

SEVEN PORTALS STUDY

*An Investigation of Economic Development in
North Carolina Through Logistics Villages*

Southeast Region

Final Report



December 31, 2011

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<p>Abstract</p> <p>The goal of this study was investigating potential logistics villages within one of the seven economic development regions across the state, specifically the Southeast Region. The initial focus was proximity for air, rail, and highway connectivity at potential sites, but the study discovered other possibilities for successful villages. Each village is evaluated for strengths, weaknesses, and needs, with emphasis on identifying what infrastructure improvements are needed to support such a village at that location. The study does not recommend specific sites above others. The major findings from this study are incorporated into a master report covering the entire state titled <i>Seven Portals Study – An Investigation of How Economic Development Can be Encouraged in North Carolina Through Infrastructure Investment</i>.</p> <p>Through research, data analyses, and outreach efforts to businesses, economic development offices, local officials, and planning offices, five potential logistics villages, including the Port of Wilmington and the concept of a virtual logistics village surrounding the port and Wilmington International Airport, were investigated for their strengths, weaknesses and needs in support of major shipment activity. The region is focusing business development in these areas: building products, advanced textiles, aerospace industry, distribution and logistics, metalworking, food processing and agri-industry, military contractors, biotechnology, and alternative energy.</p>			
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Seven Portals Study

An Investigation of Economic Development in North Carolina Through Logistics Villages

SOUTHEAST REGION REPORT

By

Dr. Joyendu Bhadury, Ph.D.

Associate Dean, Graduate Programs and Research, Bryan School of Business and Economics
University of North Carolina Greensboro

Samuel P. Troy

Executive in Residence, Bryan School of Business and Economics
University of North Carolina Greensboro

With Assistance From:

D. Thomas May

Assistant to the Dean for Economic Development, Bryan School of Business and Economics
University of North Carolina Greensboro

Philip Weikel

Research Assistant, MBA Candidate, Bryan School of Business and Economics
University of North Carolina Greensboro

For the

**Governor's Logistics Task Force
and**

The North Carolina Department of Transportation

Final Report

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Disclaimer

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UNC-Greensboro Team

Joyendu Bhadury, Ph.D. - Associate Dean, Graduate Programs and Research, Bryan School of Business and Economics, lead investigator and lead writer.

Samuel P. Troy - Executive in Residence, Bryan School of Business and Economics, investigator and writer.

D. Thomas May - Assistant to the Dean for Economic Development, Bryan School of Business and Economics, advisor.

Philip Weikel - Research Assistant, MBA Candidate, Bryan School of Business and Economics, investigator and writer.

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List of Acronyms

BCC: Brunswick Community College
BRAC: Base Realignment and Closure Commission
CAGR: Compounded Annual Growth Rate
CFCC: Cape Fear Community College
CGIA: Center for Geographic Information and Analysis
CRO: Research Contract Organization
CSX: CSX Corporation at www.csx.com
DOD: Department of Defense
ESRI: Environmental Systems Research Institute at www.esri.com
E/W: East-West
FAA: Federal Aviation Administration
FAY: Fayetteville Regional Airport
FIS: Federal Inspection Services
FORSCOM: U.S. Army Forces Command
FTZ: Foreign Trade Zone
GIS: Graphic Information Systems
ILP: International Logistics Park of North Carolina
ILM: Wilmington International Airport
ILS: Instrument Landing System
ITRE: Institute for Transportation Research and Education
L-M: Laurinburg-Maxton
MEB: Laurinburg-Maxton Airport
MOTSU: Military Ocean Terminal at Sunny Point
MSA: Metropolitan Statistical Area
NCDOC: North Carolina Department of Commerce
NCDOT: North Carolina Department of Transportation
NCIT: North Carolina International Terminal
NCSE: North Carolina's Southeast Region
NCSPA: North Carolina State Ports Authority
NCSU: North Carolina State University
N/S: North-South
PNG: Piedmont Natural Gas
PPD: Pharmaceutical Product Development Company
PWC: Public Works Commission
RCC: Richmond Community College
RR: Railroad
RTP: Research Triangle Park
SBTDC: Small Business and Technology Development Center
TIP: Transportation Improvement Plan
UNCG: University of North Carolina at Greensboro
UNCW: University of North Carolina at Wilmington
USARC: United States Army Reserve Command

Executive Summary

The goal of this study was investigating potential logistics villages within one of the seven economic development regions across the state. The initial focus was proximity for air, rail, and highway connectivity at potential sites, but the study discovered other possibilities for successful villages. Each village is evaluated for strengths, weaknesses, and needs, with emphasis on identifying what infrastructure improvements are needed to support such a village at that location. The study does not recommend specific sites above others. The major findings from this study are incorporated into a master report covering the entire state titled *Seven Portals Study – An Investigation of How Economic Development Can be Encouraged in North Carolina Through Infrastructure Investment*.

North Carolina's Southeast Region (NCSE) is a study in contrasts. While the area supports a strong agricultural, wood products and food processing base with such companies as Smithfield Foods, International Paper Company and Campbell Soup, it is also home to high tech companies like GE Nuclear Energy, Pharmaceutical Product Development Company (PPD) and Corning. While the increasing importance of the military is especially important in the Cumberland, Sampson, Hoke and Robeson County areas, tourism is important in Pender, New Hanover and Brunswick Counties. November 2010 unemployment rates range from a low of 8.4% in Sampson County, significantly below average for North Carolina and the US, to a high of 15.7% in Scotland County, substantially above the unemployment for North Carolina and the US. In 2011, five (5) of the counties in NCSE are Tier 1 counties while three (3) are Tier 3 counties. However, one theme appears to be consistent throughout the region: the importance of logistics to economic development. NCSE is:

- strategically located mid-way between Maine and Miami.
- home to the Port of Wilmington providing convenient access for international trade.
- supported by a good and growing network of interstate and state highways providing good trade routes to the North, South and West.
- serviced by two well-maintained airports (Wilmington International and Fayetteville Regional)
- accessible to CSX, Norfolk Southern, and local short line railroads.
- populated with a workforce with a strong work ethic. Three state universities, two private colleges, and eight community colleges are readily available and willing to support workforce development.
- endowed with significant amounts of land ready for development that has, for the most part, infrastructure available to support immediate development (water, sewer, electricity, gas and communications).

While all of these things are not uniformly available across the region, their near proximity to these attributes will serve as the foundation for future economic development throughout the region—a future strong in supply chain logistics.

Agriculture and manufacturing have a long history in the region. The region currently employs some 40,000 people in manufacturing. Other industries employing a large number of workers are agri-business and the food processing industry. Additionally, a significant number of farmers work on fertile land that allows some NCSE counties to be ranked among the top farm producing counties in the nation. With regard to the future, NCSE hopes to build upon this existing base by focusing on nine industrial clusters:

- **Building Products**
- **Advanced Textiles**
- **Distribution and Logistics**
- **Building and Marine Trades**
- **Metalworking**
- **Food Processing and Agri-Industry**
- **Military Contractors**
- **Biotechnology**
- **Alternative Energy**

In addition, NCSE is considering the **Aerospace Industry** as another focus cluster.

While NCSE has a primary objective of focusing “on short, immediate and long-term economic development strategies aimed at sustainable job creation and industrial investment,”¹ it has several goals or objectives that support the creation of a “Logistics Village” in the region: **International Marketing, Regional Workforce Analysis, Engagement with the Base Realignment and Closure Commission (BRAC) Regional Task Force, Renewable Energy** and the **Distribution and Logistics Hub Initiative**. Attainment of each of these goals or objectives will require NCSE to have a strong foundation in logistics to support a vibrant economy and help the region increase its position in a global marketplace.

The Bryan School of Business and Economics, UNCG, was asked to review four (4) possible sites in North Carolina’s Southeast Region (NCSE) for the potential establishment of a “Logistics Village”: **Laurinburg-Maxton Airport (MEB); Fayetteville Regional Airport (FAY); International Logistics Park of North Carolina (ILP)** and **Wilmington International**

¹ North Carolina’s Southeast, Strategic Marketing Plan, 2010-2011 p. 10

Airport (ILM). As a result of numerous interviews and research conducted to evaluate the four designated sites, the research team added a fifth possible site, a **“Virtual Logistics Village” for the Greater Wilmington Area**. Each site is unique and each offers different attributes that could support the establishment of a “Logistics Village.”

- **Laurinburg-Maxton Airport (MEB)** The Laurinburg-Maxton Airport, the semi-finalist site for consideration as North Carolina’s Global TransPark, is located entirely in Scotland County but is immediately adjacent to Robeson County and is operated by the Laurinburg-Maxton Airport Commission that reports to the governing bodies of the cities of Laurinburg and Maxton. MEB offers significant opportunity for development as a result of the availability of developable land, adequate and improving roads, and ready access to most infrastructural needs. In addition, as a direct result of its strategic physical location, MEB is in a position to take advantage of its existing interstate link to the Port of Charleston making MEB an attractive site as a distribution center for both North and South Carolina as well. The site is also located very close to rapidly expanding Ft. Bragg and Camp McCall and this proximity offers many possibilities for future economic development in the area. With this said, the airport lacks a strategic plan and facilities need major costly improvements. While there are immediate plans and funds available to improve two of the three runways, the improvements do not fill all the needs and requirements to make MEB truly competitive. In addition, the area has access to CSX, the CSX Hamlet Yard (the junction of CSX north-south and east west routes in NC), and short line railroads but to take full advantage of these resources costly rail connections are needed. Finally, while most infrastructure needs are available at the MEB site, much of the infrastructure needs upgrades and retrofitting. In order to maximize the potential this area offers, the area needs a champion (a private company or companies, government or the military) that is in a position to provide the necessary resources for upgrades and improvement.
- **Fayetteville Regional Airport (FAY)** The well maintained Fayetteville Regional Airport (FAY) is located in Cumberland County and is operated by an Airport Director for the City of Fayetteville. “Proximity” is the key word needed to understand the Fayetteville Regional Airport area and its potential as a “Logistics Village.” The area is geographically well located, has access to CSX, Norfolk Southern and short line railroads. While the connections are not on the airport site, they are all located within the City of Fayetteville. The area is also in close proximity to major interstate highways, the Port of Wilmington, Research Triangle Park, recreational facilities and developable land including shovel ready sites. In addition, and perhaps most significantly, it is located near an expanding Ft. Bragg. This expansion of Ft. Bragg is a result of the Base Realignment and Closure Commission (BRAC). By 2011, Ft. Bragg will be home to the U.S. Army Forces Command (FORSCOM) and the Army Reserve Command (USARC). These moves will have a major impact on economic development in the immediate Fayetteville area and the entire NCSE. Soldiers leaving the military at Ft. Bragg also provide the area with plentiful access to a skilled workforce with good work ethic. For the area to reach its full potential as a “Logistics Village,” the airport’s strategic plan needs to be integrated into the overall economic development efforts of Fayetteville and Cumberland County. FAY also needs better access to capital resources for infrastructure

improvements, including cargo facilities, which will enhance economic development efforts. Similar to Laurinburg-Maxton Airport, FAY needs a champion to stimulate development, with the military being the most likely candidate for the foreseeable future.

- **International Logistics Park (ILP)** The International Logistics Park of North Carolina (ILP) is built on the Columbus/Brunswick County line on US 74/76 just 15 miles from the Port of Wilmington. A joint venture between Brunswick and Columbus Counties, this is an as of yet undeveloped 1100 acre park that hopes to capitalize upon the “At Port” Logistics Model promoted by the Port of Wilmington. The potential for ILP is tremendous as the result of the vast amount of developable land that includes shovel ready sites. Close proximity to the Port of Wilmington and Wilmington International Airport is also an attribute. Utilities, gas, water electricity and sewer are readily available. Existing roads and planned road projects make ILP very accessible. An added tax advantage for ILP is Tier 1 status for all new projects. A major concern for this site is its risk exposure to the future viability of the Port of Wilmington. ILP also lacks a rail connection; however, located directly across the street is the site of another large industrial park, the Mid-Atlantic Logistics Center, that has CSX rail access. Marketing these two large sites together will enhance the areas potential as a “Logistics Village.” Immediate construction of a lighted intersection at the entrance of these two sites will make the two sites more desirable. Finally, leveraging and promoting together all of the logistics assets of the Wilmington area, including these two industrial sites, creates a very creditable site for a “Logistics Village.”
- **Wilmington International Airport (ILM)** The Wilmington International Airport (ILM) is located in New Hanover County and serves southeast North Carolina. The airport, conveniently located off I-40 and I-140, is a modern, underutilized airport that is operated by the New Hanover County Airport Authority. It is a full-service airport that offers commercial, cargo and general aviation facilities. In addition, it provides a “state of the art” Federal Inspection Services (FIS) facility. Runways are adequate and expandable to meet demand. Shovel ready industrial sites that meet the Port of Wilmington’s “At Port” Logistics Model criteria are available at the airport and larger tracks of developable land are located nearby in Pender, Brunswick and Columbus Counties. ILM has existing average to above average basic infrastructure (communications, water, sewer and power). The airport also has at-site rail service with an indirect link to the Port of Wilmington. In addition, the high quality of life in the area provides the ability to attract highly skilled workers. However, a weakness for ILM, like the nearby International Logistics Park, is its risk exposure to the future viability of the Port of Wilmington. Despite this possible weakness, leveraging and promoting together all of the logistics assets of the Wilmington area, including ILM, creates a very creditable site for a “Logistics Village.”
- **A “Virtual Logistics Village” for the Greater Wilmington Area** The final assessment is for a “Virtual Logistics Village” from the Greater Wilmington area that comprises all logistics assets of the region and is coordinated by a centralized facilitating body to work synergistically as a unified and coherent institution. The Wilmington metro area is composed of three counties: New Hanover, Brunswick and Pender. In addition, Columbus County is in close proximity to the Wilmington area and is an equal partner in

the development of the International Logistics Park located on the Brunswick/Columbus County line. The area is home to the Port of Wilmington and Wilmington International Airport. Also, CSX rail access is available as are abundant trucking services. Developable land parcels of all sizes are found in the metro area and many are shovel ready. Most of the sites are located within the three major industrial parks: International Logistics Park, Mid-Atlantic Logistics Center, and the Pender Commerce Park. Metro Wilmington also has average to above average basic infrastructure (communications, water, sewer and power) to accommodate growth. Area road access is good and getting better with planned improvements. Finally, as a result of the area's quality of life, skilled labor is available and, if specific skills are needed, area educational institutions stand ready to develop needed skills. As a direct result of all these factors, the Wilmington area is strategically positioned to capitalize upon the Port of Wilmington's "At Port" Logistics Model and thus become a "Virtual Logistics Village". An inactive Foreign Trade Zone (FTZ) is available at the Port and, as a result, sub-zone status is possible at other area sites. While all components of the "Virtual Logistics Village" are not located in one spot in the metro area, the major components of a village are found in close enough proximity to each other in the Wilmington area. Therefore, in order to create a "Virtual Logistics Village" some infrastructure needs must be addressed and area leaders need to work together and cooperatively leverage regional logistics assets to create synergy in facilitating regional economic development. In addition, leaders should explore the establishment of a "facilitation" group similar to the Aerotropolis Leadership Board in the Piedmont Triad Region. The creation of this "Virtual Logistics Village" will truly allow the Wilmington area to benefit from a global economy. However, there remains one major risk to the successful implementation of a "Virtual Logistics Village"; in order for it to flourish, the Port of Wilmington must remain viable now and far into the future.

In conclusion, as a result of the extensive research into the area conducted by Bryan School professionals and 14 separate interviews with 34 different people representing various organizations in NCSE Region, one fact became evident. In order for NCSE to truly benefit from global trade and be a true participant in the global economy, a viable Port of Wilmington is a necessity. On December 10, 2010, the NC Department of Environment and Natural Resources recently took a giant step forward in this direction when it announced that the Department will partner with the federal government to study the feasibility of improving the Port of Wilmington in order to accommodate larger ships and make the Port of Wilmington more accessible to those ships².

² NC Department of Environment and Natural Resources, *Port of Wilmington Upgrades Could Allow for Larger Vessels, Increased Traffic*. Press Release, December 10, 2010.

1 Introduction

Members of the Bryan School of Business and Economics, UNCG, were asked to review four (4) possible sites in North Carolina’s Southeast Region (NCSE) for the potential establishment of a “Logistics Village”: **Laurinburg-Maxton Airport (MEB)**; **Fayetteville Regional Airport (FAY)**; **International Logistics Park of North Carolina (ILP)** and **Wilmington International Airport (ILM)**. In addition to conducting extensive research into the area, Bryan School professionals conducted 14 separate interviews with 34 different people representing various organizations in NCSE Region. As a result of the interviews and additional research, the team added a fifth area to explore for a possible “Logistics Village,” the **“Virtual Logistics Village” for the Greater Wilmington Area**.

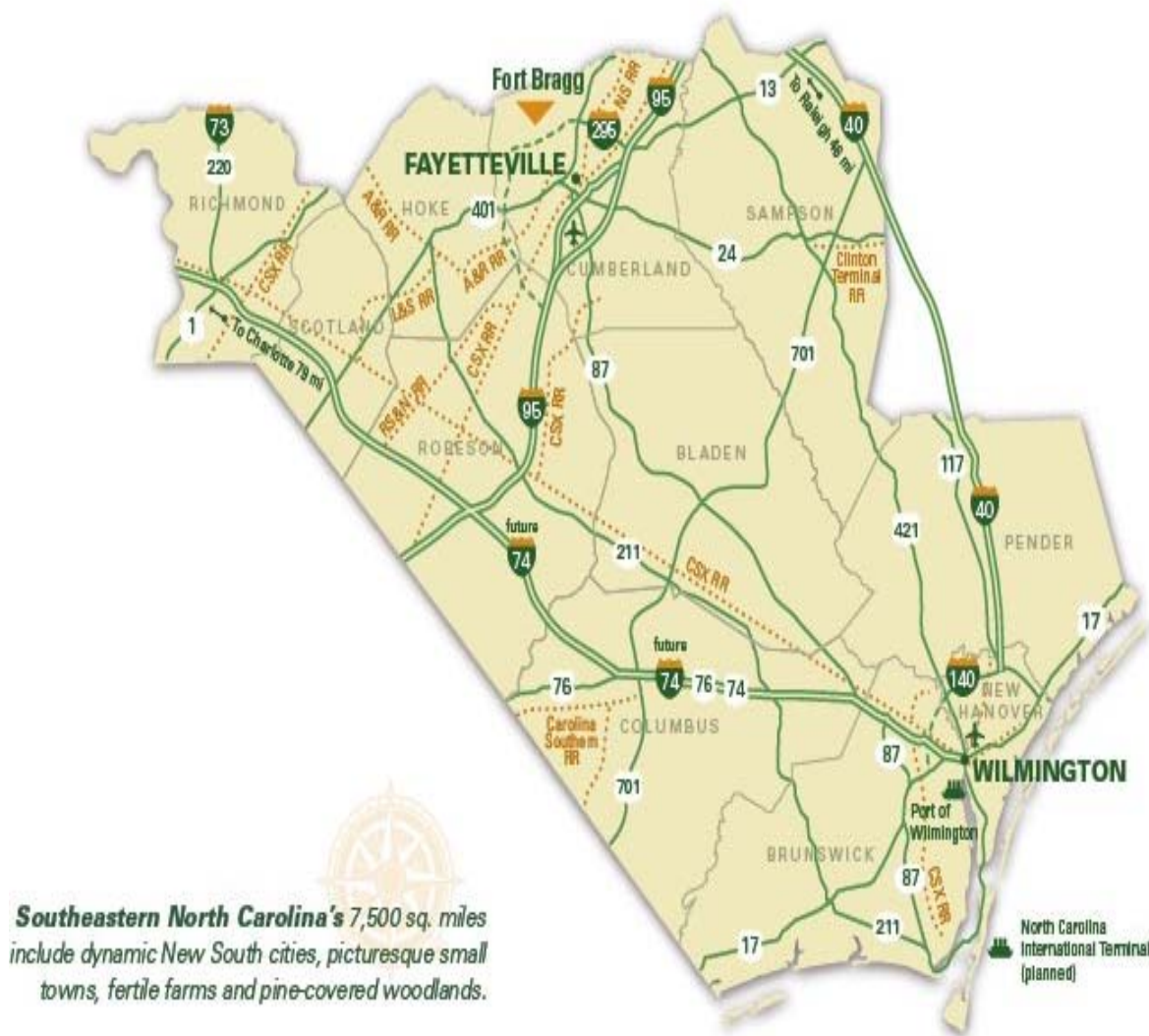
1.1 *Overview of the Region*³

North Carolina’s Southeast Region is composed of 11 counties stretching from the Atlantic Ocean to Sandhills (see Figure 1-1: Southeast Regional Map). The Southeast is home to the Port of Wilmington, North Carolina’s international container port complex. The region also encompasses Fort Bragg, now among the U.S. Army’s largest and most strategically important bases. Over one million people live in the region (See Table 1-1: Population Trends by County). Its growing population includes newly arriving residents from around the world at all stages of life and career. The region’s workforce, which now numbers nearly 500,000 people includes a diverse cross-section of workers engaged in agriculture, wood products, manufacturing, wholesale trades (i.e., distribution), construction, healthcare, government and the professions. Top private employers include GE, Smithfield Foods, Goodyear Tire & Rubber, Wal-Mart Corp., Pharmaceutical Product Development Company (PPD), Inc., and International Paper. The region’s unique network of multi-modal transportation assets continues to spur economic advantages. The Port of Wilmington, which connects firms across the state to buyers and suppliers around the world, makes the Southeast North Carolina’s “gateway to the global economy.” State and federal governments have also invested funds on highways in the Southeast Region, with new Interstate extensions around Fayetteville and Wilmington complementing I-40, I-95 and the still-in-progress I-73/74 corridor. The region’s utility infrastructure is undergoing transformation as Progress Energy’s Sutton Plant converts from coal to natural gas in a move that boosts regional natural gas capacity while serving the long-term interests of the environment. To varying degrees areas of NCSE are accessible to CSX, Norfolk Southern and local short line railroads (See Figure 1-2: Southeast Railroad Map). Eight campuses of the North Carolina Community College System serve business, industry and residents of all ages with an innovative, responsive catalogue of affordable education and training programs. Three public universities and two private colleges support Southeastern North Carolina’s global economic competitiveness through research, instruction and extension. Factors contributing to the quality of life for those who live and work in the region include temperate climate, available waterways, historical attractions and ample outdoor recreational amenities. In 2011, five (5) of the eleven (11) counties in the region are Tier 1 counties and as of November

³ Adapted from North Carolina’s Southeast Regional Profile, page 4

2010 seven (7) of the eleven counties have unemployment rates that exceed the state average of 9.9% (See Table 1-2: Regional Labor Statistics). For a complete list of available building sites in the region, refer to North Carolina's Economic Development Intelligence System (EDIS) website at <https://edis.commerce.state.nc.us/EDIS/page1.html>.

Figure 1-1: Southeast Regional Map⁴



⁴ http://ncse.org/display_map_regional_details.php

Table 1-1: Population Trends by County⁵

County	2000 Population	2000 Urban	2000 Rural	2009 Population	2014 Population
Bladen	32,278	3,582	28,696	32,838	32,504
Brunswick	73,143	24,735	48,408	109,208	133,362
Columbus	54,749	6,406	48,343	54,784	54,513
Cumberland	302,963	264,583	38,380	309,874	314,692
Hoke	33,646	14,640	19,006	45,754	52,787
New Hanover	160,307	152,930	7,377	196,667	217,451
Pender	41,082	3,243	37,839	53,508	61,253
Richmond	46,564	25,229	21,335	46,898	46,645
Robeson	123,339	42,540	80,799	130,775	133,969
Sampson	60,161	8,907	51,254	65,080	67,516
Scotland	35,998	16,980	19,018	37,002	36,511

Figure 1-2: Southeast Railroad Map⁶



⁵ <https://edis.commerce.state.nc.us/EDIS/demographics.html>

⁶ http://www.bytrain.org/quicklinks/pdf/nc_railmap_10.pdf

Table 1-2: Regional Labor Statistics

County	2011 County Tier Designation ⁷	November 2010 Unemployment Rates ⁸
Statewide	-	9.9%
Bladen	1	11.8%
Brunswick	3	11.2%
Columbus	1	12.1%
Cumberland	2	9.2%
Hoke	2	9.4%
New Hanover	3	9.2%
Pender	3	10.7%
Richmond	1	12.7%
Robeson	1	12.1%
Sampson	2	8.4%
Scotland	1	15.7%

1.1.1 North Carolina's Southeast Regional Economic Development Marketing Organization (NCSE)⁹

NCSE has targeted nine (9) industry sectors and is evaluating the addition of the Aerospace Industry. Refer to Tables 1-3, 1-4, and 1-5 for NCSE's Industry Overview, Employment Overview, and a review of Worker Travel Time.

- **Building Products:** Southeastern North Carolina has a large number of building product manufacturers and distributors. The region is an ideal location for these companies due to overall population and business growth in the region. The Fayetteville and Wilmington areas are two of the fastest growing areas in North Carolina. Wood products have always been a strong industry sector in the region, and there are over 75 wood products companies located here, making products such as wallboard, trusses, doors, cabinets, lumber, and panels. The Port of Wilmington allows for access for importing and exporting of wood and other raw materials.
- **Advanced Textiles:** Southeastern North Carolina has a long and productive history in the textile industry. Over the past decade, a shift from traditional weaving and sewing textiles to advanced and technical non-weaving textiles has occurred. Advanced and performance textiles are more automated and provide a variety of products in the

⁷<http://www.nccommerce.com/en/BusinessServices/SupportYourBusiness/Incentives/CountyTierDesignations/CountyTierDesignations2011.htm>

⁸ http://www.ncesc1.com/PMI/Rates/PressReleases/County/NR_Nov_10_CountyRates_M.pdf

⁹ Material for the targeted industries is quoted from the "2010-2011 Strategic Plan for North Carolina's Southeast"

region, including military uniforms and equipment, synthetic fibers, environmental protection products, industrial and automotive filters, and clothing. As a leading state in textile manufacturing, North Carolina has a number of resource organizations to assist companies in this industry sector.

- **Distribution & Logistics:** Southeastern North Carolina has a growing population of nearly 1.1 million people and a diverse industry base of more than 30 Fortune 500 companies. The region's geographic location midway on the east coast provides distribution access and logistics efficiencies for 9 companies engaged in manufacturing, assembly, and retail distribution. The region has a three-tiered, interlinked distribution model: 1) At-Port location offers buildings and sites within 20 miles of the Port of Wilmington. 2) Interstate corridors offer inland locations along three interstates – I-40, I-95, and I-74. 3) The region offers close proximity to key regional markets, including Charlotte, NC, Raleigh, NC, Columbia, SC, and Atlanta, GA. Furthermore, North Carolina's Southeast Regional Economic Development Marketing Organization is supportive of the completion of the feasibility study of a deeper water access port in Brunswick County and supports the hypothesis that this port will be critical to ensure North Carolina's strength in the global economy in the future.
- **Boatbuilding and Marine Trades:** Southeastern North Carolina is an excellent location for boatbuilding and marine companies. The region has a history of craftsmanship in boat construction and possesses a skilled workforce in this industry sector. The region's natural proximity to the Atlantic coast, and the many beaches, waterways, intra-coastal waterway, lakes, and rivers provide a ready market and a ready location for construction and testing. North Carolina's Industry Boating Services organization provides technical assistance and helps companies match up to potential suppliers and customers.
- **Metalworking:** Southeastern North Carolina has a cluster of metal product manufacturing companies that make a range of products, including steel coils, attic fans, aluminum fencing, grills, steel packing straps, metal buildings, pipe fittings, cranes, and nails. Overall, North Carolina has over 150,000 people employed in metalworking industries. Community colleges in the region offer customized worker and classroom training in welding and metal fabrication and technology. Machining technology and robotics programs are also available as well.
- **Food Processing and Agri-Industry:** Southeastern North Carolina has more than 20,000 people employed with food processing companies. Example of products made/grown here include pork, poultry, sauces, food/drink ingredients, value-added sweet potato products, peanuts, soybean oil, grapes, tobacco, and barbeque. The region has several of the top farm income producing counties in the nation. The region has long been known for its productive land and innovative agricultural companies and farms. Wineries and vineyards are a growth sector in the region, due to the area's fertile loamy soils that are ideal for grapes, as well as blueberries. North Carolina annually exports more than \$2 billion of agricultural products that are easily transported over a good system of interstate highways and through the Port of Wilmington.

- Military Contractors:** Southeastern North Carolina has a long heritage with the presence of military installations in the region. Ft. Bragg, located near Fayetteville, is one of the nation's largest and most important ARMY installations. Ft. Bragg hosts the 82nd Airborne Division and also the U. S. ARMY Special Operations Command, and Pope Air Force Base is located adjacent to Ft. Bragg. By 2011, U.S. ARMY Forces Command (FORSCOM) and the ARMY Reserve Command (USARC) will be fully relocated to Ft. Bragg as part of the BRAC (Base Realignment and Closure Commission). These moves are expected to bring many new personnel and contractors to the region. The southeast region has a number of resources to assist military contractor companies that have interest in the region, including the Military Business Center with its main facility in Fayetteville, BRAC Regional Task Force, and the Defense and Security Accelerator.
- Biotechnology:** Southeastern North Carolina contains several opportunities for emerging and established biotechnology companies. Wilmington has one of the largest clusters of research contract organizations (CRO) in the state and nation. Additionally, the University of North Carolina at Wilmington is developing a \$30 million marine biotechnology research center to take advantage of the region's proximity to the coast. Agricultural biotech research is growing due to the region's strong agricultural base and network of universities and community colleges engaged in biotech research and business assistance through Bio-accelerators. The North Carolina Biotechnology Center has a regional office to lead development in this sector.
- Alternative Energy:** Southeastern North Carolina is now home to emerging and diversified energy companies. Examples of alternative energy development include bio-fuels – the state's first large-scale ethanol production facility will be operational in early 2010 – bio-mass and animal waste regeneration; solar panel and wind turbine component manufacturing; and solar panel fields. DuPont is investing in a new plant to make tedlar, a film backing for solar panels, and GE is underway with nuclear energy research and development and component manufacturing. Initial research into wind energy development off the coast of North Carolina is also underway.
- Evaluation of Aerospace as Targeted Industry Cluster:** The arrival of Spirit AeroSystems to the Global TransPark and Boeing Corp. to North Charleston, along with the longtime presence of GE Aircraft Engines in Wilmington and key aviation assets of the U.S. Army at Fort Bragg, has led Southeast leaders to analyze the viability of aerospace operations as a potential target industry cluster for the region. NCSE will complete an analysis of this sector in the region and plan a marketing initiative to target companies in this sector.

Table 1-3: Industry Overview for the Region¹⁰

2009 Employment	Bladen	Brunswick	Columbus	Cumberland	Hoke	New Hanover	Pender	Richmond	Robeson	Sampson	Scotland
Total All Industries	13,202	28,900	17,010	119,789	8,379	103,413	10,635	14,980	42,145	10,167	13,993
Total Government	925	2,362	3,287	31,875	642	5,513	624	2,932	3,002	1,569	2,030
Total Private Industry	9,006	22,017	13,098	85,246	5,464	83,281	6,958	11,223	32,488	11,095	8,422
Construction	316	2,148	531	5,751	322	8,095	831	576	1,882	908	571
Manufacturing	5,752	1,740	2,402	8,025	2,215	6,806	859	3,301	7,753	3,433	2,676
Retail Trade	783	4,306	2,228	15,398	415	14,610	1,439	1,976	4,881	2,132	1,691
Transportation and Warehousing	327	141	103	4,908	82	331	78	130	178	90	385
Information	18	423	138	2,121	62	2,748	65	129	197	296	129
Finance and Insurance	117	624	501	2,545	69	3,080	120	254	1,138	246	238
Real Estate and Rental/Leasing	63	1,161	175	1,671	40	1,838	129	98	152	97	66
Professional and Technical Services	146	932	340	5,336	224	6,762	245	0	538	401	139
Administrative and Waste Services	648	1,249	905	7,045	0	5,330	444	290	1,150	633	1,012
Other Services Ex. Public Admin	147	539	311	3,520	141	2,937	165	316	465	446	180
Public Administration	876	2,157	1,694	11,979	609	4,892	539	1,423	2,757	1,464	607

Table 1-4: Employment Overview of the Region¹¹

Industry Category	2009 Estblmts*	2009 Annual Emp**	2009 Avg. Wkly Wage	2010 Q1 Estblmts*	2010 Q1 Emp**	2010 Q1 Avg. Wkly Wage	% Change Estblmts*	% Change Emp**	% Change Wkly Wage
Total All Industries	24,269	375,631	\$652	24,136	366,229	\$637	-0.55%	-2.50%	-2.30%
Total Government	991	54,414	\$829	1,010	54,452	\$795	1.92%	0.07%	-4.10%
Total Private Industry	23,305	270,826	\$605	23,126	262,941	\$592	-0.77%	-2.91%	-2.15%
Agriculture, Forestry & Fishing	475	2,025	\$453	477	1,754	\$458	0.42%	-13.38%	1.10%
Mining	16	162	\$771	17	160	\$804	6.25%	-1.23%	4.28%
Utilities	54	576	\$1,011	54	749	\$1,174	0.00%	30.03%	16.12%
Construction	2,717	18,536	\$732	2,652	18,290	\$707	-2.39%	-1.33%	-3.42%
Manufacturing	759	40,688	\$829	748	38,680	\$833	-1.45%	-4.94%	0.48%
Wholesale Trade	1,123	10,133	\$842	1,140	9,720	\$844	1.51%	-4.08%	0.24%
Retail Trade	3,658	47,341	\$441	3,659	46,408	\$424	0.03%	-1.97%	-3.85%
Transport/Warehousing	689	6,212	\$770	684	6,510	\$736	-0.73%	4.80%	-4.42%
Information	326	5,642	\$850	320	5,552	\$834	-1.84%	-1.60%	-1.88%

¹⁰ North Carolina Southeast, Regional Profile 2010

¹¹ <https://edis.commerce.state.nc.us/SASPublicStoredProcess/do>

Industry Category	2009 Estblmts*	2009 Annual Emp**	2009 Avg. Wkly Wage	2010 Q1 Estblmts*	2010 Q1 Emp**	2010 Q1 Avg. Wkly Wage	% Change Estblmts*	% Change Emp**	% Change Wkly Wage
Finance and Insurance	1,249	8,721	\$867	1,230	8,868	\$922	-1.52%	1.69%	6.34%
Real Estate and Rental	1,114	5,189	\$584	1,111	5,056	\$562	-0.27%	-2.56%	-3.77%
Professional and Tech Svcs	2,184	14,753	\$1,020	2,218	14,342	\$974	1.56%	-2.79%	-4.51%
Management of Companies	87	1,788	\$834	92	1,504	\$837	5.75%	-15.88%	0.36%
Admin and Waste Svcs	1,292	17,565	\$487	1,314	17,207	\$480	1.70%	-2.04%	-1.44%
Educational Services	537	16,857	\$683	537	17,405	\$648	0.00%	3.25%	-5.12%
Health Care/Social Assistance	2,611	49,232	\$713	2,682	49,784	\$655	2.72%	1.12%	-8.13%
Arts, Entertainment and Rec	325	4,969	\$340	320	4,037	\$347	-1.54%	-18.76%	2.06%
Accommodation and Food Svcs	2,048	37,435	\$247	2,094	35,147	\$241	2.25%	-6.11%	-2.43%
Other Services	1,660	8,382	\$477	1,703	8,203	\$445	2.59%	-2.14%	-6.71%
Public Admin	388	28,475	\$822	392	27,767	\$809	1.03%	-2.49%	-1.58%
Unclassified	984	559	\$725	692	248	\$860	-29.67%	-55.64%	18.62%

* Estlmts: abbreviation for Establishments

** Emp: abbreviation for Employment

Table 1-5: Worker Travel Time for the Region¹²

County	1990 Average Workers Travel Time (minutes)	2000 Average Workers Travel Time (minutes)	% Change from 1990-2000
Bladen	24	27	13%
Brunswick	22	25	14%
Columbus	22	27	23%
Cumberland	18	22	22%
Hoke	21	26	24%
New Hanover	18	21	17%
Pender	25	29	16%
Richmond	17	22	29%
Robeson	20	28	40%
Sampson	22	25	14%
Scotland	16	22	38%

¹² <https://edis.commerce.state.nc.us/SASPublicStoredProcess/do>

1.2 **Goals/Objectives of the NCSE Region**¹³

While NCSE has a primary objective of focusing “on short, immediate and long-term economic development strategies aimed at sustainable job creation and industrial investment,” it has several goals or objectives that support the creation of a “Logistics Village” in the region:

International Marketing, Regional Workforce Analysis, Engagement with the BRAC Regional Task Force, Renewable Energy and the Distribution and Logistics Hub Initiative.

- **International Marketing:** NCSE is an active participant the North Carolina Marketing Council that is part of the North Carolina Partnership for Economic Development. One purpose of NCSE participation on the Council is to market the region, especially to European companies, as a good place to establish a business. NCSE will also target firms located in other areas of the world. A vibrant Port of Wilmington combined with good roads, easy access to East Coast markets, reasonably priced land, availability of power, water, sewer, communications, etc. and many other attributes make the region an ideal location for establishing a business especially distribution centers incorporating light manufacturing.
- **Regional Workforce Analysis:** Funding was sought and received by NCSE to analyze the region’s labor force. Once analyzed, NCSE will work toward aligning workforce resources and skills with the region’s targeted industry clusters. This should put the region in a better position to compete in the world market since global companies look favorably on areas that have people trained with job skills they need. Overall, the area has a strong network of community colleges and universities willing to assist in providing necessary skills. A trained and skilled workforce also supports the “Logistics Village” concept.
- **Engagement with the BRAC Regional Task Force:** By 2011, as part of BRAC (Base Realignment and Closure Commission), Ft. Bragg will be home to the U.S. Army Forces Command (FORSCOM) and the Army Reserve Command (USARC). The move will make Ft. Bragg the Army’s biggest base and will thus have a major economic impact on the surrounding area. By collaborating with the BRAC Regional Task Force to develop a marketing plan to recruit defense and homeland security companies, the region should be put in a position to capitalize on the increasing size and importance of Ft. Bragg. Along these same lines, it is envisaged that many of these target companies will be involved in logistics. The establishment of a “Logistics Village” in the region may increase interest in the area.
- **Renewable Energy:** Several green and alternative energy projects are underway in NCSE and, in addition, GE Nuclear’s move to Wilmington puts the region in a position to benefit from national efforts to develop the renewable energy sector. Recognizing this fact, NCSE is partnering with other organizations and educational institutions to find funding to build upon its existing base and further develop the renewable energy sector. Given the need for efficient movement of goods (e.g., wind turbines, solar panels etc.) within the global supply chains of the renewable energy industry, it is imperative for the

¹³ Adapted from North Carolina’s Southeast, Strategic Marketing Plan, 2010-2011

success of this targeted cluster that a vibrant “Logistics Village” be present in NCSE that maintains an effective flow of goods through a viable port.

- **Distribution and Logistics Hub Initiative:** NCSE has a goal to develop the region as a distribution and logistics hub. The region is centrally located on the east coast, has an international port, two regional airports, access to interstates, rail availability, plentiful land for development, an increasing military presence, available workers and institutions that stand ready to help workers learn needed skills. With these regional assets, NCSE is in a good position to benefit from a global economy by promoting and developing these assets. This goal is a collaborative and ongoing effort between the Port of Wilmington and the 11 counties included in NCSE.

2 Suggested Logistics Villages

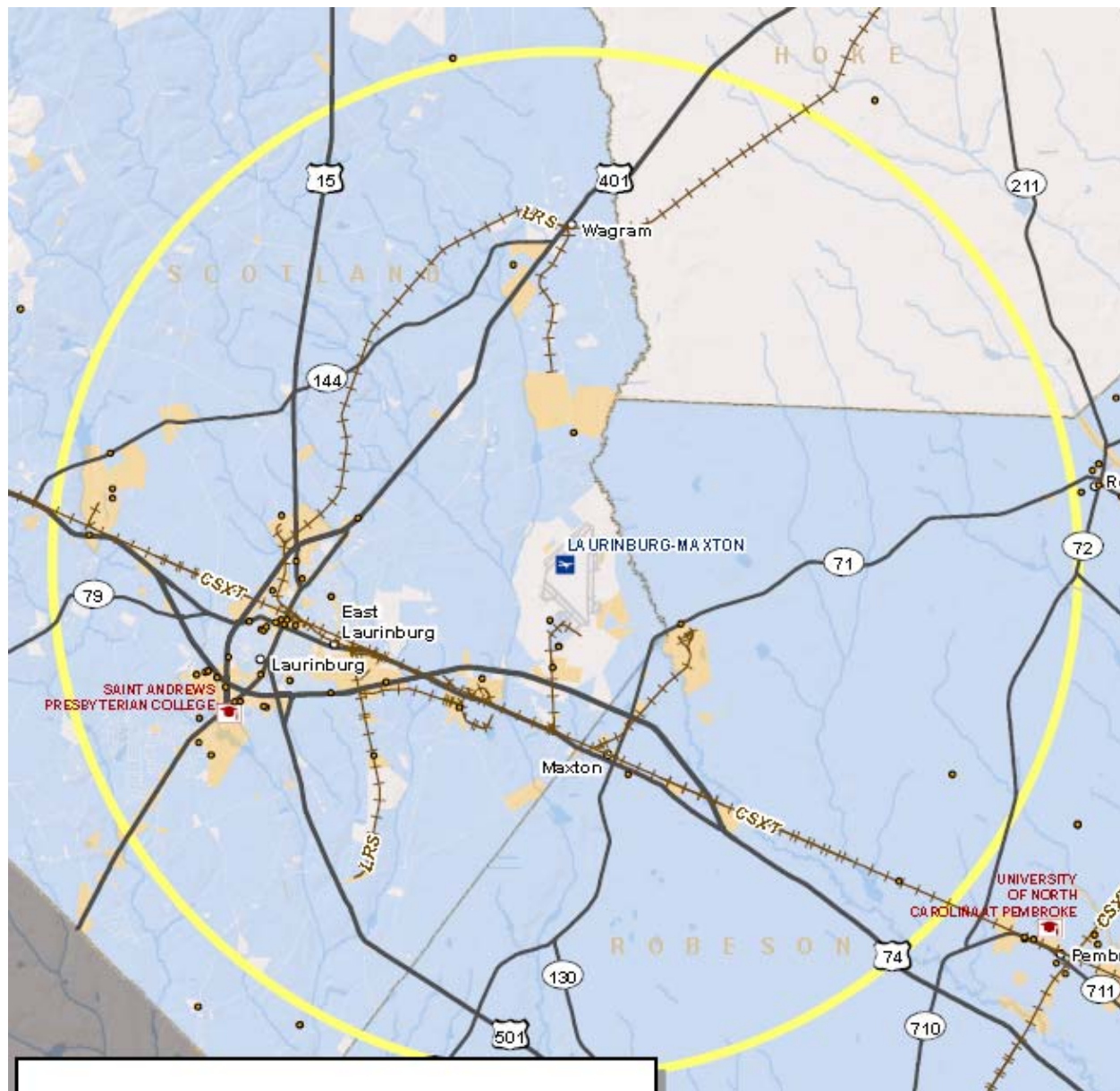
2.1 ***Logistics Village 1 – Laurinburg-Maxton Airport (MEB) Area***

The Laurinburg-Maxton Airport (MEB) is located entirely in Scotland County but is immediately adjacent to Robeson County and is operated by the Laurinburg-Maxton Airport Commission that reports to the governing bodies of the cities of Laurinburg and Maxton. MEB was given to the two cities immediately after WW II. Both cities are located in Tier 1 counties and have high unemployment rates: Scotland County 15.7 % and Robeson County 12.1% (November 2010). Figure 2-1 and Figure 2-2 provide an overview of this site's infrastructure including roads, airports, railroads, colleges and universities, etc. Figure 2-3 is an overview of the 30 minute drive time to and from the MEB site.

The Laurinburg-Maxton Airport area, including Scotland and Robeson Counties, enjoys abundant land for development, an airport with the capacity to increase runways to any length, more than adequate water and sewer capabilities, good and improving roads and a direct, albeit inactive, CSX rail connection as well as excellent access to gas transmission lines and the electric grid along with a central geographic and strategic location (See Figure 2-4: Aerial View of MEB Site). Not only is the area located in close proximity to a growing Ft. Bragg and Camp McCall but also it is about equidistant to all of North Carolina's major cities and midway between Maine and Miami. In addition, as a direct result of its strategic physical location, MEB is in a position to take advantage of its existing interstate link to the Port of Charleston making MEB an attractive site as a distribution center for both North and South Carolina as well. This proximity to South Carolina facilitates the ability of this region to work with manufacturers there in order to facilitate routing their exports through Port of Wilmington. With these resources it is easy to see why this site was one of the two finalists for consideration as North Carolina's Global TransPark. However, despite all these attributes, there are numerous costly infrastructural improvements needed to maximize its potential. Runways and taxiways would need to be restored to original lengths and widths in addition to expanding the length of the primary runway. Improvements are underway but will not address all of these issues. For example, MEB will need a control tower and needs to address issues regarding water collection lines along the runways and taxiways. The completion of I-74 from the Airport to North of Rockingham is vital to maximize its strategic advantage of great access to the Piedmont Triad and all areas beyond the Triad. The completion of the Monroe Bypass will also give them easy and fast access to the Charlotte market. To utilize its preserved rail corridor connection to CSX, the roadbed and rails would need to be restored from US 74/I-74 into the airport. The working rail connection currently stops at US 74/I-74.

Overall, the Laurinburg-Maxton area has significant potential but will need a champion (private or military) that provide the necessary resources needed for upgrades.

Figure 2-1: 10 Mile Radius for MEB Site¹⁴



¹⁴ Sources: Federal Railroad Administration, Scotland County GIS, Hoke County GIS, Robeson County GIS, NCDOT, CGIA, ESRI, FAA

Figure 2-2: 60 Mile Radius for MEB Site¹⁵

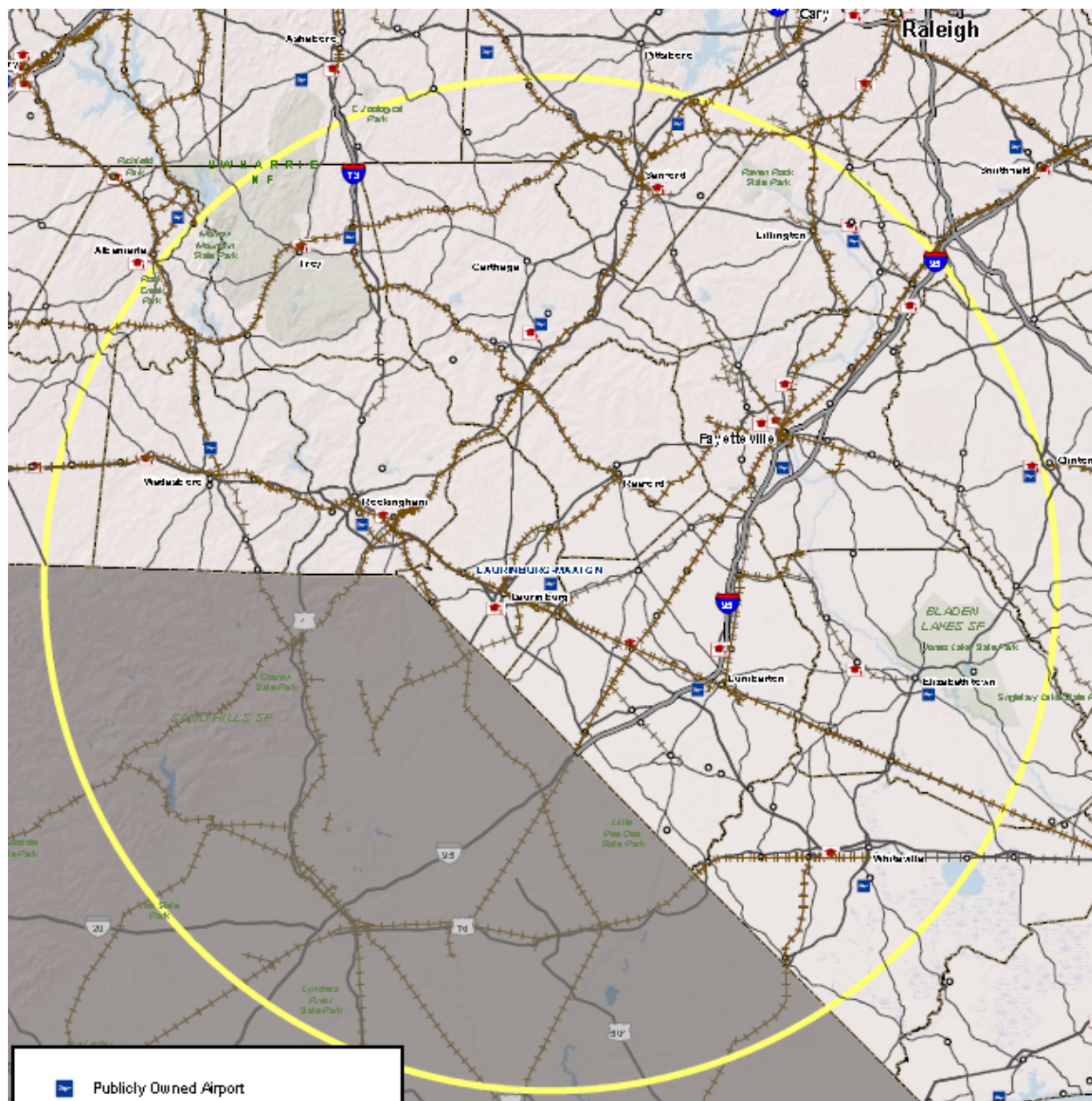
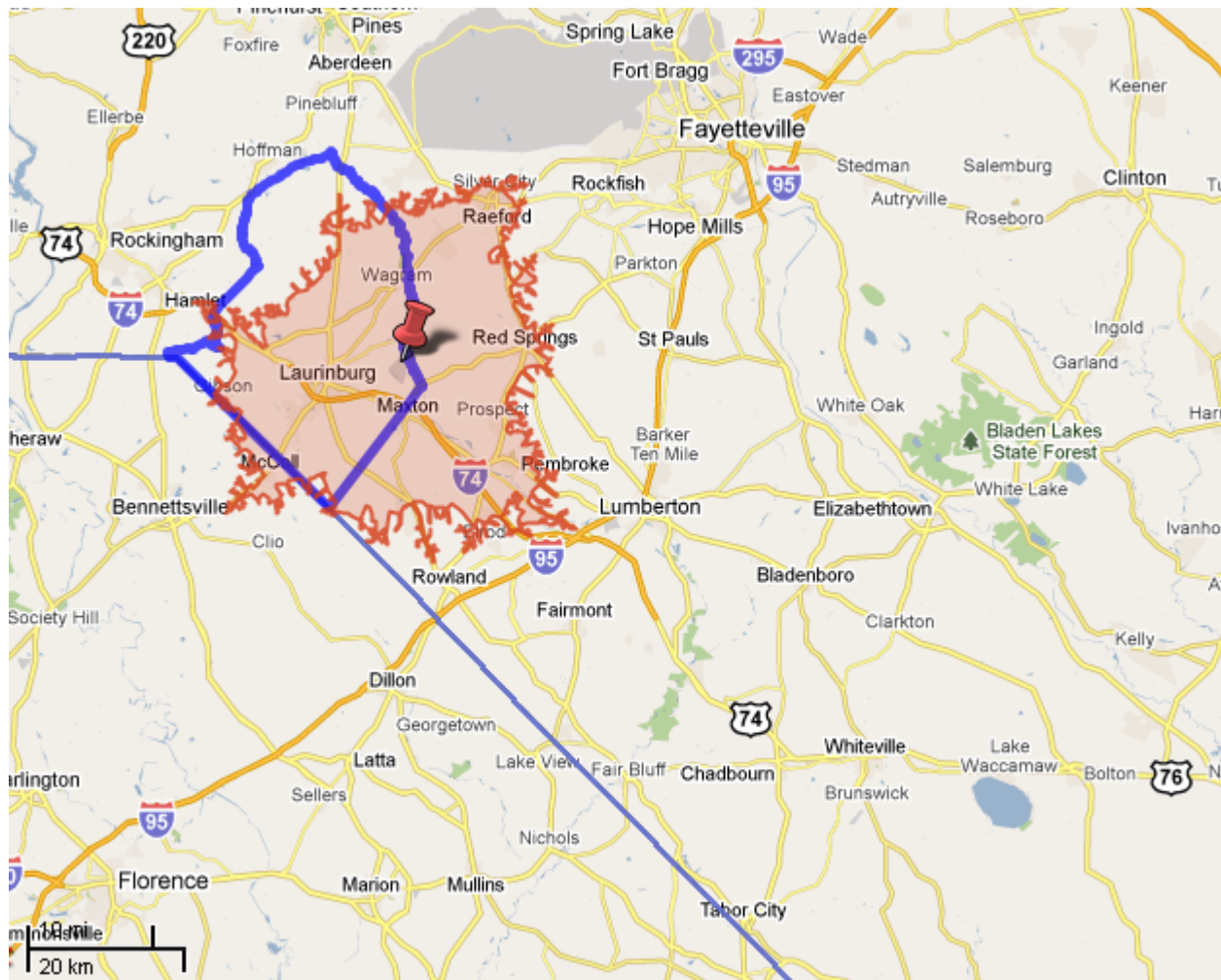


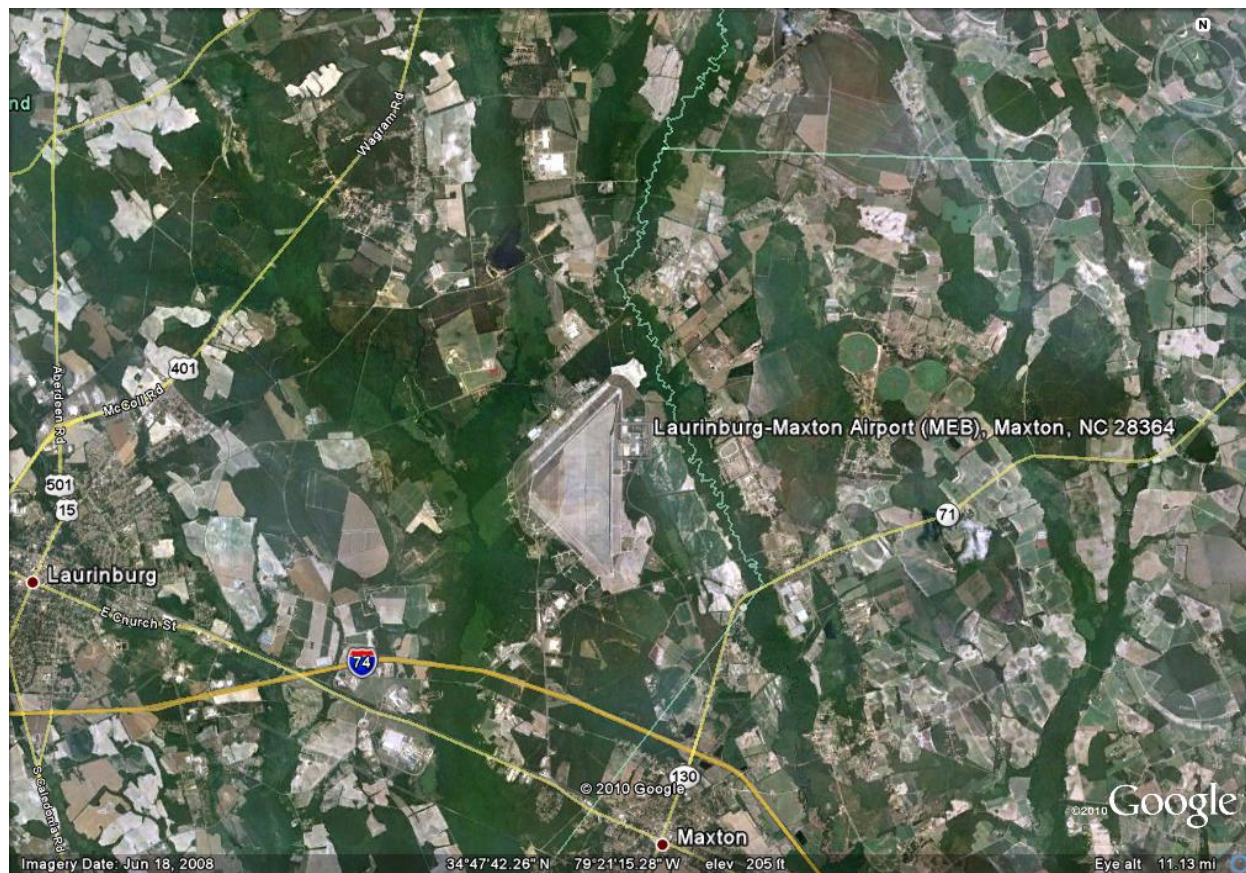
Figure 2-3: 30 Minute Drive Time from MEB Site¹⁶



* Boundary of Scotland County is outlined in blue above

¹⁶ <https://edis.commerce.state.nc.us/EDIS/maps.html>

Figure 2-4: Aerial View of MEB Site¹⁷



¹⁷ Google Maps

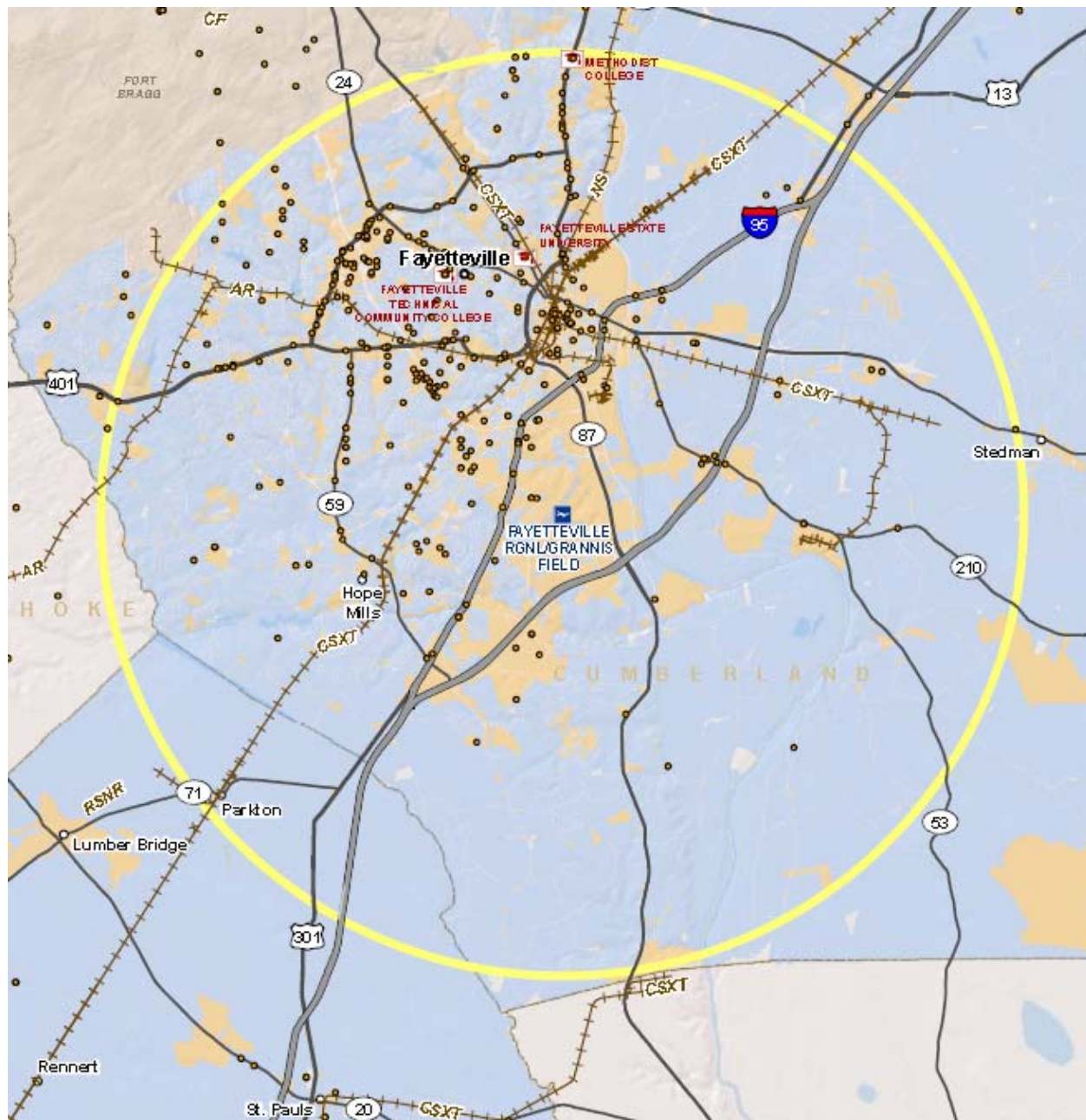
2.2 ***Logistics Village 2 – Fayetteville Regional Airport (FAY) Area***

The Fayetteville Regional Airport (FAY) is located in Cumberland County and is operated by an Airport Director for the City of Fayetteville. Cumberland County is a Tier 2 county and has an unemployment rate of 9.2% (November 2010) and is home to an increasingly important military base, Ft. Bragg. Figure 2-5 and Figure 2-6 provide an overview of this site's infrastructure including roads, airports, railroads, colleges and universities, etc. Figure 2-7 is an overview of the 30 minute drive time to and from the FAY site. By 2011, as part of BRAC (Base Realignment and Closure Commission), Ft. Bragg will be home to the U.S. Army Forces Command (FORSCOM) and the Army Reserve Command (USARC). The move will make Ft. Bragg one of the Army's biggest bases and will thus have a major economic impact on the surrounding area. In fact, Fayetteville was recently recognized for having one of the best housing markets in the US.

"Proximity" is the key word needed to understand the Fayetteville Regional Airport area and its potential as a "Logistics Village." Fayetteville is located half-way between Miami and Maine. It is on I-95 and 30 minutes away from I-40. Although not at the airport, the area has rail access on CSX and NS as well as a local short line railway. It is near the Port of Wilmington, Research Triangle Park and recreational facilities at the ocean and near the Pinehurst resorts. In addition, and perhaps most significantly, it is in very near the expanding Ft. Bragg. Airport facilities are in good condition with a 6500 ft. runway that could be expanded to 8500 ft. The airport has several parcels of land available for development and adjoining land in private hands could be developed as well (See Figure 2-8: Aerial View of FAY Site). Furthermore, additional industrial land is available in the immediate area. Some of the land is "shovel ready." Access from the airport to I-95 is excellent.

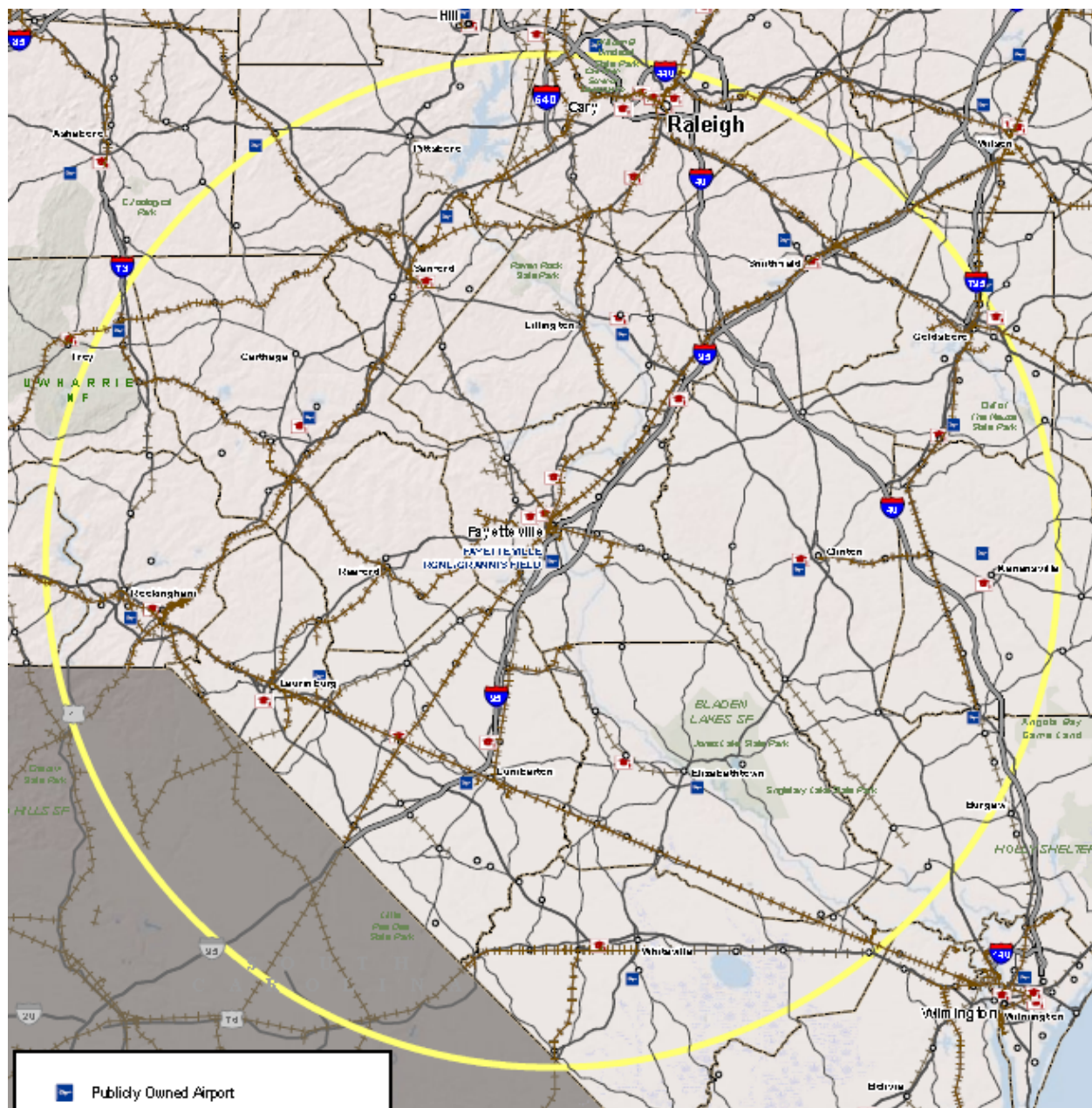
To reach its potential as a "Logistics Village," FAY would have to develop cargo facilities. It is currently considered a "truck" market. Water and sewer issues at the airport would need to be addressed and should include a pumping station for sewer service. To help make some of this happen, the Airport Plan and the Fayetteville Area Plan should be coordinated to maximize the economic development benefits of the airport.

Figure 2-5: 10 Mile Radius for FAY Site¹⁸



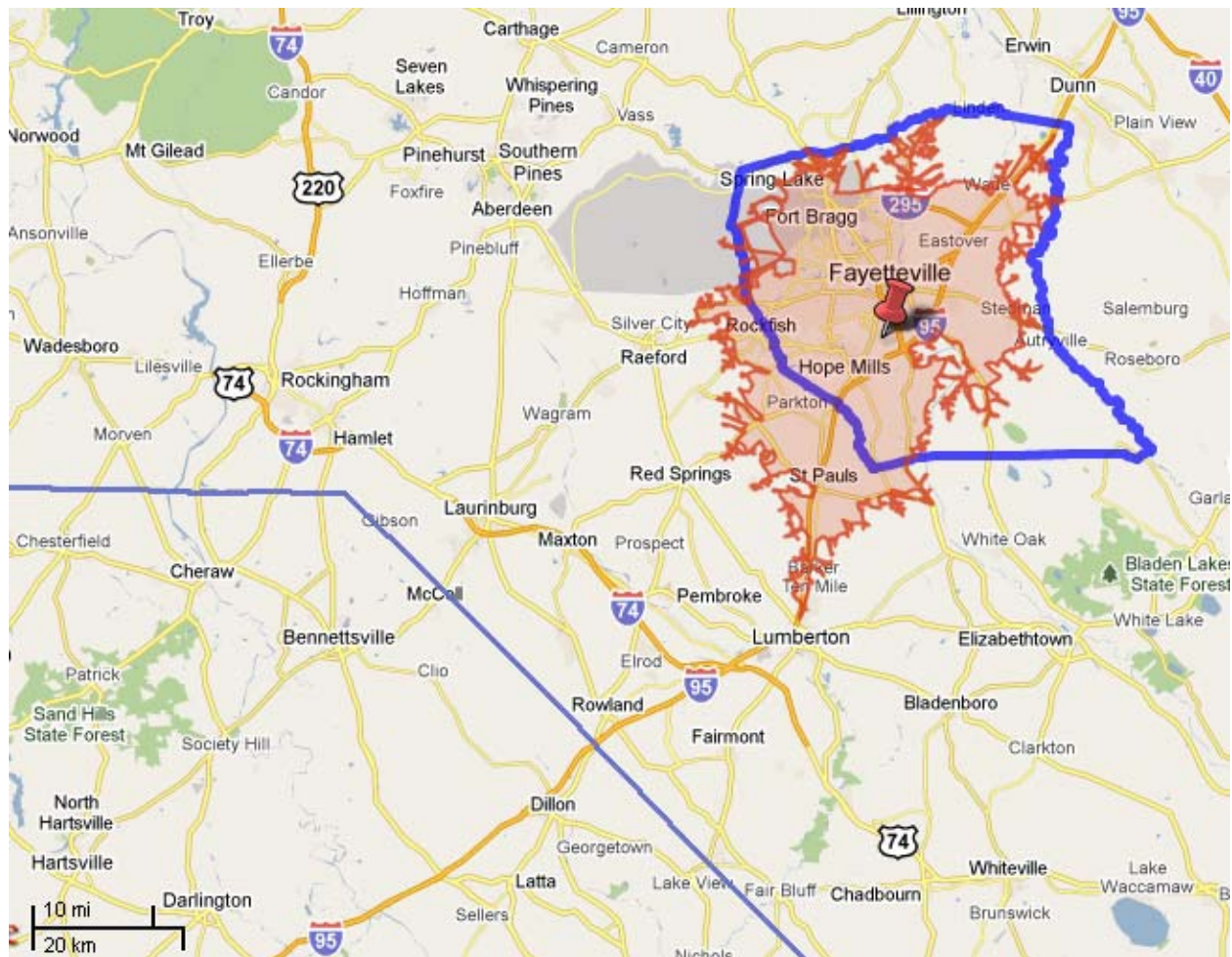
¹⁸ Sources: Federal Railroad Administration, Cumberland County GIS, Hoke County GIS, NCDOT, CGIA, ESRI, FAA

Figure 2-6: 60 Mile Radius for FAY Site¹⁹



¹⁹ Sources: Federal Railroad Administration, NCDOT, CGIA, ESRI, FAA

Figure 2-7: 30 Minute Drive Time from FAY Site²⁰



* Boundary of Cumberland County is outlined in blue above

²⁰ <https://edis.commerce.state.nc.us/EDIS/maps.html>

Figure 2-8: Aerial View of FAY Site²¹



²¹ Provided by FAY, Office of the Airport Director

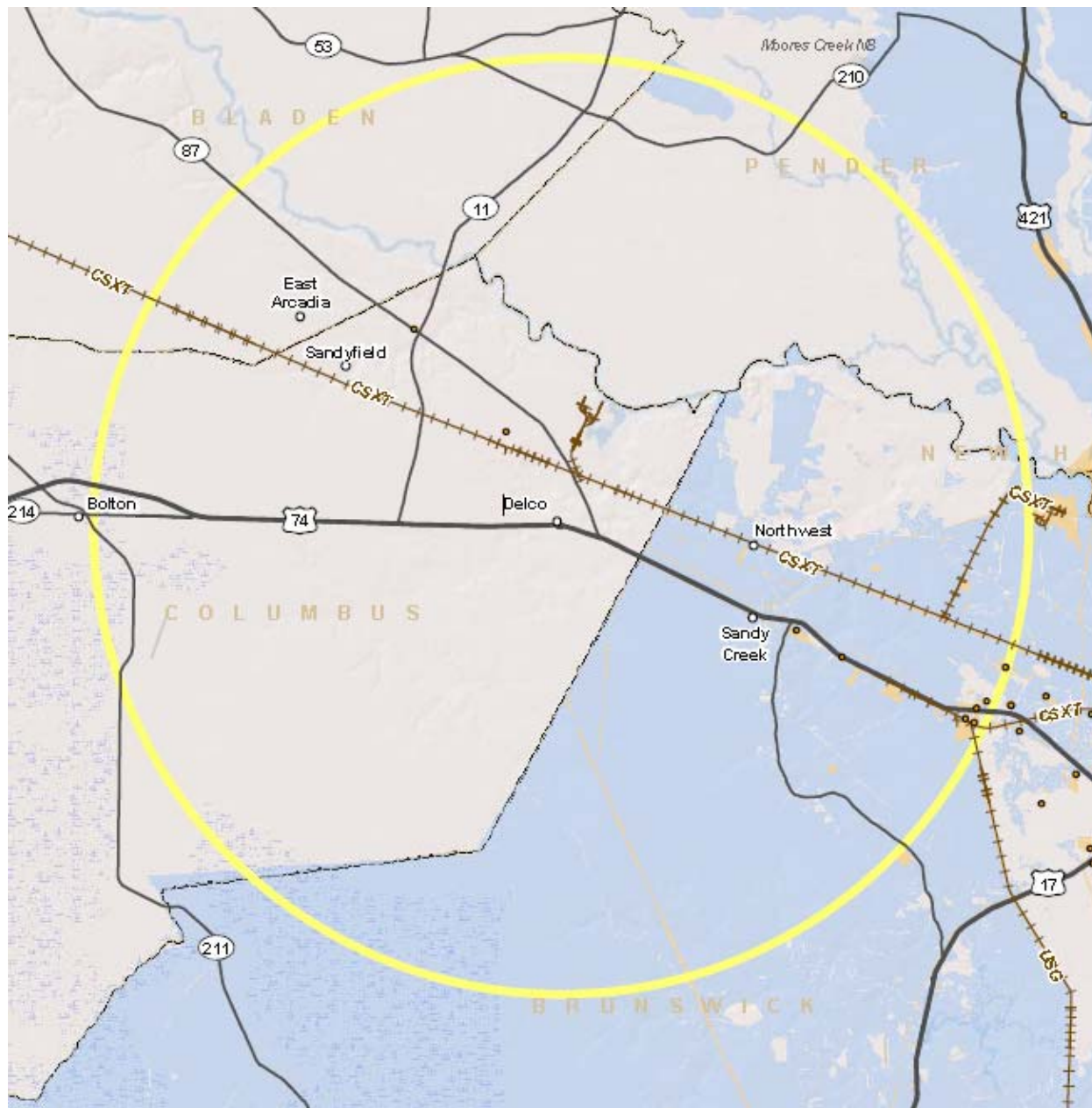
2.3 ***Logistics Village 3 – International Logistics Park (ILP) Brunswick and Columbus Counties***

The International Logistics Park of North Carolina (ILP) is built on the Columbus/Brunswick County line on US 74/76 just 15 miles from the Port of Wilmington. A joint venture between Brunswick and Columbus Counties, this is an, as of yet, undeveloped 1100 acre park that hopes to capitalize upon the “At Port” Logistics Model promoted by the Port of Wilmington. Columbus County is a Tier 1 county and Brunswick is a Tier 3 county. Both counties have unemployment rates that exceed the North Carolina average of 9.9%, Columbus County 12.1% and Brunswick County 11.2% as of November 2010. Figure 2-9 and Figure 2-10 provide an overview of this site’s infrastructure including roads, airports, railroads, colleges and universities, etc. Figure 2-11 is an overview of the 30 minute drive time to and from the ILP site.

As the result of the vast amount of developable land that includes several of the sites which are shovel ready, the potential for ILP is significant (See Figure 2-12: Aerial View of ILP Site). Close proximity to the Port of Wilmington and Wilmington International Airport is also a valuable attribute. Utilities, gas, water electricity and sewer are readily available. Existing roads and planned road projects make ILP very accessible. An added tax advantage for ILP is Tier 1 status for all new projects. Furthermore, area community colleges are aggressive in meeting the needs of potential employers. However, completion of planned road projects is critical for ILP success. In particular, building a lighted intersection at the entrances to ILP and the Mid-Atlantic Logistics Center **is vitally important**. Another concern for success is the site’s risk exposure to the future viability of the Port of Wilmington as one premise for ILPs projected success is built upon the Port of Wilmington’s “At Port” Logistics Model. Another weakness for ILP is that it does not have rail access and a spur would be very costly to build. However, the private industrial park located directly across US 74/76, the Mid-Atlantic Logistics Center, has excellent access to the CSX line.

To reach its potential as a “Logistics Village,” ILP should strategically cooperate with the Mid-Atlantic Logistics Center. If a direct rail link is necessary for a potential client, then the two parks should work cooperatively to recruit that firm as this will maximize the implementation of the “At Port” Logistics Model. Immediate construction of a “lighted intersection” **is very important for ILP**. Additionally, in the future the State of North Carolina should develop a full interchange at the intersection of Highway 87 and US 74. This interchange would link both the ILP and the Mid-Atlantic Logistics Center with access roads and eliminate the “lighted intersection” referenced above. ILP should cooperatively leverage regional logistics assets to create synergy in facilitating regional economic development.

Figure 2-9: 10 Mile Radius for ILP Site²²



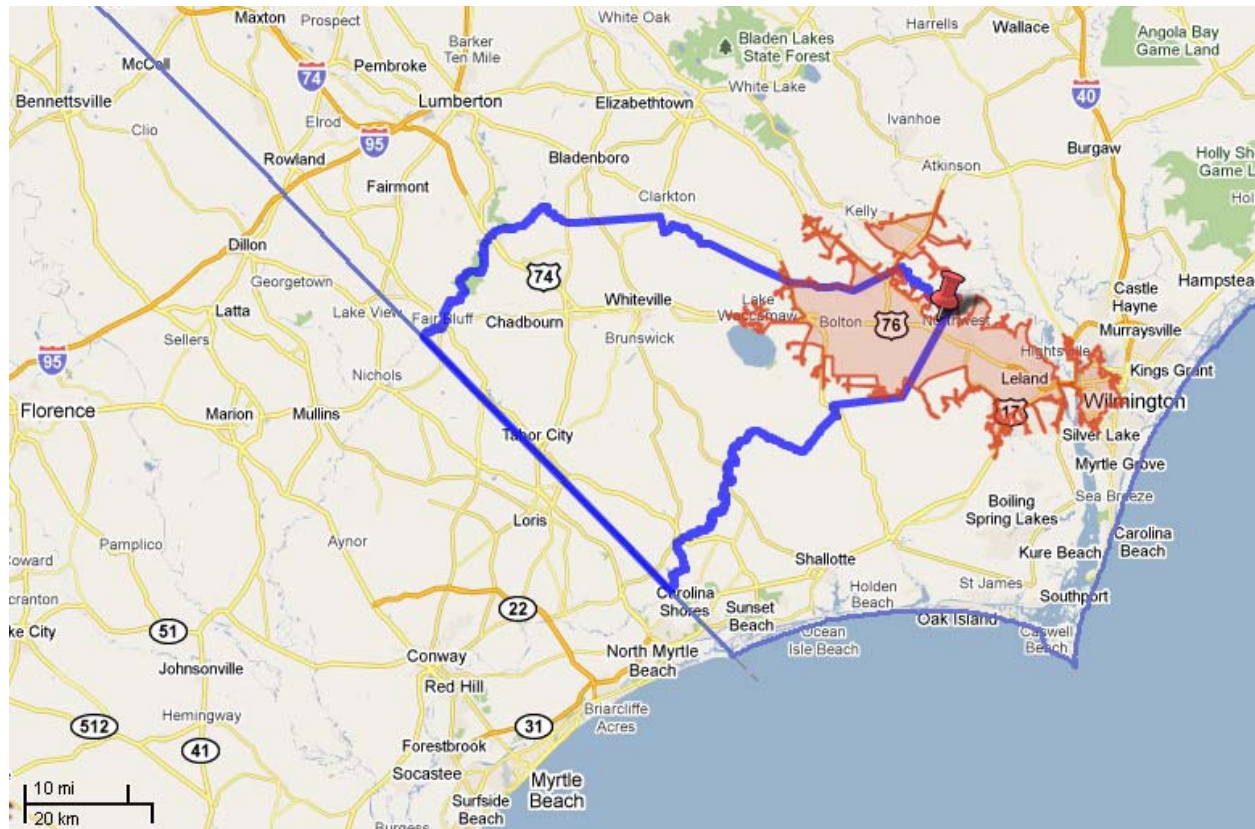
²² Sources: Federal Railroad Administration, NCDOT, CGIA, NC Commerce Dept., ESRI

Figure 2-10: 60 Mile Radius for ILP Site²³



²³ Sources: Federal Railroad Administration, NCDOT, CGIA, ESRI

Figure 2-11: 30 Minute Drive Time from ILP Site²⁴



* Boundary of Columbus County is outlined in blue above

²⁴ <https://edis.commerce.state.nc.us/EDIS/maps.html>

Figure 2-12: Aerial View of ILP Site²⁵



²⁵ http://www.columbusco.org/DotNetNuke_2/Portals/13/International%20Logistics%20Park%20of%20NCm%20%28web%29.pdf

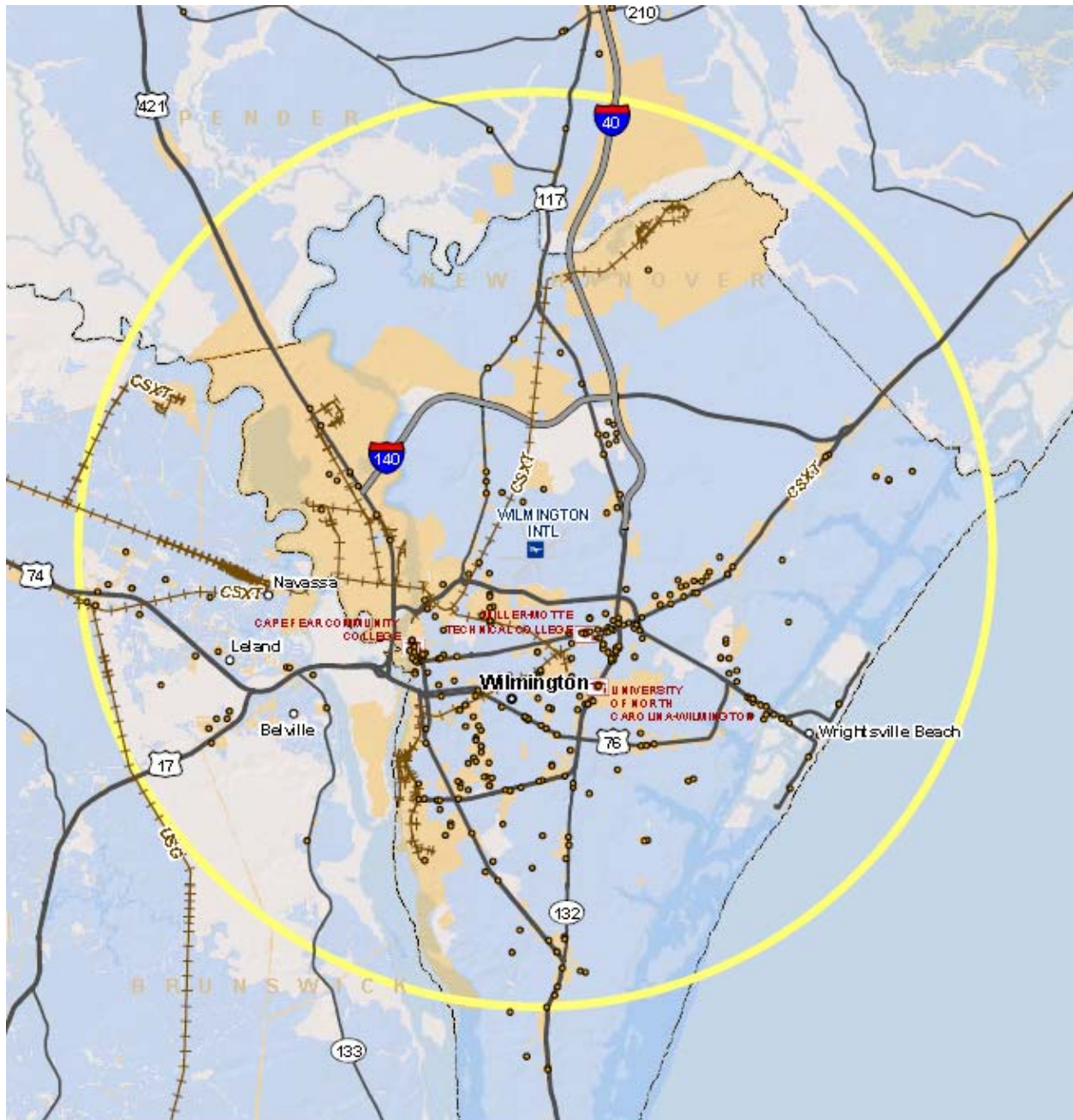
2.4 ***Logistics Village 4 – Wilmington International Airport (ILM) Area***

The Wilmington International Airport (ILM) is located in New Hanover County (Tier 3 and 9.2% unemployment, November 2010) and serves southeast North Carolina. The airport is modern, underutilized airport that is operated by the New Hanover County Airport Authority. It is a full-service airport that offers commercial, cargo and general aviation facilities. In addition, it offers a “state of the art” Federal Inspection Services (FIS) facility. Runways are adequate and expandable to meet demand. For example, the main runway is currently 8015 feet and could be expanded to 9500 or 9600 feet. Figure 2-13 and Figure 2-14 provide an overview of this site’s infrastructure including roads, airports, railroads, colleges and universities, etc. Figure 2-15 is an overview of the 30 minute drive time to and from the ILM site.

ILM has much to offer that enhances the area for consideration as a “Logistics Village.” The airport is conveniently located off I-40 and I-140, just a few miles from the Port of Wilmington, has shovel ready industrial sites (about 70% of the airport’s available land) and meets the Port of Wilmington’s “At Port” Logistics Model criteria (See Figure 2-16: Aerial View of ILM Site). Additional land is available around the airport and large tracks of land are available to the North and West of ILM in Pender, Brunswick and Columbus Counties. Rail access, indirectly linked to the Port of Wilmington, is available at ILM. An “inactive” FTZ is established at ILM and could be quickly reactivated when a need develops. ILM offers average to above average basic infrastructure (communications, water, sewer and power). In addition, as a result of a high quality of life, the Wilmington area has the ability to attract highly skilled workers. In addition, specific job training needs are ably met by Cape Fear Community College as well as UNCW and other area community colleges.

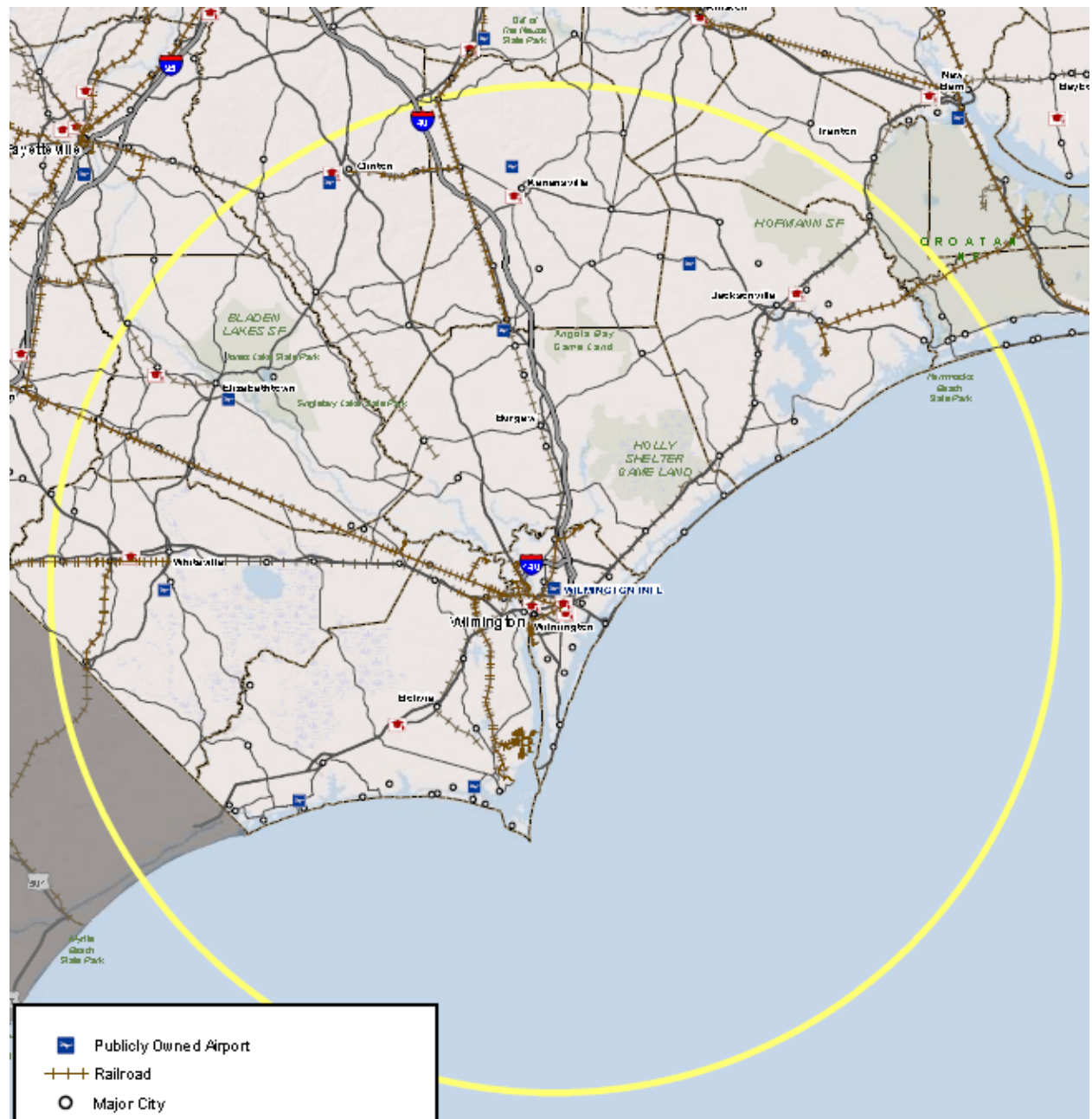
To reach its potential as a “Logistics Village,” ILM should strategically cooperate with other area organizations. For example, ILM should work closely with the Port of Wilmington to capitalize on the Port’s “At Port” Logistics Model and, to compensate for the lack of large tracks of developable land at ILM, work closely with area industrial parks (including the International Logistics Park, Mid-Atlantic Logistics Center and Pender Commerce Park). Finally, ILM should cooperatively leverage regional logistics assets to create synergy in facilitating regional economic development.

Figure 2-13: 10 Mile Radius for ILM Site²⁶



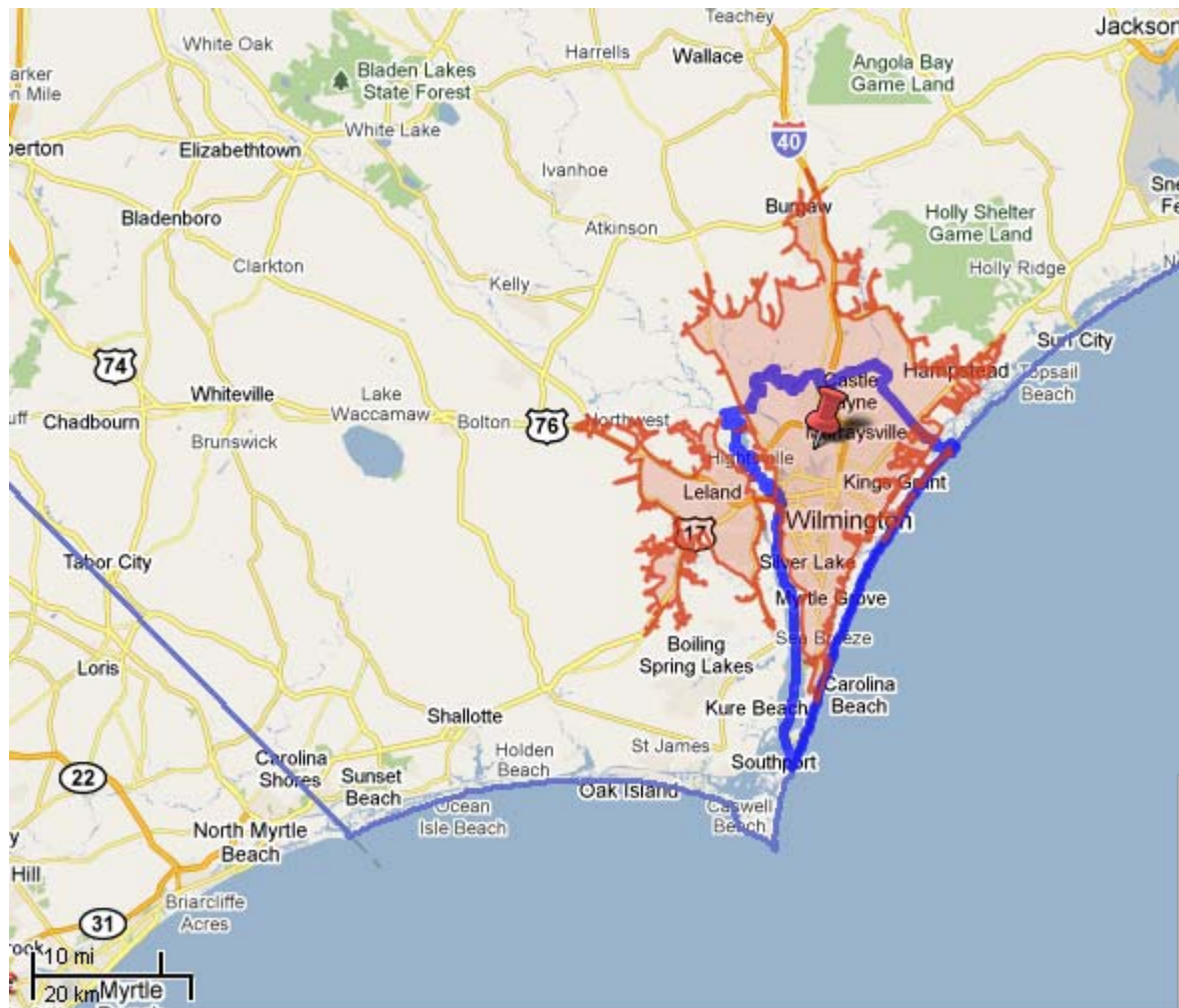
²⁶ Sources: Federal Railroad Administration, New Hanover County GIS, Brunswick County GIS, NCDOT, CGIA, ESRI, FAA

Figure 2-14: 60 Mile Radius for ILM Site²⁷



²⁷ Sources: Federal Railroad Administration, NCDOT, CGIA, ESRI, FAA

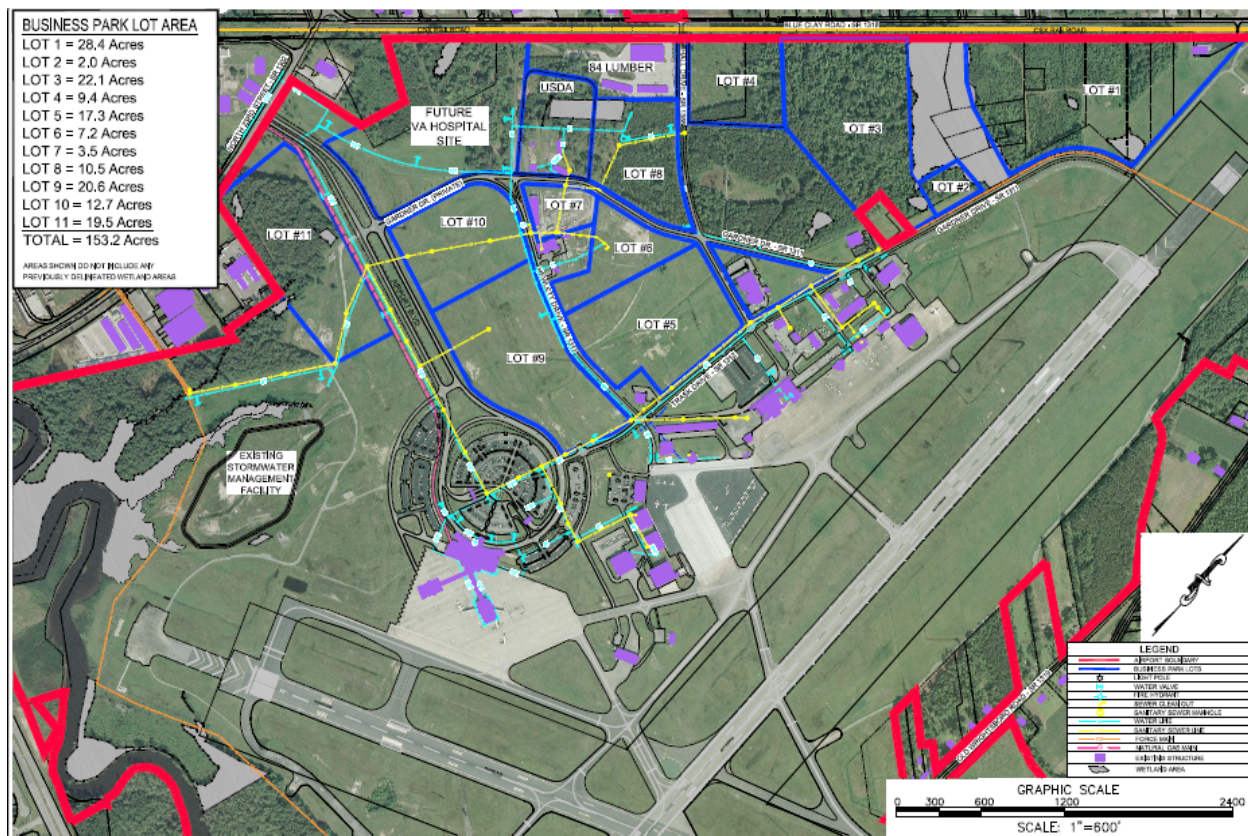
Figure 2-15: 30 Minute Drive Time from ILM Site²⁸



* Boundary of New Hanover County is outlined in blue above

²⁸ <https://edis.commerce.state.nc.us/EDIS/maps.html>

Figure 2-16: Aerial View of ILM Site²⁹



²⁹ Provided by ILM, Office of the Airport Director

2.5 **Logistics Village 5 – “Virtual Logistics Village” for the Greater Wilmington Area**

The Wilmington, NC metro area, composed of the three counties of New Hanover, Brunswick and Pender, has a population of over 350,00 people. The area is home to the Port of Wilmington and Wilmington International Airport. East-West rail access via CSX rail is already available and the area has the potential to reestablish North-South rail access by utilizing the Preserved Rail Corridor from Castle Hayne to Wallace. The establishment of an intermodal rail-truck facility in the area would further enhance the areas logistics potential. The area also supports a strong network of trucking services supporting the logistics needs of the area. Figure 2-17 provides an overview of the site’s existing infrastructure including roads, airports, railroads, etc.

Developable land parcels of all sizes are found in the metro area and many are shovel ready. The primary industrial sites are located in the International Logistics Park, Mid-Atlantic Logistics Center and Pender Commerce Park. The Greater Wilmington Area already has average to above average basic infrastructure (communications, water, sewer and power) to accommodate growth. Area road access is good and getting better with planned improvements. I-40 provides excellent access to the west and intersects with I-95 just 96 miles away. Completion of I-140, I-74/76, the Monroe Bypass and the Skyway Bridge will provide even better access. Significantly, most of these planned road projects are already included in the current Transportation Improvement Plan (TIP). (For a thorough review of the transportation needs and plans for the Wilmington area refer to “Cape Fear Commutes 2035: Identifying Tomorrow’s Travel Needs Today”, http://www.wmpo.org/PDF/2010-12_CFC%202035%20Transportation%20Plan%20Final.pdf). Finally, as a result of the area’s quality of life, skilled labor is available and easy to attract. However, if specific skills are needed community colleges and the University of North Carolina Wilmington stand ready to develop needed skills.

As a direct result of all these factors, the Greater Wilmington Area is strategically positioned to capitalize upon the area’s logistics assets and establish a “Virtual Logistics Village.” A “Virtual Logistics Village” for the Greater Wilmington Area would not only incorporate two sites under consideration in this study, the International Logistics Park and Wilmington International Airport but also the Port of Wilmington, Pender Commerce Park and the Mid-Atlantic Logistics Center. In fact, the “Virtual Logistics Village” would include all of the logistics assets within a 30 mile radius of Wilmington International Airport. While all components of a “Virtual Logistics Village” are not located in one spot in the metro area, they are all in close enough proximity to each other to satisfy the “At Port” Logistics Model criteria for the Port of Wilmington. This is a significant factor that will serve as a strong foundation for developing logistics assets in the Greater Wilmington Area.

The “Virtual Logistics Village” would be established, developed and coordinated by area leaders through the creation of a central “facilitation” board. To guide them, the group may want to use the Aerotropolis Leadership Board in the Piedmont Triad Region as their model. The creation of this type of board enables individual components of the “Virtual Logistics Village” to work synergistically together as a unified coherent institution to cooperatively leverage all of the area’s logistics assets in order to have the greatest impact on regional economic development. In

fact, the creation of such an organization is an investment for the future of economic development in North Carolina's Southeast (NCSE).

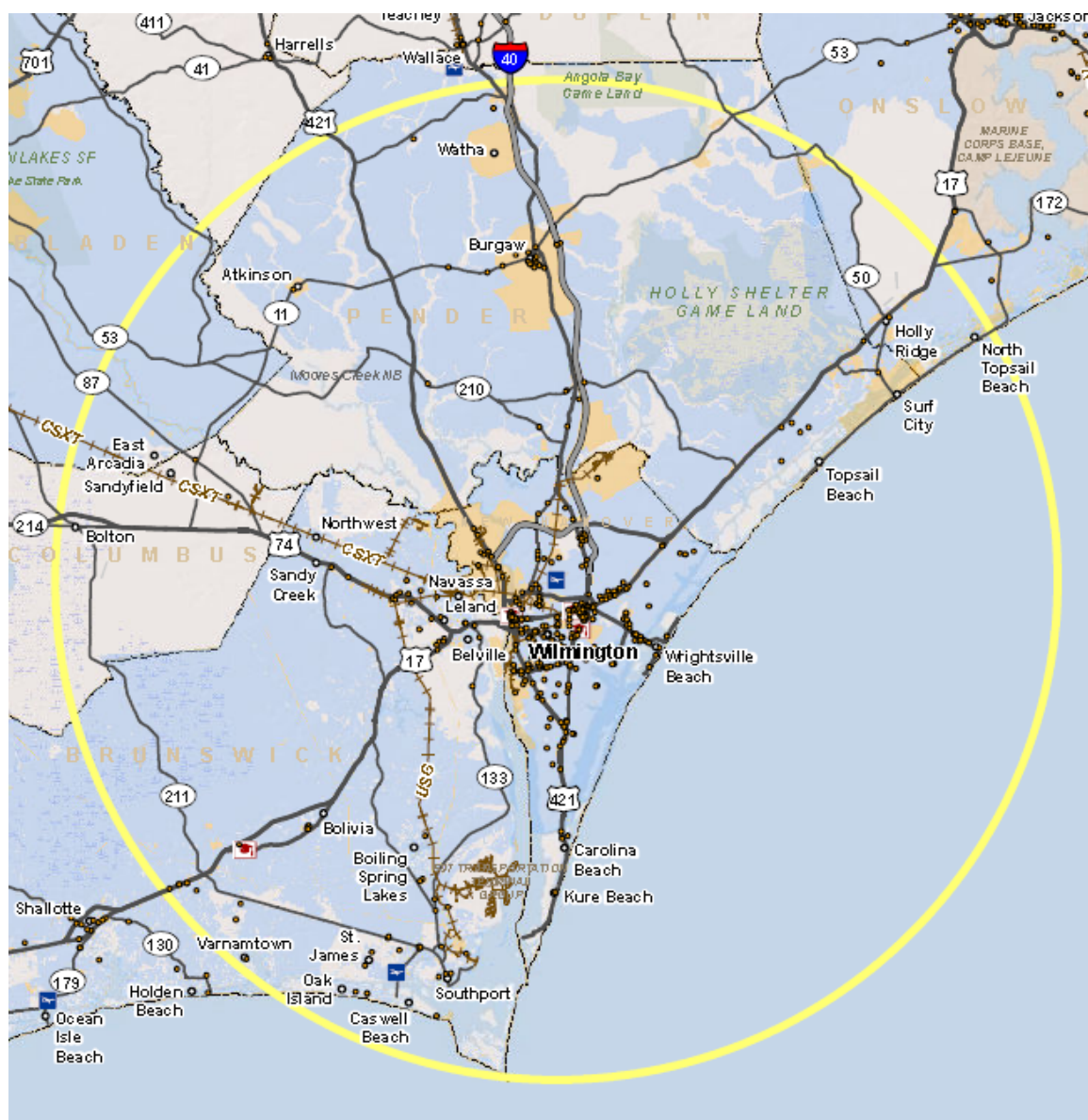
The combined logistics assets of a "Virtual Logistics Village" far outweigh the value of Wilmington International Airport and the International Logistics Park when evaluated separately. This scenario brings together the Port of Wilmington, a modern airport (ILM) easily capable of expansion, abundant land (primarily located at Pender Commerce Park, the International Logistics Park and the Mid-Atlantic Logistics Center), and a labor pool composed of skilled and unskilled workers. In fact, as a result of the high quality of life in the Wilmington area, this is an area of the state that can attract a skilled labor force that is key factor in attracting high paying jobs. With regard to the unskilled workers, there are areas of high unemployment in the Wilmington area (Brunswick County 11.2%, Pender County 10.7% and Columbus County 12.2%) that can provide unskilled workers. While many of these workers previously worked for the textile and furniture industries and do not have current skills, they have a good work ethic and are willing to be trained with new skills. Fortunately, the area has an exceptional network of community colleges and UNCW that stand ready to train these workers in order to provide them with needed skills. The combined "Virtual Logistics Village" also further expands opportunities to further global trade in the Wilmington area and NCSE. All three industrial sites mentioned earlier fall within the Port of Wilmington's "At Port" Logistics Model. Basically, a container delivered to or from any one of these sites would be delivered at the same low rate. This makes these sites very competitive when recruiting large distribution centers that often involve light manufacturing as well. ILP brings an added benefit to the "Virtual Logistics Village," it is partially located in Columbus County, a Tier 1 County. This designation brings with it all the tax incentives associated with locating in a Tier 1 County. Additionally, the Mid-Atlantic Logistics Center adds a rail component to the industrial sites as the Center will have a spur to the East-West CSX line. Finally, these same facilities could serve as a basis for further developing export opportunities for North Carolina's agricultural products such as sweet potatoes, wood products, and pork and poultry. The Port of Wilmington already has an inactive FTZ that could be reactivated and sub-zones could be established, as needed, at any site in the "Virtual Logistics Village" including ILM or the three industrial sites mentioned.

Most significantly, for the short-term, the "Virtual Logistics Village" is essentially ready to begin operation without additional major investments as the infrastructure already exists to support this effort. In fact, only two things are immediately needed to support the creation of a "Virtual Logistics Village," the establishment of a coordinating board and a lighted intersection at the entrance to ILP and the Mid-Atlantic Logistics Park.

In the longer term the "Virtual Logistics Village" will need additional things to help it realize its potential for the Greater Wilmington Area. Planned roads, many already in the Transportation Improvement Plan (TIP) will need to be completed. These include: I-140, I-74/76, the Monroe Bypass, Skyway (perhaps more strategically located in terms of the Port of Wilmington) and a full interchange at the intersection of Highway 87 and US 74 (this interchange would link both the ILP and Mid-Atlantic Logistics Center with access roads and eliminate a "lighted intersection" referenced above). "Last mile" issues at the Port of Wilmington will also need to be resolved. With regard to rail service, the establishment of a rail intermodal facility in the Wilmington area, improved rail connections at the Port of Wilmington and reestablishment of

North-South rail service are important for future development of the “Virtual Logistics Village.” However, for the “Virtual Logistics Village” to work successfully, keep the area competitive in the global economy, create good paying jobs, spur international trade and stimulate economic development in the Greater Wilmington Area and NCSE, the Port of Wilmington must remain viable now and far into the age of the post-Panamax shipping environment. In fact, the greatest risk for the “Virtual Logistics Village” and area economic development is that the Port of Wilmington does not remain viable.

Figure 2-17: 30 Mile Radius for “Virtual Logistics Village”³⁰



³⁰ Sources: Federal Railroad Administration, New Hanover County GIS, Brunswick County, Pender County, Onslow County, Bladen County, City of Wilmington, NCDOT, CGIA, ESRI, FAA

3 Summary

3.1 *Logistics Villages Compared*

All five “Logistics Village” sites that were studied in this report share some common characteristics:

- The NCSE region is strategically located half-way between Maine and Miami and has convenient road access to the Midwest making this an advantageous location for distribution and logistics operations.
- The area shares an excellent network of existing roads including interstates, limited access highways and four-lane highways. In fact, the completion of planned road construction ((I-74, I-140, Skybridge and, while not in the region but still strategically important for the area, the Monroe Bypass) will only enhance area transportation and provide a stronger foundation for a distribution and logistics based cluster for NCSE.
- The area has a temperate climate and a reasonable cost of living.
- The growing military presence in the Fayetteville area and the Port of Wilmington are regional assets and are critical components for economic development in NCSE. For the region to flourish and benefit from a global economy, the Port of Wilmington must remain viable now and far into the future. In addition, Ft. Bragg must remain as a very significant military base that will enhance economic development opportunities.
- The region has a strong agricultural and food processing base. The agricultural base should be fully exploited by developing exports of these products through the Port of Wilmington. This will be further facilitated with the addition of cold storage facilities at Port of Wilmington.
- While not excellent, the region generally has good access to railroads, CSX, Norfolk Southern and numerous short line connections. Improvements such as the establishment of an intermodal rail/truck facility in or near the NCSE region that has a direct rail link from the Port of Wilmington and the reestablishment of some preserved rail corridors could improve the attractiveness of the area to industry especially for supply chain based companies. Specifically, consideration should be given to reopening the preserved rail corridor from Castle Hayne to Wallace as it has the potential increase North Carolina agricultural exports from the Port of Wilmington. Also, re-establishment for this same link has possible beneficial military benefits as it provides better access to the Port of Wilmington. Additionally, an improved rail connection at Pembroke, connecting CSX north-south service to CSX’s service to the Port of Wilmington, could facilitate military deployments from Ft. Bragg to the Port of Wilmington and increase international trade opportunities at the Port as well.

- Eight Community Colleges, three North Carolina state supported universities and two private colleges are located in the region and stand ready to train workers for needed skills.
- While not equally distributed throughout the region, infrastructure requirements (water, gas, electrical power, sewage and septic facilities and communication needs) are generally available throughout the region to support economic development. Improvements and upgrades for infrastructure requirements are needed at some sites but are nonetheless available.

This is not an all-inclusive list of common characteristics; however, it demonstrates that NCSE is poised to benefit from a global economy. While investments are needed at each site studied to maximize the opportunity, it is clear the region is poised for economic growth.

What follows are a triad of three tables for each of the four primary sites studied (See Tables 3-1 thru 3-12) and two tables (See Tables 3-13 and 3-14) for the proposed “Virtual Logistics Village.” The first table in the triad is an “Assessment Matrix” for the sites studied and is based on the data provided in the tables that follow. The second table for each site is a more detailed “Site Summary” for the proposed site and the third table outlines “Strengths, Weaknesses and Conclusions” for the same. No detailed “Site Summary” for the “Virtual Logistics Village” is included.

Table 3-1: Assessment Matrix for MEB Area

Measure	Village 1 Laurinburg-Maxton Airport (MEB) Area
Facility Type*	Airport General Aviation
Target Industries	Military Industries, Warehousing and Contractors; General Distribution and Logistics; Aviation Support Industries
Speed of Implementation	Long-Range (10-20 years)
Infrastructure - Transport	
Highway	Good and will improve
Rail	Exists but needs retrofitting
Air	
Existing runways	Three (two are operational) Lengths: 6503' and 3753' ILS Category 1 Capability
Can runways be extended?	Yes, to almost any length
Maritime (ship/barge)	100 Miles to Port of Wilmington
Infrastructure - Other	
Communications	Adequate to very good access
Power	Excellent access
Water	Good access with expansion possibilities
Sewer	Good access upgrades needed
Land Available (acreage)	Plentiful-multiple sites some shovel ready
Labor Force	
Availability	Available but training may be needed

Measure	Village 1 Laurinburg-Maxton Airport (MEB) Area
Education Programs to Support Local Industry	Yes
Specialty Criteria**	Abundance of land; ability to expand runways to almost any length

* Facility type = major business practice at this location (intermodal facility, warehouse, distribution center, light manufacturing, and so forth)

** Specialty Criteria = foreign trade zone, customs, high-security, and so forth

Table 3-2: Site Summary for MEB Area

Facility	Current Status	Improvements Needed
Roads	Adequate but lacks good connections East-West (especially around Charlotte) and access to the Triad North & West	See roads recommendations
Airports	Currently inadequate. However, three runways currently exist with unlimited expansion (two semi-functional and one closed). No commercial and limited cargo service No current strategic plan	Major improvements needed for two runways and taxiways. Reopen third runway with major improvements. Needs control tower
Railroads	Inadequate. Have a preserved rail corridor to CSX line. Potential exists to connect to a niche RR service connecting it to Norfolk-Southern	Reactivate preserved rail corridor to CSX line south of I-74 Create new line to connect to niche RR for N-S access
Ports	Adequate. 100 miles from Port of Wilmington Already completed Interstate connection to Port of Charleston via I-74, I-95, & I-26	Better highway connection to NC Port at Wilmington. View NC deepwater port as critical for future economic development
Shovel Ready Sites	More than adequate with all necessary infrastructure	To maximize use of existing land, upgrades needed for

Facility	Current Status	Improvements Needed
Shovel Ready Sites (continued)	services available. Existing Certified Industrial Site	water and sewer facility
Workforce (Table Continued Next Page) Workforce Continued	Adequate with training. Workforce has good work ethic and willing to learn High unemployment area Training readily available from area colleges and universities	Workers will need to be trained for industries requiring skilled jobs.
Communication	Adequate but gaps	Provide uniform hi-speed coverage
Power	More than adequate with North-South and East-West feeds. Good access to natural gas	
Water/Sewer	Adequate with excess capacity at existing 2 million gallon facility that is a revenue generator for MEB Could develop additional access to an existing 7 million gallon facility (not in service)	Existing airport water/sewer facility needs upgrades 7 million gallon facility to the North would need connection to the airport and upgrades including conversion from industrial to potable water Water collection lines along runways and taxiways need improvement.
Specialty Criteria	Abundance of land; ability to expand runways to almost any length	

Table 3-3: Strengths, Weaknesses, and Recommendations for MEB Area

	Strengths	Weaknesses	Recommendations
Laurinburg-Maxton Airport (MEB)	<p>Good strategic location</p> <p>Significant developable land including large parcels</p> <p>Significant expandable runways</p> <p>Availability of electrical, power, gas, water/sewer, and communications</p> <p>Proximity to rail both N/S and E/W</p> <p>Proximity to Ft. Bragg leading to possible economic development</p> <p>Existing and planned interstate highway development provides multi-directional access</p>	<p>Skilled workers prefer living in larger towns with more amenities</p> <p>Facilities require significant costly improvements (especially runways/taxiways, water/sewer, drainage</p> <p>Workforce training needed for industries requiring skills other than manual labor</p> <p>High cost for developers needing large volumes of water/sewer services and/or rail connections</p> <p>Too much dependency on military</p> <p>Lack of strategic plan for airport</p>	<p>Find a champion (private/government) to provide dollars for upgrades! Most likely military as Ft. Bragg expands and outsources</p> <p>Needs balance between commercial and military</p>

Table 3-4: Assessment Matrix for FAY Area

Measure	Village 2 Fayetteville Regional Airport (FAY) Area
<u>Facility Type*</u>	Commercial and General Aviation
<u>Target Industries</u>	Defense/Homeland Security; Distribution; Aerospace; General Manufacturing
<u>Speed of Implementation</u>	5-10 years
<u>Infrastructure - Transport</u>	
Highway	Very Good
Rail	Not at site but good connections in metro area
Air	
Existing runways	Two-only one FAA supported Lengths: 7712' & 4800' ILS Category 1 Capability
Can runways be extended?	Yes, at a cost
Maritime (ship/barge)	92 Miles to Port of Wilmington; Fayetteville is accessible by barge via Cape Fear but not currently operational
<u>Infrastructure - Other</u>	
Communications	Very good
Power	Adequate
Water	Improvements Needed
Sewer	Improvements Needed-Pumping Station
Land Available (acreage)	Some existing sites available at airport, improvements needed for other sites
<u>Labor Force</u>	
Availability	Yes, including skilled labor
Education Programs to Support Local Industry	Yes
<u>Specialty Criteria**</u>	Fayetteville Economic Development seeking FTZ; no cargo facilities

* Facility type = major business practice at this location (intermodal facility, warehouse, distribution center, light manufacturing, and so forth)

** Specialty Criteria = foreign trade zone, customs, high-security, and so forth

Table 3-5: Site Summary for FAY Area

Facility	Current Status	Improvements Needed
Roads	Adequate plus.	See roads recommendations
Airports	<p>Central location, halfway between Maine and Miami</p> <p>Moderate commercial and general aviation facility (no cargo facility)</p> <p>One FAA supported runway which can only handle narrow body aircraft.</p> <p>Cash flow positive but limits growth (debt free)</p>	<p>Runway/taxiway upgrades needed (see water/sewer)</p> <p>Cargo facility required</p> <p>Additional Sources for Capital Improvements</p>
Railroads	Inadequate at FAY but good metro access; FAY 5-8 miles from main line	Spur required if cargo issue is resolved; costly
Ports	92 miles to Port of Wilmington with adequate highway	
Shovel Ready Sites	Moderate airport sites available in NW corner with additional private tracts available	Water and sewer improvements needed for development of existing property
Workforce	Better than adequate skilled labor & technical labor available (military discharges around 6000 per year)	Needs to be promoted for recruitment of industry to area
Transport Servicing	Trucking facilities are plentiful	
Communication	Good to very good	
Power	Adequate, owned by city	
Water/Sewer	Adequate, presuming “no growth”	Pumping station at FAY for additional sewer capacity

Facility	Current Status	Improvements Needed
Water/Sewer (Continued)		<p>No sewer facilities on southside of airport</p> <p>Taxiways need remediation for water problems</p> <p>Overall improvements needed for future growth</p>
Specialty Criteria	Applying for FTZ, location undetermined	

Table 3-6: Strengths, Weaknesses, and Recommendations for FAY Area

	Strengths	Weaknesses	Recommendations
Fayetteville Regional Airport (FAY)	<p>Proximity (Highways, Ft. Bragg, Recreation, Port, RTP, etc.)</p> <p>Ft. Bragg expansion will stimulate airport growth (commercial/industrial, general aviation, and military related traffic)</p> <p>Military outsourcing leads to airport growth potential (hangers, runways, land sites)</p> <p>Better than adequate skilled and technical labor available (around 6000 military discharged per year)</p> <p>Roads are better than adequate in all directions</p>	<p>No cargo facility</p> <p>No at site rail connection</p> <p>Port 92 miles away</p> <p>Only one FAA supported runway that can handle narrow body aircraft</p> <p>Additional capital sources are not currently available</p> <p>No updated Fayetteville Area Plan and Airport Plan not tied to economic development driven issues</p> <p>Water and sewer issues need to be addressed</p> <p>Limited number of large parcels of land for growth</p> <p>Expansion of runways will be expensive</p>	<p>See that city and economic development proactively recruit a champion, military is a good candidate to spur growth and provide dollars for Logistics Village at airport.</p> <p>Update Fayetteville Area Plan and coordinate with Airport Plan in order to promote economic development at FAY</p> <p>Correct water and sewer issues to maximize growth potential</p>

Table 3-7: Assessment Matrix for ILP Area

Measure	Village 3 International Logistics Park (ILP)
Facility Type*	Future distribution center and light manufacturing
Target Industries	Logistics and Distribution Facilities meeting “At Port” Logistics Model criteria; Metal Fabricators; Food Processing/Food Manufacturing (Agri-Industry); Furniture and Furnishings (Distribution and Light Manufacturing); Automobile Equipment; Electronics
Speed of Implementation	Immediate
Infrastructure - Transport	
Highway	Good and improving
Rail	Across US 74 at Mid-Atlantic Logistics Center
Air	ILM 17 Miles
Existing runways	See ILM
Can runways be extended?	See ILM
Maritime (ship/barge)	15 Miles to Port of Wilmington
Infrastructure - Other	
Communications	Good/AT&T Fiber Optic Digital Switch
Power	Good
Water	Good-new service
Sewer	Good-new service
Land Available (acreage)	1100 Acres
Labor Force	
Availability	Yes, skills training needed
Education Programs to Support Local Industry	Yes
Specialty Criteria**	Meets Ports “At Port” Logistics Model; Inactive FTZ at port could be used to establish sub-zone

* Facility type = major business practice at this location (intermodal facility, warehouse, distribution center, light manufacturing, and so forth)

** Specialty Criteria = foreign trade zone, customs, high-security, and so forth

Table 3-8: Site Summary for ILP Area

Facility	Current Status	Improvements Needed
Roads	Adequate	See road recommendations, especially needs traffic light
Airports	ILM- 17 miles	Need planned roads to be very accessible (specifically I-140 loop)
Railroads	Inadequate, however Mid-Atlantic Logistics Center across hwy has CSX access	Cooperatively market both parks for firms needing rail access
Ports	Excellent (15 miles away) Qualifies for “At Port” Logistics Model	Road improvement needed to provide better access to Port. Ready access to Port that is capable of handling Post-Panamax vessels. Raise public awareness of Port’s importance to economic development in NCSE.
Shovel Ready Sites	Excellent 1100 acres zoned industrial with water and sewer availability; additional acreage available	See all above recommendations
Workforce	Abundance of people. BCC excellent at training-developing logistics curriculum at nearby campus	Lacking needed skills for specific jobs
Communication	Coverage but uneven	Improve uniform coverage
Power	Abundant electricity and natural gas	
Water/Sewer	Under construction with ability to expand	Finish construction
Specialty Criteria	Meets “At Port” Logistics Model criteria. ILP is located in Tier 1 county (Columbus). Large tracts of land available	

Table 3-9: Strengths, Weaknesses, and Recommendations for ILP Area

	Strengths	Weaknesses	Recommendations
International Logistics Park (ILP)	<p>Lots of land with available infrastructure (power, water, sewer, gas, etc.)</p> <p>Meets “At Port” Logistics Model criteria</p> <p>Near airport</p> <p>Advantages of Tier 1 county status resulting in state tax breaks and other incentives</p> <p>Low county tax</p> <p>Joint venture between Tier 1 and Tier 3 counties assuring consistent planning</p>	<p>Railroads</p> <p>Roads</p> <p>Skilled specific workforce</p> <p>Risk exposure to future availability of the Port of Wilmington</p>	<p>Do planned road projects- start with full intersection with traffic light</p> <p>Cooperate with Mid-Atlantic Logistics Center and ILP to maximize implementation of “At Port” Logistics Model</p> <p>Cooperatively leverage regional logistic assets to create synergy in facilitating regional economic development</p>

Table 3-10: Assessment Matrix for ILM Area

Measure	Village 4 Wilmington International Airport (ILM) Area
<u>Facility Type*</u>	Airport, Commercial, General Aviation and Cargo
<u>Target Industries</u>	“Clean” Industries; Aircraft Maintenance; Distribution/Light Manufacturing
<u>Speed of Implementation</u>	Immediate
<u>Infrastructure - Transport</u>	
Highway	Very good and improving (See “Cape Fear Commutes 2035: Transportation Plan”)
Rail	On-site
Air	
Existing runways	Two Lengths: 8000’ & 7004’ ILS Category 1 Capability
Can runways be extended?	Yes, at a cost
Maritime (ship/barge)	2 miles to Port of Wilmington
<u>Infrastructure - Other</u>	
Communications	Excellent
Power	Available
Water	Good, secondary source needed
Sewer	Good
Land Available (acreage)	Yes, sites at airport and in vicinity, some shovel ready
<u>Labor Force</u>	
Availability	Excellent, with ability to attract skilled workers
Education Programs to Support Local Industry	Yes
Specialty Criteria**	Full-service customs FIS facility; Meets “At Port” Logistics Model; Inactive FTZ At Port could be used to establish a sub-zone

* Facility type = major business practice at this location (intermodal facility, warehouse, distribution center, light manufacturing, and so forth)

** Specialty Criteria = foreign trade zone, customs, high-security, and so forth

Table 3-11: Site Summary for ILM Area

Facility	Current Status	Improvements Needed
Roads	Overall good	<p>Ease access from Port of Wilmington to ILM with completion of I-140.</p> <p>Move the Skybridge closer to downtown near the Memorial Bridge. As proposed, the bridge will not improve traffic to and from the Port of Wilmington. With the existing bridge site, truckers would have to add several miles to their route to take advantage of Skybridge and would have to pay a toll.</p> <p>Continue I-74 all the way to Wilmington or at the very least continue it to I-140.</p> <p>Build the Monroe Bypass.</p>
Airports	Good	None needed
Railroads	Adequate with existing rail link	<p>Needs extension to Port of Wilmington</p> <p>Needs N-S access connecting Castle Hayne to Wallace</p>
Ports	Better than average as ILM is just 2 miles north of Port	Maintain a viable port in NCSE
Shovel Ready Sites	Sites shovel ready Meets “At Port” Logistics Model criteria	Need secondary water source and stormwater facilities to fully develop
Workforce	Excellent-area capable of attracting skilled labor	Develop programs to impart skillsets that match the targeted cluster (Example: Logistics program-UNCW)
Communication	Average to Above average	Provide uniform coverage throughout Greater Wilm. Area

Facility	Current Status	Improvements Needed
Power	Adequate	Work to assure sufficient electric energy resources are devoted to meet future demand
Water/Sewer	Presently adequate	<p>Secondary water source needed (Pollution and drought are concerns for Cape Fear River Basin)</p> <p>Start up issues at Cape Fear Public Utility Authority need to be addressed</p>
Specialty Criteria	<p>FTZ (Inactive)</p> <p>State of the art Full Service Federal Inspection Services (FIS) facility</p> <p>Space for Expansion at ILM</p>	

Table 3-12: Strengths, Weaknesses, and Recommendations for ILM Area

	Strengths	Weaknesses	Recommendations
Wilmington International Airport (ILM)	<p>Modern, underutilized, full-service, and well maintained airport. Runways are adequate and expandable to meet demand</p> <p>Road access</p> <p>Rail access</p> <p>Proximity to Port</p> <p>Shovel ready industrial sites for expansion</p> <p>Available FTZ (Inactive)</p> <p>Full-service Federal Inspection Services (FIS) facility</p> <p>Adequate workforce to meet current jobs</p> <p>Quality of life imparts the ability to attract highly skilled workers</p> <p>Average to above average adequacy of basic infrastructure (communication, water, sewer, power)</p>	<p>Low cargo and passenger volume.</p> <p>No secondary source of water</p> <p>No N-S rail</p> <p>Direct rail access to port</p> <p>Port viability in post-Panamax world</p> <p>Lack of large tracts of developable land</p> <p>Develop skill sets for targeted industry clusters</p> <p>Possible future problems with potable water and secondary water source</p> <p>Work to assure that sufficient electric energy resources are devoted to meet future demands</p> <p>Operations of Cape Fear Utility Authority need to be addressed</p> <p>Proximity to Wetlands</p>	<p>See Roads Recommendations</p> <p>See Rail Recommendations</p> <p>Wait for Moffat Nichol study 1st Quarter 2011</p> <p>Work with industrial parks in close proximity to airport</p> <p>Tap into resource base of retirees e.g. UNCW-Cameron Executive Network (CEN)</p> <p>Better communication with Progress Energy for future development</p>

Table 3-13: Assessment Matrix: “Virtual Logistics Village” for the Greater Wilmington Area

Measure	Village 5 Virtual Logistics Village
<u>Facility Type*</u>	Airport, trucking, rail, port, logistics and distribution, warehousing center, and manufacturing
<u>Target Industries</u>	See ILM, ILP and NCSE’s targeted clusters
<u>Speed of Implementation</u>	Immediate
<u>Infrastructure - Transport</u>	
Highway	Good to very good and improving (See “Cape Fear Commutes 2035: Transportation Plan”)
Rail	Available with limitations
Air	ILM
Existing runways	Two at ILM Lengths: 8000’ & 7004’ ILS Category 1 Capability
Can runways be extended?	Yes, at a cost
Maritime (ship/barge)	Port of Wilmington
<u>Infrastructure - Other</u>	
Communications	Good to Excellent
Power	Adequate
Water	Adequate- Secondary water source needed. Overall area has future water concerns
Sewer	Septic and Traditional Available
Land Available (acreage)	Excellent- numerous shovel ready of all sizes
<u>Labor Force</u>	
Availability	Overall excellent- some skills training may be needed
Education Programs to Support Local Industry	Yes
Specialty Criteria**	ILM has full-service customs FIS facility; Area meets “At Port” Logistics Model; inactive FTZ at Port could be reactivated and sub-zones established as needed at other “Virtual Logistics Village” sites

* Facility type = major business practice at this location (intermodal facility, warehouse, distribution center, light manufacturing, and so forth)

** Specialty Criteria = foreign trade zone, customs, high-security, and so forth

Table 3-14: Strengths, Weaknesses, and Recommendations: “Virtual Logistics Village” for the Greater Wilmington Area

	Strengths	Weaknesses	Recommendations
“Virtual Logistics Village” for the Greater Wilmington Area	<p>All transportation modes</p> <p>Adequate infrastructure</p> <p>Shovel ready sites</p> <p>International trade (Port of Wilmington)</p> <p>Major industrial parks including: International Logistics Park, Mid-Atlantic Logistics Center, Pender Commerce Park</p>	<p>Absence of strong coordination</p> <p>Highway and rail access (“the last mile”)</p> <p>Risk exposure to future viability of the Port of Wilmington</p>	<p>Enhance coordination with a “facilitation” group (e.g., similar to Aerotropolis Leadership Board for PTI)</p> <p>Capitalize on “At Port” Logistics Model</p> <p>Improve highway and rail access</p> <p>Continue to invest in maritime activities</p>

3.2 **Logistics Villages: Resources Compared**

In order to compare the five proposed “Logistics Village” sites in NCSE, key criteria needed for a successful “Logistics Village” are reviewed with the data coming from Tables 3-1 to 3-14 shown above. These tables reveal the following points of comparable salient infrastructure issues:

- Highways:** In general, all five sites have good road access and planned improvements will only make access easier. When I-74 is complete to the Piedmont Triad and beyond, NCSE access to the Midwest will improve as truck traffic will be able to bypass the congested Raleigh area. This is especially true for the International Logistics Park (ILP), the Wilmington International Airport (ILM), the “Virtual Logistics Village” and the Laurinburg-Maxton Airport (MEB) sites. For these same sites, The Monroe Bypass, along with the completion of I-74 to Rockingham, and completion of I-140 in the Wilmington area will provide better access to the Charlotte market and beyond. **Key to the near term success of the ILP is a full lighted intersection at the entrance to the Mid-Atlantic Logistics Center and ILP.** In the future the state should also consider building a full interchange at the intersection of Highway 87 and US 74 that would provide links via access roads to not only ILP but the Mid-Atlantic Logistics Center and

allow the removal of the interim lighted intersection. While the Port of Wilmington by itself is not a targeted site, it is part of the “Virtual Logistics Village” and this site will benefit significantly from all road projects and will help the Port to implement its “At-Port” Logistics Model and become more globally competitive. Planned road projects for the Fayetteville area will slightly enhance traffic around the Fayetteville Regional Airport (FAY); however, overall, FAY already has excellent immediate access to I-95 and access to I-40 is just 30 minutes away via I-95.

- **Railroads:** The area around MEB has the best potential for rail access. Not only does the site have a preserved rail corridor to CSX but it has the ability to tap into short line railroads a few miles north of the airport. While the ILP does not have direct rail access to CSX, the Mid-Atlantic Logistics Center, located directly across the street has CSX rail access. The Fayetteville area has excellent rail access (Norfolk-Southern, CSX and short lines); however, FAY’s direct access to rail is several miles away. ILM has direct access to CSX and indirect rail access to the Port of Wilmington. The “Virtual Logistics Village” would benefit from ILM’s and Mid-Atlantic Logistics Center’s access to CSX. Overall, NCSE would benefit from North-South rail access from the Port of Wilmington and an intermodal facility to make the Port of Wilmington more competitive in a global economy.
- **Air:** The best existing air service is at the modern, well-maintained ILM site as it has a good combination of commercial, cargo and general aviation facilities along with a full-service US Customs Federal Inspection Services (FIS) facility. ILM also has the capacity to increase runway length. If a “Virtual Logistics Village” were established in the Wilmington area, ILM is a valuable asset as a result of its existing facilities, its nearness to the Port of Wilmington and already existing and proposed industrial parks located within a 15 mile radius of the airport. These industrial sites include ILP, the Mid-Atlantic Logistics Center and Pender Commerce Park. All three of these sites fall within the Port of Wilmington’s “At Port” Logistics Model. The biggest drawbacks for FAY are that they lack cargo facilities and have only one FAA supported runway. However, the main runway could also be expanded to 8500 feet based upon demand. MEB has three runways but only two are operational. However, as a result of land available at the MEB site the main runway could be extended to almost any length. Operational runways at MEB are undergoing improvement but will not be fully improved to their original design. While MEB offers great potential, there is a substantial cost associated with improving the runways to maximize that potential.
- **Infrastructure (Communications, Natural Gas and Electricity, Water and Sewer):**
 - **Communications:** Access to reliable, high-speed broadband communications is generally good across NCSE; however, it is not uniform with generally better service in the major cities and slower more spotty coverage in rural areas. The immediate Wilmington area, including the Port of Wilmington and ILM, is well wired and generally has the most advanced communications access. Wilmington

was the first market in the nation to convert to digital TV and is now experimenting with the “white space” created as a result of the conversion. MEB has a major AT&T fiber optic line running through the site; therefore, has access to this line when a need develops. Broadband and an AT&T Fiber Optic Digital Switch are available at the ILP and, as a result of the military facilities in the Fayetteville area, access to reliable communications is very good. Should the need arise for advanced communications service, each of the sites under consideration should be able to meet these demands.

- **Natural Gas and Electricity:** Gas service is available at MEB and the site also has excellent access to electrical power via the North-South and East-West electric grid. With regard to the Wilmington area, including the “Virtual Logistics Village,” ILM and ILP have access to natural gas resources. Sufficient electrical power exists for present demand in the Wilmington area but concern was expressed that there may not be enough electrical power resources to meet future demand. Electrical power for FAY is supplied by Fayetteville’s Public Works Commission and this may be a positive for the area as the Commission may be in a position to react more quickly for industrial requests for electrical power than larger utility companies. Especially significant for NCSE is the fact that Piedmont Natural Gas (PNG) will build a new natural gas line that will bisect NCSE from Hamlet to Progress Energy’s Sutton facility outside of Wilmington. (The Sutton Power Plant is currently converting from a coal-fired to a natural gas facility.) This second pipeline will be a significant asset for economic development in NCSE.
- **Water and Sewer:** Although there are some individual issues, access to water and sewer is generally good across NCSE. MEB has excellent access to both water and sewer. Not only do they have the capacity to enlarge and improve their existing on-site facility but also, if the need arises, MEB could tap into another facility located at the WestPoint Home facility located a few miles away. However, there would be considerable cost associated with updating and modernizing the WestPoint Home facility. FAY does have water and sewer issues that would need to be addressed including building a sewer pumping station. Water for the ILP comes from Columbus County and sewer service will come from Brunswick County. ILP is also located near a regional water treatment facility. With regard to the Wilmington area, the possibility of developing a secondary water source should be explored as there were significant concerns expressed by interviewees about future water quality from the Cape Fear and the impact of long-term drought on the Cape Fear. Additionally, administrative issues caused by the start-up nature of the new Cape Fear Utility Authority need resolution.

- **Developable Land:** Each of the five possible sites studied for a “Logistics Village” has land available for development. Similar to the Global TransPark, MEB has land available to meet almost any need. Some of that land is already shovel ready and located in a certified industrial site fronting the future I-74. The ILP has 1100 acres available and, immediately across the street from ILP, the Mid-Atlantic Logistics Center has an additional 1100 acres with rail access. FAY has some parcels immediately available but infrastructural improvements would be needed to build on other existing parcels. Additional land is also available near the airport. ILM has around 150 acres available at site and other possible sites adjoin the airport. If the “Virtual Logistics Village” is considered significant, developable land is available at ILP, the Mid-Atlantic Logistics Center, and Pender Commerce Park and at or adjacent to ILM. A large percentage of this land is shovel ready and meets the criteria for the Port of Wilmington’s “At Port” Logistics Model.
- **Labor:** As of November 2010, NCSE has a large existing labor pool with unemployment ranging from a low of 8.4% in Sampson County to a high of 15.7% in Scotland County. While many of these workers have skills, many would need training to develop new skills. The area is fortunate to have 8 Community Colleges, 3 state supported universities and 2 private colleges located in the region. Many offer innovative, responsive catalogues of affordable education and training programs. Additionally, should specific business needs arise, these same institutions will develop programs to meet them. Thus, the value of these educational institutions to economic development in the area is significant. FAY and the surrounding area benefits from its proximity to Ft. Bragg as many skilled military personnel with good work ethic leave the service from Ft. Bragg and seek employment in the area. The Wilmington area benefits from an excellent quality of life and is able to attract skilled workers for available positions.
- **Specialty Criteria:** ILM has a full service US Customs Federal Inspection Services (FIS) facility and, while they do not have a FTZ, they could become a sub-zone of the currently inactive FTZ at the Port of Wilmington. Should the need arise, the ILP and the “Virtual Logistics Park” could establish sub-zones of the inactive FTZ at the Port. Fayetteville has funds available and is studying the possibility of establishing a FTZ at a site that is presently undetermined. Specialty criteria for MEB would have to include the ability to develop runways to almost any length and their ability to develop significant land parcels of all sizes in the immediate vicinity of MEB.

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Appendices

Appendix A: Slides from the Governor's Logistics Task Force Meeting on December 15, 2010

SEVEN PORTALS STUDY RESULTS: SOUTHEAST REGION

Presentation to
Governor's Logistics Task Force


December 15, 2010



UNCG

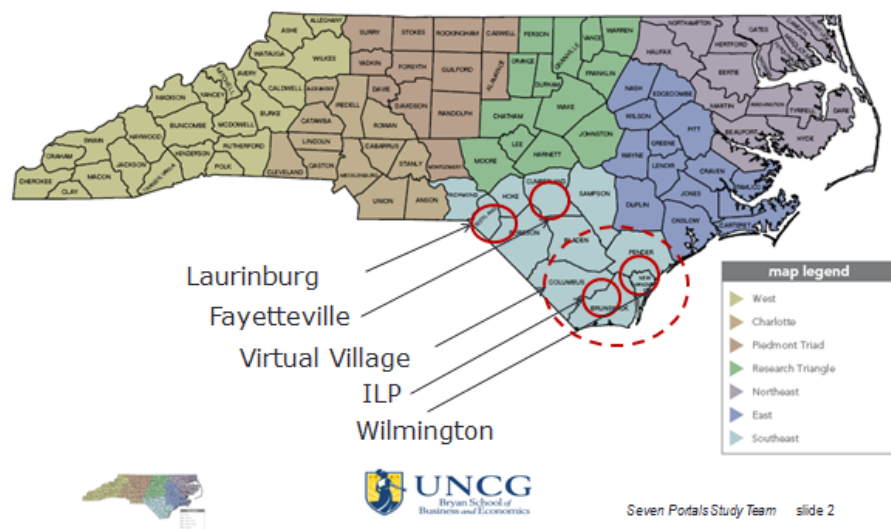
Bryan School of
Business and Economics

By UNCG Team:
Joy Bhadury, Ph.D. and Sam Troy
with assistance from Philip Weikel and Tom May



Seven Portals Study Team slide 1



Southeast Region- Geographical Landscape



Southeast Region-Socioeconomic Landscape

- 2009 Demographics
 - Population (1.08 million)
 - Labor Force (498,732)
 - Land Area (7,500 sq. miles)
- Statewide Unemployment is 9.1%
- Seven of 11 counties are above state avg.
- Five of the 11 counties are designated Tier 1

- Clusters of Economic Activity (Present and Targeted)
 - Knowledge-Based
 - Manufacturing
 - Logistics and Distribution
 - Agriculture/Food Processing
 - Defense Related

Seven Portals Study Team slide 3

A Summary of 4 Sites

Site	Strengths	Weaknesses	Needs
Laurinburg-Maxton Airport (MEB)	<ul style="list-style-type: none"> • Significant capacity for expansion • Proximity to Ft. Bragg and Camp McCall 	<ul style="list-style-type: none"> • Facilities require significant costly improvements • Lack of strategic plan for airport 	<ul style="list-style-type: none"> • Needs champion (private/ government)
Fayetteville Airport (FAY)	<ul style="list-style-type: none"> • "Proximity" • Ft. Bragg expansion • Adequate labor available 	<ul style="list-style-type: none"> • Lack of capital sources for infrastructure improvement • Disconnect between Airport Plan and economic development 	<ul style="list-style-type: none"> • Proactively recruit a champion (military?) • Update Fayetteville Area Plan and coordinate with Airport Plan • Correct water and sewer issues
International Logistics Park (ILP)	<ul style="list-style-type: none"> • Abundance of shovel ready sites • Meets "At Port" criteria • Tier 1 County Status 	<ul style="list-style-type: none"> • Risk exposure to future viability of the Port of Wilmington 	<ul style="list-style-type: none"> • Planned road projects (full intersection) • Cooperate with Mid-Atlantic Logistics Center • Leverage regional logistics assets
Wilmington International Airport (ILM)	<ul style="list-style-type: none"> • Modern full-service (FIS) airport • Shovel ready industrial sites • Quality of life 	<ul style="list-style-type: none"> • Risk exposure to future viability of Port of Wilmington 	<ul style="list-style-type: none"> • Leverage regional logistics assets • Utilize professional skills of retirees

An Ideal Logistics Village for the Greater Wilmington Area

- “Virtual Logistics Village”
- Strengths
 - All transportation modes
 - Adequate infrastructure
 - “Shovel Ready”
 - International trade (Port of Wilmington)
 - Major industrial parks including: International Logistics Park, Mid-Atlantic Logistics Center, Pender Commerce Park
- Weaknesses
 - Absence of strong coordination
 - Highway and rail access (“the last mile”)
 - Risk exposure to future viability of the Port of Wilmington
- Needs
 - Enhance coordination with a “facilitation” group (e.g., similar to Aerotropolis Leadership Board for PTI)
 - Capitalize on “At Port” model
 - Improve highway and rail access
 - Continue to invest in maritime activities



Seven Portals Study Team slide 5

Risk Management: Way Forward

- Four alternative decisions for NC Ports:
 - (1) Do Nothing
 - (2) Minor Enhancements
 - (3) Major Enhancements
 - (4) Have NC become a major participant in the deep water port business
- Suggestions:
 - Utilize pending Moffatt and Nichol study expected in the first quarter of 2011.
 - For the immediate future, study the feasibility of (3) above
 - Engage in a state-wide dialogue and debate on (4) above



Seven Portals Study Team slide 6

INTERVIEW NOTATION: Additional background interviews were conducted with Michael Rice, Toby Bronstein, Carroll Harris (All 3 of these of these individuals were representatives of “No Port Southport, NC Inc.” currently known as “Save the Cape, Inc.”); Steve Yost, Director, NCSE; John D. Kasarda, Ph.D, Director, Kenan Institute of Private Enterprise, Kenan-Flagler Business School, UNC Chapel Hill and Don Parker, Deputy to the Commander, Military Ocean Terminal at MOTSU. Transcripts are not available for these interviews.

Appendix B: Interview with Officials from International Logistics Park

INTERVIEW SESSION FOR THE INTERNATIONAL LOGISTICS PARK BRUNSWICK AND COLUMBUS COUNTIES, NORTH CAROLINA

OCTOBER 1, 2010

PARTICIPANTS

Jim Bradshaw, Executive Director, Brunswick County Economic Development Commission

Gary Lanier, Director, Columbus County Economic Development Commission

Mike Reaves, Chairman, Brunswick County Economic Development Commission

Velva Jenkins, Assistant Vice President for Economic and Workforce Development, Brunswick Community College

Steve Yost, Director, North Carolina's Southeast Region

Jimmy Yokeley, Jr., Director, Distribution Services, Business and Economic Development, North Carolina Ports

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions.

I. General Questions:

- A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
- The International Logistics Park (ILP) is a large undeveloped 2200 acre Park that is already zoned for industrial use. Another Industrial Park is located directly across the street with the same available acreage. Both Parks have the ability to expand. Much of the land around the Parks is owned by International Paper and not individual farmers. This may make future expansion a little easier for both Parks. Additional land with Agrarian Growth Zones designation is also available for expansion.
 - With the planned upgrade of NC 74 to Interstate status, the Park will have easy access to the Triad and beyond via I-74 and 73. In addition, with the completion of I-140 to NC 74 (currently under construction), ILP will have easy interstate access to I-40 and I-95.
 - Water, sewer and power are readily available. (In fact, utilities are already arranged for immediately availability.)
 - Both Brunswick and Columbus Counties have low tax rates (property and real estate).
 - ILP is strategically located just fifteen miles (container delivery charges increase after 20 miles) from the Port of Wilmington. Thus, ILP would easily meet the criteria for an “At Port” facility.....a very big plus.
 - The part of the GLP located in Columbus County has “Tier One Status and this enables the entire park to be eligible for incentives associated with such designation.
 - Port of Wilmington has FTZ designation; therefore, it would be easy to establish sub-zone status at ILP when the need arises.
 - ILP is a public/private partnership thus assuring consistent planning not dispersant efforts as might happen with a number of small industrial parks located in the same area.
 - Labor is readily available and Brunswick Community College stands ready to train the labor force for needed skills.
 - Recently granted permission from NCDOT will allow a temporary entrance into the ILP and the Industrial Park across the street as well. (Money is needed, however, to construct the entrance.)

- B. What the real or perceived weaknesses of your facility?
- Will need a highway interchange with future I-74 where it will cross NC 74 and 76.
 - Industrial Park across the highway has rail access but the ILP does not currently have rail. A high cost would probably be incurred to bring rail to ILP.
 - If the roadways are not constructed as they are currently being discussed, the ILP will be at a disadvantage (Interchange with future I-74, completion of I-140, the “Skyway Bridge and the widening of NC 87 to Elizabethtown.
 - “Huge disadvantage” if the new International Terminal at Southport (or an alternate location) is not constructed. In fact, if NC cannot develop a true deep water port that can handle post Post-Panamax ships, NC will lose its link to the world. (It was pointed out by participants that this is not only a disadvantage for the ILP but also the entire State of North Carolina. Furthermore, in addition to losing future jobs, the State will lose existing jobs as well because companies utilizing NC Ports will move to another port city. The idea was also expressed that in around 10 years, you will either have Tier 1 Ports or Tier 4 Ports....there will be nothing in between.)
- C. Are you targeting specific industries or clusters? If so, what are they?
- Logistics – especially “At Port” type facilities
 - Metal fabricators
 - Plastics
 - Food Processing/Food Manufacturing (Agri-Industry)
 - Furniture and Furnishings (Distribution and light manufacturing)
 - Textiles
 - Automobile equipment
 - Electronics
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- Strategic, central East Coast location with good roadways that will be greatly enhanced with roads under construction or planned for the near future
 - Shovel ready industrial sites to meet most any need
 - Collaborative approach to economic development including strong ties to NC Ports

- Low taxes and a readily available labor pool that can be easily trained by a cooperative Community College
 - Proximity to airport and rail connections
 - Readily available access to water and sewer connections
- E. What ought to be the topmost priorities of economic development (with regard to logistics) in NCSE?
- Assure that there is coordinated, orderly development of proposed roads, bridges and highways.
 - A competitive port facility is vital to the industrial development efforts of this area of the State.
 - Promote “At Port” model to attract industry to the area.

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- The roads are generally good for the area but will be greatly enhanced with the construction of an Interchange with future I-74, completion of I-140, the construction of the “Skyway Bridge and the widening of NC 87 to Elizabethtown.
 - Access to the existing Port of Wilmington is excellent and within range to be considered as an “At Port” facility. Should a deepwater port be constructed somewhere in the immediate area, the ILP would also be strategically located to take advantage of this facility as well.
 - The Wilmington Airport is located around 15miles from the ILP and planned roads will make the airport very accessible to the ILP.
 - ILP does not now have direct rail access but another large industrial park across the street does have rail access. As a result, if the need were to develop, rail might be made able to the ILP.
- B. What are your current and future assets/needs for power, water sewer, and communications?
- The ILP has an abundant supply of power and water and the infrastructure in place to expand the sewer system.
 - Access to natural gas resources
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- D. Is there land available to expand your facility?

- As presently designed, the ILP has 2200 acres zoned for industrial. On top of that, another Industrial Park is located directly across the street from the ILP and has the same available acreage. Both Parks have the ability to significantly expand. Much of the land surrounding the Parks is owned by International Paper and not individual farmers. This may make any future expansion a little easier for both Parks.

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
 - Development plans are very current and have been shared with us.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
 - The partners in the ILP are very will to collaborate with others to help the overall economic development efforts in NCSE. In fact, the development of the ILP is a collaborative effort. Brunswick and Columbus counties officials worked closely with representatives from NCDOC, NC Ports, NCSE and Brunswick Community College. Participants were very enthusiastic in stating their willingness to reach out to other possible partners to make this effort succeed.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
 - If a post-Panamax competitive Port facility is not built in NC, the State/region stands to lose jobs rather than gain jobs. Viable NC Ports are essential to the economic development efforts of the Region.
 - If funding is not provided for planned roadways, as described previously, this will impact economic development efforts in this area of NCSE.

IV. Workforce Questions:

These questions were primarily answered by Velva Jenkins, Assistant Vice President for Economic and Workforce Development, Brunswick Community College (BCC). Other participants added their comments but primarily Ms. Jenkins addressed these issues. As an aside, Ms. Jenkins noted that BCC frequently will offer incoming industry temporary office space while the new facility is under construction. This allows BCC to work hand in hand with incoming business and quickly determine their training needs.

- A. What is the availability of skilled labor to support your logistics facility?

- There is an abundance of people that want to work but may not have specific skills needed for specific jobs. As a result, BCC closely coordinates with Jim Bradshaw, Executive Director, Brunswick County Economic Development Commission. As needs are determined, BCC reacts quickly to provide the needed training. In addition, BCC is proactively establishing a Logistics Program to support the ILP. They have the space available, the curriculum has been approved and faculty is available. It is also a plus that the BCC Leland Campus is just minutes away from the ILP and, in fact, was established at this site in order to attract industry. Bottom line: there is workforce availability and training is readily available to develop new customized skill sets for this willing workforce.

B. Specifically, what kind of skilled labor is needed?

- At this time, BCC is planning for the future by anticipating a need for logistics training.
- Metal fabricators

C. What educational programs are available to support your facility and who provides them?

- At this time, BCC is offering basic and soft skills classes to help interested people become more employable.
- BCC also operates a Small Business Center to help budding entrepreneurs.
- BCC also participates in the Brunswick County Economic Alliance that is a communications resource that makes interested businesses aware of resources and programs such as grants that may assist them.
- BCC regularly participates in visits to existing plants to help determine training needs.
- According to Gary Lanier, Director, Columbus County Economic Development Commission, SE Community College in Whiteville offers programs in micropropagation with an emphasis on food processing. This program even extends down into the high schools in Columbus County.

V. **Is there anything else you would like to tell us about your facility or the area that will help us with our research?**

- Raise public awareness of the NC Ports and the key role they play in economic development efforts especially in NCSE Region.
- The State (elected officials) need to focus their attention on NC Ports and learn the key role they play and their increasing importance for the future economic growth.

- Construction funding for planned highways, intersections, roads and bridges in this area of the State is vital to the economic success of this Region.
- A viable, competitive Port is the key to economic vitality in this Region.

Appendix C: Interview with Wilmington Airport Officials

INTERVIEW SESSION FOR THE WILMINGTON, NC, INTERNATIONAL AIRPORT (ILM)

OCTOBER 1, 2010

PARTICIPANTS

Jon Rosborough, Airport Director, Wilmington International Airport

Julie Wilsey, Deputy Airport Director, Wilmington International Airport

Gary Broughton, Director of Operations, Wilmington International Airport

Jim Morton, Finance Director, Wilmington International Airport

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).

- Wilmington International Airport (ILM) is operated as an independent Airport Authority thus facilitating an efficient decision making process.
- ILM has scheduled passenger service, commercial cargo service and general aviation facilities.
- ILM has a “full service” Federal Inspection Station (FIS) with a state of the art Custom’s facility.
- ILM is located on 1800 acres of land with designated commercial sites available for development. About 70% of the sites are certified industrial sites and are “shovel ready.” All necessary utilities are readily available. Furthermore, these sites meet criteria for “At Port” facilities. Also, ILM has the opportunity to expand but needs commitments before they will proceed. However, as desirable land does become available, they will consider purchasing the land even without a firm commitment from a firm desiring to locate on airport grounds.
- The airport is physically situated in a highly desirable part of the State that offers a good quality of life to residents including excellent medical facilities, a highly respected University and a very supportive Community College (Cape Fear).
- Facilities located at ILM are not subject to a city tax...county taxes do apply.
- If ILM owns a building in which a company is located, the company is not subject to taxation on the building.
- ILM has a direct link to rail service but it does not connect directly with the Port of Wilmington; however, there are plans to construct this link in the future.
- Road access to ILM is very good and the airport is in close proximity to downtown. Additionally, there are future plans, still on the drawing board, to improve access that will enhance access to ILM.
- ILM currently has two runways (8015 feet and a cross runway 6600/7000 feet). They could expand the longer runway to 9500 to 9600 feet if there is demand.
- Security is a plus for ILM.

- North Carolina is a right to work state which is of interest to relocating industry.
- B. What are the real or perceived weaknesses of your facility?
- Wetlands are an issue but this is typical for any coastal environment.
 - The recently formed Cape Fear Utility Authority, a merger of two different organizations, has had some start up problems especially dealing with sewer failures but none at ILM.
 - There is a need for additional commercial flights to cities not currently served by the existing airlines at ILM.
 - A direct rail link to the Port of Wilmington is needed.
- C. Are you targeting specific industries or clusters? If so, what are they?
- Prefer clean industries that want to build “Class A” facilities
 - Distribution Facilities, especially those that might combine distribution with some light manufacturing
 - Aircraft Maintenance
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- ILM is a full-service airport with passenger, commercial and general aviation facilities.
 - Conveniently located midway between Florida and New York, ILM is an International Port of Entry with a state of the art Customs facility that is easy to access in terms of air traffic.
 - Wilmington offers superb quality of life to residents and has a good infrastructure for development.
 - ILM offers easy access to the Port of Wilmington, interstate highways (existing and planned), shovel ready industrial sites and close proximity to other large undeveloped industrial sites and a rail connection.
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
- Participants said to talk with Scott Satterfield, New Hanover County Economic Developer, who has the best handle on the response to this question.
 - Nurture “the creative entrepreneur”
 - Increase incentives to the film industry as this drives traffic volume up at the airport

- Increase the main runway length to 9600 feet. However, participants were quick to point out that the FAA would not approve this without increased demand.

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- While there is an existing rail link at ILM, there is a need for a rail spur to the Port of Wilmington.
 - There is existing good road access to ILM but planned improvements will enhance access.
 - Utilities are available and sufficient for needs.
 - The Port of Wilmington is physically located within a few miles of the airport.
 - ILM is well maintained and poised for and can accommodate growth.
- B. What are your current and future assets/needs for power, water sewer, and communications?
- ILM needs a secondary water source.
 - Storm water facilities at ILM are adequate and can accommodate current growth. Pipes are in place to service some of the potential development sites.
 - Resources are there to support planned growth.
 - Wilmington has superior communications. It was selected as the test market for conversion to digital TV and now is a test site for utilizing the “white space” that became available as a result of the conversion.
 - The airport maintains well trained fire and police personnel.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- ILM currently has two runways (8015 feet and a cross runway 6600/7000 feet).
 - The main runway could be expanded 9500 to 9600 feet. (Land is available for this extension)
 - Wetlands are an issue but this is typical for any coastal environment.
 - A significant amount of the pavement on the runways and taxiways has recently been rehabbed and there are plans in place to finish the project in the near future.

- ILM has installed a number of LED lights and plans to convert entirely to LED lights within 5 years.

D. Is there land available to expand your facility?

- There is land available around the airport and ILM is buying it as it becomes available. The land can be used for a runway extension and/or development sites.

III. Planning Questions:

A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**

- ILM has a strategic plan in place that was written in 2005 and runs through 2015...the plan is normally updated every 5-7 years. (We were provided a copy of the plan.)

B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)

- ILM officials work closely with the Cape Fear Utility Authority, Wilmington Industrial Development group and the Chamber of Commerce.
- They do not have a formal partnership with Cape Fear Community College but call upon them when there is a need.

C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?

- If enacted, laws that facilitate/encourage unionization such as card check, are labor issues that would hurt the airport and hinder development.
- There are potential environmental problems if measures are taken to the extreme.
- If government involvement is reasonable and balanced, ILM should be able to fulfill its goals as stated in its strategic plan.

IV. Workforce Questions:

A. What is the availability of skilled labor to support your logistics facility?

- Cape Fear Community College is very proactive in training workers with current and anticipated skills.
- With an aging population, there is a future concern that the labor pool may become limited.

- Workforce development provided by institutions such as Cape Fear Community College were instrumental in attracting industry such as GE Nuclear and Verizon to the region.

B. Specifically, what kind of skilled labor is needed?

- “Cape Fear Futures Program” is a great program aimed at math and science education.
- When a need develops, Cape Fear Community College has a great track record for quickly developing courses to address the specific skill or skills.

C. What educational programs are available to support your facility and who provides them?

- Once again Cape Fear Community College and Community Colleges in surrounding counties are very responsive in developing courses to address needed skills.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

Appendix D: Interview with Laura Padgett, Wilmington City Council

INTERVIEW SESSION WITH LAURA PADGETT, WILMINGTON CITY COUNCIL

OCTOBER 5, 2010

PARTICIPANTS

Laura Padgett, Councilwoman, City of Wilmington

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

- A. Please provide us with background information about your geographic area. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
 - Shore up and strengthen some of the assets we already have in the areas of biotech and pharmaceutical research.
 - Look at real estate as though it was an industry but at the same time try to move away from focusing too much attention on real estate (broaden the economic base).
 - For Logistics Villages to succeed, they need to create jobs.
 - Look at new more efficient ways to move people and goods.
 - Multi-modal intermodal facilities are needed in the area.
 - Land is available at the airport for immediate development.
- B. What are the real or perceived weaknesses in your area?
 - Rail connections need to be fixed...there is a need for north/south rail service.
 - Don't repeat the mistakes of the Global Transpark.
 - There is not enough emphasis on the medical industry.
 - Especially with regard to transportation issues, there may not be enough "thinking outside of box" going on in the area.
- C. Are you targeting specific industries or clusters? If so, what are they?
 - Place more emphasis on developing the medical industry, pharmaceutical research and biotechnology.
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
 - Not discussed
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
 - Improving and advancing the transportation infrastructure for freight and people is the most important issue in NCSE Region.

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?

- Need to finish the 2035 transportation plan, “Identifying Tomorrows Travel Needs Today” (wmpo.org). This study shows a dramatic increase in interest for mass transit in the years ahead.
 - Need more commercial passenger flights to different destinations.
 - ILM has state of the art Customs facility that could be better utilized.
 - More planning needs to go into road construction so that it matches land use.
 - Wilmington lacks some major road connections. For example, the Skyway Bridge needs to be built and I-140 needs to be fully completed.
- B. What are your current and future assets/needs for power, water sewer, and communications?
- With regard to communications, Wilmington is well wired. It was the test city for converting TV signals to digital and now is experimenting with utilizing the “white space” that was created as a result of the conversion.
 - Water and sewer issues are always of concern because Wilmington is a coastal city. The creation of the Cape Fear Public Utility Authority should help with some of these issues.
 - There is some concern that Progress Energy may not have enough resources devoted to the area and may be under planning potential future usage.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- D. Is there land available to expand your facility?
- Not discussed

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
- Not discussed
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- Not discussed
- C. Are there impediments that may keep you from fulfilling your

strategic plan? What are they?

- Lack of Federal funds to complete infrastructure projects such as roads may be an impediment to completing the transportation plan. Wilmington has traditionally been at a disadvantage with regard to transportation funding.

IV. Workforce Questions:

A. What is the availability of skilled labor to support your logistics facility?

- Wilmington and New Hanover County are fortunate to have Cape Fear Community College and UNCW. Both contribute very positively toward workforce development.

B. Specifically, what kind of skilled labor is needed?

- There is a need for an engineering school at least at the undergraduate level and perhaps at the Master's Degree level.
- There is also a need for a degree in logistics.

C. What educational programs are available to support your facility and who provides them?

- Cape Fear Community College and UNCW provide excellent support for workforce development. If there is a need, they try to develop the appropriate curriculum.

V. Is there anything else you would like to tell us about your area that will help us with our research?

- The quality of primary education in the area is an impediment to development. Students need to be better prepared to move into 2 and 4 year institutions.
- In order to recruit more global companies more diversity is needed within the community.
- Emphasized again the need to think “outside the box” and used the film industry as an example.
- Suggested we meet with Connie Majure-Rhett, President and CEO of the Greater Wilmington Chamber of Commerce as well as Rob Kaiser, Publisher of the “Greater Wilmington Business Journal.”

Appendix E: Interview with UNCW, Cameron School of Business Officials

INTERVIEW SESSION WITH OFFICIALS AT THE CAMERON SCHOOL OF BUSINESS, UNCW

OCTOBER 5, 2010

PARTICIPANTS

William “Woody” W. Hall, Jr., Senior Economist, Center for Business and Economic Services, Cameron School of Business, UNCW

William H. Sackley, Associate Dean and Director, Center for Business and Economic Services, Cameron School of Business, UNCW

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

- A. Please provide us with background information about your geographic area. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
 - Interviewees recommended the research team should review the “Economic Impact of the NC Ports,” ITRE, NCSU.
 - The climate and quality of life in the area are a big attraction and have an impact on economic development.
 - Income and educational achievement levels are higher in New Hanover County than in the surrounding counties.
 - Three parts to the NCSE Region:
 - Wilmington MSA
 - Fayetteville MSA
 - All the other outlying counties
 - Each of the three areas has different opportunities for growth and development and each has its own set of problems they need to overcome to be successful.
 - Outside of New Hanover County, agriculture and agri-business are still very important to NCSE Region.
 - Skill levels vary with more skilled labor available in Metro areas of the Region.
 - NCSE Region is a service driven economy although manufacturing is still important.
 - The completion of I-40 created a big boom for the area and essentially changed everything.
 - UNCW and Cape Fear Community College are real positives for New Hanover County and beyond. However, UNCW is underfunded when compared to other universities in the North Carolina system.
- B. What are the real or perceived weaknesses of the NCSE Region?
 - Roads are probably one of the top areas of weakness in the area. The completion of I-73, I-74 and I-140 will bring another boom to the area and have a significant positive impact on economic development in many counties in the Region.
 - Rail links are weak to non-existent.
 - ILM is small and has limited passenger service.
- C. Are you targeting specific industries or clusters? If so, what are they?
 - Pharmaceuticals

- Clinical research
 - Film Industry (Less now than in the immediate past)
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- Not discussed
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
- Completion of I-74, I-73 and I-140
 - As Port traffic tends to move east to west the completion of I-74 is especially important to a healthy NC Port.
 - Rail links need to be fixed and Norfolk-Southern needs to create an intermodal facility in cooperation with the Ports.
 - The airport needs to grow....if you really want to think outside the box then a new Regional Airport should be considered at some point in the future.

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- Discussed in I. E. above.
- B. What are your current and future assets/needs for power, water sewer, and communications?
- Two biggest issues for the area are the availability of potable water and waste water disposal.
 - While the immediate Wilmington area is blessed with a superb communications infrastructure, broadband access is uneven in the NCSE Region even in some parts of New Hanover County.
 - Not aware of any issues with regard to power.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- Not discussed
- D. Is there land available for development?
- There is sufficient land available for development as NCSE Region grows.

III.Planning Questions:

- A. What is the overall strategic plan for your area, when was it written and are there plans to update it? **(May we have a copy?)**
 - Historically most planning that was completed was reactive rather than proactive.
 - Not aware of plans for the area like the “Aerotropolis Study” produced for the Triad.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
 - In the past a need was not recognized for collaboration among the above mentioned facilities; however, cooperation / collaboration is becoming increasingly important time.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
 - Not discussed

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
 - Currently, the region has Tier 1, 2 and 3 counties and skill levels vary significantly across these three tiers of counties. In general, better skills are available in metro counties.
 - The number 1 and 2 needs of UNCW are to establish, in priority order, an engineering program and a logistics program.
 - UNCW hopes to have a logistics program in the future at the undergraduate level and perhaps at the graduate level. (There is some thought being given to establishing a graduate degree first.)
- B. Specifically, what kind of skilled labor is needed?
 - Education to support GE Hitachi Nuclear Energy located in Wilmington
 - Education to support the chemical industry
- C. What educational programs are available to support your facility and who provides them?
 - UNCW and Cape Fear Community College offer many programs to support workforce development.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

Appendix F: Interview with Connie Majure-Rhett, President, Greater Wilmington Chamber of Commerce

**INTERVIEW SESSION WITH CONNIE MAJURE-RHETT, GREATER WILMINGTON
CHAMBER OF COMMERCE**

OCTOBER 5, 2010

PARTICIPANTS

Connie Majure-Rhett, President and CEO, Greater Wilmington Chamber of Commerce

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

- A. Please provide us with background information about your area. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
 - As a result of the quality of life in the area, it is easy to attract a skilled workforce.
 - Very affordable housing is available across the Cape Fear River.
 - The area has a fairly balanced economy.
 - ILM is a plus for the area.
 - Unique opportunity to experiment with the use of “white space” created as a result of conversion to digital TV. (Wilmington was the first city in the country to convert.)
 - The Cape Fear Public Utility Authority, a recently created organization, is a plus and a minus for the area. Basically, it will be good for the area after initial start-up problems are resolved.
- B. What are the real or perceived weaknesses of your area?
 - The City infrastructure is old and demand, created as the result of the completion of I-40, exceeded the City’s ability to keep up with the needs.
 - The completion of the Skybridge is essential and will give Leland tremendous growth opportunities. (Interestingly, the Mayor of Leland does not support Skybridge.
 - I-140 needs to be fully completed as soon as possible.
 - Wilmington city streets need improvements.
 - The infrastructure does not adequately support the existing Port of Wilmington. Roads and railroads are not strategically aligned with the Port. If the new “International Terminal” were to be built in Southport, infrastructure would need to be constructed to support the facility.
- C. Are you targeting specific industries or clusters? If so, what are they?
 - Referred us to Scott Satterfield, Economic Developer for New Hanover County but did mention the following sectors:
 - Marine Sciences
 - Bio-Pharmaceuticals
 - Nuclear
 - Film Industry

- Manufacturing
- Chemical Production
- Port Development

D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?

- Not discussed

E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?

- Fully develop the planned roads including the Skybridge
- Obtain more direct flights to and from ILM

II. Infrastructure Questions:

A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?

- Need to construct I-140, Skybridge, I-73/74 and improve city streets
- Need better rail access and connections
- Need an intermodal rail facility
- Airport needs more direct flights

B. What are your current and future assets/needs for power, water sewer, and communications?

- The area needs an assured continuing supply of potable water. The Cape Fear River, the primary source of water, is affected but what is put into it upstream. Pollutants and droughts are a real concern.
- Broadband is either good or bad in the area. There are several areas with inadequate or no coverage. Brunswick and Pender Counties are truly impacted by limited coverage. Even areas with good broadband coverage need to get better and Wi-Fi access needs to be expanded.

C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.

- Not discussed

D. Is there land available for industrial development?

- Yes, especially around the airport and to the north of the airport. The larger development sites are those north of the airport. Surrounding counties also have available land.

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
- “Cape Fear Future” was created to address economic development in the years ahead. It is “an initiative to further develop the Cape Fear region’s Knowledge Sector Economy to promote economic development and ensure the future prosperity of the region.”
(<http://www.wilmingtonchamber.org/capefearfuture.html>)
 - “Cape Fear Future” needs to be a Regional effort and serve as the basis to create a shared vision for the future.
 - “Cape Fear Future” is designed to retain and attract knowledge workers. For this to succeed the area needs to embrace diversity.
 - Must move forward without degrading the quality of life that exists in the area.
 - Wilmington’s downtown continues to be important and must continually evolve. Ideally, it should be a good mix of retail, residential and bars and restaurants. The need exists for a downtown grocery store.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- For the Wilmington area to thrive, regional cooperation is important. Political cooperation and leadership is also needed to create a shared vision for the future.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
- In the future, it will become increasingly difficult to find necessary resources to carry out the plan like finding the funding to create and maintain more green space.

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
- Brain drain is a concern for the area. The area schools graduate many with knowledge skills but the area does not have enough jobs available to keep the graduates here.
 - Knowledge workers are the very heart of Wilmington’s planning efforts.
- B. Specifically, what kind of skilled labor is needed?

- As a result of the quality of life and its proximity to Fayetteville, Wilmington has a good pool of skilled labor. Wilmington could easily support a “Logistics Village” with a skilled and ready labor force.

C. What educational programs are available to support your facility and who provides them?

- The area has strong support from local community colleges and UNCW.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- At times is hard to get to get Wilmingtonians to support an idea but once they are sold on the concept or idea, they are very supportive. In this regard, people from outside the area are helping to propel the region forward.
- The down economy has helped Wilmington in a couple of ways. It is helping to give them time to catch-up with infrastructure needs and it has helped the area focus their efforts outside of the real estate sector.

Appendix G: Interview with Fayetteville Economic Development Officials

INTERVIEW SESSION WITH FAYETTEVILLE, NC ECONOMIC DEVELOPMENT OFFICIALS

OCTOBER 12, 2010

PARTICIPANTS

Bo Gregory, Director of Economic Development, Fayetteville, Chamber of Commerce

Doug Byrd, III, Economic Development, Fayetteville Chamber of Commerce

Tom May, Assistant to the Dean for Economic Development Initiatives, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

A. Please provide us with background information about your geographic area. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).

- “Proximity” is the key to Fayetteville’s future. (Think highways, Ft. Bragg, railroads, ocean, Port, RTP, etc.)
- Fayetteville is conveniently located near I-95 halfway between Maine and Miami.
- The completion of I-295 will improve access around Fayetteville. I-295 is complete from I-95 to SR 401. An additional part of I-295 is under construction from SR 401 to Bragg Blvd. The next planned phase will take the road to All American Expressway, the primary entrance into Ft. Bragg.
- Fayetteville has applied for a FTZ and funding has been provided by Fayetteville’s Public Works Commission (PWC). An exact location has not been determined.
- As PWC is owned by the city, there is good cooperation with industry and water and power sources are available. If a project is financially viable PWC will very willing to assist.
- There is land with water and sewer available for development at the Fayetteville Airport (FAY). Additional land immediately adjacent to the airport is also available for development. All of these sites are within 10 miles of FAY.
- Wal-Mart has already built a 1,000,000 square foot distribution facility in the area.
- Local “short-line” railroads, like the Aberdeen and Rockfish Railroad, connect to the major railroads, CSX and Norfolk Southern. Fayetteville also has Amtrak service.
- The military expansion of Ft. Bragg will make it one of the largest military bases in the country and in terms of officers it will be second only to the Pentagon. (Specifically, more Generals here than anyplace else other than the Pentagon.)
- As it was expressed to the interviewers, “The brains are coming, there will be spinoffs.” Cumberland County will become the “center of the military universe.”

- So far, the military expansion is a real plus and cooperation between the City and the military is excellent...”unbelievably so.”
- The Goodyear Plant has rail access and there is additional land available for development in the immediate area that could utilize the rail connection.
- There are good connections to the Port of Wilmington via NC 87, some 92 miles away. (Fayetteville supports the new port in Southport.)
- Trucking facilities in the area are good.
- Military outsourcing is a plus for Fayetteville. The military will outsource certain services that will benefit development. For example, Bragg does not want to necessary want to build all the meeting space it may need; therefore, they will work with local hotels to provide the space. Two new hotels are under development as a direct result of this outsourcing. This also keeps people off the secure base another plus for the military. Housing is yet another example that has benefitted. The housing market is actually “hot” here.
- In response to the Braggs expansion and the outside contractors the buildup will bring, local developers are planning to build a 215 acre military office park located near Bragg.
- Outsourcing will build the tax base.
- Fayetteville is home to Fayetteville State University and Methodist College as well as the state’s third largest community college, Fayetteville Technical Community College. Other great Universities are nearby.
- Fayetteville is also close to RTP.

B. What are the real or perceived weaknesses of your geographic area?

- There is no intermodal rail facility in the area.
- No rail connection exists to FAY.
- There is a “military town” perception....reality is in the mind of the beholder.
- There is a negative perception of the quality of life, in reality close to beach, golf (Pinehurst), RTP, etc. “Change is coming.”
- Master planning for the area has not been done. It was last done in 1966 but is currently being updated.
- Some people do not want change.

C. Are you targeting specific industries or clusters? If so, what are they?

- Defense/Homeland Security (The expectation is that with the growth of Ft, Bragg more defense contractors will open or expand existing offices.)

- Distribution (Convenient mid-east coast location) Wal-Mart is a recent success.
- Aerospace (Possible spinoffs from Boeing in South Carolina and Spirit at the Global TransPark.
- General Manufacturing

D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?

- Although not specifically discussed because of the limited time available for the interview, the strengths listed in I.A. above speak to issue. In addition, over and over again the interviewees stressed, “Proximity” is the key to Fayetteville’s future. (Think highways, Ft. Bragg, railroads, recreation [ocean, golf], Port, RTP, etc.)

E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?

- Elected officials need to be better educated about what is needed for economic growth; for example, better primary education, good roads, availability of water, sewer facilities, etc.
- Develop the infrastructure to accommodate growth....air, land and sea are vital.
- The State of North Carolina needs a viable, up-to-date Port for access to international markets.

II. Infrastructure Questions:

A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?

- The completion of I-295 will improve access around Fayetteville. I-295 is complete from I-95 to SR 401. An additional part of I-295 is under construction from SR 401 to Bragg Blvd. The next planned phase will take the road to All American Expressway, the primary entrance into Ft. Bragg.
- Proximity to everything as discussed previously

B. What are your current and future assets/needs for power, water sewer, and communications?

- As PWC is owned by the city, there is good cooperation with industry and water and power sources are available. If a project is financially viable, PWC is very willing to assist.

- Communications were said to be adequate with no issues involving broadband or telephone. Coverage is even throughout.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- Not discussed
- D. Is there land available to expand your facility?
- There is land with water and sewer available for development at the Fayetteville Airport (FAY). Additional land immediately adjacent to the airport is also available for development. All of these sites are within 10 miles of FAY.

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
- Master planning for the area has not been done. It was last done in 1966 but is currently being updated.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- The University and area colleges are viewed as allies and will frequently assist with business recruitment.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
- Not discussed

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
- There are three institutions of higher learning in the area but many more are in close proximity.
 - A skilled labor force is available as there are some 6000 skilled military people being discharged from Ft. Bragg each year, many of these people high-ranking officers. Not only do many of the discharged soldiers have technical skills but also they have international exposure and have soft skills employers want.

B. Specifically, what kind of skilled labor is needed?

- Not discussed

C. What educational programs are available to support your facility and who provides them?

- Not discussed

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- Suggest we interview two other Chamber people, Kathy Johnson, Existing Industry and Amber Quinn, Economic Development Manager.
- Suggest we meet with Larry Kenn (910.678.8321 work & 910.818.2997 cell) at Fayetteville Tech.

Appendix H: Interview with Bradley Whited, Director, Fayetteville Regional Airport

**INTERVIEW SESSION WITH BRADLEY WHITED, FAYETTEVILLE, NC
REGIONAL AIRPORT (FAY)**

OCTOBER 12, 2010

PARTICIPANTS

Bradley Whited, Airport Director, Fayetteville, NC Regional Airport (FAY)

Tom May, Assistant to the Dean for Economic Development Initiatives, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions.

I. General Questions:

A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).

- FAY is both a commercial (3 major airlines) and general aviation facility.
- Cost of passenger enplanement is low when compared to other commercial airports in the state.
- The area generally has low wages and this is a plus for industrial recruitment.
- There is easy access to I-95 and the I-40/I-95 interchange is about 30 minutes away.
- Rail lines are located around 5 miles from the airport.
- The northwest quadrant of the airport has good industrial sites available for development. Water and sewer connections are in the area.
- Private tracts of land are available around the airport perimeters.
- Areas are available for additional hanger construction.
- They do not have air cargo facilities....it is considered a “truck market.”
- FAY maintains and upgrades current assets (runways, taxiways, and buildings).
- FAY is basically a debt-free facility.

B. What are the real or perceived weaknesses of your facility?

- Does not have a FTZ but Fayetteville is in the process of applying for one.
- The airport does not have any vacant buildings available for immediate occupancy.
- Water and electricity are available on the south side of the airport but there are no sewer facilities. A pumping station is necessary for sewer service.
- Taxiways need remediation for water problems.
- Direct commercial flights are especially needed to Washington, D.C. and Tampa (Special Forces).

C. Are you targeting specific industries or clusters? If so, what are they?

- The airport itself does not actively market its land but instead works closely with Fayetteville and State of NC economic development officials. When there is interest in airport property, the airport responds.

- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- Easy access to I-95 and close proximity to I-40
 - Land is available for industrial development both at the existing airport site and immediately adjacent to the airport.
 - FAY is positioned for growth...they already own land that would allow them to expand and contiguous land is available.
 - Proximity to Ft. Bragg and the growth opportunities this represents is a plus.
 - Availability of skilled workforce (soldiers leaving or retiring from the military)
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
- Targeting DOD suppliers and contractors should be the top priority for economic development in NCSE.
 - Target aerospace manufacturing companies.
 - Help FAY grow by encouraging the growth of general and commercial aviation as this will help economic development efforts. (Encourage more direct flights and develop more corporate hangers.)

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- Easy access to I-95 and close proximity I-40
 - Railroad is around 5 miles away.
 - Utilities are owned and operated by the City of Fayetteville.
 - The Port of Wilmington is around 92 miles away.
 - Trucking facilities are plentiful.
 - (FAY is described elsewhere.)
- B. What are your current and future assets/needs for power, water sewer, and communications?
- There are some sewer issues as FAY is at the end of the sewer line for the City of Fayetteville.
 - Water, sewer and electricity are supplied by the city owned Public Works Commission (PWC). (EDITORS NOTE: From discussions in Fayetteville it appears this can be a plus and a minus for economic development as the PWC may not be as pro-active as some privately held utility companies;

however, when a need is determined, the PWC may be in a better position to react quickly to meet an economically viable need.)

- Communications are adequate with even broadband and telephone coverage throughout.

C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.

- FAY's longest runway has 6500 feet of usable length and can accommodate narrow body jet aircraft. With available land the runway can be expanded to 8500 feet of usable space. There are limited terrain and environmental issues that could be overcome. (Whited pointed out in order to lengthen the runway, the airport would need to demonstrate a need to the FAA and would have to find funding for the expansion.) The close proximity of the taxiway to the runway presents one problem and dollar cost to complete this kind of increase would be very high.
- The second runway is 4800 feet in length but the FAA does not support this runway as a result of "wind coverage." However, if there were a need the runway could be expanded to 6000/6300 feet and serve as an alternate runway. It would cost around \$12 million to expand this runway.
- The main runway, as is, works for FAY about 96% of the time.

D. Is there land available to expand your facility?

- The airport currently owns 1400 acres and around 250 acres are available for development. They are in the process of purchasing an additional 30 acres. (According to Whited, they are limited by the FAA in the amount of land they can purchase.)
- Contiguous land is available for purchase.

III. Planning Questions:

A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**

- Yes, the airport has a plan and an executive summary can be found at www.flyfay.com, under documents. It is a 20 year plan and was completed in 2005. FAA plans are traditionally 20 year plans.
- The plan is truly oriented toward the development of the airport and not done for economic development purposes.

- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- No, not really
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
- Money....FAY does not have a lot of residual revenue and only does a little better than break even.

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
- Labor is available at competitive rates. Fayetteville is a low wage county (Cumberland).
 - As a result of the FAY's proximity to Ft. Bragg, high-tech skilled labor is readily available as a result of soldiers leaving the service. (Whited pointed out that economic developers really need to promote the availability of this skilled pool of workers when recruiting new companies.)
- B. Specifically, what kind of skilled labor is needed?
- Not specifically discussed
- C. What educational programs are available to support your facility and who provides them?
- There is good support available from Fayetteville Technical Community College and other area institutions of higher learning.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- The airport is City owned and operated. It is not run by an independent airport authority. The City of Fayetteville does not provide money for capital improvements or money for airport operations.
- Power, water and sewer in Fayetteville are supplied by the Public Works Commission (PWC). (Whited recommended we meet with the PWC.)
- Passenger traffic is increasing (13% over the past four years). It is expected to increase with Ft. Bragg's expansion.

Appendix I: Interview with Scotland County Economic Development Officials

INTERVIEW SESSION WITH SCOTLAND COUNTY OFFICIALS

OCTOBER 22, 2010

PARTICIPANTS

Greg Icard, Director of Economic Development, County of Scotland, Laurinburg, NC

Kevin Patterson, County Manager, Laurinburg, NC

Tom May, Assistant to the Dean for Economic Development Initiatives, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions.

I. General Questions:

A. Please provide us with background information about your area. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).

- Good strategic location – they are located around 100 miles from Wilmington, Charlotte, Raleigh, Columbia and Florence. In addition, they are just 40 minutes from Fayetteville. The area is the center of a wagon wheel and growth will come but it may be by default.
- Located on the proposed I-74 corridor (part of I-74 is already open west of the airport). I-74 currently gives the area quick access to I-95 and the completion of I-74 West to connect to US 220 North will give them great access to the Triad and to areas to the North and West from the Triad. The Monroe bypass will improve access to the Charlotte market and beyond.
- Proximity to Ft. Bragg
- Think they would be a good site for an intermodal facility and applied for funds to conduct a feasibility study but were turned down. They wanted a FTZ to be considered as a part of the proposed intermodal facility. They are actually looking at the Port of Charleston to feed this facility as they believe they are strategically located the right distance from Charleston vs. Wilmington.
- The area has a good available workforce but they may need additional training depending upon the industries that come to the area.
- There are already 3 logistics companies located in the area.
- Scotland County is a net creator of jobs for the surrounding counties.
- Still have a large industrial base employing around 27% of the workforce.
- Once need is developed, water and sewer can be greatly expanded using a refurbished and upgraded facility on the property of WestPoint Home.
- Land is available at the airport and surrounding airport property. The price of the land is reasonable.
- Water and sewer connections are available but improvements are needed. (See Infrastructure)

B. What are the real or perceived weaknesses of your facility?

- High unemployment
- Need a more skilled workforce but the existing workforce has a good work ethic and is willing to learn.

- The State of North Carolina owns and controls a lot of land in the area and this keeps the property off the tax rolls.
- The Department of Defense likes the fact the airport is very quiet and hidden away. (They use the airport for special operations/Special Forces training. The Army's Golden Knights parachute team is also based at the airport.) Too much military usage may limit industrial development.
- Small available County labor pool – actually a net creator of jobs from surrounding counties. According to the Employment Security Commission of North Carolina, 8268 workers commute from outlying counties to Scotland County and 6050 people leave the county to work elsewhere. Some 3397 of imported workers come from areas outside of immediate surrounding counties. (Editor's Note: data would lead one to believe some of these workers might be coming from South Carolina.) Interviewees believe many of the imported workers are professional level positions. In addition, they believe that jobs requiring degrees are often filled by people who live or move to surrounding counties with larger towns and retail/service centers.
- The infrastructure of the Airport has deteriorated. The Airport is currently addressing some of these problems but even with improvements there are additional things needed so the Airport can handle modern aircraft.

C. Are you targeting specific industries or clusters? If so, what are they?

- Automotive
- Transportation/Logistics/Warehousing
- Possibly Call Centers
- Specialty Textiles
- Military related industries and contractors (Think they are an especially good match for a military equipment refurbishing company or companies.)

D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?

- The proximity of Laurinburg-Maxton Airport to Ft. Bragg is an asset. (There is lots of space for military suppliers and contractors. In addition, training space at Ft. Bragg is limited and the military will need to use surrounding bases for training – Laurinburg-Maxton Airport is ideally situated for this.)
- Great geographical location
- Tremendous capacity for growth (length of runways and land availability)
- Water and sewer are available and there is immediate capacity for growth.

- With the completion of I-74 to US 220 and the Monroe Bypass, the Laurinburg-Maxton Airport will have great road connections to Charlotte and the Triad. From Charlotte and the Triad, goods can go anywhere quickly.
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE
- Focus on developing the correct industry clusters
 - Work to create a deepwater port in NC... "Not having a deep water port will kill us."

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- Located on the proposed I-74 corridor (part of I-74 is already open west of the airport). I-74 currently gives the area quick access to I-95 and the completion of I-74 West to connect to US 220 North will give them great access to the Triad and to areas to the North and West from the Triad. The Monroe bypass will improve access to the Charlotte market and beyond.
 - The Laurinburg-Maxton Airport could have access to both CSX and Norfolk Southern Railroads. There is already access to CSX. The track is maintained to US 74 and the right of way exists from there onto Airport property. There is access to Norfolk Southern via existing rail to the Westpoint Home facility that is about three miles from the airport.
 - The Port of Wilmington is around 100 miles from Laurinburg-Maxton Airport. Also, it is a reasonable distance from the Port of Charleston and they may be able to develop some tie-ins with that Port.
 - They have good availability of water and sewer. The Airport itself has a 2 million gallon capacity. In addition, there is an unused water and sewer facility at the WestPoint Home facility. It has a 7 million gallon capacity. It would have to be upgraded to bring it back into use and would have to be converted from producing industrial use water to potable water.
 - Several large trucking companies are located in the area to serve existing industry.
- B. What are your current and future assets/needs for power, water sewer, and communications?
- Water and sewer is available and can expand. (See II A. above) The area experienced no shortage of water during the drought.

- Communication infrastructure is not an issue as far as access is concerned so long as you are located in the primary coverage area. There are weak spots outside of the primary areas.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- See Airport write-up.
- D. Is there land available to expand your facility?
- Lots of land for development and runways could be expanded to almost any length

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
- Have a “Vision” plan for Scotland County. (Editor’s Note: A copy was provided.)
 - Airport has an outdated plan.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- They have a good working relationship with area Chambers of Commerce.
 - Area Community Colleges are very cooperative and react quickly to the needs of the area.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
- Money

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
- The area has a good available workforce but they may need additional training depending upon the industries that come to the area.
 - The existing workforce has a good work ethic and is willing to learn.
 - Workforce is not highly skilled.
- B. Specifically, what kind of skilled labor is needed?
- This will depend upon the industry that is recruited.

C. What educational programs are available to support your facility and who provides them?

- UNC Pembroke and Richmond Community College are very responsive to the economic development needs.
- SBTDC is very cooperative and frequently offers courses on how to sell to the military.
- UNC Pembroke and RCC also offer entrepreneur training.
- Working towards developing a business incubator for military contractors
- RCC has more activity in Scotland County than Richmond County.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- There needs to be a balance at the airport between military operations and general industry. There is a concern that too much military will bring too much security.
- Camp McCall is located in Scotland County and is closely tied into Ft. Bragg. In case of a situation at Ft. Bragg, Camp McCall is the back-up site.
- The largest NC prison is under construction in Scotland County and is using water from the Laurinburg-Maxton Airport facility.

Appendix J: Interview with Laurinburg-Maxton Airport Officials

INTERVIEW SESSION WITH LAURINBURG-MAXTON AIRPORT OFFICIALS

OCTOBER 22, 2010

PARTICIPANTS

Jo Ann Gentry, Interim Executive Director, Laurinburg-Maxton Airport Commission

Chip Morton, Chairman, Laurinburg-Maxton Airport Commission

Larry Barnett, Former Executive Director, Laurinburg-Maxton Airport Commission

J. Randy Hoffman, Manager/Co-Owner Scotland Aero Services, Laurinburg-Maxton Airport

David Raley, Consulting Engineer to the Laurinburg-Maxton Airport

Paul D. Smith, Aviation Program Manager, WK Dickson, Consultant to the Laurinburg-Maxton Airport

Tom May, Assistant to the Dean for Economic Development, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions.

I. General Questions:

A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).

- A lot of data is available from the Global TransPark search. There were 13 semi-finalists and the list was narrowed to two finalists, Kinston and Laurinburg-Maxton (L-M). Kinston eventually became the finalist. According to the interviewees, their bottom line opinion is that they have a TransPark it just not meet John Kasarda's dream/definition. (Editor's Note: In order to discuss L-M's consideration for the Global TransPark designation, Tom May, Joy Bhadury and I met with John Kasarda, Director, Kenan Institute of Private Enterprise, UNC Chapel Hill on November 12, 2010. Kasarda was instrumental in developing the concept for the TransPark and was on the committee that made the ultimate selection.)
- L-M has an industrial park as part of its operation with developed and undeveloped land available. There are some 1500-1800 acres of developable land available. Some of this land is contained in a certified industrial park and has water and sewer service available. In fact, all utilities are available.
- Certified industrial site is located on I-74 and has some very visible sites.
- Some 500 additional acres are available among the three runways; however, FAA permission is needed to develop this acreage.
- Additional development land is available for purchase adjacent to the L-M property.
- L-M Airport has excess water-sewer capacity.
- L-M has access with extensions and major improvements to two railways, CSX and Norfolk Southern via Laurinburg and Southern Company and Aberdeen and Rockfish Railroad. (See II.A below)
- L-M offers a good, low-cost area for locating corporate hangers.
- They have three existing runways (one is not in use) that could be expanded to about any length needed.
- Planned facility upgrades will enhance prospects for general aviation.
- L-M's close proximity to Ft. Bragg is a real asset. They expect there will be some outsourcing of services from Ft. Bragg as its importance increases. Examples provided by L-M officials are that they expect

warehousing opportunities for items like clothing and equipment, related manufacturing and operations that support the military. (Editor's Note: This is consistent with what Fayetteville officials believe.)

B. What are the real or perceived weaknesses of your facility?

- Money is always an issue. As a result, maintenance of existing property is difficult. L-M airport only has 6 employees two of which are needed to cut the grass. Money for capital improvements are also an issue. L-M must always find matching funds for maintenance and improvement of the facility.
- Water collection lines along the runways and taxiways need replacement.
- L-M needs an airport tower as it will add to airport capabilities.
- While L-M has excess capacity at its water and sewer facility, it needs lots of upgrades.
- Runways and taxiways need improvement. They have received funding to repave the main runway but they did not receive sufficient funding to repave the entire width of the existing runway and this limits the size of aircraft that can use the airport. Secondary runway needs work as well.
- There is a concern that the military will utilize the airport too much and discourage industrial/general aviation use. After 9/11 the usage of the airport flip-flopped. Previously usage was around 98% general aviation and 2% military. Currently, this is just the opposite as it is now around 95% military and 5% general aviation. Military traffic did not increase, general aviation simply collapsed. In 2001 they had around 10 commercial/general aviation accounts. None exist now.

C. Are you targeting specific industries or clusters? If so, what are they?

- As a result of L-M's close proximity to Ft. Bragg, they expect L-M will benefit from and target outsourced services from Ft. Bragg. Examples provided by L-M officials are that they expect warehousing opportunities for items like clothing and equipment, military related manufacturing and service operations that support the military.
- Aviation support facilities
- Increase general aviation (In order to make this happen, L-M officials think they need to have draw like a restaurant or a "7 Eleven" type operation.

D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?

- Proximity to Fayetteville, especially Ft. Bragg

- They have land...lots of land.
- They are a one-stop shop for economic development. L-M has it all, land, water, sewer, runways that can be expanded, rail connections (current and planned), roads, trucking companies and proximity to major cities and Port of Wilmington.
- L-M is geographically and strategically located 100 miles from Charlotte, Wilmington, Raleigh and Myrtle Beach. Fayetteville and Ft. Bragg are just 40 miles away and they are located midway between Miami and Maine.
- They are close to the I-40 and I-74 intersection giving them quick N-S and E-W access.

E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?

- Jobs, jobs, jobs!
- Bring in new jobs to replace traditional industry jobs.

II. Infrastructure Questions:

A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?

- L-M has access with extensions and major improvements to two railways, CSX and Norfolk Southern via Laurinburg and Southern Company and the Aberdeen and Rockfish Railroad. At present, the rail line that connects to CSX comes into the
L-M Airport ends at I-74. The right of way is preserved all the way to the runway but would need the cost to develop this asset would be quite high. Additionally, if around three additional miles of track were laid down to connect with the Laurinburg and Southern Company railway, the airport would have access to Norfolk and Southern as well. In addition to adding around 3 miles of new track the line would have to be reactivated from the WestPoint Home plant to the mainline. There would be a large cost associated with developing this railway link.
- When I-74 is completed to US 220 this will give them great access to all markets to the North and West. The Monroe Bypass will give them better and faster access to Charlotte and beyond. They are already very convenient to I-74/I-95 intersection.
- They are 100 miles from the Port of Wilmington.
- Airport runways can be expanded to almost any length.
- Trucking facilities are readily available.

B. What are your current and future assets/needs for power, water sewer, and communications?

- They have excess capacity at the existing airport water and sewer facility. However, upgrades are needed. Water plant was recently expanded from a 1 million gallon per day capacity facility to a 2 million gallon per day capacity facility. If money was available, L-M could further expand the facility and sell more water and sewer services that would raise revenue for the airport.
- L-M airport water/sewer facility is interconnected with Maxton and Laurinburg water/sewer systems. While there is no formal agreement, L-M people believe they are really operating a regional water and sewer system.
- If more water and sewer capacity was needed, they could connect to the surplus water system at the WestPoint Home facility. It is some 3-5 miles from L-M and has a 7 million gallon per day capacity for water and sewer. It would need to be modernized and upgraded to produce potable water.
- Broadband is available at L-M.
- Natural gas is available from PNG.
- AT&T main fiber optic line runs through the airport.
- Great access to electrical power. There are N-S and E-W feeds available.

C. (For airports only) Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.

- Laurinburg-Maxton has three runways: **Runway 13/31** physical length is 6,500 feet with width 150 feet, usable is 3,740 and width 75 feet; **Runway 5/23** physical length and usable is 6,503 feet and 150 feet in width and **Runway 18/36** which is the closed runway is 6,500 feet in length and 150 feet wide.
- Runways can be expanded to almost any length without environmental impact. In fact, all planned runway and taxiway improvements do not have an environmental impact. Storm water management is needed but does not limit expansion.
- Runways have a good underlay...6 inches of concrete.
- They are a Category I landing facility but they need a Category III facility to be viable.
- Category I primary runway is 6503 feet long and can be expanded to 9000 feet.
- The secondary runway is 3500 feet in length with a 75 ft. width.

- Closed runway could be expanded to 12,000 feet.
- If they closed all existing runways and taxiways, they could build a 13,000 foot plus runway.
- The primary runway will be rehabilitated in the very near future. L-M has received \$4 million to repave the runway to a 100 ft. width...not the full 150 ft. width. Ramps and taxiways need to be rehabbed as well but this would require more money....around \$1 million more. At present they cannot handle wide body jets without full improvements.

D. Is there land available to expand your facility?

- L-M has an industrial park as part of its operation with developed and undeveloped land available. There are some 1500-1800 acres of developable land available. Some of this land is contained in a certified industrial park. Some 500 additional acres are available among the three runways; however, FAA permission is needed to develop this acreage. Additional development land is available for purchase adjacent to the L-M property.

III.Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
- Reviewing the original master plan that was written for the Global TransPark competition. In the new version, they plan to scale it back from the more grandiose plan developed for the Global TransPark.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
- L-M coordinates with the cities of Laurinburg and Maxton.
 - Two Community Colleges use airport facilities.
 - UNC Pembroke is just 15 minutes away and many other colleges and universities are nearby.
 - (Editor's Note: Although the interviewees did not say it, I believe what they were saying is that although they do not have formal relationships with the institutions, should the need arise, these institutions would pitch in to do whatever was necessary to help economic development.)
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
- They need money to market the airport.

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
 - There is a surplus of labor although much of the available labor is not skilled or skilled in areas no longer needed.
- B. Specifically, what kind of skilled labor is needed?
 - At this point, L-M does not have specific skilled labor needs. When L-M attracts an industry, they will work with area colleges and universities to train the workers for specific skill. In fact, when an industry or industries are recruited, they even has a Service Building onsite to serve as a temporary headquarters for the company or companies.
- C. What educational programs are available to support your facility and who provides them?
 - UNC-Pembroke
 - Presbyterian College
 - St. Andrews College
 - Richmond Community College
 - Sandhills Community College
 - Robeson Community College
 - All are good to work with and will do what is necessary to assist when the need arises.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- The L-M Airport has tremendous potential for growth...they have land, water, sewer, natural gas and other amenities. They just need to get the word out that they are there.
- They need money to market L-M.
- The refurbished runway will truly help but it really needs to be improved to its maximum width.
- L-M Airport was a government glider airbase during the WW II. It was declared government surplus after the war and given to the towns, not counties, of Laurinburg and Maxton. However, it is totally located within Scotland County, not Robeson County. The total gift included some 4600/4700 acres. One of the conditions of the gift was that it must be maintained as an airbase. A joint resolution of the two towns created the L-M Airport Commission. Each town appoints three members to the Commission.

While the Commission operates L-M, they still must have budgets approved by the two town councils.

- After L-M was turned down for the site of the Global TransPark, the two counties looked at making L-M Airport into a two-state (NC and SC) TransPark. Ultimately, local officials made a presentation promoting this idea to 2 Senators and 5 Congressional Representatives. Although nothing happened, they felt it was a good exercise because it got all of the local counties and cities working together.
- L-M makes sufficient money for daily operations of the airport but does not make money for capital expenses. Historically, the Commission raised money by selling industrial sites and selling water and sewer services.
- The base currently is used for at least three types of military operations: jump school, Special Forces training and home of the Army's Golden Knights' Parachute Team.

Appendix K: Interview with North Carolina Ports Authority Officials

INTERVIEW SESSION WITH NORTH CAROLINA PORTS AUTHORITY OFFICIALS

OCTOBER 29, 2010

PARTICIPANTS

Glenn Carlson, Chief Commercial Officer, Business and Economic Development, North Carolina Ports Authority

Jeff Miles, Chief Operations Officer, Operations, North Carolina Ports Authority

Stephanie Ayers, Director, Port Planning and Development, North Carolina Ports Authority

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions.

I. General Questions:

- A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.)
 - Quality and availability of labor
 - Lowest cost structure
 - Access to NC market
 - Projections of higher population growth in area
 - Highway access good and improving
 - Inactive FTZ
- B. What are the real or perceived weaknesses of your facility?
 - Overall lack of availability of a rail connection to the North
 - Lack of intermodal rail connectivity
 - “Last mile” issues at the Port of Wilmington – see “V.” below for more detail
 - Port of Wilmington’s ability to remain competitive in a “large ship” (post-Panamax) environment
 - Infrastructure maintenance related to capital constraints
 - Constrained navigational access
- C. Are you targeting specific industries or clusters? If so, what are they?
 - Agricultural
 - Replenishable fuel (“energy”)
 - Textile market
 - Containers
 - Apparel
 - Auto parts
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
 - Region as a whole should be selected, as it is the nexus of three modes of transportation
 - A regional “Leadership Board” should be formed to spearhead the formation and implementation of a regional “Logistics Village” for the Greater Wilmington Area.
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
 - Improved rail mobility
 - Near-port Distribution Centers – (“At Port” Logistics Model)
 - Military

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
 - See “V.”
- B. What are your current and future assets/needs for power, water sewer, and communications?
 - Not specifically discussed but see “V.” for information on this topic.
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
 - Not discussed
- D. Is there land available to expand your facility?
 - Not discussed

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
 There are several reports that are pertinent to this study and are available to review, they are:
 - 2010 – 2014 Strategic Business Plan
 - 2006 Port of Wilmington Expansion Plan (Moffatt & Nichol)
 - 2010 Market and Port Assessment Study (Moffatt & Nichol) – currently underway, expected completion Jan 2011
 - GIS – provides overview of properties, buildings, warehouses, etc. (<https://ncportsbd2.connectgis.com>)
 - 2006 The Local and Regional Economic Impact of the North Carolina State Ports Authority (John Martin)
 - 2010 Economic Contribution Study of North Carolina State Ports Authority (ITRE/NC State University) – currently underway, expected completion Dec 2010
 - 2010 Port of Wilmington Truck and Rail Counts (NCSPA)
 - 2009 Monroe Connector/Bypass Stated Preference Travel Study (RSG Inc.)
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
 - The Port of Wilmington is working with area industrial parks to fulfill their vision of establishing “At Port” distribution/logistics facilities especially within a 15 mile – 20 mile radius of the Port.
- C. Are there impediments that may keep you from fulfilling your

strategic plan? What are they?

- Lack of intermodal rail (no competition, only one Class I Rail provider)
- Near-port Distribution Centers

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
 - Skilled
 - High work ethic
 - Good management/labor relationship
- B. Specifically, what kind of skilled labor is needed?
 - Need more higher-order labor (i.e., electronic, computer-industrial skills).
- C. What educational programs are available to support your facility and who provides them?
 - Development of logistics program through the local community college (BCCC) and other programs are under development through the UNC system.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

(The North Carolina Ports Authority provided the following as a written report to help the UNCG research team better understand the issues that concerns that impact North Carolina Ports.)

The North Carolina State Ports Authority (NCSPA) is an ‘enterprise’ agency of the state of North Carolina. This means that while the NCSPA benefits from some advantages of being a state agency (eligible for capital funding for major infrastructure programs, state employee benefits, sustained relationships with government and sister agencies), it does not receive dedicated capital or operating funding from the state. It is a self-sustaining organization that generates its own revenues and uses those to pay its operating costs (with the capability to issue bonds, enter into real estate transactions and finance debt). A Board of Directors that adheres to by-laws established and unanimously adopted by the Board governs the NCSPA. The eleven members of the Board are appointed by the Governor, the Speaker of the House and the Senate President Pro Tem.

From 1720 to 1870, North Carolina was the world's largest producer of Naval Stores--tar, pitch, rosin, and turpentine. The argument for state-owned ports began in the 1920's, when North Carolina's economic development was handicapped because of higher freight rates than those charged by Virginia competitors - a situation partly due to the state's notable lack of adequate ports and water transportation. The value of state-owned deepwater ports was recognized by the North Carolina legislature in 1945 with the creation of the NCSPA. Public terminals equipped to handle oceangoing vessels were completed at Wilmington and Morehead City in 1952. With ships came rail, and up until the 1960's, Wilmington was the headquarters of the Atlantic Coast Line Railroad, now part of CSX. Times changed and so did the methods of shipping. In

the mid 1970's, the Ports Authority bought two container cranes eventually locating both at the Port of Wilmington and Morehead City became a major port for breakbulk cargoes. At one time, there were five active Class I railroads in Wilmington, today, there is only one; CSX.

The Port of Wilmington is situated on the eastern bank of the Cape Fear River with a 42-foot deep navigation channel to provide access from the Atlantic Ocean (following the completion of a major deepening project in 2004). The Port of Wilmington is equipped to handle containerized, bulk, break bulk and specialized cargos. The Port is a C-TPAT Certified location (Customs-Trade Partnership Against Terrorism), designated as a foreign trade zone, and is one of the nation's Strategic Seaports.

Shippers are diverting an increasingly higher percentage of their cargo from the West Coast to the East Coast to avoid increased regulation and cost issues, but primarily to maintain inventory levels closer to consumption areas. Shipping lines were already seeking alternative port sites on the East Coast of the United States to support this action by their customers. The Panama Canal expansion is a major factor that supports this eastward migration, and is expected to force East Coast ports to improve infrastructure to accommodate the newer larger and deeper draft vessels coming into service in the next five to 10 years.

It is difficult and tentative to predict when and how the container industry will recover from the current economic recession, but it is safe to assume that the current U.S. port landscape may be dramatically altered, with a stronger focus on East Coast ports competing for port infrastructure capacity to serve fewer, more consolidated shipping lines, with larger, deeper draft ships. Economists predict that container shipping will rebound by 2014; several east coast ports were already experiencing significant turnarounds as early as this year.

Port of Wilmington Facility

The NCSA owns or operates North Carolina's Port of Wilmington and Port of Morehead City deepwater ports and Greensboro and Charlotte inland terminals.

The Port of Wilmington offers terminal facilities serving military, container, bulk, and break bulk, and specialty cargo operations. CSX Transportation (railroad) provides daily service for boxcar, tanker, and general cargo services. According to the most recent statistics by the American Association of Port Authorities, the cargo volume at the Port of Wilmington was 6,872,424 short tons in 2008. The Port of Wilmington was ranked # 24 of all container ports in the United States in container cargo throughput that same year.

The Port of Wilmington is North Carolina's largest port with an operating terminal of 284 developed acres with two vacant industrial-zoned properties adjacent to the facility (available for future development). It is one of ten ports on the east coast; competing ports include Virginia Ports Authority in Norfolk, Newport News, Portsmouth, and Front Royal; South Carolina State Ports Authority, with three port terminals in Charleston, Georgetown, and Port Royal; and the ports of Georgia in Savannah and Brunswick.

Container cargo volumes at the Port of Wilmington are projected to grow with a compounded annual growth rate (CAGR) of 7.5 percent from 2010 to 2017; and bulk and break bulk cargo volumes are projected to increase by 7.1 percent CAGR between 2010 and 2017.

In order to maximize container throughput capacity at the existing Wilmington facility and to meet the demand of increasing container traffic over the next ten years, a container yard improvement plan is underway at the Port of Wilmington. This program will double the Port of Wilmington's container capacity and increase revenues at the Port. It is estimated to be completed by 2014 and cost approximately \$180 million. Improvements include the purchase of four new 100 foot gage container cranes and other container handling equipment; the purchase and implementation of a new terminal operating system to support a high velocity operation; berth, dock, and paving improvements to accommodate post-Panamax vessels and higher throughput capacity; and, new property development.

North Carolina's ports are an important economic asset not only to the areas where port facilities are located, but also to commerce and economic development efforts statewide. An economic impact report for North Carolina's Ports in Morehead City and Wilmington titled *The Local and Regional Economic Impact of the North Carolina State Ports Authority* showed that the Port of Wilmington directly supported more than 4,300 jobs in 2006. These are jobs that exist solely due to the existence of the Port of Wilmington facility and are directly related to the activities of the Port of Wilmington; jobs like stevedores, terminal operators, truckers, steamship agents, freight forwarders, and others on the terminal and involved in maritime activities. Overall, North Carolina ports directly and indirectly support 85,000 jobs, which contribute \$299 million annually in state and local tax revenues based on the Ports' fiscal 2005 cargo volumes.

Truck traffic

Port officials indicate that container, specialized cargo, and military vehicle traffic enters/exits the Port of Wilmington via the South Gate entrance/exit on Shipyard Boulevard. The South Gate necessitates the use of Shipyard Boulevard to Carolina Beach Road (US 421 North), to Front Street (US 421 North Truck Route) to the Cape Fear Memorial Bridge to access US 421, US 74/76, and US 17, or Shipyard Boulevard to College Road north to access I-40.

The bulk and break bulk cargo vehicle traffic enters/exits the Port of Wilmington via the North Gate entrance/exit on Burnett Boulevard. The North Gate necessitates the use of Burnett Boulevard to Front Street (US 421 North Truck Route) to the Cape Fear Memorial Bridge to access US 421, US 74/76, and US 17. In order to access I-40, truck traffic utilizing the North Gate would likely use US 421 N to the I-140 Wilmington Bypass.

Port officials indicate that the number of trucks entering and exiting the Port of Wilmington is expected to grow based on projected cargo forecasts. In the first quarter of 2010, the Port of Wilmington had 62,072 truck movements. This included 49,213 container trucks with an average of 647 container trucks per day.

The single largest truck customer for the Port of Wilmington containers is located in Charlotte. In fact, the top Charlotte customer (not including other destinations in that vicinity or region) is

more than three times larger than the next largest beneficial cargo owner customer in North Carolina. Five of the top 16 port customers are located in the Charlotte Economic Development region and those five customers made up more than 25 percent of the total container traffic (origin/destinations) to the Port of Wilmington in fiscal year 2009.

The other primary origin/destination market for containers in North Carolina is the Piedmont Triad region. Six of the largest origin/destination locations (out of the top 16 port customers) in the Piedmont Triad made up more than 17 percent of the total container market origin/destinations for the Port of Wilmington in fiscal year 2009.

Other large customers (i.e., origin/destinations) for the Port of Wilmington container business are located in Rutherford and Caldwell counties in the West Economic Development region and Nash county in the East Economic Development region. The top sixteen customers in North Carolina made up more than 52 percent of the total origin/destinations for the Port of Wilmington's container traffic in fiscal year 2009. Overall, the Charlotte and Piedmont Triad origin/destinations made up the largest majority of port container traffic.

A recent truck traffic study by Resource System Group in July 2009, on behalf of the NC Turnpike Authority for the Monroe Bypass project, indicated that out of the 251 respondent truckers that used I-74/76 from the Port of Wilmington to Charlotte, 74 percent expressed support for the toll road project. Supporting the origin/destination data, more than 66 percent of those truckers surveyed were destined for the Monroe/Charlotte area.

There are a number of congestion and safety issues associated with these routes being used by trucks. The first issue is related to the location of Sunset Park neighborhood which is adjacent to the Port of Wilmington on the east. The neighborhood does not allow through truck traffic, which necessitates separate gates to the North and South of the facility.

The major congestion and safety issue in the area is Front Street. South Front Street (US 421 Truck) is the main access road for Wilmington's North Gate port traffic and the US74/76 access route for all port truck users. South Front Street is also utilized by other industrial users including two private port terminal operators; Hess and Colonial. Both have active trucking and rail operations adding additional truck and rail traffic to the route. Front Street in this area has active rail lines down the center lane with three rail/road crossings within two blocks. The Authority has encouraged the Wilmington Metropolitan Planning Organization to expand South Front Street (US 421 Truck) to four lanes to better accommodate the growing truck traffic and to alleviate congestion. This project has been recognized in the Cape Fear Commutes Long Range Transportation Plan for possible upgrade in 2026 – 2035.

Front Street (along the designated Truck Route) has also been designated North Carolina Bicycling Highway 3 and 5. The NC Department of Transportation, as part of the North Carolina concept of Complete Streets, has funded and planned a resurfacing project that will install on-road bicycle lanes along South Front Street (US 421 Truck) between the Memorial Bridge and Burnett Boulevard. This project is expected to narrow the truck travel lanes within the existing pavement width to accommodate bicycle lanes. This means altering existing 15-foot wide truck lanes to 11 feet and adding a 4 feet wide bike lane, in certain areas of the project.

NCDOT Resurfacing project C202476 is under contract and scheduled for completion by November 2010.

All of the truck routes around the Port of Wilmington are expected to operate at a poor LOS in 2035. Future growth projections suggest that congestion levels on the local transportation network could hamper the Port's growth plans and competitiveness. Deficiencies in the existing transportation network diminish the ability to efficiently distribute goods and services from the Port of Wilmington.

According to the *Brunswick County Transportation Plan*, Wilmington is possibly the only port city that has a drawbridge (Cape Fear Memorial Bridge) as the primary entrance to the city. The Cape Fear Memorial Bridge opened an average of 20 times per month from April 2008 to January 2009. The bridge was open for an average of 11 minutes per opening, queuing an average of 1,313 vehicles. This could potentially cause delays to traffic en route to the Port via the Cape Fear Memorial Bridge (US 17 Business), as the bridge opens at various times throughout the day and is not limited to any particular time of day or peak/non-peak traffic hours.

Finally, port officials state that there are minimum air draft requirements associated with bridge height. The construction of a bridge that could obstruct air draft for the vessels utilizing the navigation channel should be studied with serious consideration. Currently, vessels that call, or are interested in calling, on the Port of Wilmington that require considerable air draft clearances are cruise ships and container vessels. Due to the existing Progress Energy power lines defining the controlling air draft limitation for the Cape Fear River navigation channel, only small cruise vessels currently call on the Port of Wilmington. In order to adequately service future container services that will call on the Port of Wilmington, it would be necessary to provide an air draft clearance of approximately 200 foot clearance to accommodate all vessels that could transit the Panama Canal. Air draft heights would need to be evaluated to determine the adequate height needed to develop a sustainable cruise industry in Wilmington.

Rail Traffic

The Wilmington & Weldon Railroad was one of the nation's first railroads in 1840, and served as a vital link in the chain of supplies to Confederate troops during the Civil War. At the turn of the century, this railroad merged with several others on the East Coast to become the Atlantic Coast Line Railroad, which was headquartered in Wilmington until 1960. The 2030 LRTP indicates that Wilmington is currently served by the CSX railroad only. CSX now owns and operates the largest intermodal rail network in the eastern United States.

The Wilmington switching yard, Davis Yard, is located in Leland and processes approximately 90,000 to 98,000 rail cars per year. CSX also has interchanges with short lines to the US Army's Military Ocean Terminal at MOTSU in Brunswick County and the Wilmington Terminal Railroad (with connections to the Port of Wilmington).

Rail cars into and out of the Port are substantially fewer than the number of trucks per month. At the present time, containerized freight coming into or leaving the Port is transported only by

truck. Bulk and break bulk freight are transported by both truck and rail. Additional growth in commodities like grains, fertilizer, and steel will contribute to added rail usage in the region.

The Port of Wilmington is capable of providing intermodal rail service (i.e., containers via rail); however, the current volume of container traffic generated at the facility does not meet the threshold set by the rail service provider to justify competitive intermodal rates. The NCSPA, in partnership with NC DOT and CSX, has upgraded the rail line from Wilmington to Charlotte and removed all clearance restrictions to accommodate for double stacked container rail cars. At some point in the future, a portion of container traffic that is currently moved via truck will transition to rail; the amount is dependent on market and pricing factors.

Imports, exports, and commodities used by businesses in southeastern North Carolina are continually hampered by inefficiencies in the rail system. The State of North Carolina purchased 27 miles of the former Wilmington & Weldon rail line between Wallace (in Duplin County) and Castle Hayne (just north of Wilmington in New Hanover County) in hopes of restoring this rail line. The state is currently studying the possibility of restoring this line in order to create a more direct route to the primary CSX north-south line along I-95. This rail service would significantly impact the pork and poultry producers in the Duplin County region (for containerized frozen pork and poultry product and grain commodities), as well as open up the Port of Wilmington to the northern I-95 corridor sections of the state.

Appendix L: Interview with Steve Yost, Director, NCSE

INTERVIEW SESSION WITH STEVE YOST, DIRECTOR, NORTH CAROLINA'S SOUTHEAST

NOVEMBER 24, 2010

(ADDITIONAL BACKGROUND AND INFORMATIONAL INTERVIEWS WERE HELD
WITH STEVE YOST ON SEPTEMBER 16, 2010 AND JANUARY 24, 2011)

PARTICIPANTS

Steve Yost, Director, North Carolina's Southeast

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

- A. Please provide us with background information about your facility. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
- The mainline of CSX cuts across NCSE from East to West. This is a plus and a minus. As CSX has a monopoly with regard to rail in this area, they are more likely to cooperate only when they see revenue coming their way. Generally speaking, railroads are not really interested in rail spurs as they tend to slow down traffic on the mainline. The best industrial rail access in NCSE is at the Mid-Atlantic Logistics Center that is located directly across the street from the International Logistics Park. CSX is most interested in the Charlotte area where they have an intermodal facility that is part of CSX's National Gateway Program.
 - Logistics is an asset in NCSE. The Port of Wilmington along with its logistics and marketing initiative (At Port Logistics Model), a good and improving highway infrastructure (I-73/74, I-95, I-40, I-140, etc.), existing rail access in NCSE and good truck availability all contribute to a strong foundation in logistics and distribution.
 - The Mid-Atlantic Logistics Center and the International Logistics Park are under development to play off the Port of Wilmington. Both industrial parks meet the Port of Wilmington's "At Port" Logistics Model.
 - NCSE has a good existing road structure with excellent planned new and improved interstates.
 - As a result of the region's assets, Yost envisions NCSE becoming a significant logistics hub for the East Coast. NCSE is geographically well situated and is conveniently located right in the middle of the East Coast, halfway between Maine and Miami.
 - There is lots of land of all sizes available for development. Four large sites are: International Logistics Park, Pender Commerce Park, the Laurinburg-Maxton Airport area and the Mid-Atlantic Logistics Center.
 - Community colleges are a true strength for the region as are K-12 technical education programs.
 - The agricultural base of the region is a real plus as it provides the region with many agribusiness and food processing business opportunities.
 - Overall, the region has a diverse workforce. There are essentially three "labor sheds" in NCSE:

1. The Wilmington metropolitan area
 2. Fayetteville and surrounding area
 3. The far western part of the Region that plays off of the Metro areas of Charlotte, the Piedmont Triad and Wilmington
- B. What are the real or perceived weaknesses of your facility?
- The region needs better rail connections especially North/South access out of Wilmington. The only area in the region with North/South and East/West rail access is the Fayetteville area.
 - The current Port of Wilmington is land-locked and will probably not be able to handle post-Panamax class cargo ships. In 2010 Congressman McIntyre came out against the providing additional funds to study the feasibility of creating a new deepwater port near Southport. Among the issues raised against developing the Southport site are the closeness of the site to Progress Energy’s nuclear power plant and the closeness to MOTSU.
 - “No Port Southport” is a vocal, well-funded, effort based in Southport that is fighting the proposed Southport facility.
 - There are workforce issues in the region but workers generally have a good work ethic and can be trained. It is a challenge to get the people trained as it takes time for people to get properly trained with new skills.
 - High unemployment in the region is a problem.
- C. Are you targeting specific industries or clusters? If so, what are they?
- Yes, NCSE is targeting nine industry clusters and exploring another. They are: Building Products; Advanced Textiles; Distribution and Logistics; Building and Marine Trades; Metalworking; Food Processing and Agri-Industry; Military Contractors; Biotechnology and Alternative Energy. In addition, NCSE is considering the Aerospace Industry as another focus cluster.
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- Logistics is an asset in NCSE. The Port of Wilmington along with its logistics and marketing initiative (At Port Logistics Model), a good and improving highway infrastructure (I-73/74, I-40, I-95, I-140, etc.), existing rail access in NCSE, excellent strategic geographical location and good truck availability contribute to a strong foundation in logistics and distribution. Combined, these assets make the region an ideal site for a “Logistics Village.”
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?

- Regional cooperation to maximize the many assets of NCSE

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
 - Yost provided the research team with materials describing the physical assets in NCSE and discussed them. Yost's comments on the region's physical assets are captured in "I. A and I. B" above.
- B. What are your current and future assets/needs for power, water sewer, and communications?
 - Yost provided the team with printed materials describing the above listed assets and referred the team to NCSE's website: <http://www.ncse.org/>
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
 - Not discussed
- D. Is there land available to expand your facility?
 - There is lots of land of all sizes available for development in NCSE. Four large sites are: International Logistics Park, Pender Commerce Park, the Laurinburg-Maxton Airport area and the Mid-Atlantic Logistics Center.

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
 - NCSE has a plan that it regularly updates. The most recent is "North Carolina's Southeast: Strategic Marketing Plan, 2010-2011". A copy was provided to the research team.
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
 - As the regional economic development organization, NCSE works closely with many public and private sector partners. A list of the partners can be found in the NCSE's Strategic Marketing Plan.
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
 - It is important for NCSE that the Port of Wilmington remains viable now and far into the future.

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?

- NCSE has a high unemployment rate; thus, workers are available but their skill sets vary. In some parts of the region, skilled workers are readily available (e.g. Fayetteville and Wilmington) and in other areas of the region the workforce worked in legacy industries (e.g. furniture and textiles) and need specific training. The needed training is willingly and proactively provided by area colleges and universities.
- B. Specifically, what kind of skilled labor is needed?
- Labor needs vary across NCSE. Needed skills also vary across the region.
- C. What educational programs are available to support your facility and who provides them?
- NCSE has 8 community colleges, three state supported universities and two private colleges that are eager to assist in training NCSE's workforce. These institutions are located across NCSE and are very willing to develop programs to support economic development.

V. Is there anything else you would like to tell us about your facility or the area that will help us with our research?

- The Region has a significant traditional industrial base (textiles, furniture, wood working) and the Region is trying to build up on that. Around 40% of the companies they talk with have a Port component which is about double from what they saw 10 years ago. The key to future development revolves around a viable Port. Port access is the key for the Region. It is important to the Region to work out the NCIT issue.
- The Region needs to better align themselves with other cities in the Western part of the State....Charlotte for example.
- Ft. Bragg expansion is very important to the Fayetteville area. With the expansion of Ft. Bragg, the opportunities will expand outside of the immediate area of Fayetteville.
- Port development is vital to the Eastern part of the NCSE Region.

Appendix M: Interview with Scott Satterfield, CEO, Wilmington Industrial Development

INTERVIEW SESSION WITH R. SCOTT SATTERFIELD, CHIEF EXECUTIVE OFFICER, WILMINGTON INDUSTRIAL DEVELOPMENT

NOVEMBER 24, 2010

PARTICIPANTS

R. Scott Satterfield, Chief Executive Officer, Wilmington Industrial Development

Joy Bhadury, Associate Dean, Bryan School of Business and Economics, UNCG

Samuel Troy, Executive in Residence, Bryan School of Business and Economics, UNCG

INTERVIEW QUESTIONS FOR SEVEN PORTALS/LOGISTICS VILLAGES

Explain Seven Portals/Logistics Villages Concept and respond to interviewees questions

I. General Questions:

- A. Please provide us with background information about New Hanover County and the Wilmington area including ILM. Be sure that you include strategic advantages and special criteria (FTZ, Customs, High Security, etc.).
 - Good development sites are available at ILM and surrounding areas (North and West). In fact, there is abundant land on US 421.
 - Interstate access is good especially with planned completion of planned roads.
 - Port of Wilmington is an asset and the airport is indirectly connected to the Port.
 - Power is adequate for the present. Progress Energy has been a good long-term partner. Progress Energy is currently upgrading an area coal fired plant to a gas fired plant.
 - Quality of life

- B. What are the real or perceived weaknesses of your facility?
 - There are infrastructure needs associated with the undeveloped land in New Hanover County.
 - Progress Energy does not have an economic development official in the area. (Outlying areas surrounding New Hanover may have more of a concern about this than New Hanover County.)
 - Rail connections are a weakness.
 - Satterfield expressed a concern regarding the importance of the Port of Wilmington in a post-Panamax environment and posed the question, “Can we legitimately be a logistics center with the current port in a post-Panamax environment?” He then answered the question by saying, “Maybe yes and maybe no.” He wonders if there is a possible tie in to the Port of Charleston.
 - Need to overcome issues regarding ownership of property at ILM. At present, potential investors can only have a long term lease on airport property. Long term leases may not always work for all companies.
 - With regard to water issues, redundancy is always an issue in coastal areas. At present most water comes from the Cape Fear River. Satterfield believes that there needs to be a comprehensive Regional approach to solving water and sewer issues in the area.

- The new Cape Fear Public Utility Authority has experienced start-up issues. The combination has undergone more start-up issues than anticipated. Overall, in the future, the Authority will have a positive impact and become a plus for the area.
- C. Are you targeting specific industries or clusters? If so, what are they?
- Corning, GE and PPD provide a great base of existing industry and they would like to build off these industries. For example, there are spin-offs possible that are directly associated with GE Nuclear like in the metal-working industry and pharmaceutical spin-offs possible as a result of PPD.
 - Military/aerospace companies...really a combination of the two industries.
 - Distribution/Logistics/light assembly
 - They are not just limited to this list but are exploring others as well.
- D. Why should your facility (either as a standalone or collaborating with other facilities) be chosen as the Logistic Village for the Southeast Region?
- Not discussed
- E. What ought to be the topmost priorities of economic development (wrt logistics) in NCSE?
- Not discussed

II. Infrastructure Questions:

- A. What are your current and planned physical assets (roads, railroads, utilities, port, airport, trucking center, etc.)?
- With regard to water issues, redundancy is always an issue in coastal areas. At present most water comes from the Cape Fear River. Satterfield believes that there needs to be a comprehensive Regional approach to solving water and sewer issues in the area.
 - The new Cape Fear Public Utility Authority has experienced start-up issues. The combination has undergone more start-up issues than anticipated. Overall, in the future the Authority will have a positive impact and become a plus for the area.
 - Satterfield expressed a concern regarding the importance of the Port of Wilmington in a post-Panamax environment and posed the question, “Can we legitimately be a logistics center with the current port in a post-Panamax environment?” He then answered the question by saying, “Maybe yes and maybe no.” He wonders if there is a possible tie in to the Port of Charleston.

- Power is adequate for the present. Progress Energy has been a good long-term partner. Progress Energy is currently upgrading an area coal fired plant to a gas fired plant.
- B. What are your current and future assets/needs for power, water sewer, and communications?
 - See II A. above
- C. **(For airports only)** Please tell us about your runways and including plans and ability to expand. Are there other issues concerning your airport, i.e. environmental, etc.
- D. Is there land available to expand your facility?
 - There is land at the airport that is immediately available for development. (Ownership of the airport land may be an issue.) There is additional land available in New Hanover County but may have infrastructure needs. Large parcels of land are also available in Pender, Brunswick and Columbus counties.

III. Planning Questions:

- A. What is the overall strategic plan for your facility, when was it written and are there plans to update it? **(May we have a copy?)**
 - Not discussed
- B. Does your plan coordinate or tie-in with other facilities in your area? (For example, if you represent an airport, do you coordinate your efforts with the port, an industrial park, community college, etc?)
 - Not discussed
- C. Are there impediments that may keep you from fulfilling your strategic plan? What are they?
 - Not discussed

IV. Workforce Questions:

- A. What is the availability of skilled labor to support your logistics facility?
 - As a result of the quality of life in Wilmington, there is no problem recruiting skilled workers. (In some cases, however, they may be a problem hiring the “trailing” spouse for someone recruited to the area.
- B. Specifically, what kind of skilled labor is needed?
 - CFCC can train people for needed skills and respond quickly to needs.

C. What educational programs are available to support your facility and who provides them?

- One of the areas greatest assets is Cape Fear Community College (CFCC). They are truly “in the game” when it comes to job training. Basically, at little or no cost, they provide great customized training for companies. Wilmington also has a great University, UNC Wilmington. Students graduating from the University want to stay in the area thus providing a great labor pool of educated people.

V. **Is there anything else you would like to tell us about your facility or the area that will help us with our research?**

- According to Satterfield, “the Wilmington area is a logistics driven area and can pretty much compete with anyone.”

Appendix N: Infrastructure Improvement Suggestions

INFRASTRUCTURE IMPROVEMENT SUGGESTIONS FOR THE NCSE REGION

HIGHWAYS

Wilmington (ILM)

- Complete the I-140 loop.
- Move the Skybridge closer to downtown near the Memorial Bridge. As proposed, the bridge will not improve traffic to and from the Port of Wilmington. With the existing bridge site, truckers would have to add several miles to their route to take advantage of Skybridge and would have to pay a toll at that.
- Continue I-74 all the way to Wilmington or at the very least continue it to I-140.
- Build the Monroe Bypass.
- Other highway improvements suggested by NCSU, ITRE are also relevant.

International Logistics Park (ILP)

- Immediately build a full intersection with a traffic light at the entrances to the International Logistics Park and the Mid-Atlantic Logistics Center.
- In the future the lighted intersection referenced immediately above should be replaced with a full highway interchange at the intersection of Highway 87 and US 74. This interchange would link both the ILP and the Mid-Atlantic Logistics Center with access roads.
- Continue I-74 all the way to Wilmington or at the very least continue it to I-140.
- Complete the I-140 loop.
- Move the Skybridge closer to downtown near the Memorial Bridge. As proposed, the bridge will not improve traffic to and from the Port of Wilmington. With the existing bridge site, truckers would have to add several miles to their route to take advantage of Skybridge and would have to pay a toll at that.
- Build the Monroe Bypass.

Fayetteville (FAY)

- Projects as proposed on the NCSU (ITRE) list are good for the City of Fayetteville; however, they do not greatly improve access or directly help the creation of a “Logistics Village” at or around the Fayetteville Regional Airport.

Laurinburg-Maxton Airport (MEB)

- Complete I-74 from where it now ends to where it will connect with US 220 in Rockingham.
- Continue I-74 all the way to Wilmington or at the very least continue it to I-140.
- Build the Monroe Bypass.

RAIL

- Establish an intermodal rail/truck facility in or near the NCSE region that has a direct rail link from the Port of Wilmington
- Reopen the preserved rail corridor from Castle Hayne to Wallace as it has the potential increase North Carolina agricultural exports from the Port of Wilmington. Also, re-establishment for this link has possible beneficial military benefits as it provides better access to the Port of Wilmington.
- Improved rail connection at Pembroke, connecting CSX north-south service to CSX's service to the Port of Wilmington, could facilitate military deployments from Ft. Bragg to the Port of Wilmington and increase international trade opportunities at the Port as well.

WATER/SEWER IMPROVEMENT SUGGESTIONS FOR THE NCSE REGION

Wilmington (ILM)

- Wilmington is at the end of the Cape Fear River Basin and receives most of its water from the Cape Fear. As a result of its physical location, Wilmington is concerned not only about the quality of the water flowing into Wilmington but also about the quantity.
- Wilmington has recently created the Cape Fear River Authority and it is currently undergone some initial start-up problems.

International Logistics Park (ILP)

- Water and sewer service is available and has been planned for in the development of the Park.

Fayetteville (FAY)

- The Fayetteville Regional Airport is at the end of the City of Fayetteville's water and sewer system. To accommodate industrial expansion, the City would need to invest a considerable amount of money to increase capacity and build a pumping station.

Laurinburg-Maxton Airport (MEB)

- Water and sewer service is available at the airport. They currently have a 2 million gallon capacity for each. Infrastructure could be expanded to accommodate growth especially if an existing facility at the WestpointHome facility is upgraded and converted to produce potable water.

COMMUNICATION ISSUES IN THE NCSE REGION

- Broadband coverage in the NCSE Region is uneven. Where it is good it is very good and where it is bad it is very bad or non-existent. Cities in the Region have the best coverage while coverage surrounding the International Logistics Park, Laurinburg-Maxton Airport and outlying areas around Wilmington like Pender County need improvement.
- Wilmington has the best coverage. It was the test city for TV's digital conversion and is now actively experimenting with how to best utilize the "white space" created as a result of the conversion to digital TV.

Appendix O: Consolidated Feedback Comments Received from Officials in NCSE Region

Allen Pope (April 14, 2011 Email) NCDOT, Division 3 Engineer

“I am okay with this summary, but have one comment concerning the **International Logistics Park (ILP)**. The developers of this site have not applied for a driveway permit. A signalized intersection may or may not be approved at this site. This section of highway will probably start out as a super street type intersection. As volumes increase, this intersection with two industrial parks will need to be an interchange. The future plan for US 74-76 is to bring it up to interstate standards. If you have further questions concerning this parks access, you may contact Anthony Law, our District Engineer, at the email address noted above. Thanks!”

G. W. Burns (April 11 and May 26, 2011 Emails; Telephone Message June 2, 2011 and telephone conversation June 3, 2011). NCDOT, Division 6 Engineer

Two emails were sent to Greg Burns and a follow-up telephone call was placed to seek input regarding the NCSE Region part of the “7 Portals” study. Greg and Sam Troy discussed the report on June 3, 2011, and Mr. Burns provided the following email comments on the same date: “I did read the executive summary and have no comments or changes to recommend. I have attached some previous thoughts from one of our other District Engineers regarding economic development sites in Robeson County for your information in addition to what I had previously forwarded from Drew Cox. Thanks, Greg”

Don Eggert (May 2, 2011, Email). Cape Fear RPO

“Thank you for the opportunity to comment on your study. Our main concern is that the interests of local governments in my area (all of Columbus Co. & most of Pender and Brunswick Co.) when it comes to planned highway and other transportation improvements are represented in the process.”

Janet Robertson (May 2, 2011, Email). Lumber RPO

“This appears to be a thorough and accurate assessment of the area. Thank you.”

Bradley Whited (May 6, 2011, Email). Director, Fayetteville Regional Airport (Comments are for Richard Heicksen)

“My comments are 1.) that currently the Airport does work in conjunction with the Chambers ED division on related NC Commerce RFPs, 2.) Funding of large projects and with private dollars is very hard to find, and 3.) with reference to the availability of cargo facilities, Fayetteville developed one in the late 1980s, however, in studying the cargo market in Fayetteville since 1987 it has always been found to be a "truck" market. The 1987 Cargo building was turned over to the City/Airport seven years prior to the end of its ground lease due to no business prospects. In the early 1990's the Major Cargo operators at RDU, talked to

Fayetteville Airport Management about the Cargo building and operations, but frankly that was simply a negotiation tactic for discussion with RDU, not a serious inquiry of our facility. Therefore, the building was converted to productive business use.

We appreciate the reports recognition of the condition of our facilities, we do take great pride in them.”

Joel Strickland (May 9, 2011, Email). Mid-Carolina RPO

“Sorry for being slow to get back with you.

With the Fayetteville Regional Airport being the only site in my planning area I’ll be happy to give you a few comments on it.

I personally believe the Fayetteville Airport is really an underutilized asset in Southeastern North Carolina and it is primed for growth. The passenger rates at the airport have seen dramatic increases over the last few years with the airport’s commercial airline fees being more competitive with that of RDU airport. I fly in and out of the airport a couple of times of year and it is very easy to get in and out of and the options at the airport allow you to get anywhere you need with only one stop in-between at the most. Secondly, the airport has great leadership with Mr. Whited and Mr. Coleman. They have always been very easy to work with from a planning perspective and have been very accommodating in assisting us with our needs.

I realize these are a few short comments, but I wanted to send you something. Hope this helps.”

Mike Kozlosky (May 3, 2011, Email). Wilmington RPO

See handwritten notes from Mr. Kozlosky on Executive Summary at the end of this document.

Response from Joy Bhadury:

As lead author of the Seven Portals Study report for NCSE, I wish to begin by thanking you for your careful and detailed comments. Going forth, your comments will be used to annotate the discussions of the larger Seven Portals Committee. Below are answers to some of your queries:

(i) As for the several of your inquiries regarding "Virtual Regional logistics park", it is perhaps best to give you the relevant excerpt from the main report - please see cut out below. As an example of a coordinating board for a similar activity, we refer you to the Aerotropolis Leadership Board in the Piedmont Triad (<http://ptp.appiandigital.net/aerotropolis/>). If you have any questions about how that works, the best person to get answers from is Mr. Dave Hauser, the Managing Director <dhauser@piedmonttriadnc.com>.

(ii) Industry clusters that are currently being targeted in NCSE were copied from the brochures obtained from NCSE's economic development agency and based on discussions with Mr., Steve Yost and other economic developers in NCSE about regional goals. Both Sam and I like your suggestion about film tourism (who can forget about Wilmington's role) cluster but it does not

appear on these brochures. I suggest you contact Mr. Yost about this and also about the details of their targets regarding the Aerospace industry cluster.

(iii) Military logistics seems like a viable economic cluster for NCSE especially given the developments at Ft. Bragg. In that regard, we met with Mr. Don Parker from MOTSU. Currently, given the extreme sensitivity of MOTSU operations, opportunities for partnership with private logistics providers are limited. However, we do agree with you that as the developments at Ft. Bragg take hold, it has the potential to spawn a substantial military-industrial economic cluster in NCSE. While not a focus for the location of a freight village, that is paramount in its significance and has been the subject of many discussions and an entire meeting of the Governor's Logistics Task Force (the group that commissioned our study).

Thanks for your careful reading and detailed feedback.

Best Regards
Joy Bhadury

1.1 Logistics Village 5 – “Virtual Logistics Village” for the Greater Wilmington Area

The Wilmington, NC metro area, composed of the three counties of New Hanover, Brunswick and Pender, has a population of over 350,000 people. The area is home to the Port of Wilmington and Wilmington International Airport. In addition, CSX rail access is available as are abundant trucking services. Figure 2-17 provides an overview of the site’s infrastructure including roads, airports, railroads, etc. Developable land parcels of all sizes are found in the metro area and many are shovel ready. Metro Wilmington also has average to above average basic infrastructure (communications, water, sewer and power) to accommodate growth. Area road access is good and getting better with planned improvements. I-40 provides excellent access to the west and intersects with I-95 just 96 miles away. Completion of I-140, I-74, the Monroe Bypass the Skyway Bridge will provide even better access. Finally, as a result of the area’s quality of life, skilled labor is often available. However, if specific skills are needed community colleges and the University of North Carolina Wilmington stand ready to develop needed skills. As a direct result of all these factors, the Wilmington area is strategically positioned to capitalize upon the Port of Wilmington’s “At Port” Logistics Model and for a “Virtual Logistics Village”. This would be a “Virtual” village comprised entirely of the logistics assets of this area and coordinated by a central facilitating group. An inactive FTZ is available at the Port of Wilmington and sub-zone status is possible at other area sites. While all components of a “Virtual Logistics Village” may not be located in one spot in the metro area, they are all in close enough proximity to each other to satisfy the “At Port” Logistics Model criteria for the Port of Wilmington.

In order to create a “Virtual Logistics Village” some infrastructure needs must be addressed and area leaders need to work together and cooperatively leverage regional logistics assets to create synergy in facilitating regional economic development. With regard to infrastructure needs, the following are needed: a lighted intersection at the entrance to ILP and the Mid-Atlantic Logistics Center; complete planned road projects; improve rail access at the Port of Wilmington and ILM; address “last mile” issues at the Port and maintain the viability of the Port of Wilmington in a

William H. Sackley, Associate Dean and Director, Center for Business and Economic Services, Cameron School of Business, UNCW

Connie Majure-Rhett, President and CEO, Greater Wilmington Chamber of Commerce

Bo Gregory, Director of Economic Development, Fayetteville, Chamber of Commerce

Doug Byrd, III, Economic Development, Fayetteville Chamber of Commerce

Bradley Whited, Airport Director, Fayetteville NC Regional Airport

Greg Icard, Director of Economic Development, County of Scotland, Laurinburg, NC

Kevin Patterson, County Manager, Laurinburg, NC

Jo Ann Gentry, Interim Executive Director, Laurinburg-Maxton Airport

Chip Morton, Chairman, Laurinburg-Maxton Airport Commission

Larry Barnett, Former Executive Director, Laurinburg-Maxton Airport

J. Randy Hoffman, Manager/Co-Owner, Scotland Aero Services, Laurinburg-Maxton Airport

David Raley, Consulting Engineer to the Laurinburg-Maxton Airport

Paul D. Smith, Aviation Program Manager, WK Dickson, Consultant to the Laurinburg-Maxton Airport

Glenn Carlson, Chief Commercial Officer, Business and Economic Development, North Carolina Ports Authority

Jeff Miles, Chief Operations Officer, Operations, North Carolina Ports Authority

Stephanie Ayers, Director, Port Planning and Development, North Carolina Ports Authority

R. Scott Satterfield, Chief Executive Officer, Wilmington Industrial Development

Don Parker, Deputy to the Commander, Military Ocean Terminal, MOTSU

Feedback From Mr. M. Kozlowsky

Executive Summary

North Carolina's Southeast Region (NCSE) is a study in contrasts. While the area supports a strong agricultural, wood products and food processing base with such companies as Smithfield Foods, International Paper Company and Campbell Soup, it is also home to high tech companies like GE Nuclear Energy, Pharmaceutical Product Development Company (PPD) and Corning. While the increasing importance of the military is especially important in the Cumberland, Sampson, Hoke and Robeson County area, tourism is important in Pender, New Hanover and Brunswick Counties. November 2010 unemployment rates range from a low of 8.4% in Sampson County, significantly below average for North Carolina and the US, to a high of 15.7% in Scotland County, substantially above the unemployment for North Carolina and the US. In 2011, five (5) of the counties in NCSE are Tier 1 counties while three (3) are Tier 3 counties. However, one theme appears to be consistent throughout the region: the importance of logistics to economic development. NCSE is:

- strategically located mid-way between Maine and Miami.
- home to the Port of Wilmington providing convenient access for international trade.
- supported by a good and growing network of interstate and state highways providing good trade routes to the North, South and West. *I-95, US 17, US 74, US 76*
- serviced by two well-maintained airports (Wilmington International and Fayetteville Regional)
- accessible to CSX, Norfolk Southern, and local short line railroads.
- populated with a workforce with a strong work ethic. Three state universities, two private colleges, and eight community colleges are readily available and willing to support workforce development.
- endowed with significant amounts of land ready for development that has, for the most part, infrastructure available to support immediate development (water, sewer, electricity, gas and communications).

*MOTSU and
Fort Bragg/
Jacksonville*

While all of these things are not uniformly available across the region, their near proximity to these attributes will serve as the foundation for future economic development throughout the region... a future strong in supply chain logistics.

Agriculture and manufacturing have a long history in the region. The region currently employs some 40,000 people in manufacturing. Other industries employing a large number of workers are agri-business and the food processing industry. Additionally, a significant number of farmers work on fertile land that allows some NCSE counties to be ranked among the top farm producing counties in the nation. With regard to the future, NCSE hopes to build upon this existing base by focusing on nine industrial clusters:

- Building Products
- Advanced Textiles
- Distribution and Logistics
- Building and Marine Trades
- Metalworking
- Food Processing and Agri-Industry
- Military Contractors
- Biotechnology
- Alternative Energy

Film? Tourism? → Not sure if these are appropriate for Economic Development, Not really Industrial but important

Can you go into further detail?

In addition, NCSE is considering the **Aerospace Industry** as another focus cluster.

While NCSE has a primary objective of focusing “on short, immediate and long-term economic development strategies aimed at sustainable job creation and industrial investment,”¹ it has several goals or objectives that support the creation of a “Logistics Village” in the region: **International Marketing, Regional Workforce Analysis, Engagement with the Base Realignment and Closure Commission (BRAC) Regional Task Force, Renewable Energy** and the **Distribution and Logistics Hub Initiative**. Attainment of each of these goals or objectives will require NCSE to have a strong foundation in logistics to support a vibrant economy and help the region increase its position in a global marketplace.

The Bryan School of Business and Economics, UNCG, was asked to review four (4) possible sites in North Carolina’s Southeast Region (NCSE) for the potential establishment of a “Logistics Village”: **Laurinburg-Maxton Airport (MEB); Fayetteville Regional Airport (FAY); International Logistics Park of North Carolina (ILP) and Wilmington International Airport (ILM)**. As a result of numerous interviews and research conducted to evaluate the four designated sites, the research team added a fifth possible site, a “**Virtual Logistics Village**” for the **Greater Wilmington Area**. Each site is unique and each offers different attributes that could support the establishment of a “Logistics Village.”

Describe a “Virtual Logistics Village”

- **Laurinburg-Maxton Airport (MEB)** The Laurinburg-Maxton Airport, a finalist site for consideration as North Carolina’s Global TransPark, is located entirely in Scotland County but is immediately adjacent to Robeson County and is operated by the Laurinburg-Maxton Airport Commission that reports to the governing bodies of the cities of Laurinburg and Maxton. MEB offers significant opportunity for development as a result of the availability of developable land, adequate and improving roads, and ready

¹ North Carolina’s Southeast, Strategic Marketing Plan, 2010-2011 p. 10



access to most infrastructural needs. The site is also located very close to rapidly expanding Ft. Bragg and Camp McCall and this proximity offers many possibilities for future economic development in the area. With this said, the airport lacks a strategic plan and facilities need major costly improvements. While there are immediate plans and funds available to improve two of the three runways, the improvements do not fill all the needs and requirements to make MEB truly competitive. In addition, the area has access to CSX and short line railroads but to take full advantage of this resource costly rail connections are needed. Finally, while most infrastructure needs are available, they also need upgrades and retrofitting. In order to maximize the potential this area offers, the area needs a champion (a private company or companies, government or the military) that is in a position to provide the necessary resources for upgrades and improvement.

- **Fayetteville Regional Airport (FAY)** The well maintained Fayetteville Regional Airport (FAY) is located in Cumberland County and is operated by an Airport Director for the City of Fayetteville. “Proximity” is the key word needed to understand the Fayetteville Regional Airport area and its potential as a “Logistics Village.” The area is geographically well located, has access to CSX, Norfolk Southern and short line railroads. While the connections are not on the airport site, they are all located within the City of Fayetteville. The area is also in close proximity to major interstate highways, the Port of Wilmington, Research Triangle Park, recreational facilities and developable land including shovel ready sites. In addition, and perhaps most significantly, it is located near an expanding Ft. Bragg. This expansion of Ft. Bragg is a result of the Base Realignment and Closure Commission (BRAC). By 2011, Ft. Bragg will be home to the U.S. Army Forces Command (FORSCOM) and the Army Reserve Command (USARC). These moves will have a major impact on economic development in the immediate Fayetteville area and the entire NCSE. Soldiers leaving the military at Ft. Bragg also provide the area with plentiful access to a skilled workforce with good work ethic. For the area to reach its full potential as a “Logistics Village,” the airport’s strategic plan needs to be integrated into the overall economic development efforts of Fayetteville and Cumberland County. FAY also needs better access to capital resources for infrastructure improvements, including cargo facilities, which will enhance economic development efforts. Similar to Laurinburg-Maxton Airport, FAY needs a champion to stimulate development, with the military being the most likely candidate for the foreseeable future.
- **International Logistics Park (ILP)** The International Logistics Park of North Carolina (ILP) is built on the Columbus/Brunswick County line on US 74/76 just 15 miles from the Port of Wilmington. A joint venture between Brunswick and Columbus Counties, this is an as of yet undeveloped 1,100 acre park that hopes to capitalize upon the “At Port” Logistics Model promoted by the Port of Wilmington. The potential for ILP is tremendous as the result of the vast amount of developable land that includes shovel ready sites. Close proximity to the Port of Wilmington and Wilmington International Airport is also an attribute. Utilities, gas, water electricity and sewer are readily available. Existing roads and planned road projects make ILP very accessible. An added tax advantage for ILP is Tier 1 status for all new projects. A major concern for this site is its risk exposure to the future viability of the Port of Wilmington. ILP also lacks a rail connection; however, located directly across the street is the site of another large

industrial park, the Mid-Atlantic Logistics Center, that has CSX rail access. Marketing these two large sites together will enhance the areas potential as a "Logistics Village." Immediate construction of a lighted intersection at the entrance of these two sites will make the two sites more desirable. Finally, leveraging and promoting together all of the logistics assets of the Wilmington area, including these two industrial sites, creates a very creditable site for a "Logistics Village."

- MLK Parkway (US 74/76)*

• **Wilmington International Airport (ILM)** The Wilmington International Airport (ILM) is located in New Hanover County and serves southeast North Carolina. The airport, conveniently located off I-40 and I-140, is a modern, underutilized airport that is operated by the New Hanover County Airport Authority. It is a full-service airport that offers commercial, cargo and general aviation facilities. In addition, it provides a "state of the art" Federal Inspection Services (FIS) facility. Runways are adequate and expandable to meet demand. Shovel ready industrial sites that meet the Port of Wilmington's "At Port" Logistics Model criteria are available at the airport and larger tracks of developable land are located nearby in Pender, Brunswick and Columbus Counties. ILM has existing average to above average basic infrastructure (communications, water, sewer and power). The airport also has at-site rail service with an indirect link to the Port of Wilmington. In addition, the high quality of life in the area provides the ability to attract highly skilled workers. However, a weakness for ILM, like the nearby International Logistics Park, is its risk exposure to the future viability of the Port of Wilmington. Despite this possible weakness, leveraging and promoting together all of the logistics assets of the Wilmington area, including ILM, creates a very creditable site for a "Logistics Village."

- Major Roadways US 74, 76, 17 and I-95*

Planned Improvements Bypass Cape Fear Highway

• **A "Virtual Logistics Village" for the Greater Wilmington Area** The final assessment is for a "Virtual Logistics Village" from the Greater Wilmington area that comprises all logistics assets of the region and is coordinated by a centralized facilitating body to work synergistically as a unified and coherent institution. The Wilmington metro area is composed of three counties: New Hanover, Brunswick and Pender. In addition, Columbus County is in close proximity to the Wilmington area and is an equal partner in the development of the International Logistics Park located on the Brunswick/Columbus County line. The area is home to the Port of Wilmington and Wilmington International Airport. Also, CSX rail access is available as are abundant trucking services. Developable land parcels of all sizes are found in the metro area and many are shovel ready. Most of the sites are located within the three major industrial parks: International Logistics Park, Mid-Atlantic Logistics Center, and the Pender Commerce Park. Metro Wilmington also has average to above average basic infrastructure (communications, water, sewer and power) to accommodate growth. Area road access is good and getting better with planned improvements. Finally, as a result of the area's quality of life, skilled labor is available and, if specific skills are needed, area educational institutions stand ready to develop needed skills. As a direct result of all these factors, the Wilmington area is strategically positioned to capitalize upon the Port of Wilmington's "At Port" Logistics Model and thus become a "Virtual Logistics Village". An inactive Foreign Trade Zone (FTZ) is available at the Port and, as a result, sub-zone status is possible at other area sites. While all components of the "Virtual Logistics Village" are not located in one spot in the metro area, the major components of a village are found in close enough proximity

Southern New Hanover may also have some large undevelopable tracts.

MOTSU Access to Port Bragg

to each other in the Wilmington area. Therefore, in order to create a “Virtual Logistics Village” some infrastructure needs must be addressed and area leaders need to work together and cooperatively leverage regional logistics assets to create synergy in facilitating regional economic development. In addition, leaders should explore the establishment of a “facilitation” group similar to the Aerotropolis Leadership Board in the Piedmont Triad Region. The creation of this “Virtual Logistics Village” will truly allow the Wilmington area to benefit from a global economy. However, there remains one major risk to the successful implementation of a “Virtual Logistics Village”; in order for it to flourish, the Port of Wilmington must remain viable now and far into the future.

Can you elaborate on what infrastructure needs to be addressed?

In conclusion, as a result of the extensive research into the area conducted by Bryan School professionals and 14 separate interviews with 34 different people representing various organizations in NCSE Region, one fact became evident. In order for NCSE to truly benefit from global trade and be a true participant in the global economy, a viable Port of Wilmington is a necessity. On December 10, 2010, the NC Department of Environment and Natural Resources recently took a giant step forward in this direction when it announced that the Department will partner with the federal government to study the feasibility improving the Port of Wilmington in order to accommodate larger ships and make the Port of Wilmington more accessible to those ships².

Recommendation is to create the "Virtual Logistical Village"

² NC Department of Environment and Natural Resources, *Port of Wilmington Upgrades Could Allow for Larger Vessels, Increased Traffic*. Press Release, December 10, 2010.