force until March 31, 2012
• March 2012 Final Report to the Governor

http://www.ncdot.gov/business/committees/statewidelogistics/
Seven Portals Study

Idea:
Assess possible locations for transport-driven logistics portals statewide
Base them on the seven economic regions
Examine modal connections, land availability, economic growth impact potential, feasibility, benefits, up-fit costs, governance, partnerships
Do not reinvent the wheel

Themes:
From our back yard to your doorstep, worldwide
Easy and affordable access to transportation

Result:
Feasibility assessment (economics, land use, modal connections, Supporting commercial, educational and cultural activities)

Intended impact:
New knowledge economy-based enterprises (jobs)
Enhanced logistics connectivity
Improved, integrated, statewide transportation support
What drives each region’s economy?
- Agriculture
- Tourism
- Military

Where are the customers?
- International
- National
- Regional

Is the region prepared / cost to prepare?
- Rail
- Highways
- Air
- Maritime
- Utilities (Power / IT / Water–Sewer)

Who will govern / fund it?
- Private
- Public
- Public / Public
- Private / Public
Task Force Next Steps

• Review the final recommendations of the *Seven Portals Study*
• Review the findings of the Maritime Strategy Study
• Review the findings and recommendations of the Military Growth Task Force’s Defense Logistics Initiative study
• Review of information from statewide outreach efforts
• Produce final report
North Carolina Maritime Strategy Study

- Common theme across state was the need for a port presence in North Carolina
- Need for a third-party assessment
- Task Force recommended that NCDOT execute a contract
- AECOM, URS, and Eydo

http://www.ncmaritimestudy.com/
“How can NC become a portal to the global economy?”

- Economic Viability & Benefit
- Other State’s Port Status
- Shippers
- Industry Targets / Niche Markets
- Potential Site/s
- Water Side / Land Side Cost
- State & Local Impacts
- Public Outreach & Input
Today, US imports are driven by China trade

China’s entry into WTO was a game-changer…

…creating the need for a new, high-capacity, point-to-point pipeline for goods between Asia and North America
STATEWIDE LOGISTICS PLAN FOR N.C.

Panama Canal Expansion – a New Paradigm?
Maritime Study Scope

• Conduct an open evaluation of North Carolina’s position, opportunities and challenges as a portal for global maritime commerce;

• Examine the role of North Carolina ports in sustaining and strengthening the State’s economy;

• Obtain input from freight transportation, economic development, and community interests, and

• Identify specific strategies to optimize benefits received from the State’s investments in port and associated transportation infrastructure.
Study Outcomes

✓ Decision tool and process for evaluating port and related multi-modal investments
✓ Basis for long- and short-term investment strategy for more efficient, effective and safe movement of waterborne cargo in and out of the state
✓ Identification of priority projects
✓ Support for long-range planning
✓ Address institutional issues to approach maritime transportation issues in a more seamless manner
NC Freight Nodes and Facilities

- Note: agriculture exists across the state; the areas of dense agricultural production illustrated are intended to be representative

Source: AECOM/URS
Truck-Served NC Market Areas Benefitting from Highway Investment

Legend
- Truck markets anticipated to be captured by NC Ports, based on highway travel times
- Truck markets that may be captured by NC Ports depending on infrastructure investments, based on highway travel times
- Truck markets not anticipated to be captured by NC Ports, based on highway travel times
Refrigerated Cargo

- Updated forecast reflects stronger projection for this market
- Cost data and more detailed export data available

Source: AECOM, from IHS Global Insight projected growth and PIERS historical data
Grain Infrastructure

- New bulk grain terminal with 3.2 million bushels storage capacity and on-terminal rail with loop track
- Highway improvements to reach eastern NC soybean-producing counties within trucking distances – includes US 70 North Carteret Bypass

Source: AECOM
Wood Products Infrastructure

- New bulk wood pellet terminal with 55,000-ton storage capacity and on-dock rail with loop track
- Wood chips and breakbulk wood products can be accommodated within available terminal capacity
- Highway improvements to enhance access to timber areas in southeastern NC
- Rail service to timber areas in western NC on existing rail network

Source: AECOM
Container Infrastructure

- Expanded and modernized terminal at Port of Wilmington
- Channel deepening (most costly 51’ alternative evaluated for BCA)
- Highway improvements to enhance access to key population centers and intermodal terminals
- New intermodal terminal east of Charlotte

Source: AECOM
Containerized Cargo Infrastructure

Estimated Capital Cost ($millions, 2011)

- Highway network (thru 2040)
- Inland facilities (near term)
- Rail network (near term)
- Port and terminal improvements (near term)
- Berth and channel dredging (near term)
- Local rail access (immediate)
- Local highway access (immediate)
- Port and terminal improvements (immediate)
- Berth and channel dredging (immediate)
## Economic Development Opportunities

<table>
<thead>
<tr>
<th>Market</th>
<th>Economic benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain</td>
<td>Profit margins to growers of all Ag products</td>
</tr>
</tbody>
</table>
| Wood            | Maintain industry important to state economy  
Opportunity to diversify – pellets / chips / paper                                                                                                                                                    |
| Cold Storage    | Profit margins to producers  
Makes region more attractive to grocery distribution centers                                                                                                                                          |
| Containers      | Helps diverse set of NC shippers by improving vessel calls and container accessibility – compliments ref. containers                                                                                     |
| Ro/Ro & Lo/Lo   | Supports existing manufacturing industry  
Supports the Military  
Creates opportunities for wind and new manufacturers                                                                                                                                             |
Summary Schedule and Milestones

- **Project Kick-Off:** May 2011
  - Data Analysis
  - North Carolina Economic Context & Trade Flows

- Market Scenarios
- Alternatives Definition
- Alternatives Evaluation
- Evaluation / Decision Matrix

- Statewide Infrastructure Needs

- Working Draft: February 2012
- Final Report: April 2012
Military Reset Study/Defense Logistics Initiative

- Study regarding the maintenance, repair, and reset of military equipment (ground force specific)
- Developed with the NC Eastern Region Military Growth Task Force
- DOT has supported the initiative
Why North Carolina?

Traditional Depot-Level Maintenance Flow

\[ \text{Distance} = \downarrow \text{Efficiency} \]

Longer distance equals

- Greater energy consumption
- Larger carbon footprint
- Extended time

- Military Base
- Military Depot
- Port of Entry
**Why North Carolina?**

**Vision**

Proximity equals

- Lower energy consumption
- Reduced carbon footprint
- Less transport time

\[ \downarrow Distance = \uparrow Efficiency \]
State Transportation Logistics Coordinating Council

- Created by EO-85: [Signed March 25, 2011]
- Membership:
  - Secretary of Transportation (Chair)
  - Executive Director of the North Carolina Global TransPark
  - Chief Executive Director of the North Carolina State Ports Authority
  - President– North Carolina Railroad Company
  - Other persons as determined necessary by the Secretary
The Council is tasked with:
- Identifying areas for cooperation among the State’s transportation logistics entities, including improving the State’s transportation services
- Coordinating on projects to create or expand companies in North Carolina or to attract companies to the State
- Sharing of personnel and resources to the maximum extent practicable.

To date, the Council has met twice and discussed numerous opportunities.
Creation of a Freight Logistics Authority

**Purpose:** Guide, oversee, and synchronize investments in transportation infrastructure

**Method:** Take actions and advise the Governor about investments that will improve the state’s prosperity and quality of life.
Logistics Agency Consolidation

- The General Assembly, Logistics Task Force and the Governor all recommended consolidation of the state’s logistics assets.
- The General Assembly in 2011, realigned both the North Carolina State Ports Authority and the North Carolina Global TransPark under the authority of DOT:
  - NCSPA: Session Law 2011–145 (Section 14.6 (a) thru (k))
  - NCGTP: Session Law 2011–340
- Statewide Logistics Director
NC Ports Realignment

- Under the Type 2 transfer, Authority required to use state human resources and fiscal/budgeting systems [Session Law 2011-145 Section 14.6(a)]
  - The North Carolina State Ports Authority shall use the State's budgeting, accounting, and human resources systems and shall comply with laws and policies related to submitting budget requests to the Office of State Budget and Management.

- Realignment of the Authority within DOT and under the direct supervision of the Secretary of DOT [Session Law 2011-145 Section 14.6(h)]
  - The North Carolina State Ports Authority is hereby created within the Department of Transportation and shall be subject to and under the direct supervision of the Secretary of Transportation. It shall be governed by a board composed of nine members and hereby designated as the Authority. Effective July 1, 1983, it shall be governed by a board composed of 11 members and hereby designated as the Authority.
NC Ports Transition Process

3 Prong Process: NCDOT/NCSPA Workteams, Board Interaction, Strategic Planning

- **Board Interaction**
  - 8 member subcommittee: 4 BOT members, 4 NCSPA members (future plans to incorporate GTP board as well)
  - Jan 10th: Initial Meeting

- **Workteams**
  - 27 in total—Made up of both NCDOT and NCSPA staff (roughly 60 people) representing all areas of both organizations
  - Groups are working to find areas of efficiency and developing relationships with their respective counterparts

- **Strategic Planning**
  - Development of an integrated and comprehensive strategic business plan with measurable deliverables
  - 5/10 Year Workplan
  - NCDOT 2040 Strategic Plan
“If you don’t know where you are going, you might end up some place else.”

-Yogi Berra
Grain and Soybeans

- Market capture forecast reflects stronger projections for soybean exports from NC
- Stakeholder input provided better data on current export volumes
- Market report from soybean association provided additional guidance

### Annual Tonnage

- **Bulk grain in short tons**
  - Grain Exports
  - Grain Imports

Grain imports not anticipated

Source: AECOM, from IHS Global Insight projected growth and PIERS historical data
Ro/Ro and Oversize Cargo

Updated forecast reflects stronger projection for Ro/Ro and oversize cargo market opportunity

Better data on current export volumes

Cost data completed since last projection

Source: AECOM, from IHS Global Insight projected growth and PIERS historical data
Wind Power Cargo

**Annual Tonnage**

- Illustrative projection of construction and maintenance of offshore wind farm, sized to assume 12.5% of state’s retail electricity.

*Source: AECOM, based on current dimensions of equipment, NC policy and market maturation forecasts.*
Wood Pellets

- Assumes two small pellet facilities locate in the state and use in-state ports.
- Upside opportunity for greater volumes as some plants have higher volumes, but would need to be supported by inland distribution network.

**Wood Pellet Exports**

**Wood Pellet Imports**

**Wood pellets in short tons**

- 2010: 100,000
- 2020: 200,000
- 2030: 300,000
- 2040: 400,000

**Wood pellet imports not anticipated**

*Source: AECOM, from IHS Global Insight projected growth and PIERS historical data*
Other Wood Products

- Updated forecast reflects stronger projection for growth in wood products
- Better industry data on current total NC export volumes
- Cost data completed since last projection

**Wood products in short tons**

- **Annual Tonnage**

<table>
<thead>
<tr>
<th>Year</th>
<th>Wood Product Exports</th>
<th>Wood Product Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2020</td>
<td>400,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2030</td>
<td>700,000</td>
<td>150,000</td>
</tr>
<tr>
<td>2040</td>
<td>1,000,000</td>
<td>200,000</td>
</tr>
</tbody>
</table>

**Source:** AECOM, from IHS Global Insight projected growth and PIERS historical data
Containers

Containers in TEUs

- No significant change from prior forecast
- Good balance of imports and exports

Source: AECOM, from IHS Global Insight projected growth and PIERS historical data
Chemicals and Phosphates

- Organic growth of existing market
- No significant changes from prior forecast

Annual Tonnage

Source: AECOM, from IHS Global Insight projected growth and PIERS historical data
Grain Infrastructure

Estimated Capital Cost ($millions, 2011)

- Highway network (thru 2040)
- Rail network (near term)
- Local rail access (immediate)
- Local highway access (immediate)
- Port and terminal improvements (immediate)
Ro/Ro & Oversize Cargo Infrastructure

Estimated Capital Cost ($millions, 2011)

- Highway network (thru 2040)
- Inland facilities (near term)
- Rail network (near term)
- Port and terminal improvements (near term)
- Local rail access (immediate)
- Local highway access (immediate)
- Port and terminal improvements (immediate)
Wood Pellet Infrastructure

Estimated Capital Cost ($millions, 2011)

- Highway network (thru 2040)
- Rail network (near term)
- Local rail access (immediate)
- Local highway access (immediate)
- Port and terminal improvements (immediate)
Other Wood Products Infrastructure

- Highway network (thru 2040)
- Rail network (near term)
- Local rail access (immediate)
- Local highway access (immediate)
- Port and terminal improvements (immediate)
Ro/Ro & Oversize Cargo Infrastructure

- New Ro/Ro and heavy cargo terminal (21 acres) - additional area could accommodate upside wind power opportunity
- Two 200-ton cranes
- Inland ramps at targeted locations (2 assumed)
- Highway improvements focused primarily on US 70 corridor
- Rail access

Source: AECOM
## Infrastructure Cost for Containers

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Radio Island RTG + 45’</th>
<th>Radio Island RTG + 51’</th>
<th>POW RTG + 45’</th>
<th>POW RTG + 47’</th>
<th>POW RTG + 51’</th>
<th>Southport ASC + 51’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berth/dredging</td>
<td>$11</td>
<td>$68</td>
<td>$197</td>
<td>$315</td>
<td>$427</td>
<td>$362</td>
</tr>
<tr>
<td>Port/ terminal</td>
<td>$395</td>
<td>$395</td>
<td>$272</td>
<td>$287</td>
<td>$301</td>
<td>$1,170</td>
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<tr>
<td>Highway network</td>
<td>$2,925</td>
<td>$2,925</td>
<td>$2,611</td>
<td>$2,611</td>
<td>$2,611</td>
<td>$4,345</td>
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<tr>
<td>Highway access</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$17</td>
</tr>
<tr>
<td>Rail network</td>
<td>$204</td>
<td>$204</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Rail access</td>
<td>$5</td>
<td>$5</td>
<td>$1</td>
<td>$1</td>
<td>$1</td>
<td>$6</td>
</tr>
<tr>
<td>Inland facilities</td>
<td>$131</td>
<td>$131</td>
<td>$131</td>
<td>$131</td>
<td>$131</td>
<td>$131</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,694</strong></td>
<td><strong>$3,751</strong></td>
<td><strong>$3,212</strong></td>
<td><strong>$3,345</strong></td>
<td><strong>$3,471</strong></td>
<td><strong>$6,091</strong></td>
</tr>
</tbody>
</table>
Initial Economic Benefit Findings

• Significant spin-off benefits for the general public
• Preliminary BCA indicate that there are viable opportunities for each market scenario inclusive of the requisite long-term land improvements
• Significant travel time savings across most market scenarios
• Other benefit types are more balanced – including direct benefits to shippers as well as to travelers in the state
• Logistics benefits are greatest for the container scenario
• Strong support for the cold storage scenario
• Grain and wood products scenarios successfully support important sectors of the North Carolina economy