

**Economic Development Strategy “Vision Plan”
Currituck County, North Carolina**

**Final Report
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INTRODUCTION

The UNC Center for Competitive Economies (C³E) is part of the Frank Hawkins Kenan Institute of Private Enterprise and UNC's Kenan-Flagler Business School. The Center brings the considerable resources of the University to help communities in North Carolina, the United States and beyond address critical challenges of competitiveness and economic development. In that role, C³E conducts economic policy studies for local, state and national governments across the spectrum of economic development issues. In particular, C³E designs, develops and deploys econometric technologies to analyze the economic impact of various interventions on state, regional and national economies.

History and Plan Organization

During 2004 and 2005, C³E collaborated with the North Carolina's Northeast Partnership (NCNE) in performing an "Economic Vision Study", a comprehensive study addressing economic opportunities and obstacles faced by NCNE's 16 member counties. The conclusion, findings and recommendations of that work came to the attention of leaders and involved citizens of Currituck County who subsequently contacted C³E to discuss how that research could assist Currituck County's own economic development efforts.

In late 2005, C³E research staff, including then Center Director Dr. Michael I. Luger and Executive Director Brent Lane, met with the Currituck County Economic Development Board to discuss the NENC study findings and their relevance to issues concerning county leadership and citizens. These discussions resulted in a request for proposal to C³E from the county to perform a comparable "Vision Study" for Currituck. That proposal was developed and submitted to the county. Upon the approval of the Currituck County Board of Commissioners, C³E was engaged in 2006 by Currituck County to perform the proposed analysis.

This document is the complete Currituck Economic Development Strategy "Vision Plan" resulting from that research. This plan was developed by the University of North Carolina's Center for Competitive Economies (C³E) in consultation with Currituck County leaders and citizens. It represents an analytical and objective analysis of Currituck County's economy and economic development options and utilizes the insights, suggestions and priorities of a broad cross-section of the county's citizens, business leaders, visitors, public officials, and external expertise in making recommendations that offer the best economic development outcomes.

This document summarizes and interprets the findings of several different analyses which are individually described more completely in the accompanying appendices. The findings are presented first, followed by descriptions of strategic economic development options suggested by the findings.

FINDINGS

Currituck's economy is developing rapidly, with or without action by the County. At issue is whether there are actions to be taken to address the manner in which that development is occurring.

Geographically and economically Currituck is effectively two counties. Its only significant industry, tourism, while continuing to thrive, may not be sufficient to produce the employment and tax base needed to adequately serve a rapidly growing county. Fortunately, Currituck possesses several assets offering potential for greater economic growth. However, the rapid pace of development in Currituck and comparable regions suggest that direct actions – rather than reactions - are needed to capture that potential within the needed timeframe.

Currituck Demographic and Economic Scan

The Vision Plan research began with the performance of a “Demographic and Economic Scan” to compile a solid information foundation on key economic and demographic descriptors of Currituck County. This scan included comprehensive data on current and historical trends on factors such as:

- Population changes and trends
- Income and wealth characteristics
- Educational attainment levels
- Workforce size, skill level and employment commuting patterns
- Business climate quantitative and qualitative measures
- Business and industry sites and infrastructure
- Quality of life measures

While the complete outcome of this scan is described in Appendix A of this report, there were several conspicuous findings warranting special attention in considering Currituck's economic development imperative.

Finding: The Currituck Economy Appears to be doing Well...

For the casual visitor, Currituck's economy appears prosperous. This impression is conveyed by the county's natural beauty, the conspicuous abundance of its coastal vacation areas, and the rapid influx of new residents on the mainland. Indeed there are many enviable aspects to the Currituck economy:

- Between 1990 and 2000, county population grew by 32%, and between 2000 and 2006, the growth rate reached 31%
- Currituck's median household income of \$49,863 is well above that of most North Carolina counties
- Its unemployment is often among the lowest in the state and its poverty rate is also among the lowest; and

- Its residents enjoy a property tax rate well below that of their neighbors in adjoining counties.

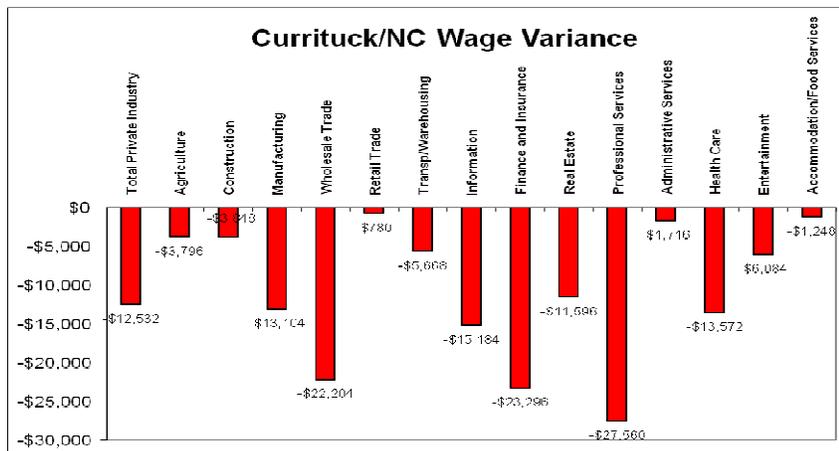
Nearly all these good things are attributable to the success of Currituck’s tourism industry which regularly sets new records for visitation, expenditures and tax receipts:

- Each year, approximately 1,600 Currituck jobs are attributable to travel and tourism
- 65.3% of the County’s employment is in related areas like construction, retail trade, real estate and rental and leasing, and accommodation and food services.
- The 9.9% growth of tourism in the county between 2006 and 2007 was the highest in the state
- This increased activity has yielded a 619 new jobs, a 36% increase, in tourism-related jobs since 2001; and
- The taxes paid by land and home owners on Currituck’s small bit of the Outer Banks, which account for the majority of the County’s property taxes, have kept the property tax rate low for all Currituck residents.

...But Perhaps Not Well Enough.

Beneath the appearances is another reality known to most Currituck residents. The Currituck economy is not producing many jobs, and few of those jobs pay very well.

- While Currituck’s household income ranked 9th highest in North Carolina last year, average weekly wages earned in the county ranked 84th
- The wages paid Currituck workers lag their North Carolina peers in every industry category, with the average Currituck private sector employee earning **\$12,500 less annually** than her North Carolina counterpart
- Moreover, a significant number of Currituck’s jobs are seasonal in nature. As a result, the county’s unemployment rate, which was the lowest in North Carolina in September 2006, typically more than doubles between September and December



Currituck Labor Force and Skill Mix Inventory

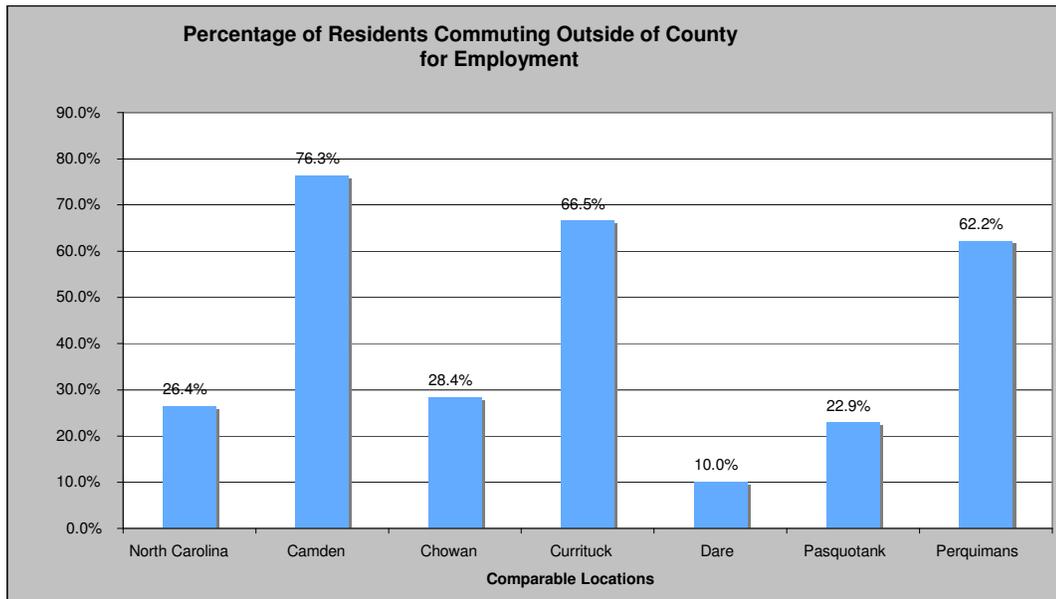
In the NENC Vision Plan C³E had found that the depth of the region’s labor force was underestimated due to the high level of worker “out commuting” to Virginia and neighboring counties. A similar effect appears to be at work in Currituck County, where 76.5% of the resident workforce commuting to jobs outside the county. The complete outcome of this inventory is described in Appendix B.

Because workforce statistics are compiled based on place of employment – not residence – Currituck County’s workforce, and therefore its capacity to support industrial and economic growth, is underestimated. To remedy this information shortcoming C³E performed an inventory of the county’s resident labor resources to provide a more accurate assessment of the county’s resident labor force as an essential asset for economic development planning and industrial recruitment.

Finding: Out-Commuting and Out-Migrating Reveal Outstanding Challenges

Many Currituck residents have adapted to these economic realities in very logical fashion - by finding employment outside the county. While this can be perfectly acceptable for many citizens, it can have ominous effects warranting the attention of the county’s leaders.

- Most Currituck residents adapt by working outside the county with more than 76% of its citizens “out-commuting” to jobs in adjoining areas
- However, many low-income residents choose, or are forced, to leave the county in pursuit of other opportunities. Between 2000 and 2005, 5,259 Currituck residents with median household incomes of \$21,693 moved out of the county.



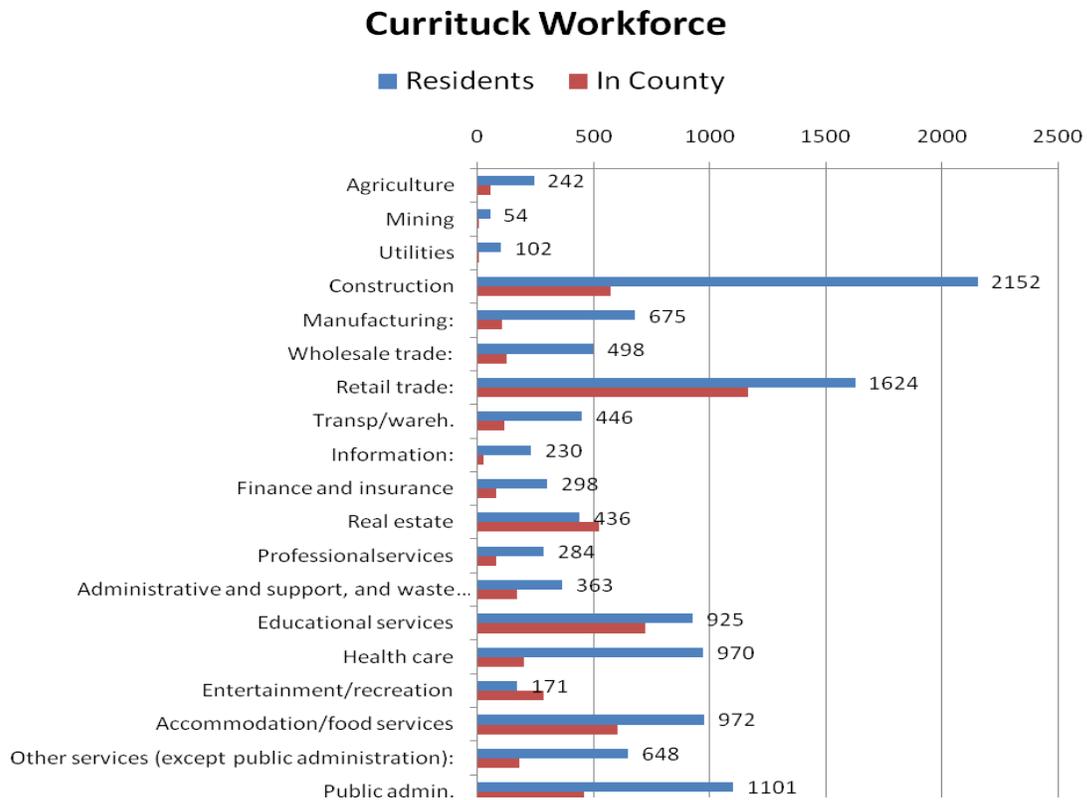
Finding: Currituck’s Resident Workforce is Deeper than it Appears

The limited quantity and quality of the Northeast North Carolina workforce has typically been viewed as one of the region’s challenges. This perception has created an obstacle to the attraction and development of new employers, especially in high-skill dependent firms.

The effect was especially pronounced in Currituck County. However, C³E has found in earlier that the county’s workforce is actually significantly larger and potentially more talented than initial appearances might suggest. Such underestimation is the result of the level of out-commuting by the region’s residents to jobs elsewhere.

A lack of accurate labor force information has been a disadvantage in promoting Currituck County as an economic development location. To remedy this information shortcoming an inventory was performed to provide a more accurate assessment of Currituck County’s resident labor pool:

- Workforce undercounts can be exacerbated by high rates of out-commuting such as that in Currituck County where 76% of its citizens commute to jobs outside the county
- This high rate of out-commuting suggested that the county might possess a much larger resident workforce than conventional measures are reporting



- Conventional place of employment data showed that the Currituck County has a 2006 workforce of only 5,460 workers, with high relative employment levels in real estate, agriculture, arts, construction, public administration, retail trade, education, and hospitality services
- In contrast, place of residence data analysis indicated that Currituck County actually **more than twice as many workers, 12,190**, with high relative levels of higher skill occupation in construction, professional services, manufacturing, and administration services.

Currituck “Virtual Micropolitan” Construction

Economic development efforts to encourage appropriate commercial, entertainment, service and retail development in Currituck County are hampered by the county’s low “economic profile”. While Currituck is experiencing rapid growth of residents and visitors possessing highly desirable demographic characteristics, unfortunately the county is obscured statistically by its inclusion in the Hampton Roads metropolitan area (MSA) and also lacks a federally designated “micropolitan”. As a result, the county faces challenges in garnering notice from prospective national retail and commercial property developers.

To counter this situation, C³E constructed a “virtual micropolitan” profile of Currituck County that aggregated the buying power of the county’s dispersed towns and visitor streams. This has provided a more accurate depiction of Currituck’s market potential, enabling a persuasive communication of the county as a commercial development location.

Finding: A “Virtual Micropolitan” Reveals Currituck’s Unmet Retail Potential

A micropolitan is an urban cluster of at least 10,000 persons located within a rural county or counties, constituting a community that is too urban to be called rural and too rural to be called urban. The concept of micropolitans can serve as focal points for the development and attraction of new retail and service industries, residential and industrial development, and tourism.

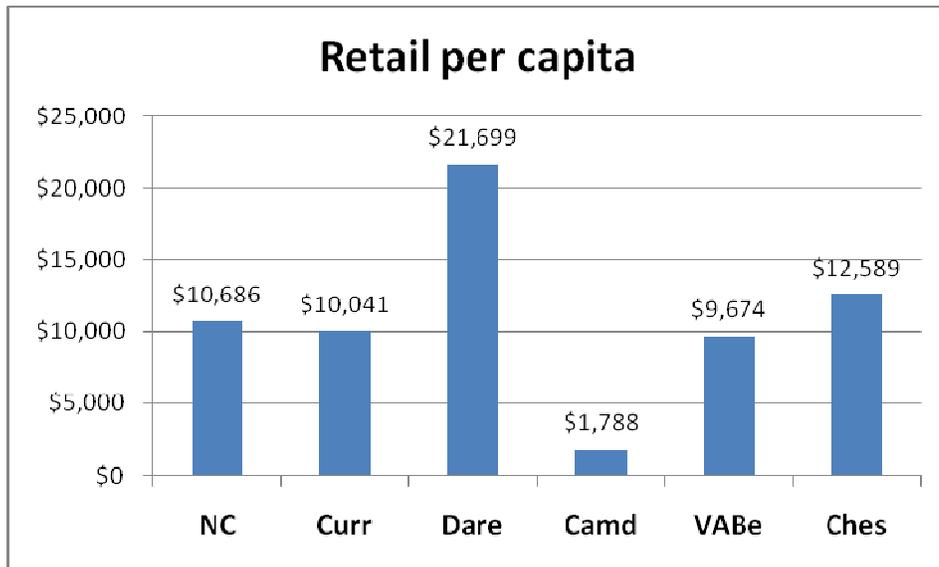
Unfortunately, Currituck County lacks such a designated micropolitan. Moreover, the county’s inclusion in the Hampton Road Metropolitan Statistical Area (MSA) effectively obscures the county statistically, thus hampering the attraction and development of service and retail businesses to serve the county’s citizens.

To counter this effect, the demographic and spending capacity of Currituck County were aggregated to examine their comparability to retail, hospitality and service economies of three other northeastern North Carolina micropolitans.

This analysis revealed that:

- Currituck County possesses market capacities approximating those of Washington, Roanoke Rapids and Elizabeth City
- Comparative analysis described the extent to which Currituck County is underserved by industry sectors and specific retail and hospitality chains

- Yet, even when taking into account retail expenditures from the County’s tourism industry, retail spending per capita lacks behind the State and well behind its neighbors Dare County and Chesapeake, Virginia



Finding: “Leakage” Drains Much Needed Money Out of Currituck’s Thin Economy

Currituck’s relatively undeveloped retail economy, especially in combination with its high rate of employment “out-commuting”, results in yields economic “leakage” as Currituck’s citizens must obtain many goods and services outside of the county borders.

- Currituck’s high out-commuting rate accounts for much of the “retail leakage” the county experiences, as commuters do much of their shopping near their place of work rather than within Currituck
- As a result, Currituck “leaks” approximately 28% of the county’s proportional retail sales and sales tax revenue to other counties, especially to Dare County which also imports much of Currituck’s tourism-related spending

Low wage employment and high out-commuting rates, especially when combined with high rates of residential development, can lead to deterioration of Currituck’s tax base at a the very time that rapid growth creates increasing demand for public services.

Tourism Development Opportunities Definition

Tourism revenues in Currituck have more than tripled over the past ten years. However, the vast majority of those revenues – and the resulting economic benefits - accrue within a very small area of the county. Nonetheless, the county’s high level of tourism visitation is an obvious opportunity for expanded economic development and Currituck has taken several actions to capitalize on such opportunities. An important component of the Vision Plan was therefore to uncover information that would aid in devising appropriate economic development strategies to expand tourism’s benefits.

C³E employed multiple research methods, including surveys, statistical analysis, and key informant interrogations to construct an in-depth demographic characterization of Currituck’s current tourism activity. Early in this process it became clear that 1) extending the tourism “season” and 2) developing more mainland tourism opportunities was highly desired by both public officials and local businesspeople. The result was a strategic realignment of the project’s research method to particularly focus on those issues. A thorough discussion of this research is described in Appendix B, “Currituck’s Tourism Economy”.

Another issue that arose to greater prominence during the course of the research was the revitalization of the Mid-Currituck Bridge project. This long awaited transportation project had become moribund in recent years and most Currituck citizens had become resigned to its perpetual postponement. But in 2007, under the leadership of North Carolina Senate Pro Tem Marc Basnight, the project appears have been accelerated toward completion as early as 2012. Given the economic significance of this development the project research plan was amended to include an examination of that bridge's likely and potential impact to Currituck’s economic. That research is described in Appendix C: “Economic Impact of Mid-Currituck Bridge”.

Finding: Currituck Greatest Economic Strength is also Highly Vulnerable

Currituck’s robust tourism industry is a precious asset that is also highly vulnerable. Despite all efforts are promotion and development, it is a reality that weather disruptions to Currituck’s primary economic engine are not just likely, they are inevitable. For while Currituck has avoided direct strikes by hurricanes in recent years, even close calls anywhere on the North Carolina can negatively affect visitorship to Currituck’s beaches. The effect of a Katrina scale hurricane impact on Corolla – and therefore Currituck – is now all too imaginable.

But such weather effects need not be dramatic to be devastating. For example, one of the most salient issues today, especially for coastal communities, is the possibility of rising sea levels. For Currituck, the most vulnerable area - Corolla and Carova - to these changes is also the County’s most vital economic asset:

- The North Carolina Department of Environment and Natural Resources (DENR) estimates that Corolla’s shoreline is currently seeing annual erosion rates of up to 12 feet per year, with the average of the entire coast at about 2.7 feet per year

- The US Environmental Protection Agency (EPA) estimates that almost all of Corolla and Carova, based on the elevation, is “vulnerable” over the next few decades to rising sea levels, either by erosion of absolute changes in water level
- The effects are already being felt. In 2005, the construction of new homes or home renovations located in floodplain were banned, and 1994, the National Flood Insurance Program stopped granting insurance coverage to those living within the 1% annual flood chance area, as dictated by Federal Emergency Management’s Flood Insurance Maps (FIRM)

Education Trends Offer Currituck Tourism Expansion Opportunities

An extensive secondary-source survey of Currituck tourism businesses identified several important trends offering potentials for enhancing Currituck’s existing Outer Banks focused tourism industry and for extending tourism into Currituck Sound natural resource-based “eco-tourism” activities:

- The trend toward larger parties with more children is creating a demand exceeding existing recreation and entertainment in Corolla, driving visitors to seek out opportunities in Dare County
- Trends in homeschooling and year-round schools in states from which Currituck draws most of its visitors (North Carolina, Pennsylvania, Ohio, New York) are creating new customers within Currituck prime demographic
- The increasing popularity of eco-tourism offers opportunities to enhance the experience of existing visitor streams and to attract entirely new demographics drawn to Sound-based accommodation and recreation activities; and
- The pervasive use of internet-based marketing research by prospective visitors has greatly disaggregated the marketplace, enabling the pursuit of narrowly focused niches previously uneconomical to identify and serve.

Mid-Currituck Bridge will be Built Someday, then What?

The often delayed Mid-Currituck Bridge is currently scheduled for construction beginning in 2010 to be completed by 2014. Its development should provide easier mainland access to Corolla and Carova tourists and will likely capture a considerable amount of tourism spending currently leaked to Dare County. Most discussion of the bridge has focused on the beneficial effect on expedited visitor arrival and departures. But considerable increases in mainland development is also expected from cross-Sound, mid-week travel to new retail, entertainment and hospitality establishments.

C³E calculated the estimated impacts of the first year of the commercial activity that would likely occur after bridge construction. This analysis assumed that market conditions would spur a commercial and business mix similar to that in Dare County in the area surrounding the Mid-Currituck Bridge. This analysis found that:

- A proportional mix of businesses will occur in the in approximately 7.6 square mile area in the vicinity of Aydlett between Hwy 158 and the mainland bridge intersection at the Currituck Sound

- This business mix at the Mid-Currituck Bridge would total 34 businesses, including retail stores, restaurants, service businesses, and a hotel with estimated total annual sales of \$78 million dollars
- The business mix around the Mid-Currituck Bridge will create a total of 468 new jobs with \$9.6 million in new labor income. The total production or industry output generated by this new development is \$36.2 million.

This analysis assumes such a business mix will occur in the absence of additional land use and development controls, although the County could aspire to a less intense use of the land or to higher end and higher value commercial development around the bridge.

Targeted Industry Clusters Characterization

In the NENC Vision Plan C³E performed and reported on a detailed *Industry Cluster Analysis* for the Partnership counties as well as the counties across the Virginia border in the southern portion of the Hampton Roads economic sub-region. That analysis identified several industry groups for which the region demonstrated emerging competitive advantage. Especially revealing was the identification of several industry clusters for which NENC was benefiting from synergies with the adjacent Hampton Roads economy.

However, the constituent firms comprising these clusters varied significantly, making a determination of their appropriateness for Currituck County’s economic development strategy difficult. A fuller understanding of the population characteristics of the firms was needed to more confidently identify industry clusters for Currituck’s economic development targeting requires within those NENC clusters.

To accomplish this C³E performed a Targeted Industry Clusters Characterization that used multiple public and proprietary corporate information sources to characterize the national population of firms for the regional industry clusters of northeastern North Carolina and southeastern Virginia – the greater “Hampton Roads” economic region. Those characteristics were compared with the attributes of Currituck County to identify industry clusters most appropriate for a targeted industrial development strategy. This extensive analysis is described in Appendix D: “Currituck Targeted Industry Clusters Analysis”.

Finding: Synergy with Hampton Roads offers Promising Industrial Prospects

Being part of the Hampton Roads metropolitan area often seems to completely obscure Currituck’s economy and market potential from the gaze of retailers and other business development interests. But there can also be a beneficial economic development effect if Currituck is perceived as an advantageous location for companies seeking proximity to the Hampton Roads industrial clusters.

Databases of information were compiled on the current Hampton Roads area corporate population of each of the potential industry clusters. Those cluster populations were investigated to identify and describe corporate location behavior. The criteria selected for use in targeting clusters for Currituck County included:

Cluster Traded Status

A strong selection preference for traded industry clusters was used to maximize the economic benefit. **Traded clusters** are those that bring new income into the regional economy from outside. Such is clearly the case for manufacturing firms that produce goods for export, thus importing new income to the local economy. While perhaps less obvious, the same is also true for service and retail businesses whose primary markets are non-local.

Cluster Location Quotient Trend

A selection preference was used for industry clusters exhibiting high or strengthening Location Quotients (LQs) for the region and the region's rural counties. LQs are an indicator of relative cluster strength by measuring the share of local employment in a given industry cluster relative to a national average employment share in that same cluster.

Cluster Density

A selection preference was used for industry clusters exhibiting high levels of "Cluster Density", a measure of the extent to which the cluster possesses broad presence across its constituent sub-sectors. Clusters for which the region has pronounced competitive advantage would exhibit high LQs and a large population of firms throughout the cluster's constituent subcategories.

Cluster Rural Location Proclivity

A selection preference was used for industry clusters demonstrating significant level of rural location by constituent companies, measured as a percent of total firms of the cluster located rural areas the Hampton Roads Metropolitan Statistical Area (MSA).

Cluster Locally-based/Headquartered Population

A selection preference was used for industry clusters with substantial populations of regionally based headquarters (HQs). Local HQs are considered preferable for maximum economic development and sustainability.

Cluster Medium and Small Enterprises (MSE) Population

A selection preference was used for industry clusters with significant populations of Medium and Small Enterprises (MSEs), mid-scale firms with facility, workforce (20-250) and resource requirements more appropriate to Currituck County.

Cluster Mean Wages

A selection preference was used for industry clusters with higher average wage rates.

Finding: Optimal Targeted Industry Clusters for Currituck

Industrial clusters analysis identified industry sectors where the proximity of the Hampton Roads metropolitan area creates opportunities for Currituck economic development. In particular, this industry cluster analysis identified six strong and

emerging industry clusters for which strengthened transportation, utility, and infrastructure offerings could position Currituck to serve as a location for firms attracted to or expanding within those industry clusters:

1) Aluminum products (ship building)

- Aluminum sheet, plate & foil manufacturing
- Primary aluminum production
- Ship building & repair
- Metal can, box & other container manufacturing
- Copper rolling, drawing & extruding
- Sheet metal work manufacturing
- Iron & steel mills
- Blind & shade manufacturing

2) Basic health services

- Offices of physicians, dentists & other health practitioners
- Other ambulatory health care services
- Facilities support services
- Electro-medical apparatus manufacturing
- Pharmaceutical & medicine manufacturing
- Surgical & medical instrument manufacturing
- Surgical appliance & supplies manufacturing
- Environmental & other technical consulting services

3) Metalworking and fabricated metal products

- Ornamental & architectural metal work manufacturing
- Power boiler & heat exchanger manufacturing
- Metal tank, heavy gauge, manufacturing
- Prefabricated metal buildings & components
- Fabricated structural metal manufacturing
- Metal window & door manufacturing
- Fabricated pipe & pipe fitting manufacturing
- Steel wire drawing
- Industrial & commercial fan & blower manufacturing

4) Information services (includes finance and insurance components)

- Data processing services
- Computer systems design services
- Custom computer programming services
- Software publishers
- Electronic equipment repair & maintenance
- Telecommunications
- Advertising & related services

- Investigation & security services
- Travel arrangement & reservation services
- Photographic services

5) Business services (includes finance and insurance components)

- Accounting & bookkeeping services
- Advertising & related services
- Architectural & engineering services
- Legal services
- Management consulting services
- Machinery & equipment rental & leasing
- Environmental & other technical consulting services
- Specialized design services
- Sound recording industries
- Custom computer programming services

6) Nonresidential building products

- Fiber optic cable manufacturing
- Other communication & energy wire manufacturing
- Paint & coating manufacturing
- Engineered wood member & truss manufacturing
- Switchgear & switchboard apparatus manufacturing
- Architectural & engineering services
- Ornamental & architectural metal work manufacturing
- Ceramic wall & floor tile manufacturing

A profile for existing headquarters, branch plant, and sole location was developed for each cluster (Appendix C). This profile differentiated between more urban areas in the region (Chesapeake and Virginia Beach in Virginia) and more rural counties in the region (Suffolk County, VA and Camden, Currituck, Gates, and Pasquotank Counties in North Carolina).

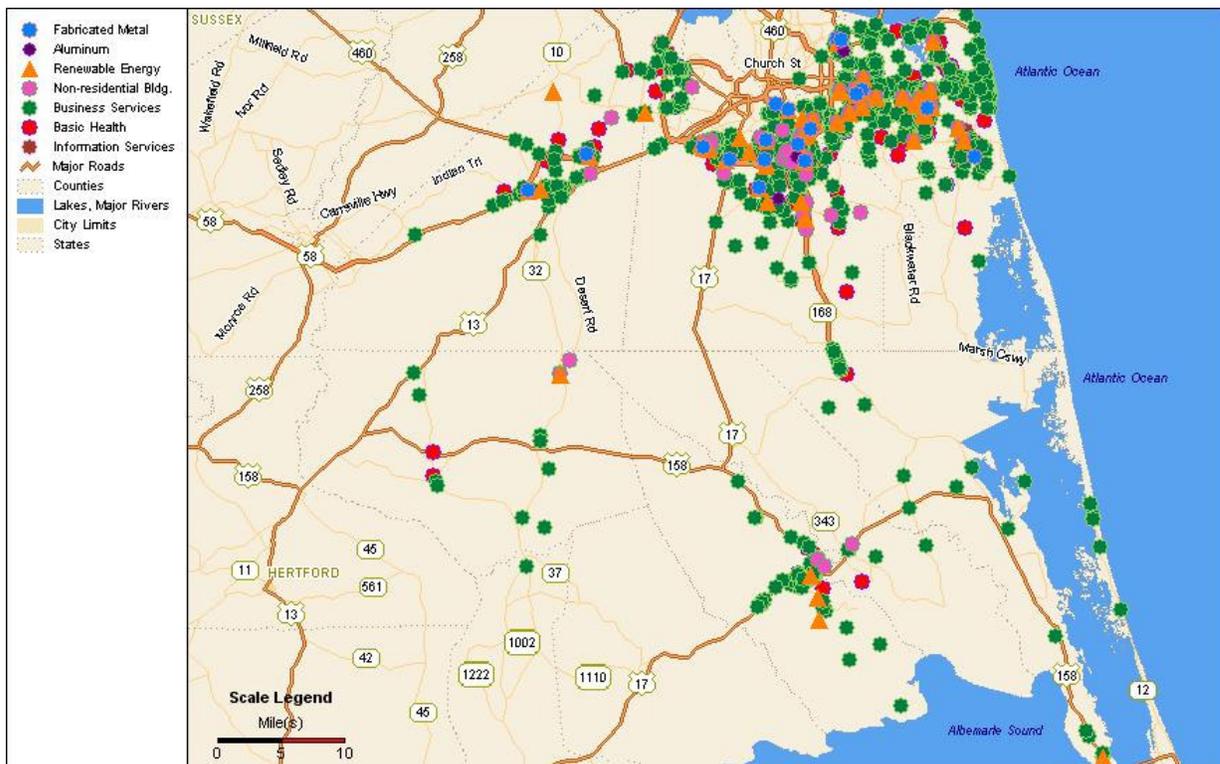
The headquarters location for each branch plant was then identified by state to ascertain whether headquarters located in some states were more likely to choose the SHR/NENC region for branch plant locations. A profile of each headquarters and sole location of industry cluster firms was then developed for the states with a prior history of locating facilities in the SHR/NENC.

This profile includes the average employment, average sales/revenue, and average facility size for each headquarters and sole location. Measures such as average revenue per employee, average revenue per square foot, and average revenue per employee per square foot were used to determine the industry averages for both headquarters and sole locations. Headquarters and sole locations with much higher than average revenue per employee per square foot were selected as recruitment targets. These measures roughly

approximate that these headquarters and sole locations are growing firms and, therefore, more likely to seek relocation or new branch plant sitings.

Location of Existing Businesses in Targeted Clusters

In addition to profiling regional businesses and potential targets in each cluster, establishment level data were used to map the location of businesses in these industry clusters in the region. As the figure below demonstrates, there is a significant and expected concentration of businesses in the metropolitan areas of the region. With the exception of the 168 corridor, there are few businesses located in the southern portion of Virginia and few businesses in the northern portion of North Carolina. Such gaps in business locations suggest that this area, including Currituck County, has been historically avoided for business locations. This could be the result of topography, land use and zoning regulations, or infrastructure limitations.



Comparable Communities Connote Currituck Challenges

While there are few, if any, counties in North Carolina with economic challenges and opportunities paralleling those of Currituck, there are comparable counties elsewhere in the eastern United States from which economic and community development insights may be drawn in guiding Currituck's efforts. The development experiences of three counties and/or communities comparable to Currituck were examined to identify applicable lessons.

Research teams engaged comparable communities' economic, public policy and business leadership in discussions of challenges faced and development strategies developed and deployed to address those challenges. Discussants were queried regarding appropriateness and sufficiency of efforts, as well as assessments of outcomes – direct and indirect – of those efforts.

Finding: Currituck's Comparables Communities Share its Challenges

Communities comparable to Currituck were identified based on parameters that most distinctly characterize the county:

1. A predominantly rural county experiencing rapid population growth but limited industrial and commercial development
2. Significant coastal tourism economy concentrated in a remotely accessible area of the county, especially where that area is connected to the mainland by only one or two transportation corridors
3. Significant eco-tourism resources in the form of parks, rivers, wetlands and other natural resources areas
4. Geographically proximate to a major metropolitan area

A dozen locations were evaluated to determine which three that had experienced the dynamic forces now facing Currituck County. The three locations that were selected were:

1. **Beaufort County, South Carolina**: one of the South's fastest growing counties, Beaufort County is home to the resort community of Hilton Head, which is connected to the county mainland by a single road, Highway 287. The major metropolitan area of Savannah lies just 30 miles south of the county, across the state line in Georgia.
2. **Camden/Glynn Counties, Georgia**: adjacent predominantly rural coastal counties in southeastern Georgia that are home of the resort communities of Jekyll, St. Simon and Cumberland Islands. To the west the counties border the Okefenokee National Wildlife Refuge. The major metropolitan area of Jacksonville lies just 40 miles south of the counties, across the state line in Florida.
3. **Collier County, Florida**: predominantly rural coastal county in southwest Florida is home to the off-shore resort community of Marco Island which is connected to

the county mainland by two state highways. To the south the county borders the Everglades National Park. The major metropolitan area of Naples lies just 20 miles north.

Sites visits were conducted to each region to meet with public and private sector leaders, including county officials, economic developers, Chamber representatives, non-profits and private industry to listen and learn from different representatives' perspectives. Meetings were held with 25 different officials across the three comparable communities

Finding: Economic Development Always the “Next” Priority

Each of the three comparable communities had established economic development goals that were generally acknowledged as unfulfilled and awaiting action. In each case many more “critical” short-term issues demanded financial and political capital forestalling progress on economic development.

As with Currituck, addressing the service requirements of rapid residential growth and the tourism industry presented challenges that necessitated postponing more aggressive. Several observations were common to all three areas and suggest significant issues for priority consideration in Currituck County's development efforts:

Tourism Economic Reliance Unsustainable but Irresistible

While tourism is and will continue to be the largest economic driver in each of our comparables: Representatives in each location are very aware of the fact that they MUST diversify, recognizing that tourism alone could not sustain their economy and infrastructure.

Officials in each community recounted tales their areas vulnerability to violent weather and its disastrous economic effects. Concerns were also expressed about the probable deleterious effects of long-term global climate change and resultant sea level rises threatening to inundate their coastal resort communities.

As in Currituck, finding employees to maintain the growth tourist industry had become a major issue. Locating employees who can afford to live in the area and work in area is becoming increasingly difficult. Examples of abortive attempts to address such concerns through labor recruitment and affordable housing were commonly lamented.

Public Ambivalence on Economic Development Dampens Initiative

Despite this it appeared that none of the comparables were proactive in the recruitment of industry. Some are doing passive recruiting in magazines and brochures and one comparable community had made an informed and unanimous decision to promote “clean industry”. Each of the three comparables preferred to rely on private sector-initiated as opposed to directed local government initiatives.

This passivity and lack of public sector initiative could be the logical result of political recognition of a lack of community consensus. Each community is dealing with inconclusive public support for action on economic development efforts. Many interviewees attributed this phenomenon to the prevalence of the

second home/vacation home market in their counties. Because large parts of their economy are made up of this demographic, finding support for economic development support is also hard to obtain.

Finding: Constraints Limit Development but Reward Initiative

In attempting to implement economic development programs, Currituck's comparables are scrambling to find, purchase and develop sites that may be suitable for industrial or business development or relocation to their areas. In addition to high property costs, they are dealing with infrastructure development limits imposed by water, sewer, roads, and utility capacities.

Despite these constraints, proactive local government efforts have successfully created mixed used business park in two of the comparable communities. In both cases public planning and economic development targeting was creatively wedded to private sector development expertise and financing. Also in both cases, the role of local government planning was acknowledged as critical.

While the communities had identified high priority business attraction targets, they also recognized their communities lacked appropriate available facilities for such firms' locations. At the same time, they understood citizens' concerns about site selection and aesthetics that needed to be addressed to achieve and maintain public support.

This understanding enabled the communities to develop plans that accommodated both the facility requirements of targeted firms with the location and appearance characteristics desired by the public. These factors were incorporated into the development guidelines under which they initiated collaborations with private sector development partners.

Finding: Proactive Community Development a Fleeting Opportunity

The experiences of Currituck's comparable communities suggest many substantive lessons for the county's development efforts. But perhaps the overwhelming lesson of Currituck's "big brothers" is found in the nostalgic, remorseful observation voiced by many of the interviewees: "What a great opportunity Currituck County has to plan and prepare."

There was an almost universal lament that "their communities" had not been more careful in their development over the past several decades, having sacrificed long-term quality of life criteria for shorter-term non-strategic opportunities. Officials repeatedly and enviously expressed that they would "love to have a clean slate" (as they perceived Currituck) to proactively create the environment they wanted.

CURRITUCK'S STRATEGIC OPTIONS

Currituck County is growing, but its economy is not growing as rapidly as its population. This is not inherently a problem, but it does present the county's leadership with challenges. In the absence of economic growth proportionate to population growth the county will experience increased demands for public services – education, water, parks, transportation, public safety, etc. – without the corresponding growth of its tax base.

1. Build Currituck's Commercial Economy

It is a public policy decision how to respond to such a situation. Pursuing a directed economic development strategy can enhance the county's tax base but will require resources. In that sense it is an investment decision: how much is to be invested and for what expected return. It is the intent of this document to describe strategic economic development options that were identified in the course of the vision planning process for consideration by the county's citizens and leaders.

1.A. Promote Currituck's "Virtual Micropolitan" as a Retail Location

Compared to other micropolitan economies, the Currituck economy is underserved in terms of retail, entertainment and service in industry. The reasons for this are varied:

- Currituck lacks a recognizable concentration of market demand, being a geographically dispersed population
- Resident demand for greater retail and service offering is dampened by the very high level of out-commuting, resulting a retardation of Currituck development
- The potential market effect of the tourism population is diminished by the dynamics of visitor travel; and
- The geographic bifurcation of the county funnels much Outer Banks visitor retail behavior towards Dare County rather than the more distance mainland Currituck.

As a result, Currituck's citizens are inconvenienced in having to secure needed goods and services from further distances in adjoining counties. More than just an annoyance, this situation has real consequences for the county's tax base through loss of sales tax revenues. Currituck "leaks" approximately 28% of the county's proportional retail sales and sales tax revenue to other counties, especially to Dare County which also imports much of Currituck's tourism-related spending. This exacerbates the county's challenge in providing public services to its rapidly growing population.

Given the market's current underestimation of Currituck's resident spending capacity it is necessary to actively promote the county as a location to retail and service firms. Portraying Currituck as a "virtual micropolitan" can encourage targeted development offsetting current retail sales (and tax revenue) leakage.

Strategic Option: Armed with enhanced market demand information and visitor characterizations, the County should proactively market Currituck County as a location for the specific businesses present in other northeastern North Carolina micropolitans but absent in Currituck.

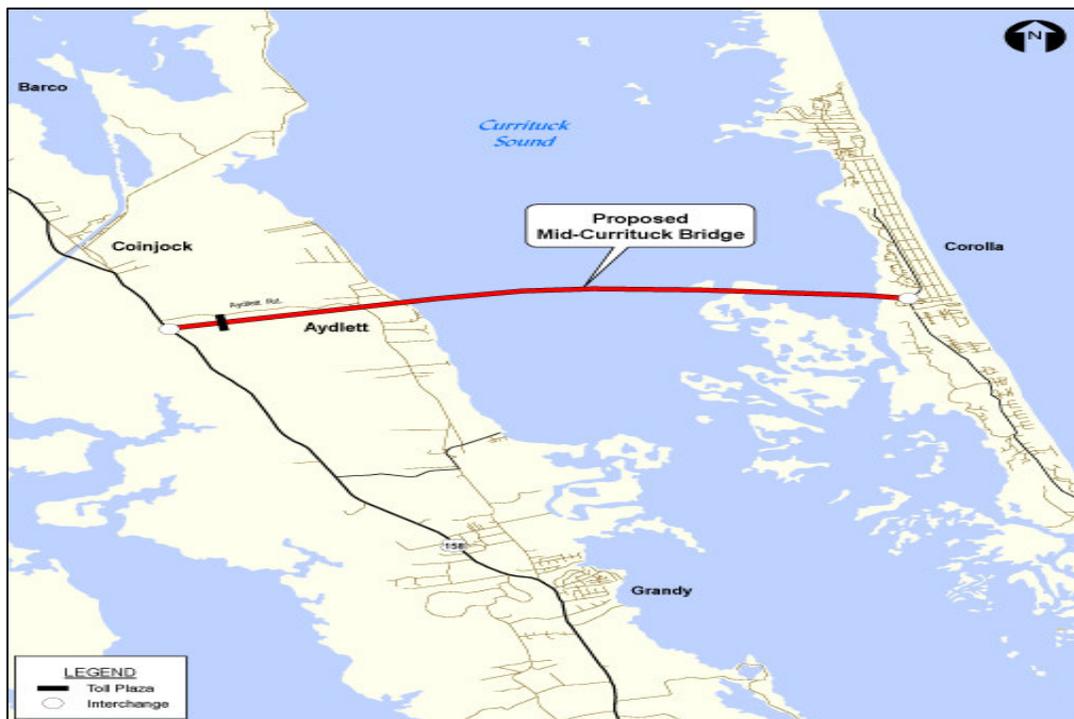
1.B. Enhance Mid-Currituck Bridge Outcomes

A major opportunity to significantly build on the county’s retail base is presented by the impending construction of the long awaited Mid-Currituck Bridge. However, given the historic underserved nature of the county’s commercial needs it would be irresponsible to be passive about the assumed development outcomes of the new bridge. Instead this is a time for action by Currituck’s leadership to ensure that the Mid-Currituck Bridge yields the scale and form of economic outcomes desired by its citizens.

The lack of a more convenient access to Corolla and Carova has been an issue for some time, but the County can use the Mid-Currituck Sound Bridge as more than just a congestion reliever. More than half of the visitors to the Outer Banks are coming from the north, so instead of winding down into Dare County to reach Corolla, Currituck will have a chance to stop visitors at the Mid-Currituck Sound Bridge with a variety of stores and local shops for them to patronize.

Instead of making their purchases in Dare County before crossing the Wright Memorial Bridge or waiting in long lines at the small Corolla stores, tourists could use this sales area—with places such as grocery stores, pharmacies, and unique local shops—to gather their last-minute supplies (and support the local sales tax base) before their holiday on the beach.

As Corolla and Carova are fairly well developed already, the construction of the Mid-Currituck Sound Bridge will open up a plethora of possibilities for growth on the mainland that will also benefit the Outer Banks and its visitors.



Economic Impact from a “Dare Scenario”

C³E calculated that in the absence of directed effort, mainland development resulting from the construction of the Mid-Currituck Bridge would likely spur a commercial and business mix similar to that in Dare County in the area surrounding the bridge. This analysis found that the mix of businesses likely to occur in the in approximately 7.6 square mile area in the vicinity of Aydlett between Hwy 158 and the mainland bridge intersection at the Currituck Sound would total:

- 34 businesses, including retails stores, restaurants, service businesses, and a hotel with estimated total annual sales of \$78 million dollars
- Generate new industry output of \$36.2 million annually; and
- Create a total of 468 new jobs with \$9.6 million in new labor income

While this is a significant economic effect, **the average job created based on the Dare County model – our “Dare” scenario - is expected to pay an average of \$20,500 year.** At this level the Dare scenario is not an improvement on the low wage jobs already typical in the Currituck economy.

Enhancing Mid-Currituck Bridge Development

Fortunately, the “Dare scenario” is not inevitable. C³E has examined tourism economy areas comparable to Currituck in that an offshore island or peninsula with tourism amenities is connected to the less developed mainland via a bridge. The experience of such areas suggests alternative scenarios for Mid Currituck Bridge development on the mainland side that explicitly encouraged up market retail, hospitality and entertainment attractions. The effect of such development has been to significantly increase the economic benefit to the mainland economy through encouraging mid-week traffic.

To successfully implement more desirable development in this area, Currituck will need to make some modifications to its business climate. Currently, there does not exist proper infrastructure to support the quantity and type of businesses the Mid-Currituck Sound Bridge will draw—access to central water and sewer, garbage collection, effective storm-water management, and the Internet will be needed along with any structural changes in the roadway and sidewalks so as to safely accommodate all forms of traffic. Support will also need to be given to the current and incoming businesses.

Growth of local business entrepreneur opportunities is one characteristic that will make future Currituck unique, and the financial and social capital that these people will be investing in the community should be nurtured and encouraged by the County as much as possible. New market to this area of the mainland Sound Bridge area (Aydlett) and its surrounding parts could also serve as the alluded-to source of entertainment and recreation for the Outer Banks vacationers and the market of short-term visitors.

<p>Strategic Option: Examine comparable area to identify ways to direct mainland development resulting from the Mid Currituck Bridge toward up market retail, hospitality and service businesses.</p>
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1.C. Pay Attention to the Toll!

The construction of the Mid Currituck Bridge is being accelerated by its development as a toll bridge. This acceleration is welcome in that it will facilitate tourists' weekend egress to the Corolla area, thus removing one of the consistent complaints of travelers. However, the discussion of the toll rate has to date has not considered the role it could play in encouraging or discouraging mid-week traffic by tourists visiting the Currituck mainland.

Current plans expect crossing the mid-Currituck County Bridge will would cost travelers \$8 one way in peak season and \$6 in the off season. These rates are based on estimates sufficient to finance construction costs that could reach \$800 million.

To date, discussions on the toll to be charged for the Mid-Currituck Bridge have not addressed the potential economic impact of varying toll costs on Outer Banks visitors' willingness to cross the bridge for mainland attractions. If the toll is sufficiently high to discourage Corolla tourists from routinely crossing back to Aydlett, the potential economic benefit to the mainland will be greatly limited. The amount of toll to be charged needs to be recognized a vital economic issue to mainland Currituck.

Strategic Option: Get involved in Mid-Currituck Bridge tolls deliberations to ensure policies encourage mid-week tourism “rebound” traffic.

2. Expanding the Tourism Economy

Tourism revenues in Currituck have more than tripled over the past ten years. However, the vast majority of those revenues – and the resulting economic benefits - accrue within a very small area of the county. Nonetheless, the county’s high level of tourism visitation is an obvious opportunity for expanded economic development and Currituck has taken several actions to capitalize on such opportunities.

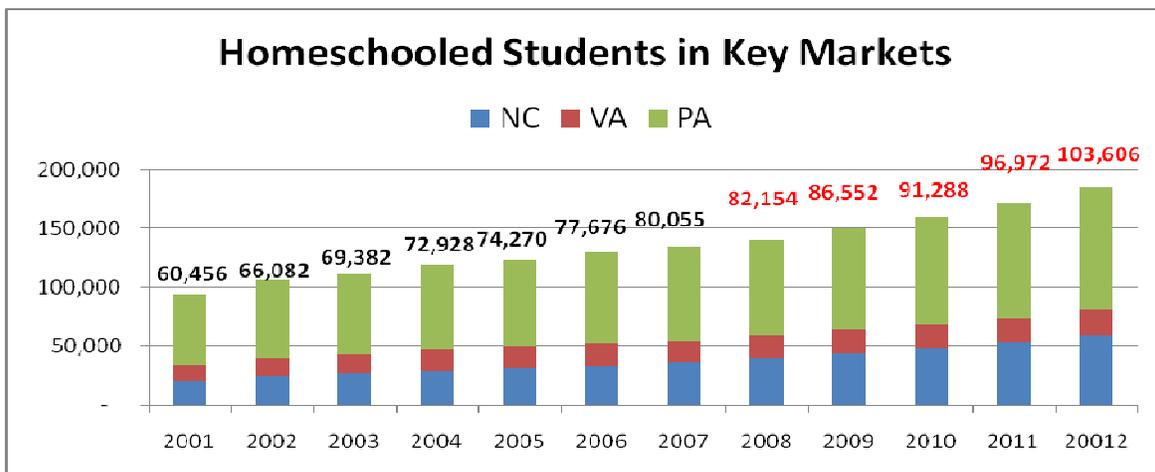
The successful and sustained growth of Currituck’s existing tourism industry structure is indicative of the competence of its existing promotion efforts. Nonetheless, underlying economic and demographic trends identified in this research suggest additional opportunities for expanding the county’s tourism economy.

2.A. Emerging Shoulder Season Tourism Opportunities

Two specific trends auger well for off-season/shoulder season attraction of the family groups that have come to typify Currituck’s Outer Banks visitors:

Homeschooling

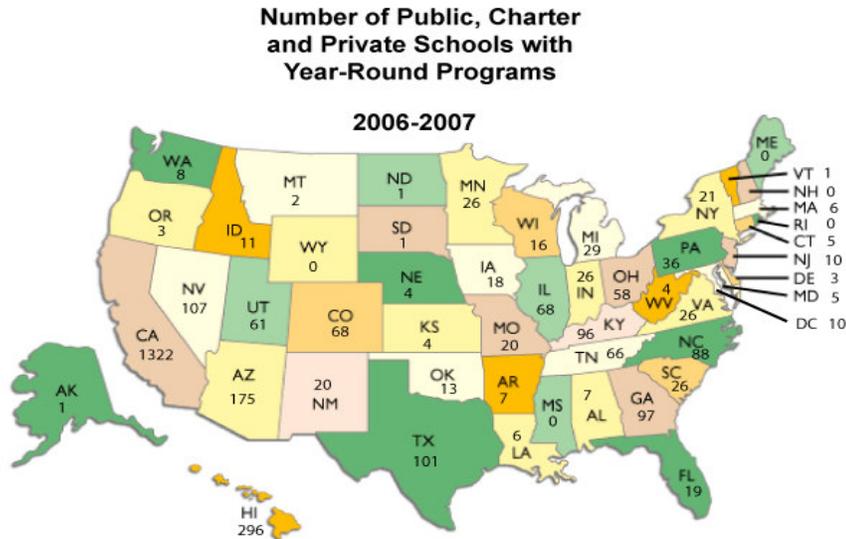
- Homeschooled students are a rapidly growing segment of family travelers with the flexibility to visit Currituck in the fall and spring shoulder seasons;
- In the prime markets of North Carolina, Virginia and Pennsylvania a total of more than 80,000 students are homeschooled
- This number is projected to grow by another 23,000 students over the next 5 years



Year Round Schools

- A similar opportunity exists for the growing population of year-round schooled students. These students are typically out of school for 3-4 weeks at time on a quarterly basis. This schedule also suits the shoulder season travel market.

- According to the National Association for Year-Round Education, more than 2.3 million U.S. public school students attended 3,181 year-round schools in the



2002-03 school year public schools

- This number has steadily grown since the 1986-87 school year, when only about 360,000 students were enrolled in 408 year-round schools;
- North Carolina, with 49,175 year round students in 2007, is an especially attractive market, followed by Ohio (24,297), Pennsylvania (16,697) and Virginia (13,512)

Strategic Option: Currituck can target families with school age children as prospective shoulder season visitors by direct internet marketing of Currituck’s natural resource attractions as an “edu-vacation opportunity”, combining vacation with natural science educational opportunities.

2.B. Position Currituck as an Environmental Education Classroom

The recent addition of attractions such as the Outer Banks Center for Wildlife Education provides new assets for attraction of these education-motivated visitors. This 22,000-square-foot center located on the Currituck Sound provides visitors the opportunity to learn about the wildlife of North Carolina's northeastern coastal region. The Center also conducts a series of educational and experiential programs using Currituck’s natural environment as an “outdoor classroom”.

Unfortunately, despite its comparable natural resource appeal, no such assets or attractions exist on the mainland side of Currituck Sound. Neither does it have suitable accommodations for student groups. This is especially unfortunate as the western side of the Sound has considerable advantage in terms of its superior water access, nearer



proximity to school and family market populations, and the passage of the Intracoastal Waterway.

One model to address this basic infrastructure absence can be seen in the example of the **Eastern 4-H Environmental Education Conference Center** in Columbia, North Carolina. The Center, opened in May of 2001, was developed with appropriated funding by

the state of North Carolina and contributions from corporations, foundations and individuals. The Center operates through the Department of 4-H Youth Development at North Carolina State University which has five additional such centers across North Carolina.



It offers a variety of educational programs, summer camps and school year field trips, including residential programs at the facility which offers:

- 250-acre site on Bulls Bay and includes woodlands, meadows, pocosin forests, wetlands, creeks and rivers
- Boardwalks, nature trails and boat piers give access to natural areas
- A facility with climate-controlled living quarters, private showers and flush toilets
- Well-equipped science lab and classrooms
- Conference facilities and meal areas

It also functions as a regional banquet, reception and corporate retreat center in a natural environment setting. Businesses, clubs, agencies, organizations, school groups, church groups, families and other groups can rent meeting rooms, dining halls, classrooms, lodging accommodations or recreational areas for a variety of purposes.

Strategic Option: Currituck should consider development of a facility comparable to Eastern 4-H Environmental Education Conference Center on the Currituck mainland sound side to provide a base for attracting and serving educational, tourism and corporate markets

2.C. Recapture Currituck’s Historic Ecotourism Market

Within the living memory of many Currituck citizens, it was not the beaches of the county that attracted tourism but Currituck Sound itself. Long before the developments in Corolla, wealthy visitors were drawn to the Sound’s natural beauty, abundant waterfowl, and thriving recreational fishing. Sportsmen from all over the United States came to fish and hunt, either in guided parties or as members or guests of the many hunt clubs. In effect, Currituck Sounds and its hunt clubs was a precursor to the modern eco-tourism market.

Ecological tourism – “ecotourism - “is a field growing in popularity. The United Nations defines ecotourism as tourism that “contributes actively to the conservation of natural and cultural heritage; includes local and indigenous communities in its planning, development and operation; [and] lends itself better to independent travelers as well as organized tours for small sized groups.” Its practice is both inherently sustainable and low-impact, so that the county’s protected natural areas, like the Currituck National Wildlife Refuge, could become generators of tourism revenue without depreciating in environmental quality.

Ecotourism Growth

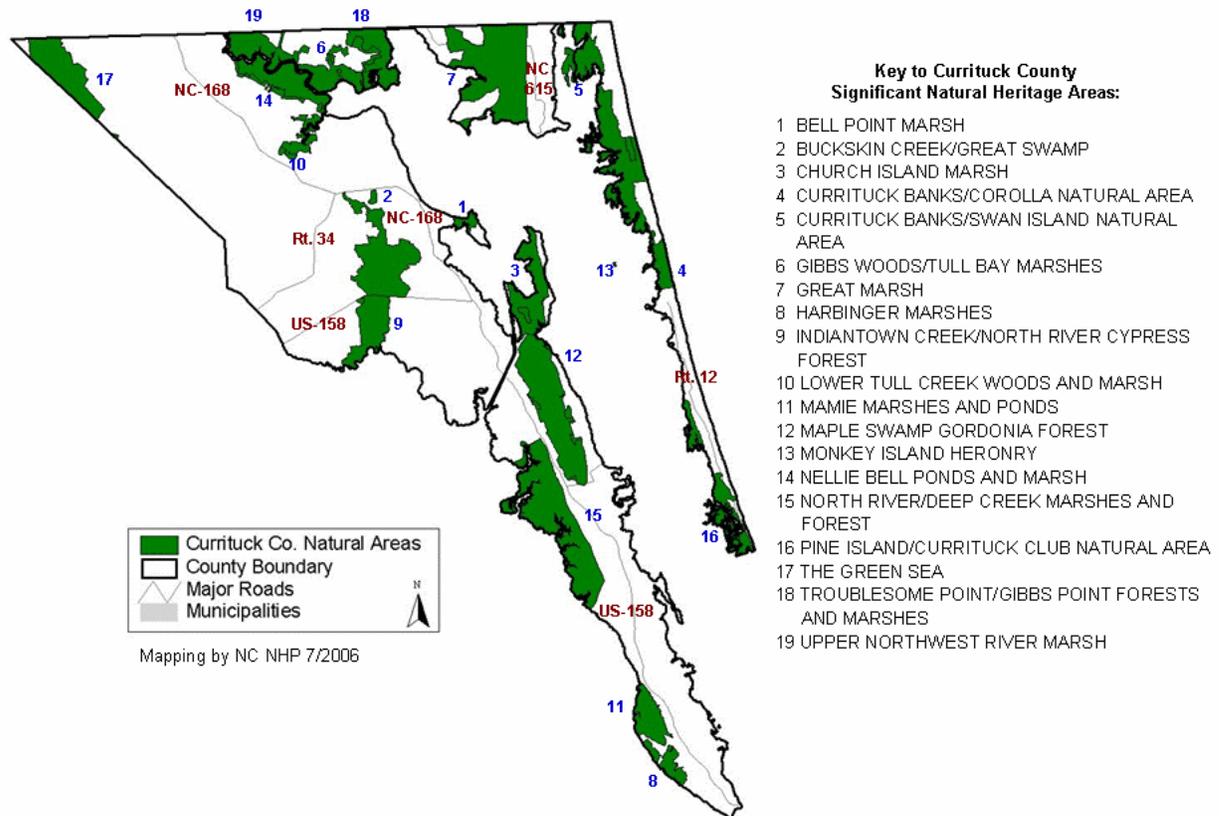
Currently in the United States, it is estimated that ecotourism is a \$77 billion business, and while this is only about 5% of overall tourist spending, it is nonetheless significant. The primary profile for ecotourists is also a good match with that of Currituck’s visitors—college educated adults between the ages of 35-54 with high (about \$73,000) incomes. Ecotourists are not necessarily intense outdoorsmen, but those who gain pleasure from spending time in natural settings and knowing that their recreation is having a low-to-no impact on the environment.

An emerging ecotourism market such as this will offer a great amount of variety and choice to Currituck’s visitor marketplace. First of all, it will be able to capitalize on the potential growth initiatives at the Mid-Currituck Sound Bridge. This is an ideal spot to locate shops for boat rental (kayaking around the Sound is an ideal activity, especially considering how shallow the Sound’s waters are), bike rental (could additionally encourage the building of nature trails in the area), and other outdoor activity centers.

Pea Island and Alligator River refuge already offer guided canoe trips of the sound, and Kitty Hawk has a particularly unique shop—Kitty Hawk Kites—which offers hang gliding, parasailing, kiteboarding, and jet skiing, kayaking and various other tours and activities from their location in Dare County. Their revenue for 2006 was over ten million dollars.

Secondly, it could cater to a part of the market that doesn’t often visit Currituck—the day and weekend trippers. These would be people coming from closer destinations to go birding on Knotts Island or kayaking in the Sound.

Even those who are just coming for the day will likely still be spending money on food, water, and gas, and over-nighters will need access to more than the limited hotel accommodations currently being offered in the County. Such activity, while still concentrated in the summer, is much more likely to proffer stable business year-round, supplying jobs and County revenue long after Corolla homes have closed their doors.



Additionally, many of the conventional and most popular ecotourism opportunities are already present on Currituck: parks/preserves, unique natural places, fishing, biking, boating and beaching. On the Outer Banks, the Currituck National Wildlife Refuge is already quite popular, with its 4,100 acres drawing 19,000 visitors every year. Its new Outer Banks Center for Wildlife Education could serve as Corolla’s base for ecotourism information, offering not only brochures and guided walks about the Refuge, but details on seasonal events, activities at Knotts/Mackay Island or on the mainland, or places on the mainland to facilitate further ecological adventure. Even Mackay Island has a large, steady annual tourist stream—over 75,000 visitors in 2006—but no ways to generate and capture potential revenue.

Other ecotourism seasonal events have also sprung up around the Outer Banks. In early November, the entire coastline will play host to the Wings Over Water Wildlife Festival, with over 17 sites from Ocracoke to North Heritage Park. Currituck will in fact be participating in several of the activities offered over the six-day period—including one new event about Nature Photography—but the tours, trips, and programs other Outer Banks locations are marketing are another great model of ecotourism activities that Currituck could follow. Coordination between the mainland, Corolla/Carova, Knotts Island, present and new businesses, the Outer Banks Chamber of Commerce, and even Virginia could open up this whole new section of the Currituck tourism industry with other festivals and fairs throughout the year.

Historically, the Currituck Sound was the county’s primary draw for visitors looking for rich water fowl hunting and fishing grounds. While it is unlikely that the Currituck Sound will regain the prominence it once enjoyed as a tourism destination, the vast and unique ecosystem should be viewed as a substantial asset rather than a barrier between the mainland and the Outer Banks.

Strategic Option: Target the attraction and establishment of entrepreneurs developing eco-tourism attractions and hospitality offering based around the Currituck Sound. Start by convening meetings of eco-tourism business and wildlife management leaders who understand the need to more completely incorporate this underutilized natural resource into the county’s overall tourism strategy.

3. Build Currituck's Economy with Growth Firms in Targeted Clusters

Currituck faces the challenges of diversifying its economy, upgrading its employment opportunities and increasing its tax base. However, conventional economic development strategies, such as the recruitment of large industrial operations and branch plants may be considered as undesirable given possible detrimental effects on the natural environment that drives the county's primary industry of tourism. Instead, Currituck can pursue development strategies that target smaller but still growing firms whose scale better fits the infrastructure and resource base of the county.

Only recently have rapid growth and a high profile as an upscale tourism mecca created potential for Currituck's recognition as a location alternative to firms drawn to, or expanding within, the Hampton Roads area. Today a convincing case can be made that Currituck possesses assets critical to successful economic development:

- Proximal location to Hampton Roads industry clusters
- Attractive property tax rates
- Highway transportation access
- Superior general and business aviation airport
- Quality of life attractions to business owners and entrepreneurs
- Large, skilled resident workforce

It is the last of these - a qualified workforce – that is the most often cited factor driving company location decisions. Significantly it was in this area that Currituck was found to be the most underappreciated in that the county possesses a far workforce than previously believed.

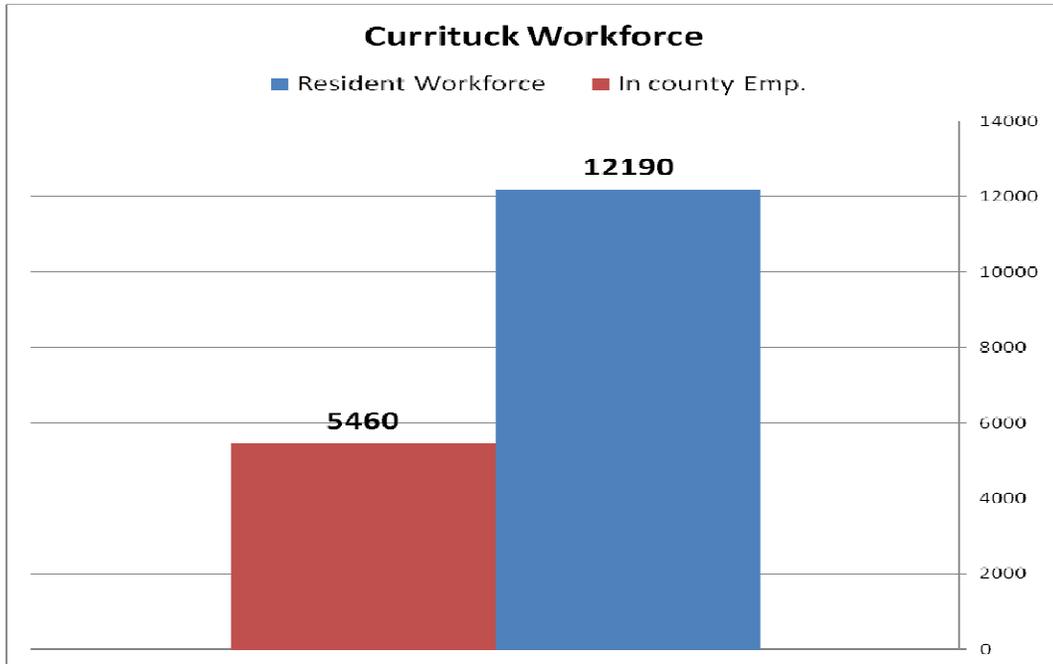
3.A. Brand and Sell Currituck's Resident Workforce

The limited quantity and quality of the Northeast North Carolina workforce has typically been viewed as one of the region's challenges. This perception has created an obstacle to the attraction and development of new employers, especially in high-skill dependent firms. However, C³E has found that the region's workforce is significantly larger and potentially more talented than initial appearances might suggest. Such underestimation is the result of the level of out-commuting by the region's residents to jobs elsewhere.

Deeper and Stronger than it Appears

A lack of specific labor force information is a disadvantage in promoting Currituck County as an economic development location. To remedy this information shortcoming an inventory was performed to provide a more accurate assessment of Currituck County's resident labor pool:

- Workforce undercounts are even more exaggerated for Currituck County where 76% of its citizens commute to jobs outside the county
- This high rate of out-commuting demonstrated that the county possesses a much larger resident workforce than conventional measures are reporting



- Conventional place of employment data showed that the Currituck County has a 2006 workforce of only 5,460 workers, with high relative employment levels in real estate, agriculture, arts, construction, public administration, retail trade, education, and hospitality services
- In contrast, place of residence data analysis indicated that Currituck has **more than twice as many workers, 12,190**, with higher skill occupation in construction, professional services, manufacturing, and administration services.

Strategic Option: Incorporate corrected resident workforce information into County economic development literature and promotional materials.

Regional Industry Clusters Offer Specific Development Prospects

Today, as for decades, Currituck residents have turned toward Hampton Roads for employment opportunities. In more recent years, workers from Hampton Roads have looked toward Currituck as a preferred residential location. Despite being officially a part of the Hampton Roads metro area, however, Currituck has rarely, if ever, been selection of companies looking to locate in the greater Hampton Roads area. The Currituck County of the past, with its predominantly agricultural economy, limited infrastructure and minimal workforce, has been easily obscured by the large shadow cast by Hampton Roads.

Currituck will need to be selective in industrial development efforts to ensure that such growth is compatible with the county's tourism economy and its own limited capacity. The industrial clusters analysis identified industry sectors where the proximity of the Hampton Roads metropolitan area creates particular advantage for Currituck. In particular, this industry cluster analysis identified several strong and emerging industry clusters for which strengthened transportation, utility, and infrastructure offerings could position Currituck to serve as a location for firms attracted to or expanding within those industry clusters. These clusters included:

- 1. Basic health services**
- 2. Hotels and transportation services**
- 3. Nonresidential building products**
- 4. Information services**
- 5. Business services**
- 6. Metalworking and fabricated metal products**

However, the constituent firms comprising these clusters varied significantly, making a determination of their appropriateness for Currituck County's economic development strategy difficult. A fuller understanding of the population characteristics of the firms was needed to more confidently identify industry clusters for Currituck's economic development targeting requires within those NENC clusters.

High Impact Growth Firms Drive US Job Creation

While there are millions of businesses in the US economy, research over the past 30 years has repeatedly found that that only a small percent of those companies are responsible for the creation of most of the country's new jobs. These "growth companies" tend to be small but undergo periods of significant growth, thereby exhibiting a disproportionate large effect on employment despite their initial modest sizes. As a result, they can be described as "high impact" economic actors, hence the characterization of these companies as "high impact growth firms".

The important economic role of these firms was first recognized by MIT researcher Dr. David Birch, who coined the term "gazelles" to describe them. Dr. Birch's work in the 1980s and 1990s was recently comprehensively updated in a US Small Business Administration (SBA) research project. That study defined high-impact firms as

enterprises whose sales have at least doubled over a four-year period from 1994 to 2006. It found that from 2002 to 2006 there were 376,605 high- impact firms in the United States.

That project’s July 2008 final report, entitled “*High-Impact Firms: Gazelles Revisited*” presented findings significant to economic development efforts in Currituck County:

- High-impact firms are relatively old, rare and contribute to the majority of overall economic growth. On average, they are 25 years old, they represent between 2 and 3 percent of all firms
- High-impact firms account for almost all employment and revenue growth in the economy.
- High-impact firms exist in all industries. While some industries have a higher percentage of these firms, they are not limited to high-technology industries.
- High-impact firms exist in almost all regions, states, metropolitan statistical areas (MSAs) and counties.

Regional High Impact Company Location Trends Favor Currituck

Perhaps most significant to Currituck County were the study’s conclusion regarding the location behavior of high impact growth companies. First, the research found that of the 52 large metropolitan statistical areas (MSAs) they studied, the area with the highest concentration of high-impact firm rate was the Hampton Roads Virginia/North Carolina MSA of which Currituck County is a part. Interestingly, the second highest concentration of high impact firms was in the far better known Research Triangle Park MSA.

Large MSAs	State	US Rank	# High-Impact Firms	Total Firms	% High-Impact Firms
Hampton Roads	VA-NC	1	1,813	70,323	2.58
Research Triangle	NC	2	2,124	84,618	2.51

Second, the study found that 23 percent of high-impact firms are located in rural areas and most high-impact firms are concentrated outside a central business district, rather than within the core of the MSA itself. Moreover, there was a significant trend favoring movement of high impact firms to the semi-rural periphery of metropolitan areas.

3.B. Market Currituck to Growth Companies

Several factors strongly favor Currituck as a prospective location for growth companies attracted to the Hampton Roads metropolitan region and for firms already within the region looking for relocate due to expansion:

- A proven quality workforce
- High quality of life factors
- Quality educational system
- Attractive cost and tax rate values

- Compelling residential real estate market
- Excellent general and business aviation airport

Databases of information were compiled on the current Hampton Roads area corporate population of each of the potential industry clusters (see Appendix I). Those cluster populations were investigated to identify and describe the characteristics of companies exhibiting location behavior favoring a Currituck site. While there was significant variation in those companies, a general profile was developed to assist in targeting prospects:

Single locations and small headquarters

- Most of the identified companies were not subsidiaries or branch plants; instead they were independently owned, entrepreneurial firms.

Smaller but growing

- A majority of the companies were of modest scale, employing 25 to 75 people in facilities ranging from 25,000 to 75,000 square feet.

Higher value added

- Many of the companies exhibited the profile of firms poised for expansion, posting high revenues per employee ratios, particularly given their modest facility scale.

The most immediate opportunities for Currituck will be growth companies already located in the Hampton Roads area that are looking for expansion or relocation sites. In those cases the necessary contact and background has already been collected in the course of this study. This information can be used to prepare and deliver direct solicitations of interest through personal communications and provision of appropriate promotional materials. The county should also consider advertizing in selected business periodicals serving the Hampton Roads area to create a brand identity for Currituck as a high quality of life business location.

Strategic Option: Proactively market Currituck as a location for firms moving to Hampton Roads region and as expansion location for regional growth companies.

3.C. Use Currituck’s Tourism Assets as Growth Company Attraction

Another significant source of business location prospects would be growth companies within the targeted industries clusters – both nationally and internationally- seeking to expand or relocate to the Hampton Roads area. Successful growing businesses can be highly mobile. Their rate of growth makes relocation a regular and expected occurrence, and once a firm has to relocate it is susceptible to solicitations to locate in areas most appealing to the entrepreneurs who founded and own the company - especially if a region offers an attractive combination of business growth resources, infrastructure and quality of life factors.

For such prospects the decision to move is an entirely personal one. Unlike a branch plant or subsidiary location prospect for which corporate management will dictate personnel

transfers, the entrepreneur's first consideration is the attraction of a locale for her/him and their family.

Identifying and soliciting prospects differs significantly from conventional economic development methods, such as attendance at trade shows, response to site consultant requests for proposals and pro-offering of economic incentives. Because these firms are privately-held, information on their operations is not commonly available.

Moreover, the entrepreneur typically performs her own research on location values. It is common that the research occurs in the context of a business development visit to existing customers, or a personal or family vacation. The challenge for an economic developer is therefore to help the entrepreneur find the information on a given locale. However, the challenge of identifying such prospects confers a significant advantage onto the community that has successfully developed such capability.

The independent nature the prospect profile is an attribute that can be used to Currituck's advantage. Because growing businesses can be highly mobile, their location is most often a function of an area's appeal to the entrepreneurs who founded and own the company. Currituck possesses a particular combination of industrial and tourism economy attributes that may offer such appeal, provided **that the prospect can be made aware of them.**

One way such awareness is formed is through direct experience of a location's attractions. Undoubtedly, many entrepreneurs are already aware of Currituck as a vacation destination. The opportunity exists to inform them about Currituck's potential as a business location as well.

Currituck can use its tourism assets in a focused campaign to attract the interest of growth companies considering relocations. Fortunately, for a significant part of the year, many of those tourism assets – for example the rental properties of Corolla that are predominantly vacant during shoulder and off-seasons - are readily available and at a reasonable rate.

One option is to identify a pool of entrepreneurial prospects from among the targeted clusters and invite them as guests to visit Currituck to discuss the County's economic development efforts. Their insights would provide a market perspective to the discussion and serve as a relevant experiment in developing a more extensive direct solicitation program.

Strategic Option: Capitalize on off-season vacation capacity to invite executives of targeted companies to experience Currituck as both a tourism destination and a business location. Draw on their insights in the design of materials and strategies that infuse Currituck's tourism promotion with business location information.

4. Enhance Currituck's Growth Company Infrastructure

The combination of the Hampton Roads MSA as a leading home for high impact growth companies and the trend toward firm location in rural and semi-rural peripheries strongly favor Currituck County. These factors clearly indicate an economic development strategy that draws upon the proximity of the Hampton Roads metropolitan area to attract the location of growth firms seeking to remain within that area's industrial cluster, while enjoying the quality of life and other advantages of Currituck.

Unfortunately it is too easy for a growth company owner or executive to assume that the near absence of an industrial economy in Currituck County is evidence of a location with unfavorable attributes. That impression is reinforced by the similarly thin industry employment in the county. But just as our work has shown that the county has a much richer resident workforce that appearances suggest, so too also does Currituck possess significant assets attractive to industry. However because of a dearth of available business and industrial properties the County is as yet not well positioned to support the relocation of prospective companies.

In-county Building Sites

Currituck currently has few – if any – facilities immediately available for an industrial location, and even its supply of identified building sites is limited. Generally, packaging and pre-approving high quality building sites can help local economic developers market development-ready opportunities to clients.

In North Carolina, the Department of Commerce established the Certified Sites Program to develop a statewide inventory of sites that meet specific business development criteria. NC Commerce's goal is to develop the state's competitive edge by creating "full-service, fully-tested" ready-to-develop business sites for clients. Such programs are often the first "point of entry" for location inquiries so it is critical that information be accurately described.

In Currituck County, only five sites are certified with the Commerce Department. These five sites scattered throughout the county, total 199 acres of industrial and commercial land in various stages of development, from vacant land to existing industrial parks. Each parcel is within a mile of Highway 158, Highway 168, or both thoroughfares. Through the "ncsitesearch.com" website, potential clients can view site profiles, which include site location, size, zoning designation, current use, transportation access, and utility service.

Regional Industry and Business Parks

Developing any new industrial, office, or mixed-use park must be undertaken with consideration for how the regional market is performing. Utilizing site selection databases, we identified 38 business parks (office, industrial, research, and/or mixed-use) in the Southern Hampton Roads (SHR) region and in the Northeast North Carolina region counties adjacent to Currituck. As listed in the accompanying figure, most of these parks are located in Virginia, with a heavy concentration in Chesapeake, Suffolk, and Virginia Beach areas. In total these parks represent over 7,000 acres, of which, nearly 3000 acres is still available. The average park size is 200 acres and the average availability is 79

acres. This indicates that, on average, only 60 percent of the current parks are full. A complete list of parks is shown in Appendix H.

Location	Park Type	Total Acres
Elizabeth City, NC	Industrial	356
Chesapeake, VA	Industrial	53
Chesapeake, VA	Industrial	700
Chesapeake, VA	Mixed-Use	180
Chesapeake, VA	Industrial	30
Chesapeake, VA	Mixed-Use	200
Chesapeake, VA	Industrial	40
Chesapeake, VA	Mixed-Use	185
Chesapeake, VA	Industrial	93.5
Chesapeake, VA	Mixed-Use	331
Franklin, VA	Industrial	231
Hampton, VA	Industrial	100
Hampton, VA	Office	700
Hampton, VA	Science/Research	70
Norfolk, VA	Office	64
Norfolk, VA	Mixed-Use	30
Portsmouth, VA	Mixed-Use	86
Portsmouth, VA	Industrial	60
Portsmouth, VA	Mixed-Use	125
Portsmouth, VA	Mixed-Use	60
Smithfield, VA	Mixed-Use	60
Smithfield, VA	Industrial	99
Suffolk, VA	Industrial	208
Suffolk, VA	Mixed-Use	150
Suffolk, VA	Mixed-Use	460
Suffolk, VA	Science/Research	150
Suffolk, VA	Mixed-Use	62
Suffolk, VA	Mixed-Use	260
Suffolk, VA	Mixed-Use	57
Suffolk, VA	Industrial	73
Suffolk, VA	Mixed-Use	250
Suffolk, VA	Office	50
Suffolk, V	Industrial	464
Virginia Beach, VA	Industrial	1100
Virginia Beach, VA	Industrial	25.9
Virginia Beach, VA	Mixed-Use	190
Virginia Beach, VA	Mixed-Use	350
Windsor, VA	Mixed-Use	89

Even with adequate infrastructure, Currituck may have difficulty competing with business parks with existing infrastructure and locations closer to core of the SHR region. Care must be exercised to differentiate a potential business park in Currituck from the existing market. It is imperative therefore that the County move to develop and promote appropriate infrastructure and facilities that will distinctly position Currituck as the preferred location for growth companies in the Hampton Roads region.

4.A. Proceed with Currituck Airport Industrial Park

The Currituck Airport Industrial Park is a critical asset to the attraction of growth company locations. The County was prescient in the concept and development of this park. While its full realization has been perhaps unavoidably slowed by a variety of issues, it is imperative to the County's economic future that the park's development proceeds expeditiously as corporate aircraft are very often essential to the business strategies of high growth firms in rural areas.

The company executives of growth companies typically rely on the ability to respond quickly to customers and clients to differentiate themselves from larger, better known competitors. The ability to travel promptly to meetings often requires the use of corporate aircraft hangered nearby. The location of a well supported general aviation facility such as the Currituck Airport is therefore a tremendous advantage to such companies.

Moreover, the availability of industrial space immediately adjacent to the airport itself is doubly advantageous as it also facilitates both the efficient import of critical parts, supplies and technical inputs and the delivery of time-sensitive high value finished products. The recent action of the County to expedite the development of the industrial park positions the County to benefit from the continued movement of new firms to the Hampton Roads area.

<p><u>Strategic Option:</u> Continue aggressively developing the Currituck Industrial Park with a focus on growth companies employing corporate aircraft and growth company owners/pilots.</p>

4.B. Develop a Growth Company "Beachhead"

The absence of immediately available industrial facility may be an obstacle to Currituck's ability to attract growth company locations. Often the growth rates of such firms do not allow the luxury of waiting for a facility to be developed. Instead, they would prefer to transition operations into a temporary facility in the area while a permanent facility is constructed or renovated.

A solution to this requirement could be Currituck's development of a highly flexible mixed use business and industrial "beachhead" facility. Such a facility would provide a variety of smaller scale "flex space" business location options for companies establishing initial operations on the Currituck area.

Based on an examination of comparable facilities, the Currituck "beachhead" building could be a 50,000 square foot building including multiple 1,000 s.f. to 5,000 s.f. mixed used tenant spaces, as well as 4 to 6 heavier adjoining industrial spaces ranging from

5,000 to 10,000 s.f. Such a facility could accommodate multiple companies in a variety of configurations.

Numerous examples of such facilities operate in the Carolinas and Virginia under a variety of designations: enterprise centers, business incubators and “telecenters”. They often are portrayed as having a specific technological target market, though most are realized as more general-purpose facilities. Nonetheless, demonstrated successes have been achieved when these facilities are conceived and implemented as feeder locations.

Development costs for comparable facilities have ranged from \$2.5 million to \$10 million depending on scale and comprehensiveness of pre-building. However, most of those developed through economic development efforts have benefited from a variety of currently available state and federal governmental funding sources

Partial funding for such a facility may be available through North Carolina’s Community Development Block Grants program. Federally funded Community Development Block Grants are allocated by the General Assembly and administered by the N.C. Department of Commerce in partnership with the N.C Rural Economic Development Center, which provides training and technical services for new and expanding businesses and entrepreneurs.

In 2006, through that program \$1.75 million was distributed to seven rural counties and communities to develop “business incubators” that support entrepreneurs starting new businesses and increase their chances for success. Incubators offer entrepreneurs practical help such as free or low-cost office space and equipment, technical assistance and marketing tools. The 2006 grants, which ranged from \$100,000 to \$350,000 each, went to Hyde, Jones, Pender and Watauga counties, along with the towns of Bryson City, Siler City and Star.

<p><u>Strategic Option:</u> Develop a multi-tenant, flex space ‘beachhead’ industrial facility to attract relocating growth firms to Currituck County.</p>

4.C. Explore Collaboration with Camden on “Green Growth Industry Park”

In the spring of 2008, the Golden LEAF Foundation sponsored a study by the University of North Carolina at Chapel Hill to examine the feasibility of developing a “green” industrial park in Camden County that would support business locations and accompanying job creation in an environmentally sustainable manner. The project was conducted by several UNC teams (including the UNC Center for Competitive Economies) and focused on three areas: (1) business opportunities and regional development, (2) environmental impacts, and (3) governance and finance.

A green design and operations approach to industrial parks focuses on the buildings housing the businesses in the park, the infrastructure supporting those buildings (e.g., water and sewer), as well as the design of the park itself (i.e., its size and layout). For example, a park could be sited and designed to avoid sensitive areas, such as wetlands or wildlife habitat, and it might be made more compact than traditional industrial parks in order to minimize impervious surfaces (roofs, parking lots, etc.) and hence, storm water runoff. A park could also be located close to residential or commercial areas to facilitate

walking, the use of public transportation, or to minimize commuting distances. A more compact design would also reduce the costs of infrastructure. This type of park might attract firms that have embraced the principles of green design. That is, firms may opt to locate their green building in a green industrial park, rather than in a traditional industrial park.

The research team analyzed industry location prospects for such a facility, as well as estimated tax revenues generated and potential number of jobs created. It also assessed the potential environmental impacts of a green industrial park, described how those impacts could be mitigated through siting, design, and operation, and offered guidelines for the development of such a park. Finally, the project assessed options available to pay for and manage or operate a green industrial park.

The study concluded with an observation similar to the challenge facing Currituck County in attracting new industry: that to be competitive, an industrial park in Camden County would have to differentiate itself from the existing industrial parks lying closer to core of the southern Hampton Roads region. However, the study also determined that an emphasis on “Green Development” was a viable means for competitive differentiation.

While concluding such a green industrial park was a feasible concept, the study acknowledged that rural communities – such as Camden - with limited resources face major challenges in developing industrial parks or other infrastructure for industrial development projects. However, counties and municipalities that cooperate on economic development infrastructure projects can pool risks, enjoy economies of scale and cost savings and pursue projects that otherwise might not be feasible.

The study cited the Kerr-Tar Mini-Hub Project as an example of such inter-local cooperation leading to the creation of a regional industrial park. The Mini-Hub Project was envisioned as an industrial geared towards mid-tech businesses that needed to be near the Research Triangle Park but not in it. Because the park required more investment than any single community could provide on its own, in 2005 county officials from Franklin, Granville, Vance, and Warren counties in North Carolina signed an inter-local agreement to share the costs of developing the park on one site that was intended to benefit all four counties.

Previous discussions between Camden and Currituck counties on collaborative industrial property development have shown the mutual recognition of shared purpose. The concept of a “green” industrial park serving Camden County has acquired considerable support and the success of the Kerr-Tar Hub has demonstrated the viability of multi-county collaboration in industrial development. Now is an excellent time to explore collaboration with Camden County in a “green growth company” initiative.

Strategic Option: Explore Collaboration with Camden County on “Green Growth Industry Park” combining strategies of environmentally-sensitive development with targeted attraction of regional growth companies.

CONCLUSION

This research project was a significant undertaking for all involved. It cost Currituck County a considerable amount of money and not a small amount of political capital from its leadership. More than 20 UNC faculty, research associates and graduate students contributed to the research over the course of nearly two years. At least 200 citizens of Currituck County participated in interviews and through their attendance and participation in community meetings.

This final report is an attempt to distill a tremendous amount of facts and opinions into a “Vision Plan” that offers both broad themes and specific actionable options for Currituck’s citizens to influence their communities’ economic future. This is a modest ambition for an effort that consumed so much time and resources. But years of work and research in the field of economic development makes one both optimistic and humble.

Humility comes from a recognition that the vast majority of any nation, state, county or town’s economy happens to it, rather than because of any development effort. Optimism comes from the repeated observation of the great effect that can be realized from a timely and well-placed lever that nudges economic forces to a community’s benefit.

The key in economic development is often recognizing where to place the crowbar, how to swing the maul, or when to pull the oar to have a great effect for a modest effort. I believe in this work we identified several such critical points at which action can yield substantial benefits to the Currituck economy.

The options we offer in this work have the potential to achieve goals given voice by many Currituck citizens who helped us: economic diversification, tax base growth, mainland tourism development, and more and better jobs. What is less certain is whether consensus exists within the county that action is either necessary or appropriate.

Communities are most often mobilized behind a concerted economic development program in response to wide perceived need or an economic crisis. Thankfully Currituck County is not in crisis. Yet this is a time for prudent action as the economic forces affecting the county are not yet at flood stage. The current national and global downturn has offered the county a fortuitous pause for catching its breath and gathering its thoughts for the inevitable resumption of rapid change that awaits it.

Perhaps it is evitable to think of Currituck’s future in the watery metaphors of a community whose past is so dominated by a history of waterfowl, hunt clubs, fisheries and mariners. But we should not let the comfortable tidal rhythms of Currituck’s current economy lull us into inaction in the face of the inevitable storms to come.

Thank you for the opportunity to work with you, and for you.

Brent Lane, Director
UNC Center for Competitive Economies

APPENDICIES

Appendix A: Currituck Demographic and Economic Scan

The demographic and economic scan for Currituck County is a comprehensive overview of both temporal and current socio-economic data that will provide Currituck County leaders, including the Economic Development Board (hereafter the EDB), with background information that will be essential to better understanding the local and regional economy. As the UNC Center for Competitive Economies (hereafter the Center) works with the Economic Development Board to craft an economic development strategic plan, the objective data provided in the economic scan will play an integral role in helping county leaders make sound public policy decisions.

Prior to undertaking the economic scan, the Center for Competitive Economies compiled and analyzed data from both public and proprietary sources in order to identify trends in the county that have a significant impact on Currituck County's economy. With the resulting data, the Center conducted a SWOT analysis, which characterized the County's strengths, weaknesses, opportunities, and threats (SWOT) in economic development. In some cases, the economic scan builds on previous data from the SWOT analysis. The general layout of the economic scan is to provide information in a written and graphical format that can be updated by County and EDB staff in the future as new publicly available data is released.

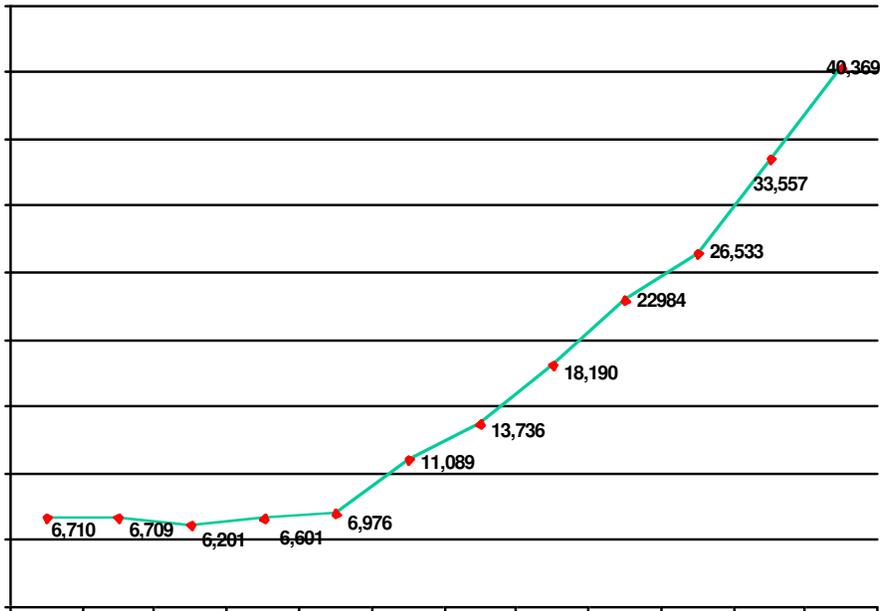
The economic scan provides an overview of data important to broadly defined economic development planning, but it cannot capture every indicator or level of detail for all data sections. General observations and notes on the measures provided are included within the economic scan. Major policy recommendations and more detailed analyses of certain segments of the economy are reserved for later sections of this report.

The economic scan includes the following sections:

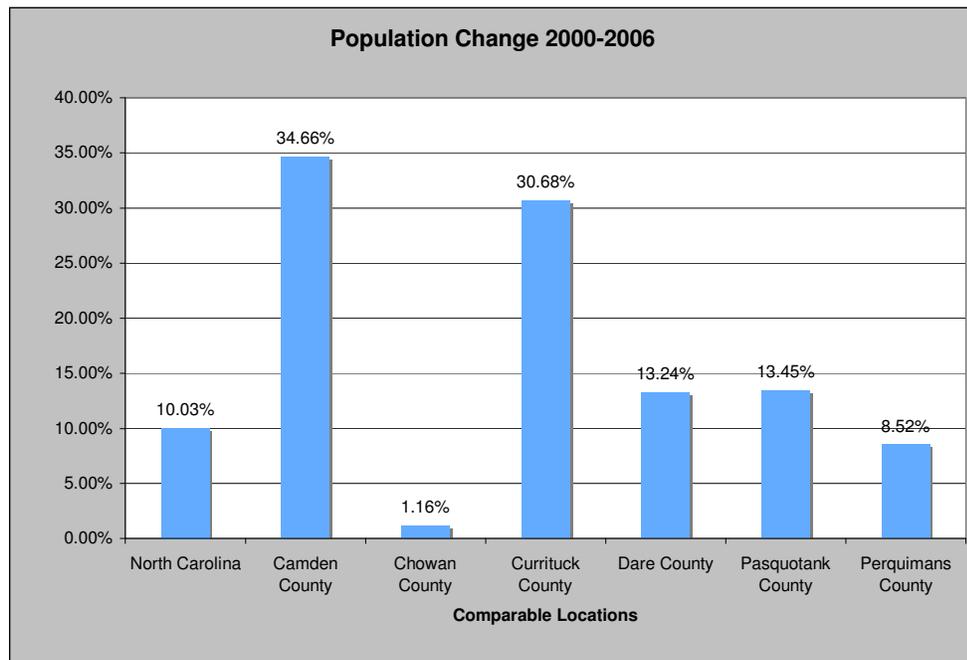
1. Demographics
2. Education
3. Income, Wealth, and Workforce
4. Business Climate: Sites and Infrastructure
5. Quality of Life Indicators

Demographics

Currituck County, like many coastal counties in North Carolina, has experienced explosive growth in the last forty years. Between 1970 and 2005, the population grew by 229%, a trend that remains strong. As of July 2006, Currituck County's population reached 23,580. By 2030, The North Carolina State Data Center projects population growth will reach 40,369, or a rough estimate of 7,393 persons per decade.



Between 1990 and 2000, county population grew by 32%, and the next decade will likely outpace the previous one; between 2000 and 2006, the growth rate already reached 31%. Currituck’s growth rate exceeds those of both the state as a whole, as well as all but one of its neighboring comparable counties.



Although Currituck is one of North Carolina’s smaller counties, in terms of population, it is experiencing significant growth, in comparison to its neighboring counties, as well as other counties throughout the state. As the 6th fastest growing state, Currituck County grew 73% between 1990 and 2006, which greatly exceeded NC’s growth rate of 21.3%.

Population and Growth					
<u>Population (July 2006)</u>			<u>Population Change 1990 - 2006</u>		
	State Rank	Population		State Rank	%Pop Change
Pasquotank	60	39,968	Currituck	6	73.0%
Dare	67	34,730	Camden	10	57.0%
Currituck	77	23,580	Dare	16	49.2%
Chowan	88	14,677	Pasquotank	40	26.5%
Perquimans	92	12,464	Perquimans	59	18.1%
Camden	97	9,298	Chowan	84	8.8%
			North Carolina		21.3%

Source: North Carolina Department of Commerce

Population density in Currituck County is growing at a steady pace as well. According to the North Carolina State Data Center, Currituck County’s land area is 261 square miles and the County had a population density of 69.51 persons per square mile in 2000. By 2007, population density estimates rose to 93.97 persons per square mile. Using conservative population estimates, the Data Center projects that Currituck County’s population density will increase to 154.26 persons per square mile by 2030.

Unlike the state as a whole, the significant population growth that Currituck County is experiencing does not seem to result from the influx of Hispanic residents. Whereas the 2006 Census estimates that 6.71% of North Carolina residents are Hispanic, only 1.78% of Currituck’s residents are Hispanic. Instead, the Center has found that second-home owners are inflating the County’s population growth. In 2005, 30.9% of the county’s housing units are recorded as for seasonal or recreational use; Currituck has the 10th highest number of recreational/seasonal homes in the state.¹ Many of these homeowners live out of state in the off-season and rent their coastal homes during the seasonal months. A more precise analysis of this demographic will be undertaken in a later section.

¹ From the Indiana Business Research Center: <http://www.stats.indiana.edu>

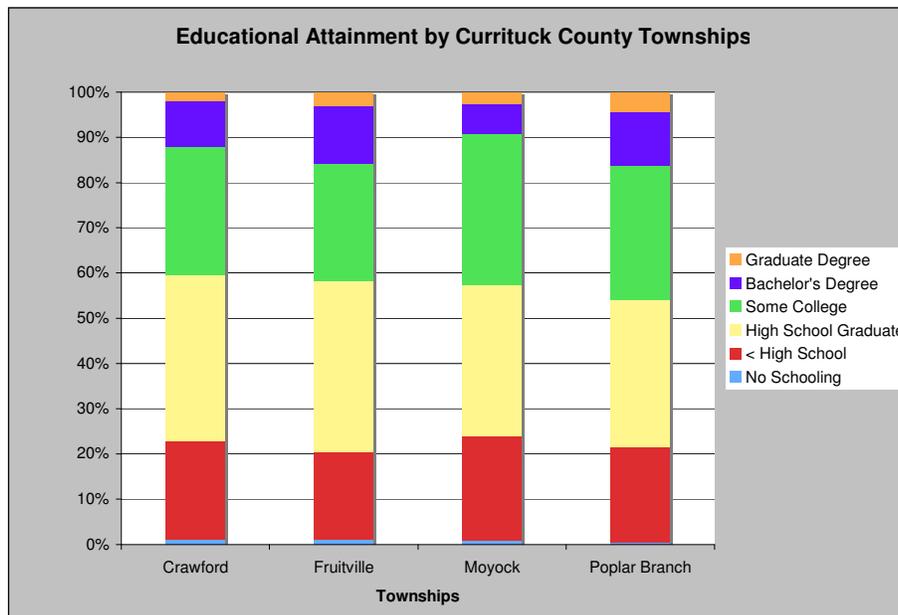
Education

Although the proportion of Currituck’s residents who received their high school diploma is on par with the state average, a significantly lower number of county residents pursued higher degrees. The 2000 US Census found that in Currituck County, 77.6% of the 25+ population are high school graduates (29th highest in the state), which compares favorably to North Carolina’s average, 78.1%.

Educational Attainment					
<u>High School Diploma or More</u>			<u>Bachelor's Degree or More</u>		
	State Rank	%Pop 25+		State Rank	%Pop 25+
Dare	2	88.6%	Dare	9	27.7%
Camden	13	82.1%	Chowan	29	16.4%
Currituck	29	77.6%	Pasquotank	29	16.4%
Pasquotank	32	76.8%	Camden	31	16.2%
Chowan	50	73.1%	Currituck	49	13.3%
Perquimans	56	71.9%	Perquimans	61	12.3%
North Carolina		78.1%	North Carolina		22.5%

Source: US Census 2000 and Indiana Business Research Center

When comparing residents with at least a Bachelor’s Degree, 13.3% of Currituck residents have an advanced degree (49th in the state), compared to 22.5% in the state. However, according to the North Carolina Department of Commerce, the county currently ranks 26th in the state for average SAT scores, which suggests significant potential for increasing the county’s educational attainment levels in the future. Compared to surrounding counties, Currituck has a slightly higher college degree



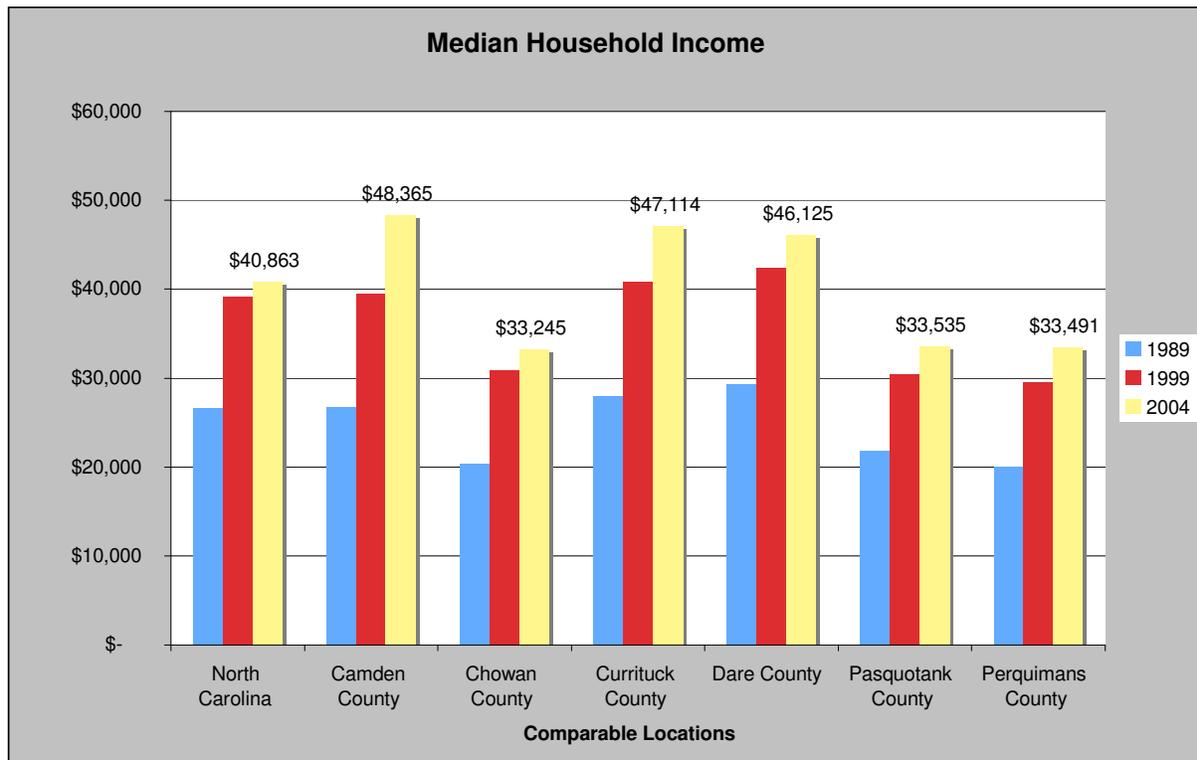
attainment ranking. However, Currituck’s current proportion of college-educated residents could affect the county’s ability to attract knowledge-based industries with higher wage employment opportunities.

Looking at educational attainment within the county, the educational levels in Currituck appear to be uniformly spread across Currituck’s four townships, indicating that residents are reaching proportionally similar levels of education. This uniformity implies that the workforce throughout the county has a comparable education levels that may be more suited to labor-intensive industries. A more comprehensive assessment of the Currituck labor force and skill mix will be made in a later section.

3. Income, Wealth, and Workforce

3.1 Income

In 2004, the North Carolina Department of Commerce found that Currituck County ranked 6th in the state for the highest median household income. Median household income in Currituck exceeded not only the state average, but also the median income level in all but one of its peer counties.



3.2 Unemployment and Poverty

In the past few years, Currituck County has experienced extremely low unemployment and poverty rates. In 2006, Currituck had the second lowest unemployment rate in the state at 3.5%; North Carolina’s unemployment rate for the same period was 4.8%. As of 2004, the county also had one of the lowest poverty rates in the state at 9.6% (fourth lowest poverty rate in the state). The state figure in 2004 was 13.8%. The 2004 poverty rate for children under 19 was also extremely low at 13.8% (7th lowest child poverty rate in the state). The table below shows how Currituck County compares with nearby counties and the state for the respective time periods.

Very low unemployment and poverty rates suggest that Currituck County is experiencing a relatively tight labor market with fair wages. However, unemployment figures may be deceiving; unemployment rates only apply to the available workforce, and do not take into account those persons who are no longer seeking work. Furthermore, they do not take into account the type of work available, and will not reflect the quality of employment taken by the workforce.

Unemployment and Poverty					
<u>Unemployment Rate (2006)</u>			<u>Poverty Rate (2004)</u>		
	State Rank	%Pop Unemployed		State Rank	%Pop in Poverty
Perquimans	48	5.2%	Chowan	25	16.9%
Chowan	52	5.0%	Pasquotank	27	16.8%
Pasquotank	52	5.0%	Perquimans	35	16.0%
Dare	66	4.5%	Currituck	96	9.6%
Camden	74	4.3%	Camden	99	8.7%
Currituck	99	3.5%	Dare	100	7.8%
North Carolina		4.8%	North Carolina		13.8%

Source: US Census 2000 and Indiana Business Research Center

3.3 Wealth: Income and Wage Discrepancy

Despite Currituck’s high median household income and extremely low unemployment rate, an income and wage discrepancy exists, which supports two key findings: first, the county experiences a spatial mismatch between its residents and higher paying jobs, and second, the majority of Currituck’s private employment is in low wage sectors, such as the retail and service industries. Combined, these two trends result in a lower per capita personal income for the county, as well as significant wage variances and a high proportion of its residents out-commuting for employment.

Personal Wealth and Wages

Per Capita Personal Income (2005)

	State Rank	Per Capita PI
Dare	10	\$ 33,463
Currituck	20	\$ 29,982
Chowan	29	\$ 28,456
Camden	39	\$ 27,167
Perquimans	52	\$ 25,996
Pasquotank	74	\$ 24,013
North Carolina		\$ 32,234

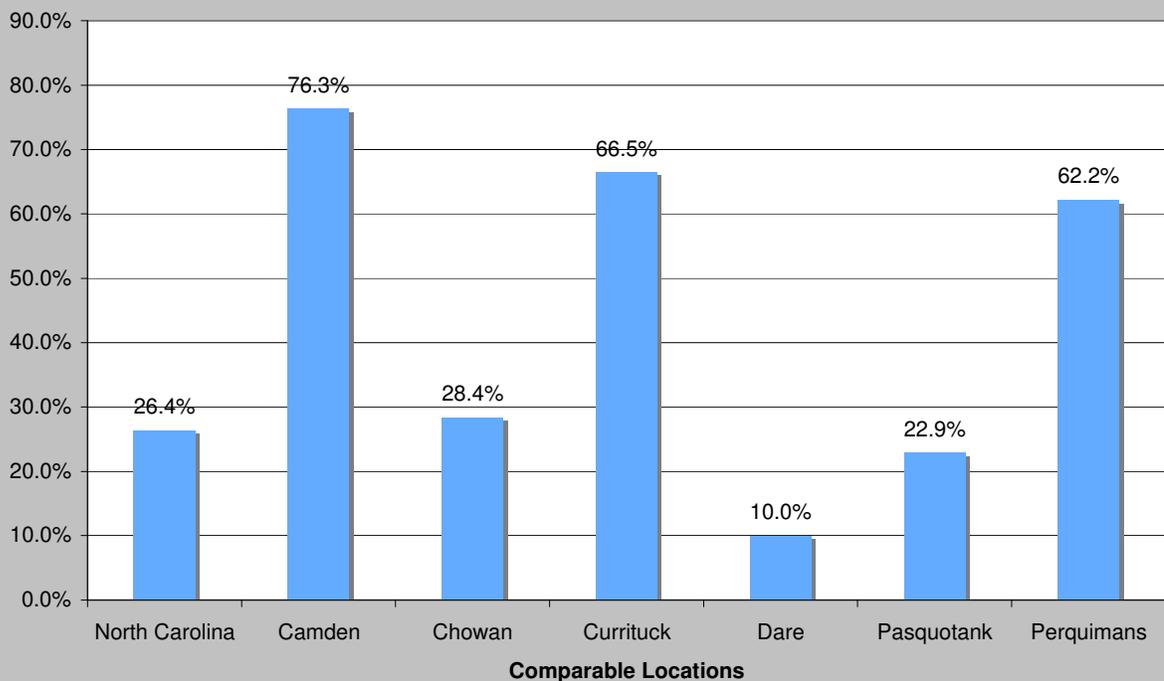
Average Weekly Wage (2006)

	State Rank	Weekly Wage
Camden	5	\$ 797
Pasquotank	36	\$ 604
Chowan	54	\$ 577
Dare	60	\$ 567
Currituck	65	\$ 559
Perquimans	93	\$ 507
North Carolina		\$ 744

Source: North Carolina Department of Commerce

In 2005, Currituck's per capita personal income was \$29,982 (20th highest PCPI in the state); however, this shows a -\$2,252 variance from the North Carolina average per capita personal income of \$32,234. To further illustrate the discrepancy between income and

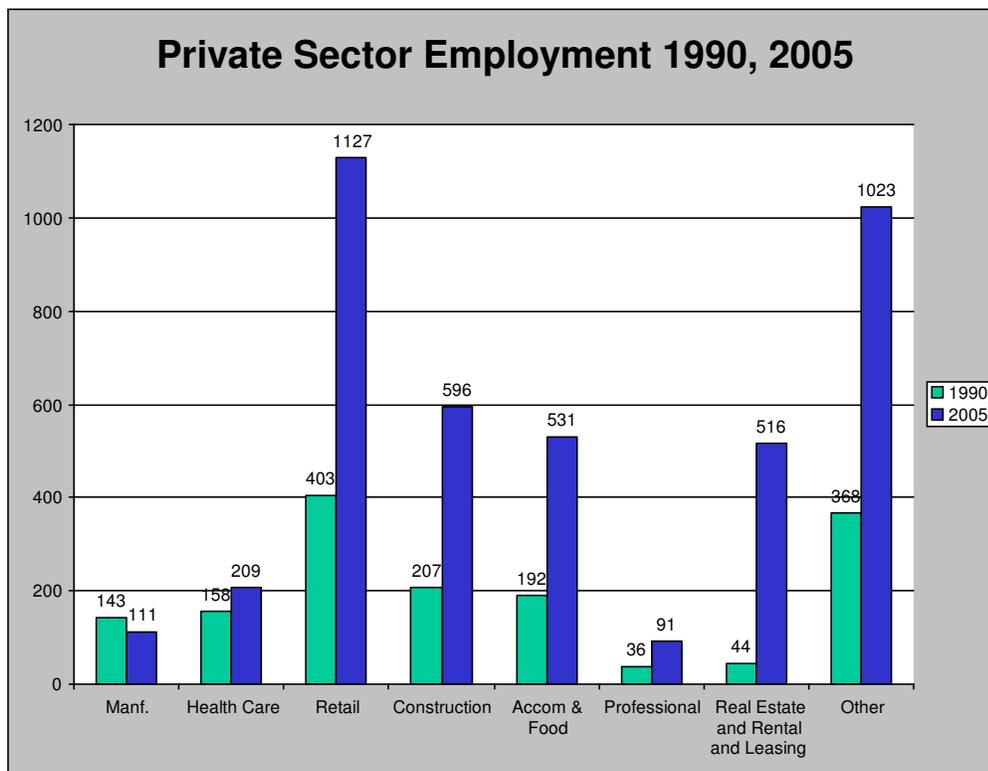
Percentage of Residents Commuting Outside of County for Employment



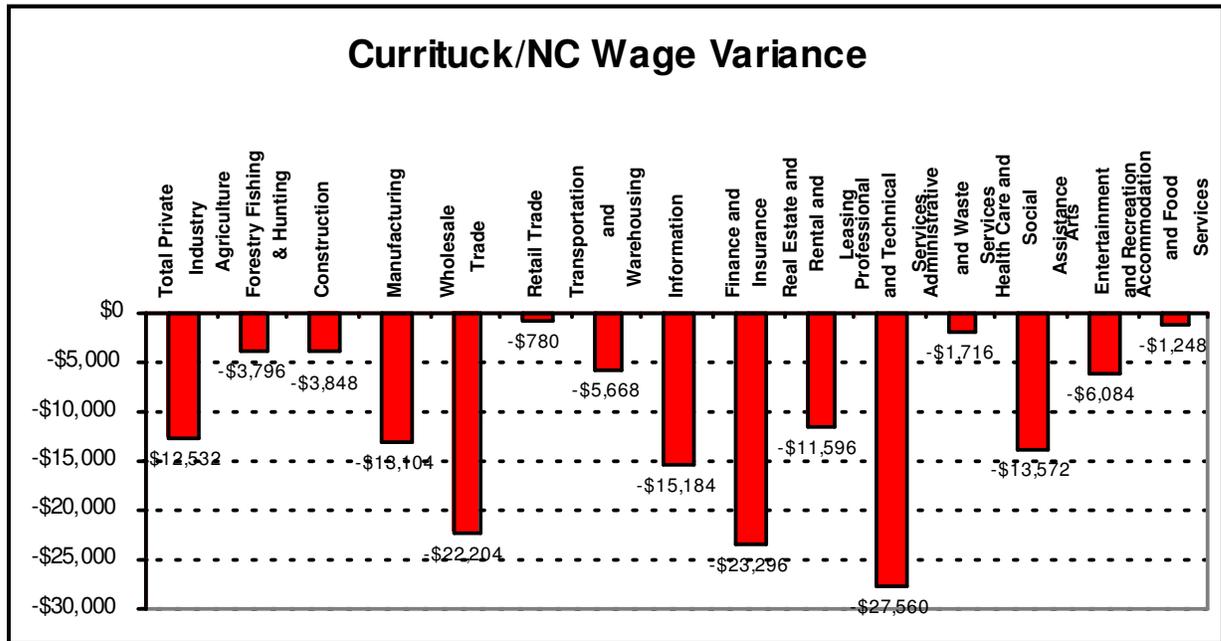
wages, the county only had the 65th highest weekly wage in the state, at \$559 per week. Of its neighboring counties, only Perquimans County had a lower average weekly wage. Furthermore, Currituck County fell short of the state average weekly wage by \$195.

Not unlike other coastal counties, a significant proportion of Currituck’s residents commute out of the county and the state for work. Over 65% of the county out-commutes, compared to only 26.4% on average in the state; neighboring counties experience similar percentages of out-commuting due to their border proximity to Virginia. Of the 65% out-commuting, 40% of county residents work in Virginia and 25% work in other North Carolina counties.

Due to the significant proportion of out-commuting from the county, private employment in Currituck is dominated by the retail, services, and real estate sectors. The predominance of these industries suggests that seasonal tourism has become a primary driver for Currituck’s economy. The full extent of tourism’s influence on the local economy will be explored in a later section.



Retail and service sectors are traditionally characterized by low wages and few benefits. However, analysis of industry wage patterns shows that Currituck experiences a significant wage variance between average industry wages for the county and the state. This supports the finding that personal income in Currituck County is lower than the state average. The chart below shows wage variance between Currituck County and North Carolina for each major industry sector. Industry sectors that traditionally provide higher wages show significantly higher wage variances in Currituck County. These wage variances help explain why Currituck County has a lower average weekly wage than both the state and many of its neighboring counties.



3.4 Workforce and Industry Concentration

Within Currituck County, there are 4,837 jobs for 23,580 residents. However, as previously discussed, a number of Currituck residents commute out of the county for work, and a portion of the population only reside in the county during the off-season. Of the 4,837 in-county jobs, 25% of the jobs are in government services. This proportion exceeds the state average of 17%. The private sector employs approximately 3,600 works, mainly in the retail and service sectors.

The retail, service, and real estate sectors have seen tremendous growth mainly in the 15 years between 1990 and 2005, possibly as a result of the county’s growing tourism economy. An in-depth analysis of industry concentration will be included in a later section.

Employment 1990-2005 in Fastest Growing Sectors				
	2005	1990	# New Jobs	% Jobs Increase
Retail	1127	403	724	180%
Construction	596	207	389	188%
Accommodation & Food	531	192	339	177%
Real Estate, Rental, & Leasing	516	44	472	1073%

The following table looks at county jobs by industry, as well as the local concentration of each industry, as measured by location quotients (LQ). The local quotient (LQ) measures the share of a regional industry sector employment relative to a national average. A local value less than 1 means the share is less than the US employment share and a value

<u>Employment Concentration by Industry</u>			
	Jobs	Industry Concentration	LQ
Total Private Industry	4,620		
Forestry, fishing & hunting, & ag support services	0	Very Low	0.00
Mining	0	Very Low	0.00
Utilities*	0	Very Low	0.00
Construction	678	High	2.52
Manufacturing	155	Low	0.29
Wholesale trade	58	Low	0.24
Retail trade	1,118	High	1.84
Transportation & warehousing*	20	Low	0.12
Information	98	Low	0.73
Finance & insurance	72	Low	0.28
Real estate & rental & leasing	854	Very High	10.03
Professional, scientific, & technical services	118	Low	0.39
Management of companies & enterprises		Very Low	0.00
Administrative & support & waste management & remediation service	174	Low	0.47
Educational services*	20	Low	0.17
Health care & social assistance	209	Low	0.33
Arts, entertainment, & recreation*	100	High	1.30
Accommodation & food services	450	High	1.03
Other services (except public administration)	258	High	1.20
Industries not classified*	0	Very Low	0.00
Source: US Census - 2005 County Business Patterns			
* Due to Data constraints, figure may be higher			

greater than 1 means that the share is greater than the US employment share. A high LQ represents a concentration of jobs within a particular industry sector and may indicate a relative competitive advantage for the local area within that industry sector. LQs will be examined in more detailed industry sector level in the industry cluster analysis section of this report.

This broad analysis demonstrates that Currituck County's economy relies heavily on the retail and service industries, which are supported by the coastal county's tourism revenues. Although traditional measures of economic health, such as unemployment and poverty rates, are extremely low, average wages in these dominant sectors are considerably less than the state average. In addition, Currituck's location quotients for

higher wage and knowledge based industry sectors such as information, financial activities, and professional services are remarkably low. As a result, Currituck County's economy has a low-wage structure, where much of the county's location advantage has involved tourism-oriented industries with low skill requirements and few long-term employment prospects. Later chapters will deal with Currituck County's industrial skill mix in more detail.

4. Business Climate

This section will give a brief overview of business site and infrastructure needs in Currituck County. A more in-depth analysis of the current status of these components of the business climate is needed to help county leaders attract new employment opportunities and diverse industry investment.

4.1 Business Sites

An integral part of industry development is fostering a good business climate. Packaging and pre-approving high quality building sites can help local economic developers market development-ready opportunities to clients. In North Carolina, the Department of Commerce established the Certified Sites Program to develop a statewide inventory of sites that meet specific business development criteria. NC Commerce's goal is to develop the state's competitive edge by creating "full-service, fully-tested" ready-to-develop business sites for clients.

In Currituck County, only five sites are certified with the Commerce Department. These five sites scattered throughout the county, total 199 acres of industrial and commercial land in various stages of development, from vacant land to existing industrial parks. Each parcel is within a mile of Highway 158, Highway 168, or both thoroughfares. Through the ncsitesearch.com website, potential clients can view site profiles, which include site location, size, zoning designation, current use, transportation access, and utility service.

To maximize the county's future potential for industrial and commercial development, Currituck's leaders may want to undertake a comprehensive business site inventory to better understand the region's development opportunities. By packaging and promoting prime development sites, Currituck County can foster a business climate that attracts the type of development the county leaders are looking for.

4.2 Infrastructure

Again, a comprehensive inventory of the county's infrastructure will add greatly to the county's strategic economic development plan. Looking at business sites that are registered with the Commerce Department, most of the certified sites have electric and natural gas infrastructure in place. However, water, septic, and telecom utilities vary from site to site. It seems likely that business sites throughout the county also have variable states of infrastructure development. Water and septic systems tend to be the infrastructure systems most in need of current update or development, owing to their long-term lifespan and the lack of public investment in these systems in rural areas. However, with the rising importance of technology sectors, investment in telecom

infrastructure will be of the utmost importance to counties like Currituck that may be interested in developing their knowledge-based industries.

Transportation infrastructure is another aspect of infrastructure development that cannot be neglected by counties pursuing economic development. In Currituck County, Highways 158 and 168 are the primary arteries for moving north and south. Highway 158 and NC-34 connect Currituck to its eastern neighbor, Camden County, and 158 provides the only connection to the Outer Banks portion of Currituck County at the southernmost point of the county. Although there are both positive and negative consequences to increasing connectivity within the county as well as to the surrounding counties, building new and improving existing transportation infrastructure is often in the best interest of counties undertaking comprehensive economic development strategies.

5. Quality of Life Indicators

Quality of Life indicators may include any type of asset that enhances the living conditions of residents within Currituck County. In particular, access to medical services, day care facilities, green spaces, and community amenities are important quality of life indicators for Currituck County.

5.1 Medical Services and Day Care Facilities

Currituck County has a fairly average set of ratios for population to medical professionals, considering the size of the county. Currituck has one physician for every 3,930 residents, one RN for every 354 residents, and one dentist for every 4,597 residents. For a small county without a local hospital, Currituck has an adequate pool of medical professionals to serve the county’s medical needs.

Medical Professionals per County (2005)					
Population/ Physician Ratio		Population/ RN Ratio		Population/Dentist Ratio	
Camden	9,298	Camden	530	Camden	-
Chowan	524	Chowan	98	Chowan	3,618
Currituck	3,930	Currituck	354	Currituck	4,597
Dare	681	Dare	155	Dare	1,740
Pasquotank	396	Pasquotank	86	Pasquotank	3,240
Perquimans	6,232	Perquimans	467	Perquimans	6,077
Source: NC Department of Commerce					

Considering Currituck’s growing population, child care facilities may become an increasingly important quality of life indicator. Currently, the county has 20 licensed facilities with the capacity to care for 623 children. In 2006, 1,345 preschool aged children (0 to 4 years old) resided in Currituck County; as the county grows, child care represents both a burgeoning employment opportunity, as well as a potential stumbling block to consistent, stable growth.

Child Care Facilities			
Licensed Facilities		Capacity	
Camden	5	Camden	244
Chowan	18	Chowan	949
Currituck	20	Currituck	623
Dare	39	Dare	1,544
Pasquotank	64	Pasquotank	2,162
Perquimans	8	Perquimans	214
Source: NC Department of Commerce			

5.2 Green Space and Community Amenities

In addition to medical professionals and child care facilities, green space and community amenities are often important quality of life indicators that attract new residents and supplement economic development strategies.

Currituck County Amenities		
Type	Amenities	City
County Parks	Maple Park	Maple
	Sound Park	Harbinger
	Veteran's Memorial Park	Coinjock
	Walnut Island Park	Grandy
	Knott's Island Park	Knott's Island
Libraries	Barbo Library	
	Corolla Library	
Airports	Currituck Regional Airport	
	Norfolk International Airport	
Medical Services	Outer Banks Hospital	Nag's Head
	Regional Medical Center	Kitty Hawk
	Albemarle Hospital	Elizabeth City
	Chesapeake General Hospital	Chesapeake, VA
Schools	Central Elementary	Barco
	J.P. Knapp Elementary	Currituck
	Knott's Island Elementary	Knott's Island
	Moyock Elementary	Moyock
	W.T. Griggs	Poplar Branch
	Currituck County Middle	Barco
	Moyock Middle	Moyock
	Currituck County High School	Barco

Currituck County offers five county parks, with various activities, two community libraries, eight county schools, and one regional airport. Furthermore, Currituck offers close proximity to a Norfolk International Airport, a major hub within an hour of the county lines, as well as close access to four hospitals. For a small county, Currituck truly does offer a good selection of community amenities and access to personal services.

Appendix B: Currituck Labor Force and Skill Mix Inventory

This section of the report has three objectives.

1. To inventory the county's current workforce
2. To examine commuting patterns and associated wages of Currituck County residents
3. To inventory the county's resident labor resources

Workforce data is collected by *place of residence* and by *place of employment*. Place of *residence* data is gathered by the decennial census and inventories the industries and occupations of persons living in the county. Place of employment data inventories employment and wage data for businesses physically located in an area, and is gathered each quarter from business in fulfillment of their federal unemployment insurance reporting requirements. Theoretically, *place of residence* and *place of employment* data would be identical if all residents of a jurisdiction worked where they lived. However, since commuting between jurisdictions is a common occurrence, place of residence and place of employment data will differ. This section of the report will discuss both place of residence and place of employment data, and how - in light of the wage differentials between Currituck county and surrounding counties - the observed commuting patterns of Currituck County residents are to be expected.

Currituck County's workforce

Any workforce analysis should investigate data on labor market conditions and the occupations and industries of persons working or living in the county. Since data on labor productivity; labor costs; and educational quality were presented in a previous section, we will focus here on the employment data reported by Currituck county businesses. To be clear, this section will discuss data by *place of employment* gathered by the US Bureau of Labor Statistics' Census of Employment and Wages for 1990 and 2006.

In 1990, Currituck County had 1,554 private sector wage and salaried employees working in the county earning an average of \$259 per week. In 2006, this grew to 4,338 employees earning an average of \$452 per week. This 179% growth in the number of employees and 75% increase in wages over the period compares with North Carolina's 27% increase in the number of employees and 88% increase (from \$382 to \$717) in its average weekly wage. The US overall had a 24% increase in employment and an 82% increase (from \$447 to \$815) in wages over the same time period. Please see table 1.

Table 1: Employment and Wage Growth: Currituck County, NC, and US 1990-2006

	1990 employment	2006 employment	90-'06 growth	1990 weekly wage	2006 weekly wage	90-'06 growth
Currituck	1,554	4,338	179%	\$259	\$452	75%
North Carolina	2,602,197	3,202,440	27%	\$382	\$717	88%
US	90,855,141	112,719,311	24%	\$447	\$815	82%

Source: BLS, Census of Employment and Wages

When divided into goods-producing and service-providing sectors, Currituck County employment shifted from a 26/74 goods-to-service ratio in 1990 to a 17/83 ratio in 2006. In comparison, North Carolina had a 39/61 ratio in 1990 and a 25/75 ratio in 2006, while the US overall had a 27/73 ratio in 1990 and a 21/79 ratio in 2006. This indicates that Currituck County is participating in the general shift to service industries, although at a somewhat higher level than either North Carolina or the US. What is interesting to note is that Currituck County employment growth exceeded that of North Carolina and the US in both goods and services sectors. Goods-producing industry employment grew 88% from 1990-2006 in Currituck County, compared with an 18% decline in North Carolina and a 5% decline in the US. Service-providing industry employment grew 211% in Currituck County, 55% in North Carolina, and 35% in the US from 1990 to 2006. Currituck County has managed to hold on to a growing goods-producing sector, while still shifting its economy to being more service oriented. Please see table 2.

Table 2: 1990-2006 Employment growth

	Currituck	Currituck	NC	NC	US	US	Currituck	NC	US
	1990	2006	1990	2006	1990	2006	growth	growth	growth
Total, all industries	1,554	4,338	2,602,197	3,302,441	90,855,141	112,719,312	179%	27%	24%
Goods-Producing (#)	397	745	1,012,830	831,107	24,719,559	23,492,281	88%	-18%	-5%
Service-Providing (#)	1,157	3,593	1,589,367	2,471,334	66,135,582	89,227,031	211%	55%	35%
Goods-Producing (%emp)	26%	17%	39%	25%	27%	21%	-33%	-35%	-23%
Service-Providing (%emp)	74%	83%	61%	75%	73%	79%	11%	23%	9%

When one looks at wages, the picture for goods-producing and service providing employment in Currituck County is intriguing. Overall, average weekly wages in Currituck County increased 75% (from \$259 to \$452) from 1990-2006. In comparison, wages increased 88% (from \$382 to \$717) in North Carolina and 82% (\$447 to \$815) in the US. Goods-producing wages increased 112% (from \$309 to \$655) from 1990 to 2006 in Currituck County, in comparison with a 96% increase (from \$413 to \$810) in NC, and a 78% increase (from \$525 to \$933) in the US. Service-providing wages grew 70% (from \$241 to \$410) in Currituck, 89% in NC (\$363 to \$686), and 88% (from \$418 to \$784) in the US. Please see table 3.

Table 3: Wage Growth, 1990-2006

	Currituck 1990	Currituck 2006	NC 1990	NC 2006	US 1990	US 2006	Currituck growth	NC growth	US growth
Total, all industries	\$ 259	\$ 452	\$ 382	\$ 717	\$ 447	\$ 815	75%	88%	82%
Goods-Producing	\$ 309	\$ 655	\$ 413	\$ 810	\$ 525	\$ 933	112%	96%	78%
Service-Providing	\$ 241	\$ 410	\$ 363	\$ 686	\$ 418	\$ 784	70%	89%	88%

The implications of this wage growth are two-sided. On the one hand, one can argue that since wages increased for both goods-producing and service-providing sectors in Currituck County, both sectors of the economy are healthy and the difference in wage growth is not important. What is important, the argument goes, is that workers in both goods-producing and service-providing sectors are better off in 2006 than they were in 1990. Furthermore, it can be argued that the average wage differential of \$265 (\$717-\$452) between the average weekly wage of Currituck workers and that of all North Carolinians, or the \$363 gap (\$815-\$452) between Currituck workers and the average US worker in 2006 is a competitive advantage. Assuming that the level of skill and productivity of workers employed in Currituck County industries are equivalent to those employed elsewhere, being a low-cost supplier of goods and services provides incentives for industries to move production or services to the area. Framing the argument in this way, Currituck County receives benefits from being a low-wage area in both the long and short term.

On the other hand, if Currituck County wage-growth is lower than average because its industry mix is concentrated in low-skilled/low-productive areas, then the prospect for parity with the larger North Carolina and the US economy remains doubtful. The result is that Currituck County workers will perpetually be poorer than their peers in either North Carolina or the US. In addition, since labor-abundant areas of the nation and world are better able to produce the products made by low-skilled/low-productive industries, the long-run competitive advantage of Currituck County would erode. The choice, quite simply put, is between being industry leaders and being industry bottom-feeders.

Indications that differentials in wage growth are a problem can be determined by whether there is convergence or divergence in wages between Currituck County workers and their peers in North Carolina and the US. If wages become increasingly divergent, then the industry mix in Currituck County becomes an area of concern, since a persistent gap in wages are indications that Currituck County is specializing in low-wage industries. On the other hand, if there is long-term convergence in wages (i.e., the differences in wages are decreasing), then the wage differential is just a short-term problem that will be solved in the normal course of time.

The data on wage differentials for 1990-2006 is presented in table 4. The data on wages indicate that the gap between Currituck County workers and the rest of North Carolina and the US is growing. In 1990, the Currituck County average weekly wage was 68% the North Carolina average weekly wage. By 2006, Currituck's weekly wage was only 63%

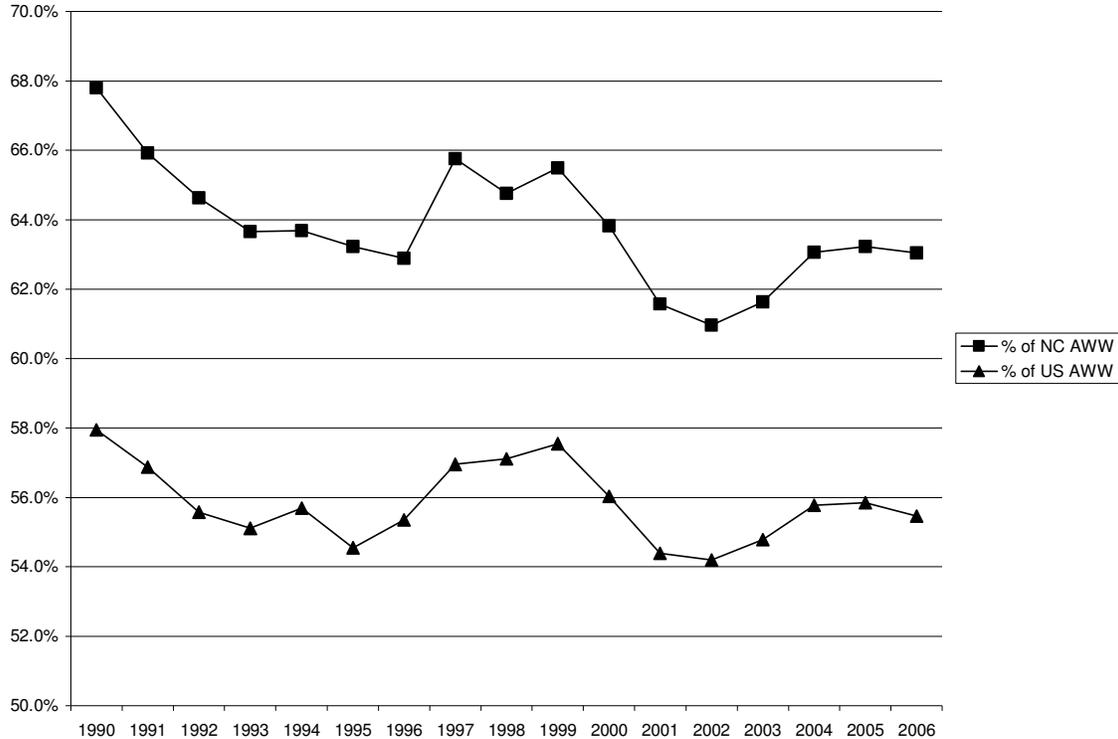
of North Carolina’s weekly wage. Similarly, Currituck workers earned 58% of the US weekly wage in 1990, but by 2006, they were earning only 55% of the average US weekly wage. The gap becomes starker when one divides industries between goods-producing and service-providing sectors. Currituck workers employed in goods-producing industries earned 75% of NC sector wages in 1990, but 81% of sector wages in 2006. For the service sector, Currituck workers were earning 66% of NC sector wages in 1990, but only 60% of the sector wage in 2006.

Table 4: Currituck County wages as % of NC and US wages, 1990 and 2006

	Currituck	NC	US	Currituck	NC	US	1990	2006	1990	2006
	1990	1990	1990	2006	2006	2006	% of NC Wage	% of NC Wage	% of US Wage	% of US Wage
Total, all industries	\$ 259	\$ 382	\$ 447	\$ 452	\$ 717	\$ 815	68%	63%	58%	55%
Goods-Producing	\$ 309	\$ 413	\$ 525	\$ 655	\$ 810	\$ 933	75%	81%	59%	70%
Service-Providing	\$ 241	\$ 363	\$ 418	\$ 410	\$ 686	\$ 784	66%	60%	58%	52%

Graphing the percent of the North Carolina average wage from 1990-2006 illustrates that Currituck County wages are decreasing as a percentage of NC wages. Quite simply, the wage gap for Currituck County is increasing. Please see figure 1.

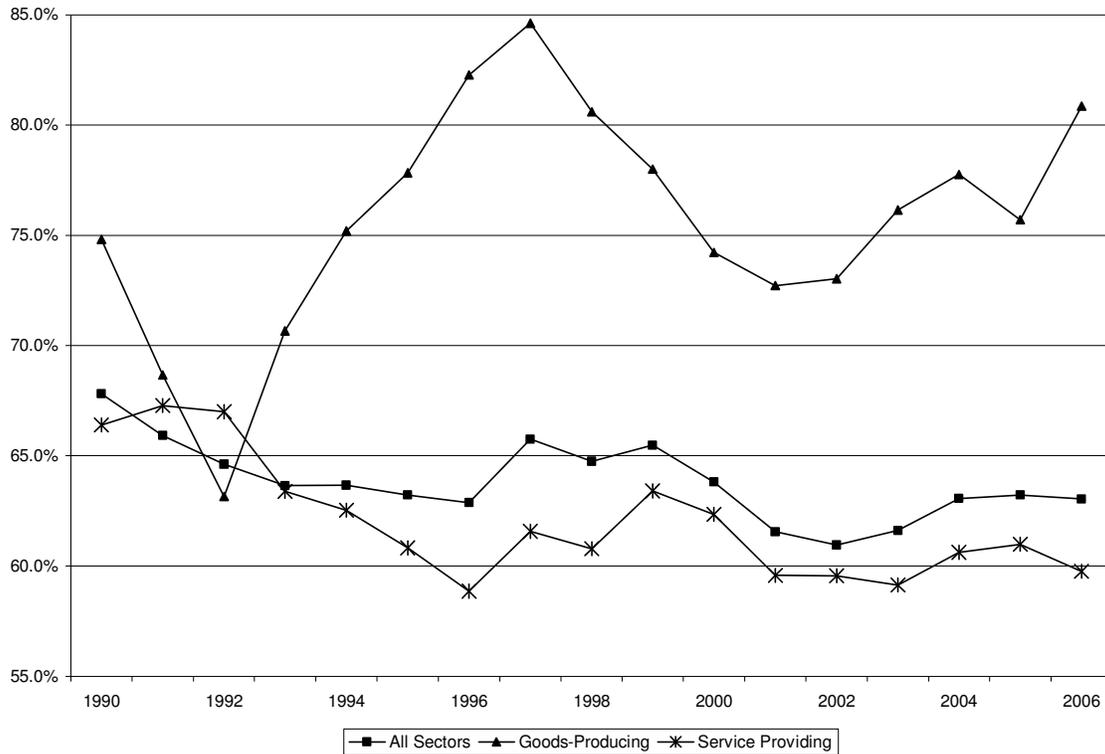
Figure 1: Currituck Wages as % of NC and US Average Weekly Wage, 1990-2006



The striking fact is that while the overall wage gap between Currituck and North Carolina is increasing, the goods-producing sector has performed admirably over the period. The

wage gap for those in the goods-producing sector has decreased over the time period, as shown in figure 2.

Figure 2: Currituck Wage as % of NC Average Wage, 1990-2006



The implication of this wage and employment data is that Currituck County industries are growing both in terms of wages and employment, but that the growth in wages and employment is slower than either the US or NC economy. The question then becomes why slow growth is occurring. As suggested by the previous discussion, a likely suspect is that the industry mix in Currituck County is over-represented by low wage, low-productive industries *particularly in the service providing sector*. The point for policy intervention then becomes to discover what industries are growing at or above the average wage and employment growth rates in Currituck County so that over time the wage gap is reduced. The point here is not to think of all industries within Currituck County as being slow-growing or low wage, but rather to understand how the current mix of industries is affecting Currituck County workers, and secondarily, to identify industries (and ultimately companies) that have higher than average wage and employment growth so that Currituck County workers can achieve greater parity with workers in other areas of the economy. There is a real and positive story to be told about the goods-producing sector in Currituck County, and we will turn to that analysis later in the report when we discuss industry clusters.

Commuting patterns and wages

This section of the report will detail commuting patterns for residents of Currituck County. It will detail the commute rates for NC, Currituck, and surrounding counties, and then investigate the reasons why Currituck residents have such high commute rates. Data will also be discussed regarding an alternative explanation for high commuter rates other than low wage rates within the county; namely that Currituck County's housing costs, tax rates, highway network, and schools make it an attractive place to live. It ends with the conclusion that the reason why commuter rates are high is not as important as understanding the costs of being a commuter county; namely that residential construction and housing requires a detailed planning process and cost remediation strategy so that the infrastructure of the county in terms of utilities, schools, and roads is not overburdened. In addition, to mitigate the costs of commuting residents who shop outside the county for local services, it is recommended that areas be set aside for retail development. Finally, it is recommended that targeted industry recruitment and retention be undertaken so that in the long term, commuter rates are reduced to the state average.

The striking fact about Currituck's commuting rates is that they are very high. Table 5 lists the commuting percentage of Currituck and surrounding counties or county equivalents. Currituck is only one of seven North Carolina counties with commute rates greater than 65%. Virginia has only 29 of the 135 counties or county equivalents with commute rates at or above Currituck's commute rates.

Table 5

County	% residents out-commuting
Camden Co., NC	76.1%
Currituck Co., NC	66.5%
Gates Co., NC	65.0%
Isle of Wight Co., VA	63.4%
Perquimans Co., NC	62.2%
Southampton Co., VA	62.2%
Chesapeake City, VA	60.0%
Suffolk City, VA	60.0%
Northampton Co., NC	57.9%
Portsmouth City, VA	54.6%
Franklin City, VA	52.3%
Newport News City, VA	43.7%
Martin Co., NC	41.7%
Bertie Co., NC	41.4%
Tyrrell Co., NC	39.6%
Washington Co., NC	32.6%
Norfolk City, VA	32.4%
Hertford Co., NC	31.8%
Halifax Co., NC	29.5%
Chowan Co., NC	28.3%
Beaufort Co., NC	23.7%
Pasquotank Co., NC	22.9%
Hyde Co., NC	12.6%
Dare Co., NC	9.9%

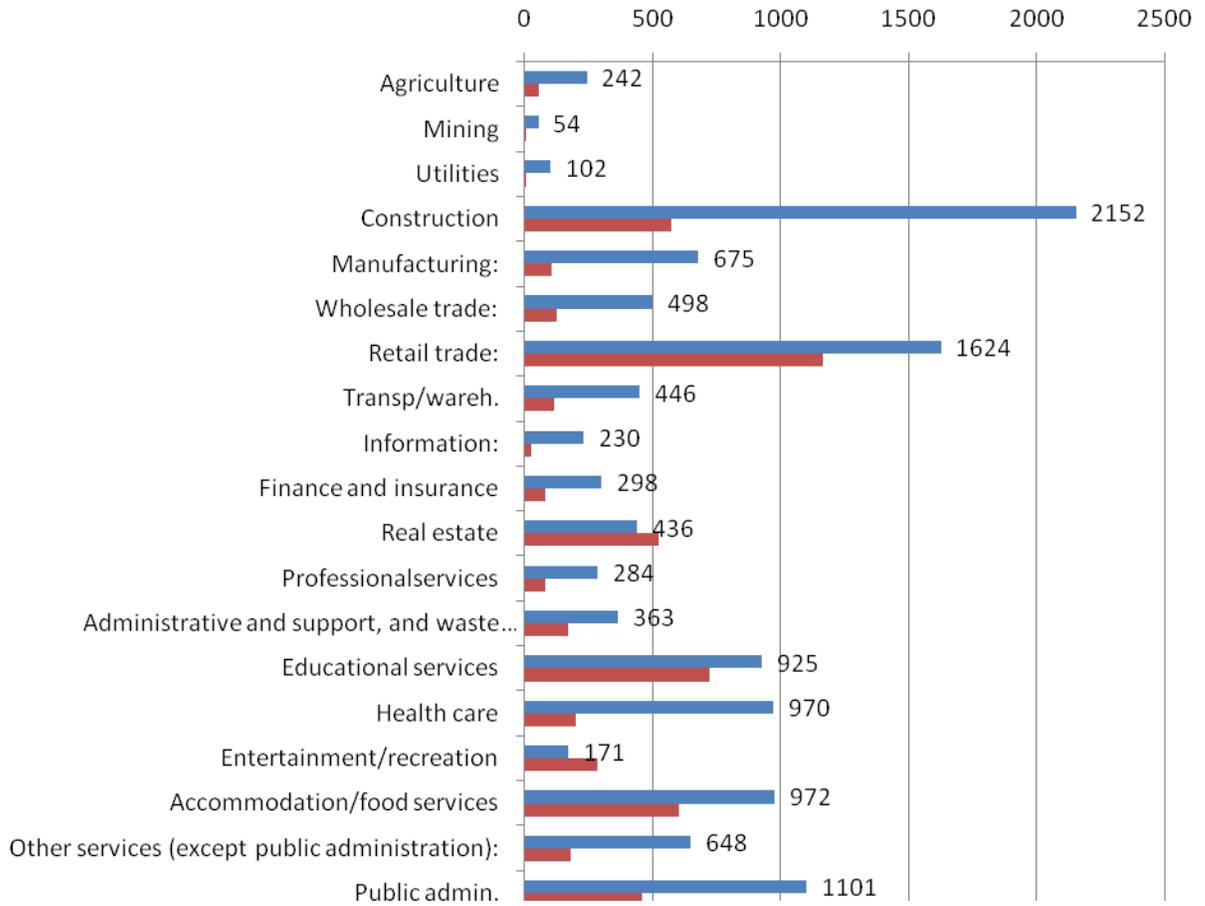
Table 6 shows that 80% of Currituck’s out-commuting residents commute to Dare County, NC and to Chesapeake, Virginia Beach, and Norfolk, VA.

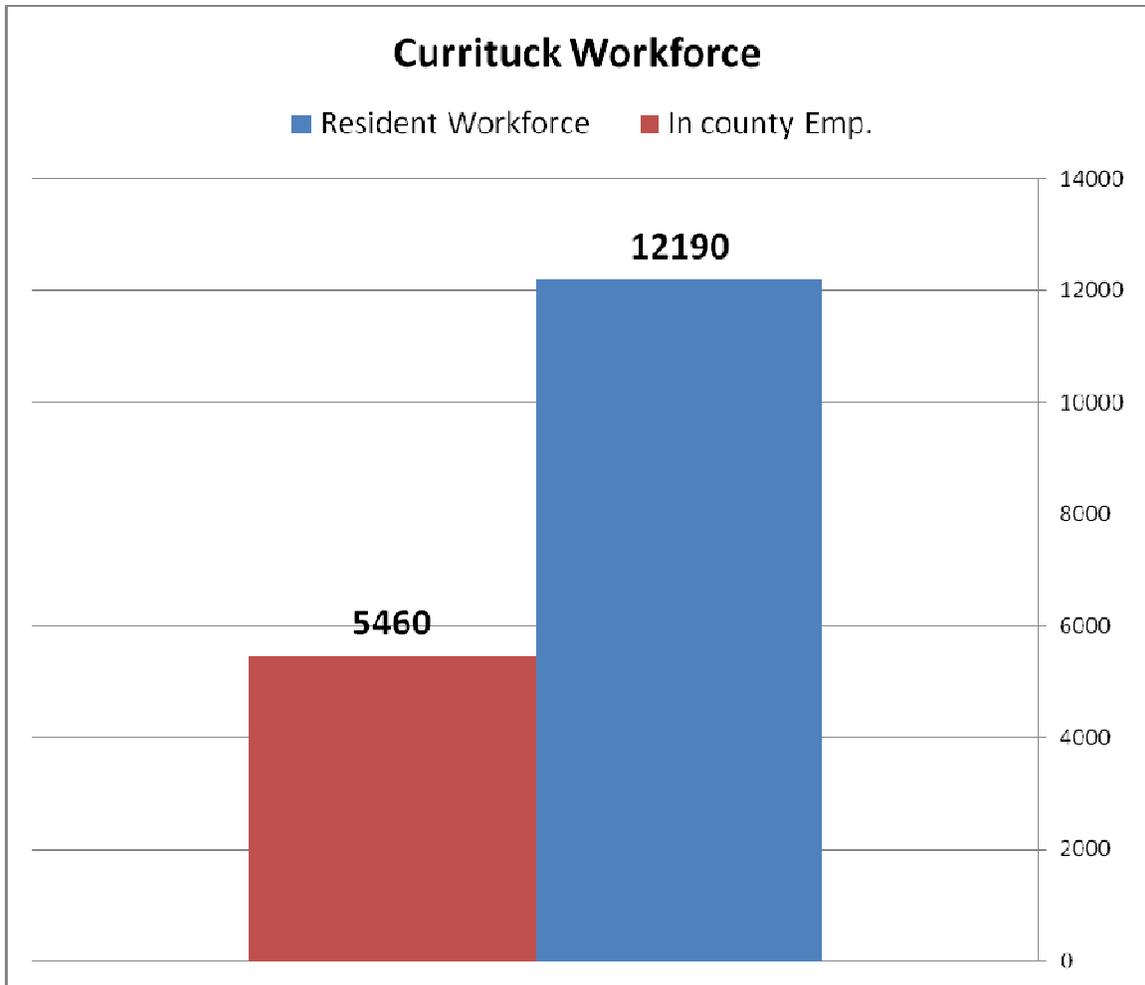
Table 6

Workplace Name	# of Currituck out-commuters	% of Currituck out-commuters
Dare Co. NC	1,539	26.9%
Chesapeake City VA	1,270	22.2%
Virginia Beach City VA	1,032	18.0%
Norfolk City VA	771	13.5%
Pasquotank Co. NC	428	7.5%
Portsmouth City VA	171	3.0%
Camden Co. NC	59	1.0%
Prince George's Co. MD	53	0.9%
Richmond City VA	49	0.9%
Chowan Co. NC	36	0.6%
Suffolk City VA	33	0.6%
Newport News City VA	31	0.5%
All Others	250	4.4%

Currituck Workforce

■ Residents ■ In County





Currituck’s Resident Labor Resources

As indicated in the introduction, the data presented thus far on Currituck County’s workforce has been on *place of employment* data. The prevalence and availability of data by place of employment makes its use common in the economic development field; however, the data will not capture a county’s true resident labor pool if the commute rate is high. In this section, we present data on Currituck County’s workforce based on *place of residence* in order to capture industry sectors for which the county already has a skilled labor force in place, but that currently are commuting elsewhere.

Table 7 provides the location quotients for both place of employment (CEW) and place of residence (Census) for 2000. Place of employment data show that the Currituck County has high relative employment levels (ranked from high to low) in real estate, agriculture, arts, construction, public administration, retail trade, education, and hospitality services. In contrast, place of residence data indicate that Currituck County has high relative levels of construction, real estate, public administration, agriculture, hospitality, retail trade, wholesale trade, mining, miscellaneous services, and administration services. Arts and education drops out of the Census data, indicating that these sectors’ employment is

largely imported from other areas in the region into Currituck. The “% difference in estimates” column indicates the percent difference between the two data sources; negative numbers indicate that Currituck County is a net importer of employment in the industry, while positive numbers indicate that Currituck is a net exporter of labor in the industry. The difference in the utilities sector appears noticeably larger than other sectors, but this may be a function of low employment numbers in the sector that in percentage terms are large. Any percent difference greater than 25% in either direction, particularly in industries with LQ’s at or above 1.0, is worth examining further for particular dynamics in the industry.

Table 7

NAICS	NAICS Description	2000 LQ	2000 LQ	# difference	%difference
		CEW	Census	in estimates	in estimates
11	Agriculture	2.45	1.66	(0.79)	-32%
21	Mining	-	1.10	1.10	NA
22	Utilities	0.04	0.92	0.88	2310%
23	Construction	1.96	2.47	0.51	26%
31-33	Manufacturing	0.22	0.48	0.27	124%
42	Wholesale Trade	0.66	1.13	0.47	70%
44-45	Retail Trade	1.73	1.19	(0.54)	-31%
48-49	Transportation	0.44	0.89	0.46	104%
51	Information	-	0.61	0.61	NA
52	Finance	0.24	0.49	0.24	100%
53	Real Estate	4.69	1.89	(2.80)	-60%
54	Science/Tech	0.55	0.40	(0.15)	-27%
56	Administration	0.37	1.00	0.62	167%
61	Education	1.68	0.86	(0.81)	-49%
62	Healthcare	0.53	0.65	0.12	22%
71	Arts	2.09	0.78	(1.31)	-62%
72	Hospitality	1.39	1.25	(0.14)	-10%
81	Misc. Services	0.73	1.09	0.36	49%
92	Public Admin	1.76	1.70	(0.05)	-3%

Table 8 updates these two data sources to 2006 using average industry growth levels for the area to derive comparable estimates. Place of residence data indicate a strong competitive advantage in utilities that is entirely missing from the place of employment

data. The advantage in arts, education, and hospitality industries shown to be important in the place of employment data (CEW) is not reflected in the place of residence data. Again, this indicates that employment in these sectors is largely imported from other areas in the region as in table 7.

NAICS	NAICS Description	2006 LQ		# difference in estimates	%difference in estimates
		CEW	Census Based		
11	Agriculture	1.58	2.27	0.69	44%
21	Mining	0.16	0.96	0.81	513%
22	Utilities	0.04	1.39	1.35	3351%
23	Construction	2.37	3.03	0.65	27%
31-33	Manufacturing	0.24	0.52	0.28	116%
42	Wholesale Trade	0.68	0.93	0.25	37%
44-45	Retail Trade	2.43	1.15	(1.28)	-53%
48-49	Transportation	0.70	0.92	0.23	33%
51	Information	0.23	0.79	0.56	238%
52	Finance	0.42	0.54	0.12	28%
53	Real Estate	7.63	2.17	(5.46)	-72%
54	Science/Tech	0.35	0.42	0.07	19%
56	Administration	0.66	0.47	(0.18)	-28%
61	Education	1.98	0.86	(1.12)	-56%
62	Healthcare	0.39	0.65	0.25	64%
71	Arts	3.99	0.82	(3.17)	-79%
72	Hospitality	1.74	0.95	(0.78)	-45%
81	Misc. Services	1.32	1.61	0.28	21%
92	Public Admin	2.05	1.67	(0.38)	-19%

Appendix C: Currituck Industry Cluster Characterization

The industry cluster analysis further describes Currituck’s business development opportunities.

Introduction

This section of the report contains an industry cluster analysis for Currituck County in the context of the Hampton Roads metropolitan area including Virginia counties in the southern portion of the Hampton Roads economic sub-region. This analysis will identify industry groups for which the research region demonstrates current and emerging competitive advantages, including identification of industry clusters for which Currituck may benefit from synergies with the adjacent Hampton Roads economy.

Industry clusters consist of co-located, interconnected business sectors. The major types of industry clusters are buyer-supplier relationships and research and development (R&D) institutions with business sectors that benefit from their close proximity. Clusters arise out of the linkages that span across industries in a particular location.²

The concept of industry clusters reaches back to Alfred Marshall’s (1920) “industry districts” in which he noted the location of small, specialized firms that benefited from each other’s labor, knowledge, and skills. Michael Porter’s *Competitive Advantage of Nations* (1998) revived this notion to argue that the economic advantage of areas is derived from the development of inter-related industries benefiting from each other’s labor, production inputs, or research activities.

Clusters are artificial constructs created by the manipulation of data on individual industries. Conceptually, a cluster is a group of businesses that are connected together in meaningful ways, most commonly, by trade (or in technical jargon, by input-output linkages), shared labor pool, or utilization of similar technologies. Industries comprising a cluster likely have similar needs in terms of infrastructure and business support services, and by definition, seek proximity to other members of the cluster. For those reasons, clusters are an attractive focus for economic development policy. Public provision of (or subsidy for) cluster-specific infrastructure and services can be justified because of the appeal of the infrastructure and services to many businesses, and the successful development of a cluster is likely to result in the creation of many jobs, large payrolls, and related positive outcomes.

The Center for Competitive Economies (C3E) in the Kenan-Flager Business School at UNC-Chapel Hill utilizes “national benchmark clusters” identified by former UNC Professor Ed Feser. Dr. Feser’s methodology uses a quantitative procedure to manipulate national-level data.³ An intuitive explanation of the procedure is that it groups together

² Porter, *The Competitive Advantage of Nations*, 1998.

³ Ed Feser’s National Benchmark Clusters are publicly available at <http://www.urban.uiuc.edu/faculty/feser/publications.html>

industries based on the strength of their sales of inputs and outputs to each other. The resulting cluster is likely to contain businesses belonging to some very different industries.

Identifying Currituck County's Industry Clusters

In practice the identification of county-level industry clusters is problematic for several reasons.

1. Most counties operate within the context of a regional economy; therefore, it is best to examine industry clusters on a regional basis to gain the most accurate determination of a county's current and emerging industry clusters.
2. In counties with a small population (such as Currituck), availability of industry sector data is often suppressed to prevent identification of employment and wage rates for specific businesses. Therefore, approaching industry cluster analysis on a regional basis generates a more complete result and is more likely to contain industry sector data suppressed at the county level.
3. In counties with a high out commuting rate (such as Currituck), the lack of existing employment for residents within the county often understates the county's ability to support industry clusters that are present in the region but do not have a strong presence in the county of study.

For these reasons, industry cluster analysis is conducted on a regional basis.

Economic Development Synergy with Hampton Roads' Economy

Currituck County's location as a bedroom community for the Hampton Roads metropolitan area obscures the local economy and market potential for prospective retailers, business development interests, and site selection consultants. However, with proper infrastructure, Currituck County may develop into an advantageous location for companies seeking proximity to the Hampton Roads industrial clusters.

Currituck County's adjacency to the State of Virginia and market linkages to the Southern Hampton Roads region further complicates the practice of industry cluster analysis by requiring researchers to obtain and aggregate data from both North Carolina and Virginia state employment agencies. Aggregation and manipulation of employment data across a potential of 60 industry clusters is very labor intensive and adds considerable time and cost to a research project. The C3E team was able to capitalize on prior research on suitable industry clusters for the North Carolina's Northeast Partnership and recent economic development planning in Currituck County to limit duplication of prior analyses. Given the time limitations for completing this feasibility study, this approach gave C3E more time to explore the suitability of the targeted clusters for a green industrial park and to better identify prospects for targeted recruitment to Currituck County.

In April 2005, C3E completed a detailed industry cluster analysis for North Carolina's Northeast Partnership (now North Carolina's Northeast Commission). This analysis

identified six industry clusters with increasing competitiveness in both NCNE region and Southern Hampton Roads.

1. Wood products and furniture
2. Metalworking and fabricated metal products
3. Printing and publishing
4. Higher education and hospitals
5. Basic health services
6. Hotels and transportation services

The study also identified five additional industry clusters that were competitive and growing within the Southern Hampton Roads region, but were virtually nonexistent within Northeast North Carolina.

1. Aluminum products (primarily ship building)
2. Nonresidential building products
3. Information services
4. Business services
5. Financial services

These clusters represented industries which could take advantage of costs and regional proximity by locating facilities in Northeast North Carolina. Research suggests that there is rarely wide annual variation in cluster specialties, and the clusters identified in the report three years ago remain viable for targeting today. As part of this study, C3E further refined the NCNE industry cluster list to better differentiate the industry clusters where Currituck County possessed the strongest competitive advantage.

Targeting Clusters for Currituck County

Databases of information were compiled on the current Hampton Roads area corporate population of each of the potential industry clusters. Those cluster populations were investigated to identify and describe corporate location behavior. The criteria selected for use in targeting clusters for Currituck County included:

- **Traded Status:** A strong selection preference for traded industry clusters was used to maximize the economic benefit. **Traded clusters** are those that bring new income into the regional economy from outside. Such is clearly the case for manufacturing firms that produce goods for export, thus importing new income to the local economy. While perhaps less obvious, the same is also true for service and retail businesses whose primary markets are non-local
- **Location Quotient Trend:** A selection preference was used for industry clusters exhibiting high or strengthening Location Quotients (LQs) for the region and the region's rural counties. LQs are an indicator of relative cluster strength by measuring the share of local employment in a given industry cluster relative to a national average employment share in that same cluster.
- **Density:** A selection preference was used for industry clusters exhibiting high levels of "Cluster Density," a measure of the extent to which the cluster possesses broad presence across its constituent sub-sectors. Clusters for which the region

has pronounced competitive advantage would exhibit high LQs and a large population of firms throughout the cluster’s constituent subcategories.

- **Rural Location Proclivity:** A selection preference was used for industry clusters demonstrating significant level of rural location by constituent companies, measured as a percent of total firms of the cluster located in rural areas of the Hampton Roads Metropolitan Statistical Area (MSA).
- **Locally-Based/Headquartered Population:** A selection preference was used for industry clusters with substantial populations of regionally based headquarters (HQs). Local HQs are considered preferable for maximum economic development and sustainability.
- **Medium and Small Enterprises (MSE) Population:** A selection preference was used for industry clusters with significant populations of Medium and Small Enterprises (MSEs), mid-scale firms with facility, workforce (20-250) and resource requirements more appropriate to Currituck County.
- **Mean Wages:** A selection preference was used for industry clusters with higher average wage rates.

Industry cluster analysis identified industry sectors where the proximity of the Hampton Roads metropolitan area creates opportunities for Currituck County economic development. Six strong and emerging industry clusters were identified for which strengthened transportation, utility, and infrastructure offerings could position Currituck County to serve as a location for firms attracted to or expanding within those industry clusters:

1. Aluminum products (ship building)
2. Basic health services
3. Metalworking and fabricated metal products
4. Information services
5. Business services
6. Non-residential building products

Major Industry Sectors Comprising Each Cluster

However, the list below briefly describes the major industry sectors comprising each cluster. An additional cluster—financial services and insurance—was identified as another prospective area of cluster focus. Yet, most of the components for this cluster are contained in business services and information services; therefore it was not profiled or targeted separately.

1) Aluminum products (ship building)

- Aluminum sheet, plate & foil manufacturing

- Primary aluminum production
- Ship building & repair
- Metal can, box & other container manufacturing
- Copper rolling, drawing & extruding
- Sheet metal work manufacturing
- Iron & steel mills
- Blind & shade manufacturing

2) Basic health services

- Offices of physicians, dentists & other health practitioners
- Other ambulatory health care services
- Facilities support services
- Electro-medical apparatus manufacturing
- Pharmaceutical & medicine manufacturing
- Surgical & medical instrument manufacturing
- Surgical appliance & supplies manufacturing
- Environmental & other technical consulting services

3) Metalworking and fabricated metal products

- Ornamental & architectural metal work manufacturing
- Power boiler & heat exchanger manufacturing
- Metal tank, heavy gauge, manufacturing
- Prefabricated metal buildings & components
- Fabricated structural metal manufacturing
- Metal window & door manufacturing
- Fabricated pipe & pipe fitting manufacturing
- Steel wire drawing
- Industrial & commercial fan & blower manufacturing

4) Information services (includes finance and insurance components)

- Data processing services
- Computer systems design services
- Custom computer programming services
- Software publishers
- Electronic equipment repair & maintenance
- Telecommunications
- Advertising & related services
- Investigation & security services
- Travel arrangement & reservation services
- Photographic services

5) Business services (includes finance and insurance components)

- Accounting & bookkeeping services

- Advertising & related services
- Architectural & engineering services
- Legal services
- Management consulting services
- Machinery & equipment rental & leasing
- Environmental & other technical consulting services
- Specialized design services
- Sound recording industries
- Custom computer programming services

6) Nonresidential building products

- Fiber optic cable manufacturing
- Other communication & energy wire manufacturing
- Paint & coating manufacturing
- Engineered wood member & truss manufacturing
- Switchgear & switchboard apparatus manufacturing
- Architectural & engineering services
- Ornamental & architectural metal work manufacturing
- Ceramic wall & floor tile manufacturing
- Lighting fixture manufacturing

Targeted Cluster Profiles

A profile for existing headquarters, branch plant, and sole location was developed for each cluster. This profile differentiated between more urban areas in the region (Chesapeake and Virginia Beach in Virginia) and more rural counties in the region (Suffolk County, VA and Camden, Currituck, Gates, and Pasquotank Counties in North Carolina).

The headquarters location for each branch plant was then identified by state to ascertain whether headquarters located in some states were more likely to choose the SHR/NENC region for branch plant locations. A profile of each headquarters and sole location of industry cluster firms was then developed for the states with a prior history of locating facilities in the SHR/NENC.

This profile includes the average employment, average sales/revenue, and average facility size for each headquarters and sole location. Measures such as average revenue per employee, average revenue per square foot, and average revenue per employee per square foot were used to determine the industry averages for both headquarters and sole locations. Headquarters and sole locations with much higher than average revenue per employee per square foot were selected as recruitment targets. These measures roughly approximate that these headquarters and sole locations are growing firms and, therefore, more likely to seek relocation or new branch plant sitings.

The following outlines the methodology utilized to identify targets of opportunity within each cluster. We began identifying the branch plants located within the Southern Hampton Roads (SHR) and Northeast North Carolina Region (NENC) for each industry cluster using establishment level data from Dun and Bradstreet’s Million Dollar Database, which identifies companies with at least one million dollars in annual revenue.

Aluminum Products (for Ship Building)

Establishment level data revealed only five branch plants for the aluminum cluster in the SHR/NENC region. These firms were headquartered in Virginia, Alabama, Maryland, Pennsylvania, and Washington. The average facility size for rural counties was 13,800 square feet, and the average employment was 27. *(Note: Clusters are not mutually exclusive and overlap exists between aluminum and metal. Three rural county companies in metal and aluminum clusters are the same, which explains similar profile results.)*

Aluminum Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	12	100%	10	100%	2	100%
HQ	0	0%	0	0%	0	0%
Branch	5	42%	4	40%	1	50%
Sole Locations	7	58%	6	60%	1	50%

Aluminum Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	20,442	21,770	13,800
Average Employment	45	49	27
Average Annual Revenue	\$5,860,865	\$5,680,938	\$6,760,500
Average revenue per employees	\$139,126	\$113,939	\$265,063
Average revenue per sq foot	\$287	\$253	\$457
Average revenue per employee per s.f.	\$6.81	\$5.23	\$19.21

An average company profile was developed for headquarters and sole locations located in these targeted states. A total population of 687 facilities (557 headquarters and 130 sole locations) was identified in the five targeted states. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Aluminum Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=557)	Sole Locations (n=130)
Average facility size in sq.ft.	124,981	49,429
Average employment	96	64
Average annual revenue	\$55,261,814	\$8,948,620
Average revenue per employees	\$576,938	\$139,229
Average revenue per sq foot	\$442	\$181
Average revenue/employee per s.f.	\$4.62	\$2.82

The total population of 687 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster.

Basic Health Services

Establishment level data revealed 359 branch plants for the health cluster in the SHR/NENC region. Thirty-six percent of these firms were headquartered in Virginia. The average facility size for rural counties was 11,621 square feet and the average employment was 28.

Basic Health Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	1124	100%	972	100%	152	100%
HQ	163	15%	138	14%	25	16%
Branch	359	32%	312	32%	47	31%
Sole Locations	602	54%	522	54%	80	53%

Basic Health Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	9,909	9,636	11,621
Average Employment	36	38	28
Average Annual Revenue	\$7,857,246	\$7,828,150	8,042,037
Average revenue per employees	\$299,804	\$292,379	\$346,563
Average revenue per sq foot	\$959	\$903	\$1,302
Average revenue/employee per s.f.	\$30.26	\$30.34	\$29.82

Basic health services are less likely to be targeted on a nationwide basis, and health service providers are more likely to work within metropolitan or state regions. Eight thousand headquarters and sole locations were identified in the basic health cluster in the state of Virginia. Currituck County is more likely to have success targeting emerging growth companies in the basic health cluster, which are already headquartered or are sole locations in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA).

An average company profile was developed for headquarters and sole locations located in this MSA. A total population of 1,707 facilities (389 headquarters and 1,318 sole locations) was identified in the Virginia Beach-Norfolk-Newport News MSA. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations. The presence of several large outliers increased the average for headquarters.

Basic Health Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=389)	Sole Locations (n=1,318)
Average facility size in sq.ft.	24500	12,639
Average employment	61	46
Average annual revenue	\$38,584,437	\$6,367,125
Average revenue per employees	\$1,486,625	\$101,489
Average revenue per sq foot	\$3,723	\$372
Average revenue/employee per s.f.	\$60.68	\$8.03

The total population of 1,707 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster.

Metalworking and Fabricated Metal Products

Establishment level data revealed only five branch plants for the metal cluster in the SHR/NENC region. Firm headquarters were evenly distributed across Alabama, Maryland, Ohio, Pennsylvania, and Virginia. The average facility size for rural counties was 13,800 square feet, and the average employment was 27. *(Note: Clusters are not mutually exclusive and overlap exists between aluminum and metal. Three rural county companies in metal and aluminum clusters are the same, which explains similar profile results.)*

Metal Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	18	100%	16	100%	2	100%
HQ	1	6%	1	6%	0	100%
Branch	5	28%	4	25%	1	50%
Sole Locations	12	67%	11	69%	1	50%

Metal Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	18,572	19,169	13,800
Average employment	59	63	27
Average Annual Revenue	\$8,955,921	\$9,230,348	\$6,760,500
Average revenue per employees	\$264,961	\$264,948	\$265,063
Average revenue per sq foot	\$662	\$688	\$457
Average revenue/employee per s.f.	\$14.27	\$13.82	\$19.21

An average company profile was developed for headquarters and sole locations in the targeted states. A total population of 2,593 facilities (609 headquarters and 1,984 sole

locations) was identified in the five targeted states. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Metal Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=609)	Sole Locations (n=1,984)
Average facility size in sq.ft.	89,515	39,601
Average employment	84	44
Average annual revenue	\$38,584,437	\$6,367,125
Average revenue per employees	\$457,755	\$145,819
Average revenue per sq foot	\$431	\$161
Average revenue/employee per s.f.	\$5.11	\$3.68

The total population of 2,593 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster.

Information Services

Establishment level data for revealed 278 branch plants for the information services cluster in the SHR/NENC region. The majority of firms were headquartered in Virginia. A much smaller set was headquartered in North Carolina. The average facility size for rural counties was 14,443 square feet, and the average employment was 32.

Information Services Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	770	100%	670	100%	100	100%
HQ	113	15%	95	14%	18	18%
Branch	278	36%	241	36%	37	37%
Sole Locations	379	49%	334	50%	45	45%

Information Services Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	11,077	10,569	14,443
Average Employment	31	31	32
Average Annual Revenue	\$8,422,053	\$7,935,673	\$11,674,416
Average revenue per employees	\$416,816	\$410,048	\$470,419
Average revenue per sq foot	\$1,106	\$1,007	\$1,790
Average revenue/employee per s.f.	\$37.63	\$38.80	\$32.57

Information services may be targeted on a nationwide basis, but the profile demonstrated that companies in the region are more likely to be headquartered in Virginia. Over six thousand headquarters and sole locations were identified in the cluster in the state of Virginia. Currituck County is more likely to have success targeting emerging growth companies in the information services cluster which are already headquartered or are sole locations in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) and the Richmond-Petersburg MSA. Both offer closer proximity to Camden than other metro regions. An average company profile was developed for headquarters and sole locations located in this MSA.

A total population of 1,023 facilities (241 headquarters and 782 sole locations) was identified in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) and the Richmond-Petersburg MSA. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations. The presence of several large outliers increased the average for headquarters.

Information Services		
Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=241)	Sole Locations (n=782)
Average facility size in sq.ft.	30,947	11,691
Average employment	41	20
Average annual revenue	\$ 128,180,101	\$6,010,886
Average revenue per employees	\$3,127,293	\$298,939
Average revenue per sq foot	\$4,142	\$514
Average revenue/employee per s.f.	\$101.05	\$25.57

The total population of 1,023 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster.

Business Services

Establishment level data revealed 557 branch plants for the business services cluster in the SHR/NENC region. Over fifty percent of these facilities were headquartered in Virginia or North Carolina. The average facility size for rural counties was 11,877 square feet, and the average employment was 33.

Business Services Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	1397	100%	1220	100%	177	100%
HQ	197	14%	173	14%	24	14%
Branch	557	40%	487	40%	70	40%
Sole Locations	643	46%	560	46%	83	47%

Business Services Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	10,873	10,810	11,877
Average Employment	36	36	33
Average Annual Revenue	\$8,742,714	\$8,558,535	\$10,054,563
Average revenue per employees	\$404,680	\$377,583	\$592,166
Average revenue per sq foot	\$1164	\$1077	\$1,736
Average revenue/employee per s.f.	\$37.21	\$34.93	\$49.86

Cluster analysis usually focuses on traded clusters, or those clusters comprised of traded industries that sell products and services outside the region. By focusing on industries that export services and import revenue, regions are more likely to grow economically. However, the lack of general business services, including retail, within Currituck County

makes the business services cluster an appropriate target. A targeted profile was developed based on business service cluster companies that are headquartered or sole locations in the Chesapeake and Virginia Beach areas.

Thousands of headquarters and sole locations were identified in the business services cluster in North Carolina and Virginia. Currituck County is more likely to have success targeting a smaller subset of emerging growth companies in the business services cluster that are already located in the Virginia Beach and Chesapeake areas. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Business Services Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=128)	Sole Locations (n=396)
Average facility size in sq.ft.	36,153	11,277
Average employment	53	22
Average annual revenue	\$222,196,982	\$5,041,031
Average revenue per employees	\$4,197,965	\$230,914
Average revenue per sq foot	\$6,146	\$447
Average revenue/employee per s.f.	\$116.12	\$20.48

The total population of 524 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster.

Non-residential Building Products

Over fifty percent of the branch plants for the non-residential building cluster in the SHR/NENC region are headquartered in Virginia, Maryland, or North Carolina. The average facility size for rural counties was 6,000 square feet, and the average employment was 21. Over 93 percent of the firms in this cluster were concentrated in the metro areas of Chesapeake and Virginia Beach. The small number of firms in rural counties in the region had much smaller average facility sizes, but similar profit levels, which explains the larger revenue per employee per square foot calculation.

Non-residential Building Products Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	132	100%	123	100%	9	100%
HQ	22	17%	21	17%	1	11%
Branch	53	40%	50	41%	3	33%
Sole Locations	57	43%	52	42%	5	56%

Non-residential Building Products Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	17,365	18,218	6,000
Average Employment	73	77	21
Average Annual Revenue	\$17,126,621	\$17,949,305	\$4,163,131
Average Revenue per Employee	\$186,117	\$180,898	\$255,136
Average Revenue per sq Foot	\$964	\$981	\$746
Average Revenue/Employee per s.f.	\$10.72	\$9.93	\$42.52

The limited number of non-residential building products companies in rural counties in the region suggests Currituck County may have limited opportunities to attract large firms in this cluster. Over one thousand and four hundred headquarters and sole locations were identified in the cluster in the North Carolina and Virginia. Currituck County is more likely to have success targeting emerging growth companies in this cluster that are already headquartered or are sole locations in the these states. An average company profile was developed for headquarters and sole locations located in these states. A total population of 1,421 facilities (344 headquarters and 1,077 sole locations) was identified in the North Carolina and Virginia. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Non-Residential Building Products		
Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=344)	Sole Locations (n=1,077)
Average facility size in sq.ft.	25,880	13,240
Average employment	71	42
Average annual revenue	\$25,749,572	\$3,858,079
Average revenue per employees	\$360,794	\$92,146
Average revenue per sq foot	\$995	\$291
Average revenue/employee per s.f.	\$13.94	\$6.96

The total population of 1,421 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. The most appropriate targets for recruitment and expansion into Camden County will be those who are identified as having higher revenues than their industry peers given the company’s size and employment levels.

Appendix D: Currituck Targeted Industry Prospects Identification

Prospect Profile

Databases of information were compiled on the current Hampton Roads area corporate population of each of the potential industry clusters. Those cluster populations were investigated to identify and describe the characteristics of companies exhibiting location behavior favoring a Currituck County site. While there was significant variation in those companies, a general profile was developed to assist in targeting prospects:

Single locations and small headquarters

- Identified companies were not subsidiaries or branch plants; instead they were independently owned, entrepreneurial firms.

Smaller but growing

- A majority of the companies were of modest scale, employing 25 to 75 people in facilities ranging from 25,000 to 75,000 square feet.

Higher value added

- Many of the companies exhibited the profile of firms poised for expansion, posting high revenues per employee ratios, particularly given their modest facility scale.

The following outlines the methodology utilized to identify targets of opportunity within each cluster. A list of growing companies suitable for recruitment is attached in Appendix 2-A. We began identifying the branch plants located within the Southern Hampton Roads (SHR) and Northeast North Carolina Region (NENC) for each industry cluster using establishment level data from Dun and Bradstreet's Million Dollar Database, which identifies companies with at least one million dollars in annual revenue.

A profile for existing headquarters, branch plant, and sole location was developed for each cluster. This profile differentiated between more urban areas in the region (Chesapeake and Virginia Beach in Virginia) and more rural counties in the region (Suffolk County, VA and Camden, Currituck, Gates, and Pasquotank Counties in North Carolina).

The headquarters location for each branch plant was then identified by state to ascertain whether headquarters located in some states were more likely to choose the SHR/NENC region for branch plant locations. A profile of each headquarters and sole location of industry cluster firms was then developed for the states with a prior history of locating facilities in the SHR/NENC. This profile includes the average employment, average sales/revenue, and average facility size for each headquarters and sole location. Measures such as average revenue per employee, average revenue per square foot, and average revenue per employee per square foot were used to determine the industry averages for both headquarters and sole locations. Headquarters and sole locations with much higher than average revenue per employee per square foot were selected as recruitment targets.

These measures roughly approximate that these headquarters and sole locations are growing firms and, therefore, more likely to seek relocation or new branch plant sitings.

Targeted Cluster Profiles

Aluminum Products (for Ship Building)

Establishment level data revealed only five branch plants for the aluminum cluster in the SHR/NENC region. These firms were headquartered in Virginia, Alabama, Maryland, Pennsylvania, and Washington. The average facility size for rural counties was 13,800 square feet, and the average employment was 27. *(Note: Clusters are not mutually exclusive and overlap exists between aluminum and metal. Three rural county companies in metal and aluminum clusters are the same, which explains similar profile results.)*

Figure 2.23

Aluminum Cluster						
	All Counties		Urban Counties		Rural Counties	
	Number	Percent	Number	Percent	Number	Percent
All Companies	12	100%	10	100%	2	100%
HQ	0	0%	0	0%	0	0%
Branch	5	42%	4	40%	1	50%
Sole Locations	7	58%	6	60%	1	50%

Figure 2.24

Aluminum Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	20,442	21,770	13,800
Average Employment	45	49	27
Average Annual Revenue	\$5,860,865	\$5,680,938	\$6,760,500
Average revenue per employees	\$139,126	\$113,939	\$265,063
Average revenue per sq foot	\$287	\$253	\$457
Average revenue per employee per s.f.	\$6.81	\$5.23	\$19.21

An average company profile was developed for headquarters and sole locations located in these targeted states. A total population of 687 facilities (557 headquarters and 130 sole locations) was identified in the five targeted states. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Figure 2.25

Aluminum Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=557)	Sole Locations (n=130)
Average facility size in s.f.	124,981	49,429
Average employment	96	64
Average annual revenue	\$55,261,814	\$8,948,620
Average revenue per employees	\$576,938	\$139,229
Average revenue per sq foot	\$442	\$181
Avg revenue per employee per s.f.	\$4.62	\$2.82

The total population of 687 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. Forty-one companies (6% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Basic Health Services

Establishment level data revealed 359 branch plants for the health cluster in the SHR/NENC region. Thirty-six percent of these firms were headquartered in Virginia. The average facility size for rural counties was 11,621 square feet and the average employment was 28.

Figure 2.26

Basic Health Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	1124	100%	972	100%	152	100%
HQ	163	15%	138	14%	25	16%

Branch	359	32%	312	32%	47	31%
Sole Locations	602	54%	522	54%	80	53%

Figure 2.27

Basic Health Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	9,909	9,636	11,621
Average Employment	36	38	28
Average Annual Revenue	\$7,857,246	\$7,828,150	8,042,037
Average revenue per employees	\$299,804	\$292,379	\$346,563
Average revenue per sq foot	\$959	\$903	\$1,302
Average revenue per employee per s.f.	\$30.26	\$30.34	\$29.82

Basic health services are less likely to be targeted on a nationwide basis, and health service providers are more likely to work within metropolitan or state regions. Eight thousand headquarters and sole locations were identified in the basic health cluster in the state of Virginia. Currituck County is more likely to have success targeting emerging growth companies in the basic health cluster, which are already headquartered or are sole locations in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA). An average company profile was developed for headquarters and sole locations located in this MSA. A total population of 1,707 facilities (389 headquarters and 1,318 sole locations) was identified in the Virginia Beach-Norfolk-Newport News MSA. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations. The presence of several large outliers increased the average for headquarters.

Figure 2.28

Basic Health Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=389)	Sole Locations (n=1,318)
Average facility size in s.f.	24500	12,639
Average employment	61	46
Average annual revenue	\$38,584,437	\$6,367,125
Average revenue per employees	\$1,486,625	\$101,489
Average revenue per sq foot	\$3,723	\$372
Average revenue per employee per s.f.	\$60.68	\$8.03

The total population of 1,707 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. One hundred and fifty-nine companies (9% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Metalworking and fabricated metal products

Establishment level data revealed only five branch plants for the metal cluster in the SHR/NENC region. Firm headquarters were evenly distributed across Alabama, Maryland, Ohio, Pennsylvania, and Virginia. The average facility size for rural counties was 13,800 square feet, and the average employment was 27. *(Note: Clusters are not mutually exclusive and overlap exists between aluminum and metal. Three rural county companies in metal and aluminum clusters are the same, which explains similar profile results.)*

Figure 2.29

Metal Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	18	100%	16	100%	2	100%
HQ	1	6%	1	6%	0	100%
Branch	5	28%	4	25%	1	50%
Sole Locations	12	67%	11	69%	1	50%

Figure 2.30

Metal Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	18,572	19,169	13,800
Average employment	59	63	27
Average Annual Revenue	\$8,955,921	\$9,230,348	\$6,760,500
Average revenue per employees	\$264,961	\$264,948	\$265,063
Average revenue per sq foot	\$662	\$688	\$457
Average revenue per employee per s.f.	\$14.27	\$13.82	\$19.21

An average company profile was developed for headquarters and sole locations in the targeted states. A total population of 2,593 facilities (609 headquarters and 1,984 sole locations) was identified in the five targeted states. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Figure 2.31

Metal Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=609)	Sole Locations (n=1,984)
Average facility size in s.f.	89,515	39,601
Average employment	84	44
Average annual revenue	\$38,584,437	\$6,367,125
Average revenue per employees	\$457,755	\$145,819
Average revenue per sq foot	\$431	\$161
Average revenue per employee per s.f.	\$5.11	\$3.68

The total population of 2,593 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. One hundred and ninety-seven companies (8% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Information Services

Establishment level data for revealed 278 branch plants for the information services cluster in the SHR/NENC region. The majority of firms were headquartered in Virginia. A much smaller set was headquartered in North Carolina. The average facility size for rural counties was 14,443 square feet, and the average employment was 32.

Figure 2.32

Information Services Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	770	100%	670	100%	100	100%
HQ	113	15%	95	14%	18	18%
Branch	278	36%	241	36%	37	37%
Sole Locations	379	49%	334	50%	45	45%

Figure 2.33

Information Services Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	11,077	10,569	14,443
Average Employment	31	31	32
Average Annual Revenue	\$8,422,053	\$7,935,673	\$11,674,416
Average revenue per employees	\$416,816	\$410,048	\$470,419
Average revenue per sq foot	\$1,106	\$1,007	\$1,790
Average revenue per employee per s.f.	\$37.63	\$38.80	\$32.57

Information services may be targeted on a nationwide basis, but the profile demonstrated that companies in the region are more likely to be headquartered in Virginia. Over six thousand headquarters and sole locations were identified in the cluster in the state of Virginia. Currituck County is more likely to have success targeting emerging growth companies in the information services cluster which are already headquartered or are sole locations in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) and the Richmond-Petersburg MSA. Both offer closer proximity to Currituck than other metro regions. An average company profile was developed for headquarters and sole locations located in this MSA.

A total population of 1,023 facilities (241 headquarters and 782 sole locations) was identified in the Virginia Beach-Norfolk-Newport News Metropolitan Statistical Area (MSA) and the Richmond-Petersburg MSA. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations. The presence of several large outliers increased the average for headquarters.

Figure 2.34

Information Services		
Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=241)	Sole Locations (n=782)
Average facility size in s.f.	30,947	11,691
Average employment	41	20
Average annual revenue	\$ 128,180,101	\$6,010,886
Average revenue per employees	\$3,127,293	\$298,939
Average revenue per sq foot	\$4,142	\$514
Avg revenue per employee per s.f.	\$101.05	\$25.57

The total population of 1,023 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. Ninety-one companies (9% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Business Services

Establishment level data revealed 557 branch plants for the business services cluster in the SHR/NENC region. Over fifty percent of these facilities were headquartered in Virginia or North Carolina. The average facility size for rural counties was 11,877 square feet, and the average employment was 33.

Figure 2.35

Business Services Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	1397	100%	1220	100%	177	100%
HQ	197	14%	173	14%	24	14%
Branch	557	40%	487	40%	70	40%
Sole Locations	643	46%	560	46%	83	47%

Figure 2.36

Business Services Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	10,873	10,810	11,877
Average Employment	36	36	33
Average Annual Revenue	\$8,742,714	\$8,558,535	\$10,054,563
Average revenue per employees	\$404680	\$377583	\$592,166
Average revenue per sq foot	\$1164	\$1077	\$1,736
Avg revenue per employee per s.f.	\$37.21	\$34.93	\$49.86

Cluster analysis usually focuses on traded clusters, or those clusters comprised of traded industries that sell products and services outside the region. By focusing on industries that export services and import revenue, regions are more likely to grow economically. However, the lack of general business services, including retail, within Currituck County makes the business services cluster an appropriate target. A targeted profile was developed based on business service cluster companies that are headquartered or sole locations in the Chesapeake and Virginia Beach areas.

Thousands of headquarters and sole locations were identified in the business services cluster in the North Carolina and Virginia. Currituck County is more likely to have

success targeting a smaller subset of emerging growth companies in the business services cluster that are already located in the Virginia Beach and Chesapeake areas. Five hundred and twenty four companies were identified in these areas. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Figure 2.37

Business Services		
Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=128)	Sole Locations (n=396)
Average facility size in s.f.	36,153	11,277
Average employment	53	22
Average annual revenue	\$222,196,982	\$5,041,031
Average revenue per employees	\$4,197,965	\$230,914
Average revenue per sq foot	\$6,146	\$447
Avg revenue per employee per s.f.	\$116.12	\$20.48

The total population of 524 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. Forty-seven companies (9% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in the Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Non-residential Building Products

Establishment level data revealed 53 branch plants for the non-residential building cluster in the SHR/NENC region. Over fifty percent of these facilities were headquartered in Virginia, Maryland, or North Carolina. The average facility size for rural counties was 6,000 square feet, and the average employment was 21. Over 93 percent of the firms in this cluster were concentrated in the metro areas of Chesapeake and Virginia Beach. The small number of firms in rural counties in the region had much smaller average facility sizes, but similar profit levels, which explains the larger revenue per employee per square foot calculation.

Figure 2.38

Non-residential Building Products Cluster						
	All Counties		Urban Counties		Rural Counties	
	#	%	#	%	#	%
All Companies	132	100%	123	100%	9	100%
HQ	22	17%	21	17%	1	11%
Branch	53	40%	50	41%	3	33%
Sole Locations	57	43%	52	42%	5	56%

Figure 2.39

Non-residential Building Products Cluster			
	All Counties	Urban Counties	Rural Counties
Average Facility Size	17,365	18,218	6,000
Average Employment	73	77	21
Average Annual Revenue	\$17,126,621	\$17,949,305	\$4,163,131
Average Revenue per Employee	\$186,117	\$180,898	\$255,136
Average Revenue per sq Foot	\$964	\$981	\$746
Avg Revenue per Employee per s.f.	\$10.72	\$9.93	\$42.52

The limited number of non-residential building products companies in rural counties in the region suggests Currituck County may have limited opportunities to attract large firms in this cluster. However, a green industrial park may be an attractive location for firms such as LEED (Leadership in Energy and Environmental Design) certified or other sustainable construction and design projects. Over one thousand and four hundred headquarters and sole locations were identified in the cluster in the North Carolina and Virginia. Currituck County is more likely to have success targeting emerging growth companies in the clusters that are already headquartered or are sole locations in the these states. An average company profile was developed for headquarters and sole locations located in these states. A total population of 1,421 facilities (344 headquarters and 1,077 sole locations) was identified in the North Carolina and Virginia. As expected, the headquarters had larger facility sizes, employment, and revenues when compared with sole locations.

Figure 2.40

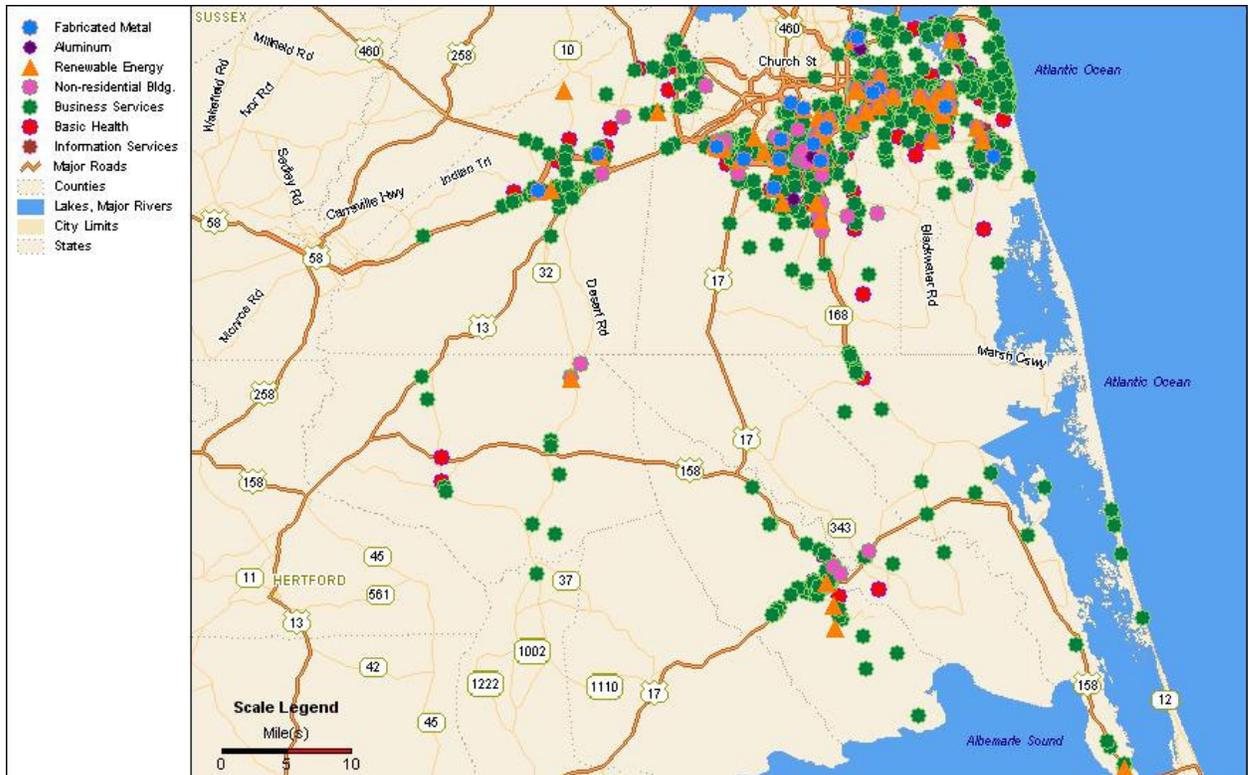
Non-Residential Building Products Cluster Headquarter and Sole Location Profile from Targeted States		
	Headquarters (n=344)	Sole Locations (n=1,077)
Average facility size in s.f.	25,880	13,240
Average employment	71	42
Average annual revenue	\$25,749,572	\$3,858,079
Average revenue per employees	\$360,794	\$92,146
Average revenue per sq foot	\$995	\$291
Avg revenue per employee per s.f.	\$13.94	\$6.96

The total population of 1,421 facilities was screened to identify those companies with average revenue per employee per square foot which was much greater than the industry norm in the industry cluster. Ninety companies (6% of the total) were identified as having higher revenues than their industry peers given the company’s size and employment levels. These companies are identified in the Appendix I as appropriate targets for recruitment and expansion into Currituck County.

Location of Existing Businesses in Targeted Clusters

In addition to profiling regional businesses and potential targets in each cluster, establishment level data were used to map the location of businesses in these industry clusters in the region. As Figure 2.43 demonstrates, there is a significant and expected concentration of businesses in the metropolitan areas of the region. With the exception of the 168 corridor, there are few businesses located in the southern portion of Virginia and few businesses in the northern portion of North Carolina. Such gaps in business locations suggest that this area, including Currituck County, has been historically avoided for business locations. This could be the result of topography, land use and zoning regulations, or infrastructure limitations.

Figure 2.43



2.D) INDUSTRY CLUSTER CONCLUSION

Currituck County may develop into an advantageous location for companies seeking proximity to the Hampton Roads industry clusters. This will require strengthened transportation, utility, and infrastructure offerings to position Currituck County to serve as a location for firms attracted to or expanding within those industry clusters.

The County should begin targeting the 625 emerging growth companies identified in each of the six industry clusters. These targeted companies are described below for each industry cluster. Each of these companies were identified as having higher revenues than their industry peers, given the company's size and employment levels

1. Aluminum products (ship building): 41 companies
2. Basic health services: 159 companies
3. Metalworking and fabricated metal products: 197 companies
4. Information services: 91 companies
5. Business services: 47 companies
6. Non-residential building products: 90 companies

Appendix E: Currituck's Tourism Economy

Currituck's strong reliance on the tourism industry is both a great strength and a great weakness for the County. Every year, millions of people flock to the Outer Banks—for Currituck, Corolla and Carova—to enjoy the natural beauty and rich history they have to offer. With Currituck and other coastal counties, this is an important source of county income, gained through taxes and outside investments. But such a heavy dependence on a market that is both seasonally active, comprised of low value-added jobs, and vulnerable to natural disasters is quite risky. Despite its overall profitability, it is unwise to place all of one's eggs into the proverbial basket, and a long-term approach to tourism and County financial management should be employed whenever possible.

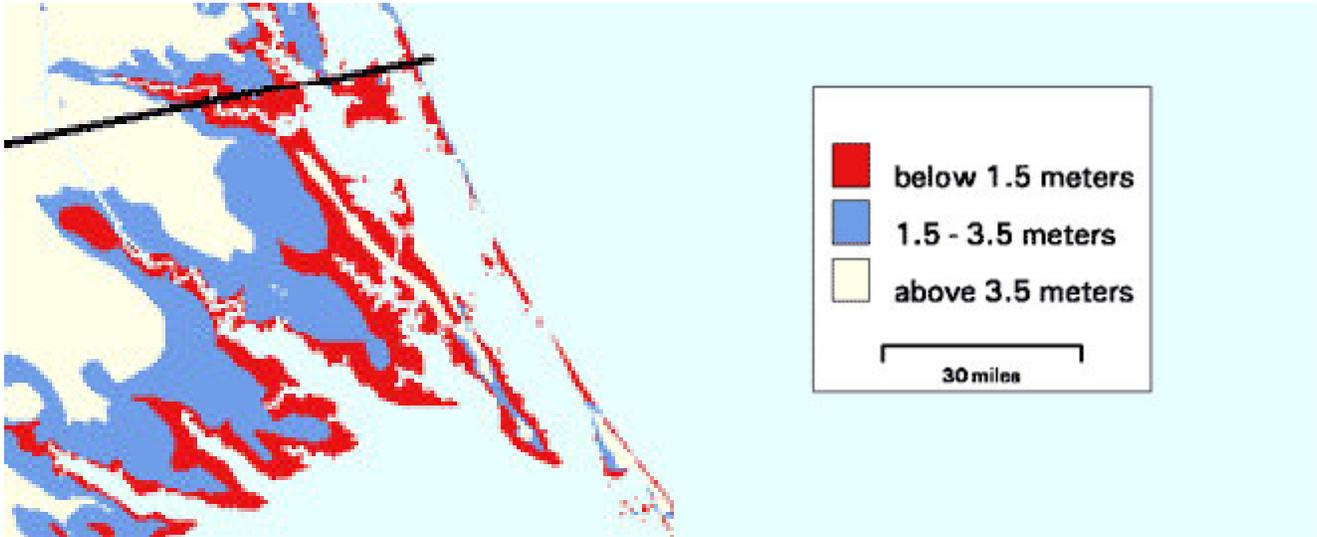
Potential for Natural Changes

Not only are the homes and businesses susceptible to damage to the ravages of nature, but so are the recreational activities that Currituck and the other Outer Banks locales offer to visitors. But with careful preparation, Currituck's tourism industry does have the capacity to be more resilient.

One of the most salient issues today, especially for coastal communities, is the possibility of rising sea levels. While disputed by many, the fact remains that the coastal landscape is changing, and considering Currituck's heavy investment in this area, the County should try to adapt accordingly. The most vulnerable area to these changes is also one of the County's most profitable: Corolla and Carova. In 2006, nearly \$13 million of the County's property taxes were levied in Corolla, about 55% of the total. These houses, in stark contrast to those on the mainland, draw an average price of \$1.1 million on the housing market, and anywhere from \$5,000-\$15,000 per week for rentals during the peak season. In addition to this, the beach houses were the effectively the sole (99.8%) source of over \$5 million in Occupancy Taxes during the 2005-2006 fiscal year, making Currituck the sixth highest grossing Occupancy Tax County in the entire state. Clearly, this is a financial base Currituck cannot afford to lose.

But in a survey of the North Carolina Coast, the US Environmental Protection Agency (EPA) estimates that almost all of Corolla and Carova, based on the elevation, is "vulnerable" to rising sea levels, either by erosion or absolute changes in water level. In its most basic form, scientists assume that a 50 centimeter rise in sea level is enough to inundate elevations of 1.5 meters (approximately five feet) and below (shown in red). In Corolla and Carova, with the exception of a few dunes, the elevation above sea level does not go above five feet. And while these estimates about vulnerability are not concrete, both EPA and US Geological Survey scientists agree that the areas further north in the Outer Banks will experience more extreme change than will their counterparts in the south.

Areas Vulnerable to Inundation, Based on Elevation

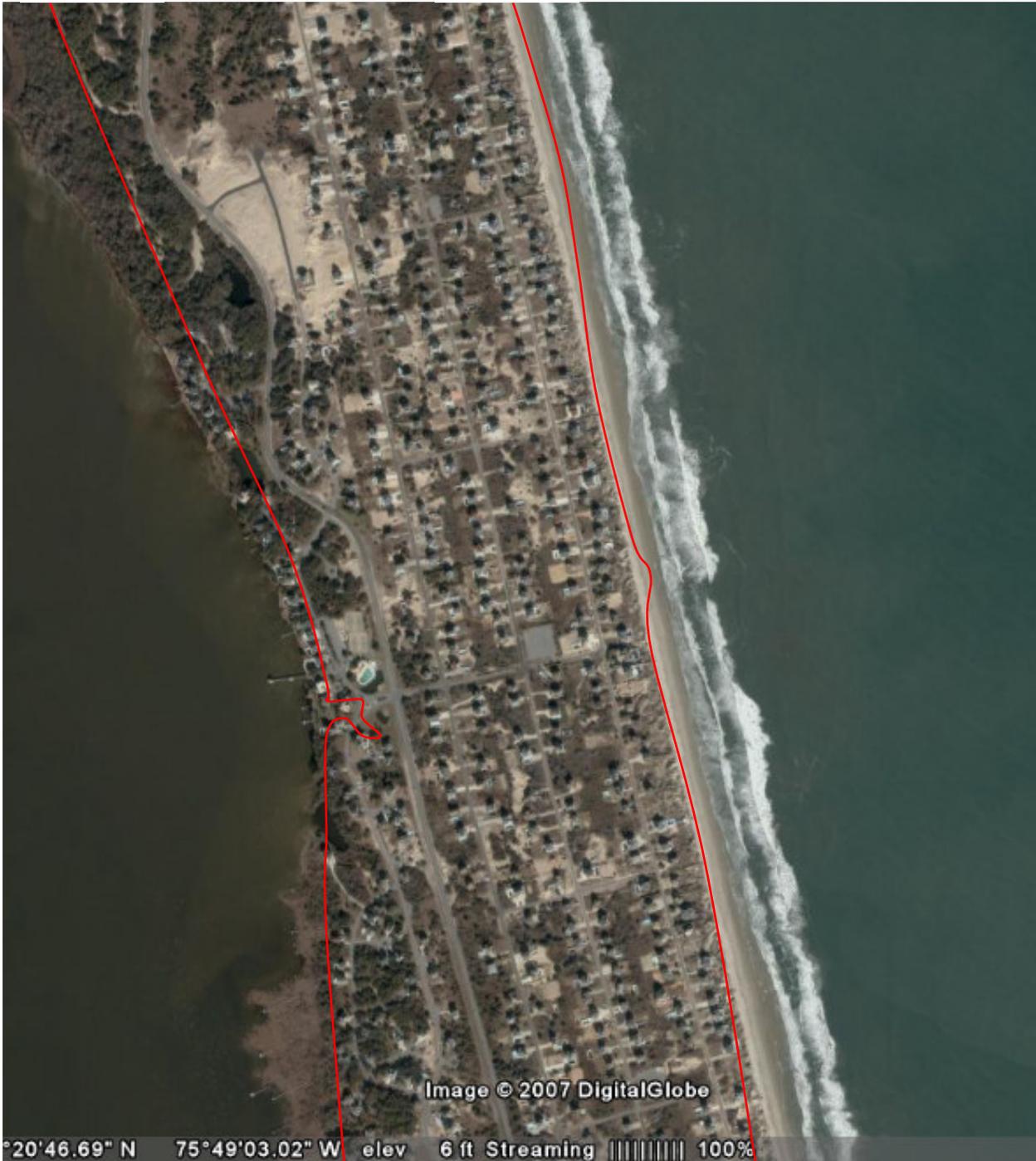


Source: US Environmental Protection Agency

Scaling back from this “inundation” model, the International Panel on Climate Change (IPCC) has developed estimates for rising sea levels over the next twenty years, postulating an increase between 11 and 21 cm by 2030 and 46 and 81 cm by 2080. Given the complex interaction of factors—temperature, erosion rates, hurricane/severe storm frequency, etc—there is currently no way to accurately estimate how these changes will manifest in reality. But in Currituck, there are currently more than 500 houses along the eastern (approximately 407) and western (approximately 96) shores that are within 250 feet of the shore and perched less than 3 feet above sea level. The rest of the housing stock on the island isn’t much further back; if the buffer is increased to 500 feet, more than 1,000 houses are within the range. And of the 7,800 total Corollan houses, 94% are owned by people/businesses located outside of Currituck County; should something happen to them, it is not as likely that the investors will feel an obligation to Currituck or its residents.

In the more immediate future, damage caused by storms (most notably, hurricanes) and floods is another vulnerable area for the County. The current coastal floodplain, as shown by the Department of Coastal Management, extends from anywhere between 300 feet on the southeastern end of the Corolla (near the bridge) to 1400 feet inland on the northeastern side of Currituck, effectively blanketing an area that already experiences localized floods during thunderstorms. The entire eastern shore of Corolla and Carova is considered is a “High Hazard” (VE) zone for flooding, while the rest of the peninsula is mostly a “Hazard Zone” (AE). With storm frequency and power expected to increase in the coming years, it is unsafe to have such a large portion of the County’s tax base resting on what is essentially the first buffer between the storm and mainland Currituck.

Aerial Photograph of Corolla



The County has even already seen some of the financial windfall from these hypotheses about natural disasters. In 2005, the construction of new homes or home renovations (that were valued at 50% of more of the original property) located in the floodplain were

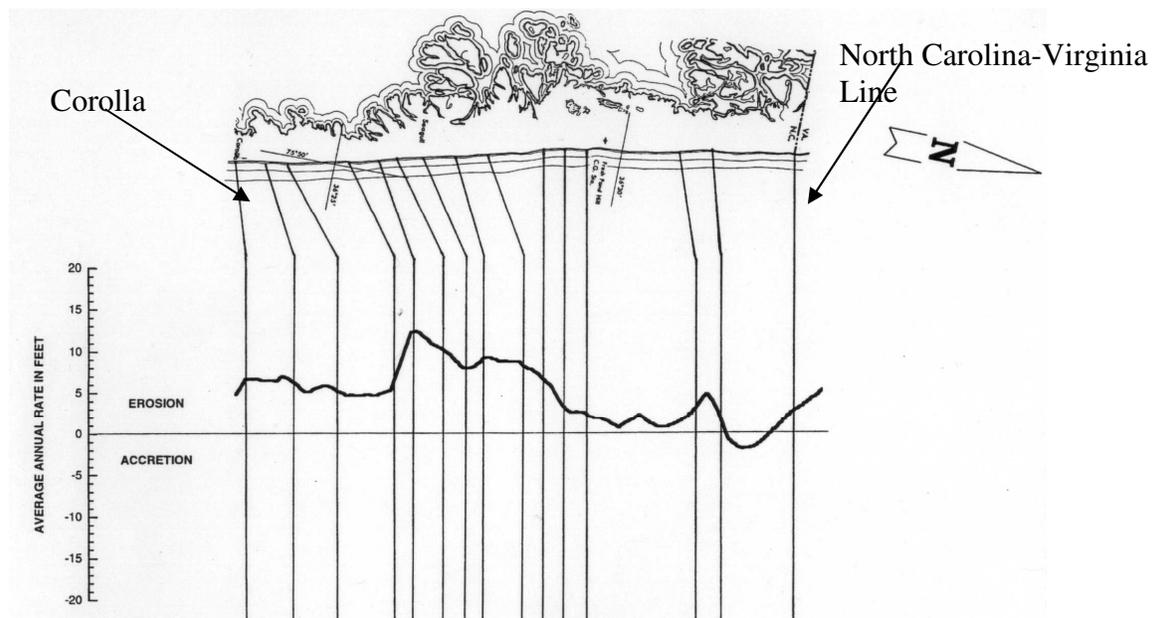
banned, and 1994, the National Flood Insurance Program stopped granting insurance coverage to those living within the 1% annual flood chance area, as dictated by Federal Emergency Management’s Flood Insurance Maps (FIRM). Insurers have also been wary about the increasing likelihood of coastal storms, citing the Outer Banks’ 1999 encounter with Hurricane Floyd and the \$105 billion in value of insured homes and commercial businesses currently located there.

Other Damages

Damages to houses do not account for the only financial losses Currituck could see in the event of natural disasters/climate change. Recreational opportunities offered in the area and the businesses that serve the visitors both face problems separate from those of the housing market.

Studies and empirical evidence has shown that the Outer Banks’ outdoor amenities, most notably its beaches, are the main draw for visitors, and this is certainly true on Corolla and Carova. Researchers have demonstrated there is a calculable, although unaccounted for, price that people are willing to pay in order to have access to the beach. The combination of this clean, safe area with opportunities for sports and recreation is of very high value indeed, and items of high value need to be cared for. Notwithstanding beach nourishment activities, the North Carolina Department of Environment and Natural Resources (DENR) estimates that Corolla’s shoreline is currently experiencing annual erosion rates of up to 12 feet per year, with the average of the entire coast at about 2.7 feet per year.

Erosion Rates for Corolla, Department of Environment and Natural Resources



Other recreational draws, such as fishing, could also be threatened by erosion. The area is currently a hub for sport fishing of largemouth bass, bluegill, yellow perch, tidewater silverside, and channel catfish, among others, and the restaurants are stocked with white perch, carp, shad, and eel also from the sound. As one of the draws for tourists to Corolla,

opportunities to should be emphasized; however, a study by researchers at Duke University, East Carolina University, and Appalachian State University estimated that the popular Corolla Beach Access ramp was losing slightly more than two feet of beach per year to erosion, more than the south's Topsail, but less than the losses in Kitty Hawk and Nags Head. This sort of issue is not necessarily a dire concern, rather another example of an outside influence that should be addressed.

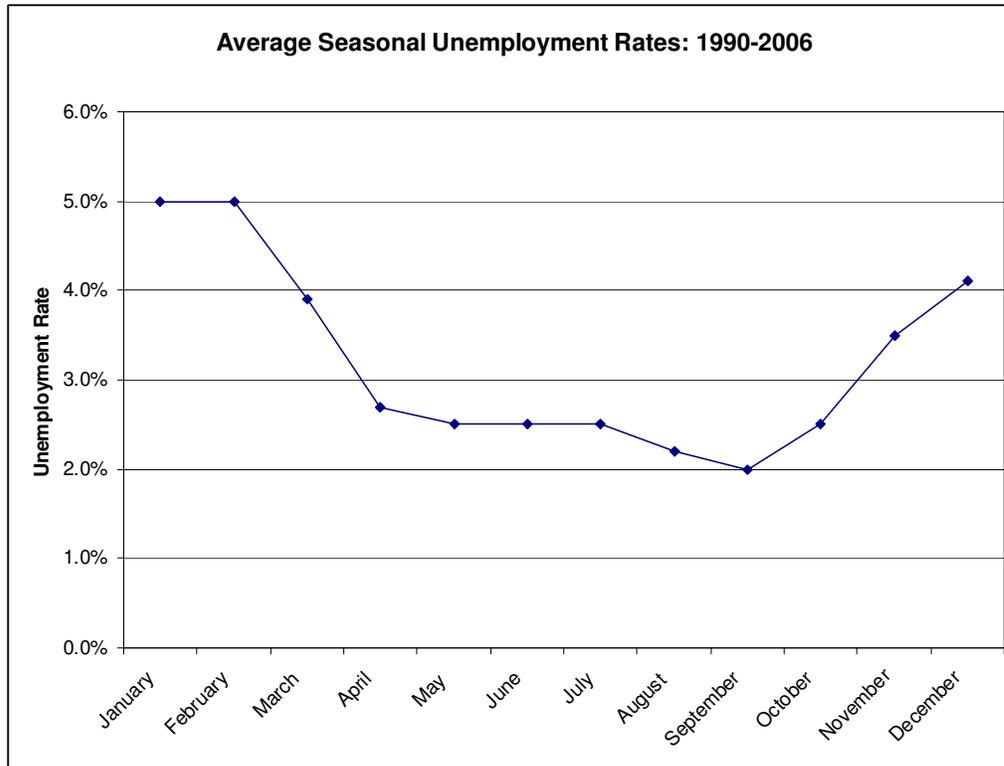
Market Adjustments to the Tourism Industry

Currituck's tourism industry also shows some areas where it could improve. With a growing workforce, healthy environment/natural resources, and under-utilized mainland, both Corolla/Carova and the County as a whole have the potential to take significant strides forward in creating a more economically balanced (for its workers), more unique (from the rest of the Outer Banks), and more resilient (for the long term market fluctuations), and tourism industry.

Employment Changes

With increases in tourism between 2006 and 2007 being the highest in the state (9.9%), it would appear as though Currituck's tourism industry is doing quite well. Each year, approximately 1,600 Currituck jobs are attributable to travel and tourism, and 65.3% of the County's employment is in related areas like construction, retail trade, real estate and rental and leasing, and accommodation and food services. This is an increase 619 individual, tourism-related jobs since 2001 (about 36%).

But the workers supporting this staple sector are not always feeling the benefits. While the median household income in Currituck of \$49,863 is above that of North Carolina, many of the industries associated with tourism pay well below. In 2007, it was estimated that the Currituck County construction sector's average annual wage was a little more than \$32,000, while those working in accommodation earned hardly a third as much, \$11,544. And workers that directly serve the seasonal economy that the County so strongly relies upon also feel the burden—unemployment is high during the off-season, with in-season wages not reconciling this fact. Even those who come to work specifically for the summer (the significant number of eastern Europeans being something of note) have a historically difficult time finding housing for their stay. With the County recently striking down Eddie Hyman's proposal for apartments (that included affordable housing), it does not appear as though Currituck is taking other active measures to change this.



Source: Bureau of Labor Statistics

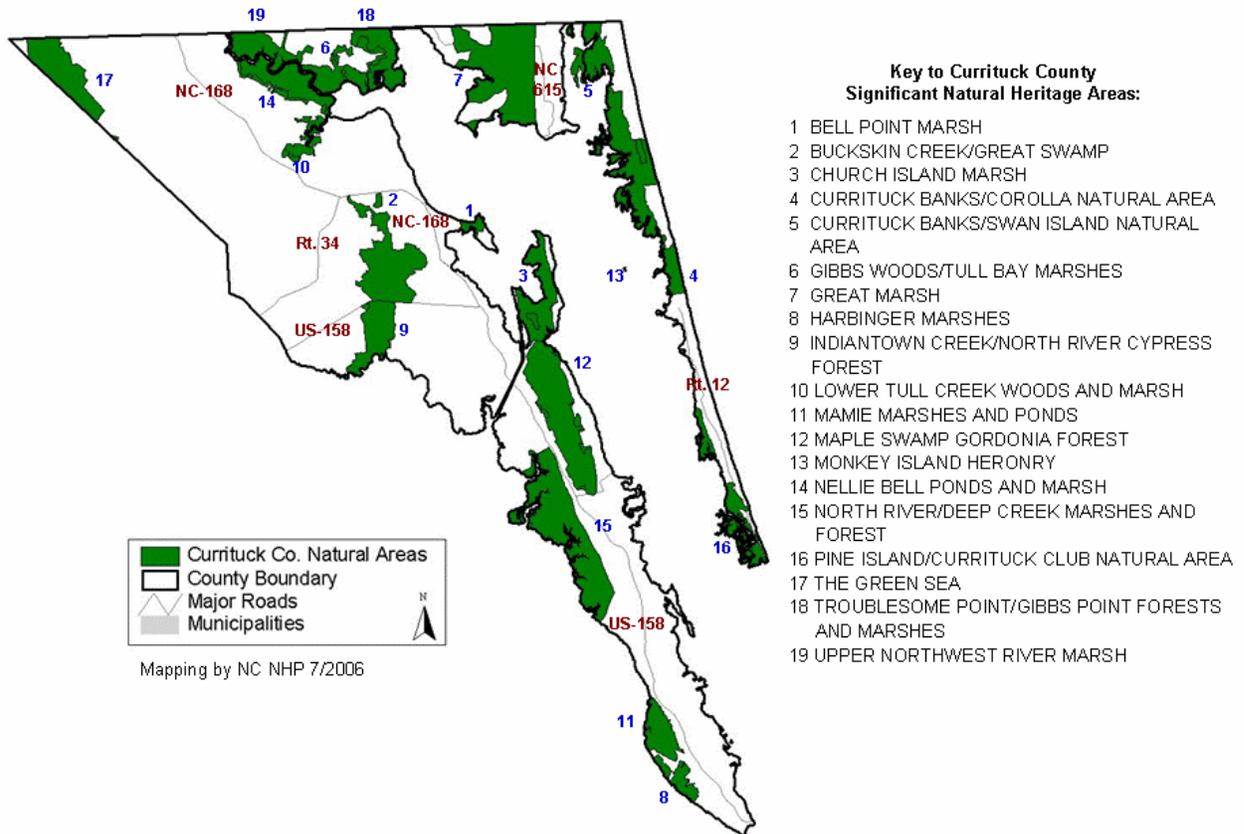
If Currituck wants to be more competitive with neighboring coastal counties, they will have to invest in their labor force. These employees are the people that visitors interact with on a daily basis, so they are therefore acting as the face for the entire County. Improving or stabilizing their working conditions will ensure more competitive employment and happier customers.

Tourism Job Market Diversification

With 50,000-60,000 vacationers per week during peak coming to Currituck, there is no shortage of tourists to engage and display the County's various amenities. Historically, visitors had come to Currituck for its aesthetic beauty and abundant natural resources. Wealthy businessmen and elites from America's booming cities arrived for hunting (birds) excursions and peaceful relaxation, with founder/owner Edward Knight keen to promote visitors to the (then Currituck but now) Whalehead Club.

But as the rapid development of the last 30 years has intensified, the area has strayed away from its environmentally reliant history. This is unfortunate: today the sound is considered a wealth of unique aquatic, bird, mammal, and plant species, with the US Fish and Wildlife Service (FWS) designating it one of the "last remaining" habitats for species such as piping plovers, sea beach turtles, and sea amaranth. A 2006 study by the North Carolina Heritage Program listed 21 "Significant Natural Heritage Areas" in Currituck County—four nationally significant sites, ten state significant sites, five regionally significant sites, and two locally significant sites.

Significant Heritage Areas in Currituck County



Source: North Carolina Natural Heritage Program

Yet today's main forms of tourist recreation and entertainment seem to neglect these and other available resources. In Corolla alone, there are almost 8,000 houses, but only 31 restaurants, two bike shops, one car rental shop (for four-wheeling in the northern end of Carova), one putt-putt golf course, one fishing/boating shop, and one go-carting raceway. Studies have shown that 65% of visitors during the summer (the prime time for these activities) stay more than six nights or more while traveling on the Outer Banks and that 66% will have at least one child under the age of 16 years old with them—what are they to do with all of this spare time and energy-filled youngsters? The answer is that most of them find other places around the Outer Banks to go, particularly Dare County. This demographic of visitors has a high expendable income (summer visitors averaging about \$82,000), yet few places in Currituck (besides the payment towards their rental home) to spend it.

Mid-Currituck Bridge

As Corolla and Carova are fairly well developed already (even if not quite to saturation, natural disaster reasons should be noted for not pursuing rigorous new construction in the area), the construction of the Mid-Currituck Sound Bridge will open up a plethora of possibilities for growth on the mainland that will also benefit the Outer Banks and its visitors.

A lack of a more convenient access to Corolla and Carova has been an issue for some time, but the County can use the Mid-Currituck Sound Bridge as more than just a congestion reliever. More than half of the visitors to the Outer Banks are coming from the north, so instead of winding down into Dare County to reach Corolla, Currituck (the northern-most County, therefore the closest access for travelers coming from high-feeder places like Virginia, New York, and Washington, DC) will have a chance to stop visitors at the Mid-Currituck Sound Bridge with a variety of stores and local shops for them to patronize. Instead of making their purchases in Dare County before crossing the Wright Memorial Bridge or waiting in long lines at the small Corolla stores, tourists could use this sales area—with places such as grocery stores, pharmacies, and unique local shops—to gather their last-minute supplies (and support the local sales tax base) before their holiday on the beach. This will be discussed in more detail in the proposed business mix further into the report.

To successfully implement desirable and sustainable development in this area, Currituck will need to make some modifications to its business climate. Currently, there does not exist proper infrastructure to support the quantity and type of businesses the Mid-Currituck Sound Bridge will draw—access to central water and sewer, garbage collection, effective storm-water management, and the Internet will be needed along with any structural changes in the roadway and sidewalks so as to safely accommodate all forms of traffic. Support will also need to be given to the current and incoming businesses. Historically, business owners in Currituck have felt isolated and left out of government decisions (local, County, or otherwise) that directly affected them. They view their business as constrained by strict regulations and County codes, and they lack the necessary technical assistance (to understand and work through the permitting process) from the County (Gerlach, 2007). Growth of local business entrepreneur opportunities is one characteristic that will make future Currituck unique, and the financial and social capital that these people will be investing in the community should be nurtured and encouraged by the County as much as possible.

Any new market to this area of the mainland Sound Bridge area (Aydlett) and its surrounding parts could also serve as the alluded-to source of entertainment and recreation for the Outer Banks vacationers and the untapped market of short-term visitors. And, judging by the excellent location has on the Sound, this area would be a prime spot to development a fresh new industry like Ecotourism.

Ecotourism

Ecotourism (ecological tourism) is a field growing in popularity, and Currituck is an ideal place for it. The United Nations defines ecotourism as tourism that “contributes actively to the conservation of natural and cultural heritage; includes local and indigenous

communities in its planning, development and operation; [and] lends itself better to independent travelers as well as organized tours for small sized groups.” Its practice is both inherently sustainable and low-impact, so that places like the Currituck National Wildlife Refuge could be a generator of revenue without depreciating in environmental quality. Currently in the United States, it is estimated that ecotourism is a \$77 billion business, and while this is only about 5% of overall tourist spending, it is nonetheless significant. The primary profile for ecotourists is also a fairly good match with that of Currituck’s visitors—college educated adults between the ages of 35-54 with high (about \$73,000) incomes. Ecotourists are not necessarily intense outdoorsmen, but those who gain pleasure from spending time in natural settings and knowing that their recreation is having a low-to-no impact on the environment.

Neighboring states Virginia and West Virginia have already been actively pursuing the ecotourism industry—they are currently two of four states who have set up Ecotourism Societies. Virginia’s spawned from an Executive Order in 2006 that created Virginia’s Coastal Zone Management Program (CZMP)—a body North Carolina has had in place with their Department of Coastal Management for many years. Although at a much larger scale than could be implemented in Currituck County, Virginia has created some adoptable ideas. Promotion and advertisement of their environmental assets has increased—CZM has been working with other mid-Atlantic states to develop and market the Virginia Coastal Birding Trail and the Seaside Water Trail (mostly for canoeing and kayaking). Similarly, to support job creation, the state developed a curriculum for “Ecotour Guide Certification,” offering a one-day course at the Virginia Institute of Marine Science to educate trainees about plants and natural areas and how to safely guide tourists through them. Virginia has pursued this goal using Federal and local tax monies and in spite of the fact that they already have a wealth of historical and cultural resources that routinely draw a solid base of tourists.

An emerging ecotourism market such as this will offer a great amount of variety and choice to Currituck’s visitor marketplace. First of all, it will be able to capitalize on the potential growth initiatives at the Mid-Currituck Sound Bridge. This is an ideal spot to locate shops for boat rental (kayaking around the Sound is an ideal activity, especially considering how shallow the Sound’s waters are), bike rental (could additionally encourage the building of nature trails in the area), and other outdoor activity centers. Pea Island and Alligator River refuge already offer guided canoe trips of the sound, and Kitty Hawk has a particularly unique shop—Kitty Hawk Kites—which offers hang gliding, parasailing, kiteboarding, and jet skiing, kayaking and various other tours and activities from their location in Dare County. Their revenue for 2006 was over ten million dollars.

Secondly, it could cater to a part of the market that doesn’t often visit Currituck—the day and weekend trippers. These would be people coming from closer destinations to go birding on Knotts Island or kayaking in the Sound. Even those who are just coming for the day will likely still be spending money on food, water, and gas, and over-nighters will need access to more than the limited hotel accommodations currently being offered in the County. Such activity, while still concentrated in the summer, is much more likely to proffer stable business year-round, supplying jobs and County revenue long after Corollan homes have closed their doors.

Additionally, many of the conventional and most popular ecotourism opportunities are already present on Currituck: parks/preserves, unique natural places, fishing, biking, boating and beaching. On the Outer Banks, the Currituck National Wildlife Refuge is already quite popular, with its 4,100 acres drawing 19,000 visitors every year. Its new Outer Banks Center for Wildlife Education could serve as Corolla's base for ecotourism information, offering not only brochures and guided walks about the Refuge, but details on seasonal events, activities at Knotts/Mackay Island or on the mainland, or places on the mainland to facilitate further ecological adventure. Even Mackay Island has a large, steady annual tourist stream—over 75,000 visitors in 2006—but no ways to generate and capture potential revenue. This is not as an endorsement of park admissions fees (such action should be carefully studied to see how it would affect visitor numbers), but merely a note that a starting base for ecotourists is already in Currituck and should be recognized and served.

Other ecotourist seasonal events have also sprung up around the Outer Banks. In early November, the entire coastline will play host to the Wings Over Water Wildlife Festival, with over 17 sites from Ocracoke to North Heritage Park. Currituck will in fact be participating in several of the activities offered over the six-day period—including one new event about Nature Photography—but the tours, trips, and programs other Outer Banks locations are marketing are another great model of ecotourism activities that Currituck could follow. Coordination between the mainland, Corolla/Carova, Knotts Island, present and new businesses, the Outer Banks Chamber of Commerce, and even Virginia could open up this whole new section of the Currituck tourism industry with other festivals and fairs throughout the year.

Summation

What we have here is simply a brief and open-ended prescription of issues that Currituck's government and tourism partners should be aware of. More in-depth studies are needed to provide an accurate environmental assessment and specific gaps in the tourism market before action is taken. We believe the County has been already aware of many of these recommendations, but the time has come to follow up. Should no action be taken, the most important consequence to be aware of is the risk factor and how it could affect different people, businesses, and the County at-large.

Appendix F: Economic Impact of Mid-Currituck Bridge

This geographic disconnect between the three regions of the county creates obvious logistical challenges for both residents and tourists. Just to the south of Coinjock, tourists traveling from Virginia to Corolla are separated by a distance of less than 10 miles; however, they will have to drive nearly 60 miles before reaching their final destination. Once at the beach, these tourists find Dare County a more convenient location for spending tourism dollars.

The development of a proposed Mid-Currituck bridge provides easier mainland access to Corolla and Corova tourists and would certainly capture a considerable amount of tourism spending currently leaked to Dare County.



Figure 5: Proposed Mid-Currituck Sound Bridge

Source: North Carolina Turnpike Authority

This economic impact analysis models the prospective annual economic and fiscal impact of the Mid-Currituck Bridge. It does not consider the one-time construction impact of the bridge or the construction impact of development spurred by the bridge's completion. Although, construction could provide significant one-time benefits to the County if local contractors and subcontractors are utilized.

Economic Impact Analysis Methodology

C³E calculated the estimated direct, indirect, and induced impacts of the first year of the commercial activity that would likely occur after bridge construction⁴ using IMPLAN Professional software. IMPLAN is an input-output modeling program that permits researchers to estimate the projected effects of an exogenous increase in demand, such as an infusion of new tourism spending due to bridge construction, in a specified geographic region, such as Currituck County.

- “Direct” effects represent the changes for a given industry resulting from the increase in final demand for that same industry on, for example, payroll.
- “Indirect” effects include the impacts on all local industries resulting from industries purchasing from industries in multiple iterations as a consequence of this increase in final demand.
- “Induced” effects are the increases in spending by households resulting from the increases in income and population that were caused by both the direct and indirect effects. The total effect of the new investments from the proposed projects is represented by the sum of all three effects - direct, indirect and induced.

In this case, the change in demand would be caused by the infusion of new private-sector investment in the region corresponding to the market driven development generated by the bridge created access to tourists and tourism spending. The implicit assumption in our model is that the direct, indirect, and induced spending attributable to the project would not have otherwise occurred in the absence of the Mid-Currituck Bridge.

Modeling Assumptions

This analysis assumes that market conditions would spur a commercial and business mix similar to that in Dare County in the area surrounding the Mid-Currituck Bridge. This analysis assumes such a business mix will occur in the absence of additional land use and development controls when the bridge is constructed. Through land use control and planning, the County could aspire to a less intense use of the land or to higher end and higher value commercial development around the bridge. Again, this analysis assumes a similar business mix to that currently serving Currituck beach tourists, which is located in Dare County.

According to Dun & Bradstreet’s Million Dollar Database, 154 businesses and industries with a million dollars in sales or more are located in the approximately 38 square miles of coastal area of Dare County. These businesses serve beach visitors, including those in Corolla and Corova. For the purposes of this analysis, we assume that a proportional mix

⁴ IMPLAN models are static models that cannot adjust for future structural changes in a study area’s economy. Therefore, it is best to limit study periods to around three to four years. This analysis only examines one-year period. Annual economic benefits are expected to repeat in future years if market conditions remain the same.

of businesses will occur in the in approximately 7.6 square mile area in the vicinity of Aydlett between Hwy 158 and the mainland bridge intersection at the Currituck Sound.

A proportional business mix at the Mid-Currituck Bridge would total 34 businesses, including retails stores, restaurants, service businesses, and a hotel with estimated total annual sales of \$78 million dollars.

Economic Impact

The business mix around the Mid-Currituck Bridge will create a total of 468 new jobs with \$9.6 million in new labor income. The total production or industry output generated by this new development is \$36.2 million.

Type of Impact	Direct	Indirect	Induced	Total****	Multiplier (Total/Direct)
Increased Industry Output*	\$31.3	\$2.2	\$2.8	\$36.2	1.2
Increased Employment**	410	27	31	468	1.1
Increased Labor Income*	\$8.2	\$0.7	\$0.7	\$9.6	1.2

*In millions of 2007 dollars

**In job-years, as reported by IMPLAN

***Sum of components may not add up to totals due to rounding

Appendix G: Sustainable Tourism Development Strategies

C³E Research Associate Christopher S. Gerlach

Prologue

In April 2005, the University of North Carolina's Center for Competitive Economies (C³E) completed a comprehensive economic development "Vision Plan" for North Carolina's Northeast Partnership. This study was undertaken as a result of legislation passed by the North Carolina General Assembly mandating that each of the seven regional partnerships shall do the following:

Perform a comprehensive study of the region's resources and existing businesses located in the region to determine what business clusters exist and the boundaries of those clusters, to develop ways to strengthen those clusters, and to determine in what areas the region has a competitive advantage that could lead to the development of future clusters.

(S.L. 2004-124, Section 13.6, p. 107)

Upon receiving the results of the study, Currituck County, one of the members of the 16-county region, immediately recognized the applicability of many of the findings to their own economic development efforts. However, as the analysis was conducted at a regional scale, some of the conclusions and recommendations identified were seen as falling outside the scope of local concerns. Early in 2006, county officials agreed to retain C³E for an additional study, this time focused on the unique opportunities and challenges faced by Currituck County in particular.

In May 2006, C³E began an intensive year-long project consisting of multiple tasks that build on the findings of the Northeast North Carolina Vision Plan. The proposed project tasks were as follows:

Task One: Currituck Demographic and Economic Scan

Task Two: Currituck Labor Force and Skill Mix Inventory

Task Three: Targeted Industry Clusters Characterization

Task Four: Currituck "Virtual Micropolitan" Construction

Task Five: Tourism Development Opportunities Definition

Task Six: Comparable Communities Assessment

Task Seven: Economic Strategic Planning Report

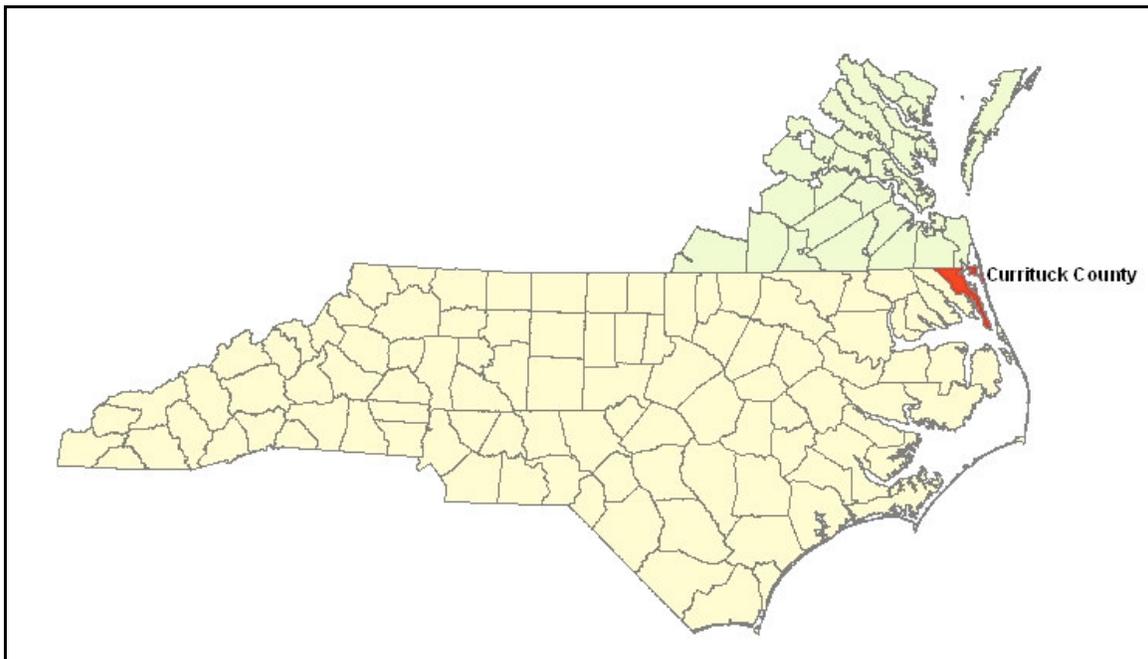
(Luger and Lane, 2006, p. 3-5)

The following paper represents a smaller scale of the C³E Currituck County Vision Plan, concerned primarily with identifying, analyzing, and making recommendations for the development of a sustainable tourism economy. Much of this paper is based on dozens of personal interviews I conducted over the last year while working on the larger project as a Research Assistant for C³E.

I. Introduction

Located in northeast North Carolina, Currituck County is an altogether unique region characterized by an extreme physical and social dichotomy that presents an interesting set of challenges for county officials charged with creating a comprehensive economic development strategy. The mainland portion is typical for eastern North Carolina, primarily rural in nature with rich agricultural traditions. The Outer Banks portion is an upscale resort community, attracting thousands of annual visitors to its nearly 25 miles of pristine Atlantic coast beaches. As a tax base and the source of revenue and employment generated from the multiple rounds of visitor spending, this thin strip of sand and the tourism industry it supports is the heart of the county's economy.

Figure 1: Currituck County, North Carolina: Overview



Source: ArcMap GIS. (2007)

Going forward, if Currituck County hopes to achieve economic sustainability, it will be necessary for county officials to begin planning for a more diverse economic base. This strategy should take a regional approach and focus on building upon observed competitive advantages within both the non-tourism and the tourism markets.

Expanding into non-tourism-related industries will provide the county with some insurance against economic downturns, changes in tastes and preferences, and natural disasters that have the potential to significantly impact tourism-related activities. Additionally, by shifting into non-seasonal, non-service sector industries, the county will realize a healthier seasonal balance and be able to provide more competitive wages thereby increasing the standards of living for area employees.

That being said, county officials should not ignore the opportunities for strengthening and diversifying the tourism sector itself. With much of the infrastructure and industrial linkages already in place, there is a massive amount of potential for high value-added development in other tourism-related industries and activities.

Currituck County must be cautious, however, that they maintain a balance between development and the delicate natural ecosystems that support the industry. If sustainability is to be achieved, county officials must ensure that some degree of regulations are in place that help to preserve the county's rich cultural heritage and natural beauty.

II. Executive Summary

In order to more fully understand Currituck County’s economic position, the following abbreviated list highlights the major strengths, weaknesses, opportunities and threats (SWOT) the county currently faces. The analysis explores the four key indices of human capital, physical capital, fiscal capital and social capital that will provide the foundation for the subsequent economic development policy recommendations. The key components for each of the four capital groups have been summarized below in Table 1.

Table 1: Abbreviated Currituck County SWOT Summary

Human Capital	Physical Capital
<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Strong positive pop./emp. growth <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Service-sector dominance <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Development of service-sector curriculum <p><i>Threats</i></p> <ul style="list-style-type: none"> • Deterioration of workforce competitiveness 	<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Natural ecosystems/Refuges <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Inadequate transportation infrastructure <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Value-added agri-/eco-tourism potential <p><i>Threats</i></p> <ul style="list-style-type: none"> • Affordable housing shortage/UDO
Fiscal Capital	Social Capital
<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Property/opportunity/sales tax revenue <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Concentrated economic dependence <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Increased entrepreneurial activities <p><i>Threats</i></p> <ul style="list-style-type: none"> • Mismanaged occupancy tax 	<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Collaborative initiatives <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Lack of community input <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Winemaking industry <p><i>Threats</i></p> <ul style="list-style-type: none"> • Community polarization/insulation

The first five recommendations, while relevant for tourism-specific industries, are more general in nature and are intended to address issues concerning the whole of the Currituck County business environment.

1. Coalition building

This recommendation brings attention to the need for Currituck County to encourage a county-wide participatory process to solve current issues of polarization and isolation. It also recommends the formation of additional partnerships to facilitate communication.

2. Infrastructure improvements

This recommendation comments on the current inadequacy of infrastructure throughout the county. Elements of this suggestion include creating central water and sewer, building bike paths on the Outer Banks and supporting the Mid-Currituck Sound Bridge.

3. Modify Unified Development Ordinance

This recommendation calls for the loosening of restrictions concerning the minimum lot size required by the UDO. It suggests that, rather than mandating a single or adjacent three-acre parcel, the ordinance should allow for a non-adjacent parcel to make up the difference.

4. Non-traditional tourism industry recruitment

This recommendation suggests that economic development officials look within the Currituck County-specific tourism sector to identify less seasonal, high-growth and high-paying opportunities in non-traditional tourism-related industries. Three such industries were found that were subsequently proposed for further investigation:

- *NAICS 4233 Lumber and construction supply merchant wholesalers*
- *NAICS 236 Specialty trade contractors*
- *NAICS 238 Construction of buildings*

5. New and existing business owner support

This recommendation speaks to the point that nearly every business owner interviewed indicated that the county's strict regulations and complete lack of technical assistance were huge barriers to opening and operating a business in the county. Suggestions were made for creating a point-of-contact and a one-stop shop for new and existing business owners.

The second five recommendations are intended to address issues specific to the promotion of a sustainable tourism economy.

6. Reinvest occupancy tax in the Outer Banks

This recommendation suggests that Currituck County is taking the visitor stream for granted and that they must address the needs of the Outer Banks business owners and the tourists they support. Several concerns have been raised that the occupancy tax that is generated on the beach is not being re-spent there.

7. Address seasonality with annual events in non-peak months

This recommendation suggests that the county devise annual events during the shoulder season to attract a threshold of visitors needed to make businesses profitable during this financially difficult time. One suggested possibility was to create a hunting and fishing-based "Outdoors" event with a corporate sponsor such as Cabela's or the Bass Pro Shop.

8. Develop agri- and eco-tourism markets

This recommendation calls for the creation of an alternative tourism market that draws on the county's rich agricultural, natural and cultural heritage. Specific suggestions include the development of "Entertainment farms" and naturalist-guided eco-tours.

9. Develop tourism-related educational programs/institutions

This recommendation speaks to the fact that Currituck County has no tertiary educational programs or institutions. It suggests that the county develop programs in viticulture, hospitality/hotel management and advertising and retailing that would tie-in closely with the county's tourism sector.

10. Develop mainland tourism opportunities

This final recommendation suggests that the county diversify its tourism base to include mainland opportunities. Three general strategies were identified:

- Bring them to the beach early.* *Bring*
- them back from the beach while they are here.* *Bring*
- them here for reasons other than the beach.*

III. Literature Review

The following detailed review of relevant literature encompasses a number of theoretical and technical concepts that will allow me to effectively identify the tourism sector in Currituck County and make informed policy recommendations to strengthen it.

Economic Base Theory

Economic base theory is a generally accepted principle of economic development that suggests that a region's economic prosperity is a function of external demand for that region's products. The theory divides the economy into two sectors. The first is a basic (export) sector that includes all goods and services produced for non-local consumption. The second is a non-basic (local) sector that includes all goods and services consumed in the local market.

The theory assumes that the basic sector supports the non-basic sector by purchasing production inputs and by paying its employees wages that are spent locally. Therefore, greater demand for basic sector goods drives demand for the non-basic sector and the economy in general.

The subsequent rounds of spending among the industries in the non-basic sector are known as the "multiplier effect" and are a useful tool for quantifying the effects of exogenous shocks to the basic sector. The multiplier effect is directly dependent on an accurate calculation of the marginal propensity to consume locally. This concept dictates what portion of each round of spending will remain in the local economy and what portion will be lost as "leakage" to the external economy. This theory will be somewhat modified during the investigation of a tourist economy where the basic sector is consumed locally (Malizia and Feser, 1999).

Cluster Theory

In Michael Porter's 1990 work, *The Competitive Advantage of Nations*, he identifies four factors that attempt to explain the reasons why clustered firms are more competitive than individual firms: factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry. However, since that time, despite an impressive number of published works on the subject, a clear definition of exactly what a cluster is, why it works, and how they can be replicated is still elusive.

In an effort to explain why firms come together and what benefits they derive from that collocating, a number of factors or "micro-foundations" have been identified since Marshall's (1920) original trinity of external economies (Cortright, 2006) (Feser and Luger, 2002) (Gordon and McCann, 2000) (Malizia and Feser, 1999) (Porter, 1990 and 1998 and 2003) (Saxenian, 1994).

Micro-foundations of Clusters

- Labor Market Pooling
- Supplier Specialization
- Knowledge Spillovers
- Entrepreneurship
- Path Dependence and Lock-In
- Culture and Embeddedness
- Local Demand

Marshall (1920) identified the first three in his work that explained the productivity benefits firms realize from collocating in either localized or urbanized agglomeration economies. By choosing to locate in close physical proximity to one another, similar firms create a strong market for a labor pool with the requisite skill set needed in that industry. Workers are, in turn, attracted to the region for the job opportunities and job security the density of like-firms provides. Firms also benefited from locating in close physical proximity to intermediate input suppliers. This was due in large part to the lower transportation costs, fewer inventory demands, and higher degree of responsiveness to market conditions. Finally, by sharing a physical geography, there was a certain amount of "knowledge spillover" or a free flow of ideas, which is a primary driver of innovation and entrepreneurial activity.

While these three factors are useful in understanding the factors that sustain existing clusters, a considerable amount of subsequent work has focused on determining the factors that lead to their formulation in the first place. Entrepreneurial activity has been identified as one such driver because it is inherently local and thrives in environments that encourage risk taking and facilitate linkages between economic actors. Path dependence is a concept that is most applicable to policy recommendations and implies that once a region establishes a concentration of interrelated firms, future development is best achieved by building on that existing framework rather than to start anew. Economic developers looking to make policy recommendations must also pay close attention to the culture of region and within the institutions themselves. Finally, Porter (1990) offers a demand-side causal factor in the formation of clusters. He suggests that, firms will choose to locate in an area with a certain threshold of demand. That demand will lead the firms to continually innovate as they try to remain competitive ultimately increasing the overall competitiveness of the region.

Techniques for Identifying a Regional Competitive Advantage

In general, there are two broad approaches for identifying and analyzing sectors within an economy that have a competitive advantage with respect to a larger comparative region.

The first, a top-down approach, is typically a quantitative investigation of the structure of the regional economy utilizing secondary data sources including the U.S. Census Bureau and the Bureau of Labor Statistics. This technique will generally lead to a higher degree of external validity and broader applicability (Malizia and Feser, 1999) (McLean and Voytek, 1992) (Porter, 2003).

There are a number of methods analysts typically use to begin to determine a region's competitive advantage. The first is to look at employment data disaggregated by the North American Industry Classification System (NAICS) code. Using this information for both the region and the nation, analysts can derive location quotients that are useful for identifying which industries within a region are more specialized relative to the nation as a whole. They can also be used to make inferences about a region's economic base discussed above.

Employment data can also be used to perform shift-share analysis that evaluates a region's competitive advantages over time. This temporal approach offers more descriptive data by separating the observed economic changes into three components: reference region shift, industry mix term and competitive shift.

These measures are useful in determining the concentration of a given industry within a locality. However, to identify how local firms interact, analysts often use input-output models. By utilizing data on sales of intermediate goods among all firms within a market, analysts can begin to get a sense of how they are interconnected and to what degree they rely on each other. Analysts can then group or "cluster" those industries with the greatest degree of buyer-supplier linkages as a means of making informed policy recommendations.

The second, a bottom-up approach, is typically a qualitative investigation of the structure of the regional economy utilizing primary data sources including surveys, interviews and case studies. Unfortunately, while providing a more nuanced understanding of a specific regional sector, this technique is limited in its applicability to other regions (Austrian, 2001) (Fromhold-Eisebith and Eisebith, 2004) (Markusen, 1994 and 1996).

This approach requires a high degree of direct contact with the economic actors in the region to determine whom they have real linkages with and how those networks can be created and strengthened.

Cluster Critique

Despite the recent enthusiasm for the cluster theory, a number of researchers have advised caution in the widespread use of clusters as a tool for public policy makers. From a theoretical standpoint, critics argue that clusters are too vague a concept to lead to such specific policy recommendations. With respect to other more complicated economic theory, clusters are conceptually much easier to understand which may engender a level of belief in their effectiveness that is lacking in many other analytical techniques.

Additionally, there are a number of limitations to the top-down approach that must be kept in mind. These techniques utilize secondary data sources and, therefore, the analysis will only be as good as the data. Furthermore, observed input-output linkages may not truly capture the relationships among firms potentially leading to incomplete and inaccurate cluster groups.

Finally, as mentioned above in the discussion of bottom-up approaches, because economic networks are so location-specific, it is often difficult to translate results observed in one region to another region (Feser and Luger 2002) (Martin and Sunley, 2003) (McLean and Voytek, 1992).

Tourism as an Economic Development Strategy

Tourism as a sector is notoriously difficult to define. One survey of eighty travel and tourism studies revealed forty-three different definitions for the terms, “traveler”, “tourist” and “visitor” (Mathieson, Alister and Wall, 1982). This variability is largely due to the fact that tourism is not simply a static set of industries, but rather depends upon a number of wide ranging factors including geography and attraction type. Therefore, it is likely that any “one size fits all” characterization of tourism industry components would either over- or underestimate the true level of economic activity in any given geographic location. In general, the tourism sector is comprised of the transportation, accommodation, entertainment, and private and public sector support service industries. In 1963, the United Nations sponsored a conference on travel and tourism at which time it recommended the following formal definitions:

For statistical purposes, the term ‘visitor’ describes any person visiting a country other than that in which he has his usual place of residence, for any reason other than following an occupation remunerated from within the country visited. This definition covers:

1. Tourists who are temporary visitors staying at least twenty-four hours in the country visited whose purpose of journey can be classified under one of the following headings;
 - (a) leisure (recreation, holiday, health, study, religion and sport);
 - (b) business, family, mission, meeting;
2. Excursionists who are temporary visitors staying fewer than twenty-four hours in the country visited (including travelers on cruises). The statistics should not include travelers who, in the legal sense, do not enter the country (air travelers who do not leave an airport’s transit area, and similar cases).

(Leiper, 1993, p. 542)

The United Nations intentionally made the definition as broad as possible as it was primarily concerned with being able to track the economic (rather than the physical or social) impacts of tourists on destination areas. In terms of domestic tourism, it is often difficult to consistently define who is a tourist and how far they must travel before they are considered to be one.

Beginning in the 1980s, the conventional notions of mass tourism began to shift towards promoting an alternative “sustainable” tourism experience. This new philosophy expanded tourism policies beyond basic economic concerns to include an emphasis on maintaining unspoiled natural and cultural resources (Fennell, 1999). In recent years,

there have been myriad additions to the tourism lexicon to include the now commonplace terms: agri-tourism, cultural tourism and eco-tourism, to name a few.

On a global scale, tourism is rapidly becoming the world's largest business enterprise. In 1950, the World Tourism Organization reported worldwide international tourism receipts at \$2.1 billion. By 2005 that number had grown to \$682.7 billion⁵ (UNWTO, 2006). This boom is due, in large part, to a global trend of increasing standards of living, decreasing costs of transportation and accommodation and an overall opening of borders as a result of democratization.

Economically speaking, the magnitude of the increase may be a result of the fact that, by definition, tourism is a purely basic (export) industry. The sector is therefore subject to the multiplier effect, which measures the aggregate tourism spending over time throughout the regional economy by accounting for the direct, indirect and induced economic effects⁶. The amount lost during each round of spending as a result of taxes, savings or investment in resources outside the economic area is referred to leakage. As the amount of leakage increases the subsequent rounds of spending are decreased and the multiplier effect is lessened (Lundberg and Krishnamoorth and Stavenga, 1995).

The initial round of spending, the direct effect, captures the changes in sales, employment, and income in businesses as a result of the purchase of goods and services by visitors. The second round, or indirect effects, account for the changes in sales, employment, and income generated indirectly in other businesses as the original tourist dollar is respent. Any portion of that dollar that was not re-spent in the local economy is considered to be leakage. This cycle continues until the effects are too small to measure. In some analyses the induced effects are included effectively endogenizing households by considering them to be a separate industry.

$$\text{Output Multiplier} = \frac{(\text{Direct} + \text{Indirect} + \text{Induced Effects})}{\text{Initial Expenditure}}$$

Source:

Blaine. (1993).

This analysis will be sensitive to the economic area used in the analysis. While a smaller area will increase the number of "tourists" within the region it will result in a lower multiplier as many of the secondary effects will occur outside the region. In general, the observed regional output multipliers ranged from 1.5 to 2.6 with an average of approximately 2.0 (Blaine, 1993).

Apart from the income and employment benefits realized from these multiple waves of spending, a tourism-based economy generates a high degree of tax revenue while

⁵ In 2006 US dollars.

⁶ Type I multipliers include direct and indirect effects. Type II multipliers include direct, indirect, and induced effects.

simultaneously saving on a great number of public service expenditures. During a typical tourism season, the regional government can expect to collect higher than average amounts of sales taxes, user fees from tolls or entrance fees, occupancy taxes from hotels and other accommodations, and the property taxes from a large number of potentially luxurious second homes. Because these taxes are paid by a temporary or absentee population, regional governments need not invest as heavily in expensive public works projects such as primary and secondary schools.

There are, however, dangers to an overdependence on a tourism-based economy. In general, a lack of diversification is inherently risky. Any region or government that relies on too heavily on one industry sector is vulnerable to downturns in the economy or changes in tastes and preferences. This is due to the fact that, in most instances, the tourism industry is a “luxury” industry, and as such, is highly income elastic. That is, a decrease in income will lead to a disproportionately large decrease in the quantity of tourism-related activities demanded. Furthermore, tourism economies are especially susceptible to natural disasters that have the potential to instantly wipe out entire sections of infrastructure and with it, the regional economic engine.

The seasonal nature of a tourism economy also leads to a number of unique challenges. As a result of being an export-oriented industry, the entire regional economy is reliant on tourism and the multiplier effect. Therefore, the slower off-peak season results in not only a loss to tourism-specific industries, but to other non-tourism-specific industries as well (Bull, 1991).

While it is true that the labor-intensive nature of service sector employment results in low peak season unemployment rates, the opportunities created are often on the so-called “low road”. These jobs are characterized as being low paying with few or no benefits, part-time, unskilled, with high turnover and a low incidence of unionization (Bull, 1991).

Extreme seasonality can also serve to overwhelm an area during the time of peak usage. Very often, tourist communities experience crippling levels of traffic congestion during the peak season. This effect is magnified in domestic tourism destinations in which the majority of visitors arrive via single occupancy vehicles. Apart from the negative environmental externalities, traffic jams can also serve to strain an already potentially tenuous local-visitor relationship as both parties may feel wholly undeserving of the inconvenience.

Rapid real estate development in tourism communities can also threaten to drastically change the character of an area and lead to affordable housing shortages. If unchecked, increased levels of development could result in a perceived “invasion of the [regional] value system” and potentially lead to widespread gentrification (Bull, 1991). Here again, there may be a backlash from locals if they witness a commercialization of their cherished regional heritage in order to appease a non-local population.

Finally, environmentally sensitive tourism destinations are at risk from overuse by a population who is both less informed and less invested in the preservation of these areas. Even minor increases in the levels of air, beach and water pollution can have dramatic negative consequences for delicate regional ecosystems and the flora and fauna that inhabit them.

Regional governments that rely on tourism must strike a delicate balance that seeks to maximize tourism revenue while simultaneously maintaining both the cultural and the environmental aspects of the area that induced tourists to visit in the first place. To accomplish this, there are a number of policies that should be adopted by local governing bodies.

To begin, tourism should be planned at a regional level. This wider perspective will help to diversify the tourism industry itself and in so doing, attract a wider, more stable range of visitors. This approach will also help to foster a regional identity and lead to the development of “tailor made” strategies that build on unique local attributes. Cooperation across governmental bodies can also result in more cost effective promotional activities able to disseminate information to wider audiences with more varied interests (Wahab, 1993).

Economies of scale can also be exploited with respect to regional infrastructure improvements. At a local level, it is vital that governmental bodies plan for and provide appropriate levels of infrastructure capable of accommodating expected future increases in demand. At a basic level, this requires, among other things, the provision and maintenance of additional roads, airports and water and sewer systems. On a more comprehensive scale, local governments should attempt to develop a regional tourism network that includes destination zones, non-attraction areas and a circulation corridor. Within each destination there must be a grouping of attractions, residential communities, and transportation networks that connect to the main circulation corridor (See Figures 2 and 3).

Figure 2: Regional Tourism Network

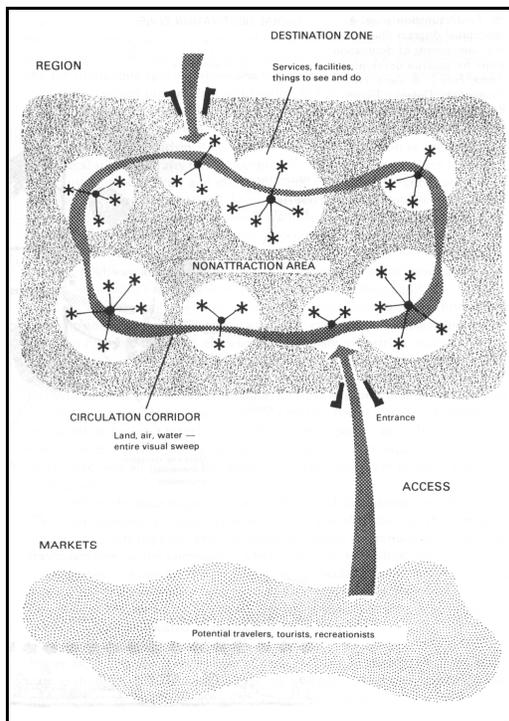
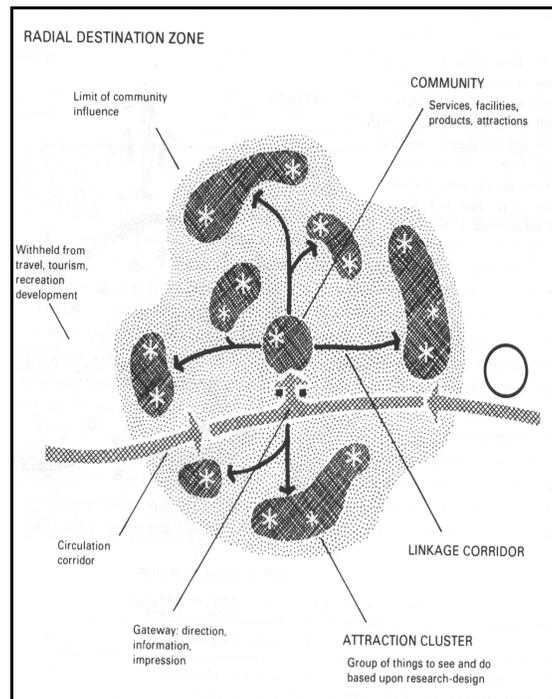


Figure 3: Radial Destination Zone



Source: Gunn. (1993).

By grouping the attractions within the destination zone, the locality can hope to tap into many of the same benefits that were realized on a regional scale. “A cluster⁷ of attractions fosters each unit to contribute to a larger theme, resulting in greater visitor appeal and easier promotion. Larger groups of attractions are more easily managed and serviced. Utilities, such as water, waste, and power are more efficiently supplied” (Gunn, 1993, p. 761).

Apart from expanding the tourism base, local governments should also seek to diversify the economy as a whole. This will help to address some of the seasonality concerns and provide some insurance against downturns in the tourism economy. To be successful, however, local governments must be committed to pursuing a comprehensive economic development strategy utilizing many of the contemporary techniques such as cluster theory.

This process begins by simply fostering a business-friendly environment. This includes, but is not limited to, providing financial and technical support to local businesses, incentivizing new businesses to locate in the region, developing appropriate land use planning and undertaking promotional activities (Wahab, 1993).

There should also be a focus on facilitating regional cooperation and communication among disparate interest groups. Local governments should attempt to create

⁷ It should be noted that the use of the term “cluster” in this context is different than the one explained in the literature reviewed in the preceding sections.

opportunities for horizontal, vertical and complementary integration. Horizontal integration occurs when industries in the same sector partner to achieve economies of scale in production, power in purchasing or distribution, or to remove competitors from the market.

Vertical integration can take two forms: backward and forward. Backward vertical integration occurs when an entity expands to acquire the inputs necessary to produce their good. Forward vertical integration occurs when an entity expands to oversee the distribution of its product. Both vertical strategies seek to consolidate control thereby creating a competitive advantage in marketing and distribution costs.

Complementary integration occurs when dissimilar industries partner in a mutually beneficial way. An example of this may include an airline's choice to purchase or partner with a hotel chain in the cities that it serves. This conglomeration will ensure that travelers have adequate accommodations during their stay thereby reinforcing their flight purchasing decision (Bull, 1993).

It should be noted, however, that while attempting to develop a robust non-tourism economy, local governments must not lose sight of the impacts to the region's primary economic engine, the tourism sector. Because natural resources are typically unpriced public goods, they are susceptible to over-use and reckless patterns of development can quickly change the character of an area and wreak havoc on the environmentally sensitive areas that are frequently the main attraction. As illustrated by Mathieson, Alister and Wall, "the continued expansion of tourism at its present rate and in its existing form is not a desirable phenomenon in most destination areas" (1982).

To that end, it is vital that local governments use a degree of regulation to maintain standards and minimize the negative impacts to the natural and cultural environment. There must be a sense of, "how much tourism is enough" and measures to ensure that those limits are respected (Wahab, 1993).

In recent years an increasingly greater number of regional governments have come to the realization that a more sustainable pattern of development is needed to insure continued prosperity. In a 1992 Tourism Sector Study, seven principles of sustainable tourism were identified to guide policy makers in this transition process:

Principle 1: Limit human impact on the planet (global) and on the region (local) to a level that is within its carrying capacity.

Principle 2: Maintain the stock of biological wealth in the region.

Principle 3: Minimize the depletion of nonrenewable resources.

Principle 4: Promote long-term economic development that increases the benefits from a given stock of resources and maintains natural wealth.

Principle 5: Provide for an equitable distribution of the benefits and costs of resource use and environmental management.

Principle 6: Provide for effective participation of communities and interest groups in the decision that most affect them.

Principle 7: Promote the values that encourage others to achieve sustainability.

(MacGregor, 1993 p. 782-785)

A short time later, these seven principles would come to form the basis for eco-tourism, the latest trend in the alternative tourism market.

IV. Currituck County: An Introduction

History

Located on North Carolina's Outer Banks, Currituck County has a rich and storied past. The county, established in 1668, was one of the first settlements in the United States and one of five original ports. Roanoke Island, which lays a short distance to the south, holds the distinction of being the first English settlement in the New World. That settlement would later come to be known as the Lost Colony when, in 1590, all 117 original settlers were found to have mysteriously disappeared.

In 1859, the Albemarle Chesapeake Waterway opened. Later renamed the Intracoastal Waterway, this 3,000-mile engineering marvel allowed commercial and recreational users to travel from Florida to Massachusetts in relative comfort and safety. This waterway bisects the Currituck mainland and was an important factor in the development of a service sector needed to cater to the north- and south-bound travelers.

The county is perhaps most well known for its rich waterfowl hunting tradition. Beginning in the late 1800s, and continuing into the early 1900s, the Currituck Sound was known as the premier hunting spot on the Atlantic Coast. Locals quickly began to offer their services as hunting guides to wealthy industrialists from the northeast looking to take advantage of this "sportsman's paradise". This eventually led to the construction of extravagant private hunt clubs including the Pine Island Club, Currituck Shooting Club, and the opulent Whalehead Club. During this time, the numbers of waterfowl reportedly killed was astronomical. According to Sharon Meade at the Outer Banks Center for Wildlife Education, the record single-day hunt for an especially lethal duo was 892 ruddy ducks (Personal communication, July 20, 2006 and October 20, 2006). With figures like these, the waterfowl population in the Currituck Sound was quickly decimated and with it, the county's primary economic engine.

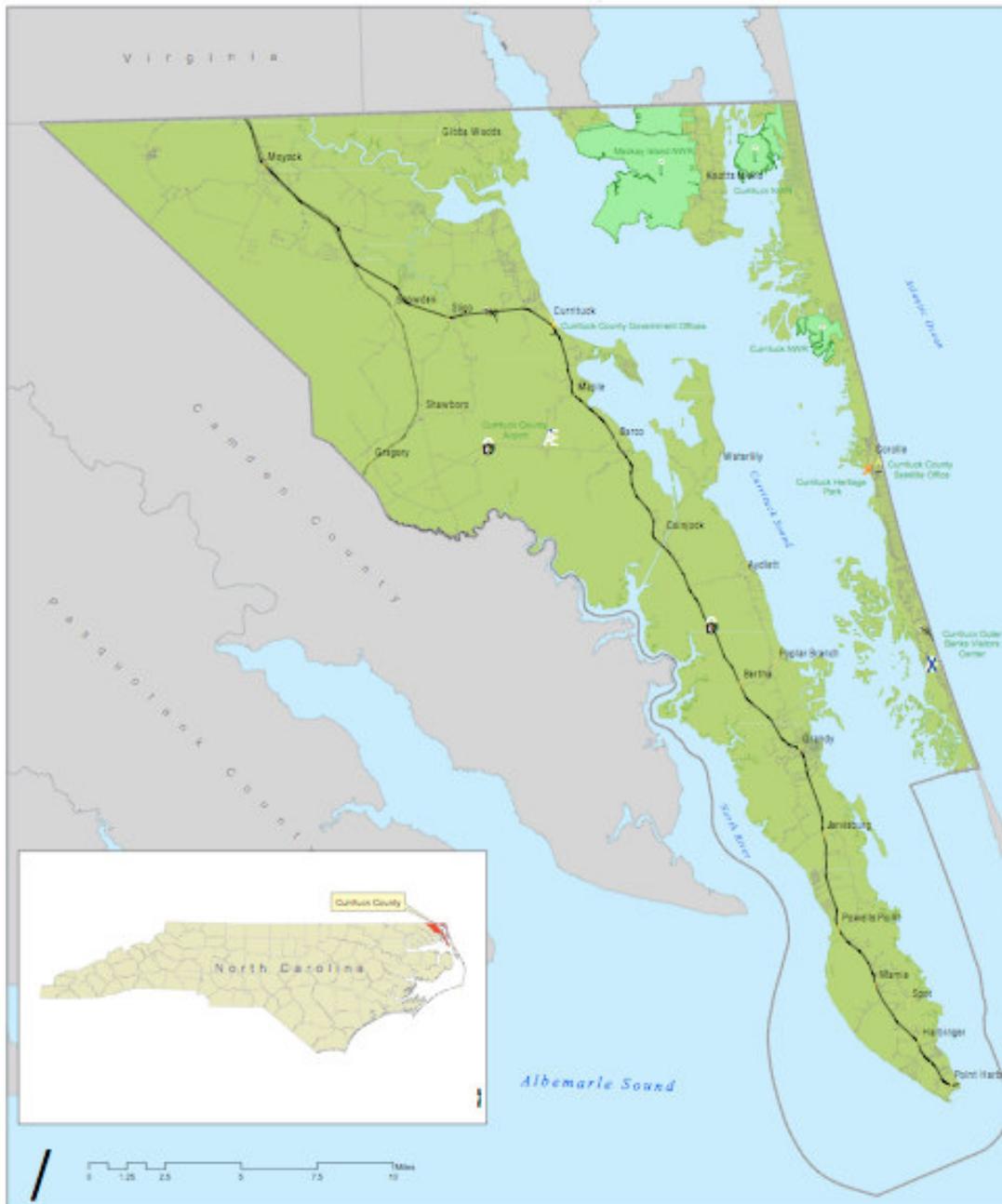
By the 1930s the focus had already begun to shift to the promotion and preservation of the shoreline. In September 1930, workers completed the three-mile long Wright Memorial [toll] Bridge that connected the Currituck mainland to the Outer Banks (North Carolina Collection, 1932). Once that bridge was in place, construction could begin on a shore road that would extend south to the Roanoke Sound Bridge allowing development to occur along that corridor. In 1953, the Cape Hatteras National Seashore became the first of its kind and was effective in attracting thousands of additional visitors to the region who would forever change the face of the Currituck County Outer Banks.

Geography

Currituck County is located in northeast North Carolina and is bounded by Virginia to the north, Dare County to the south, Camden County to the west and the Atlantic Ocean to the east. The county runs primarily north to south and is dominated by the presence of the Currituck Sound. Although, in total, the county measures in 443 square miles, less than 60 percent of that is dry land. The Currituck Sound is one of seven sounds that make up the 3,000 square-mile Albemarle-Pamlico Sound System, the second largest estuary in the United States. Despite being a large body of water, the Sound is generally shallow,

with average depths ranging between 1.1 and 1.6 meters (U.S. Department of Transportation, 1998). Apart from attracting waterfowl, the Currituck Sound is home to a wide variety of fish and is frequently used for hunting, fishing and recreational activities. This ecologically sensitive area effectively serves to divide the county into three geographically distinct regions that are separated as much by accessibility as they are by topography and land use patterns.

Figure 4: Currituck County, North Carolina: Detailed



Source: Currituck County. (2007).

The mainland is by far the most substantial of these regions and accounts for the majority of the county's landmass. Actually, this section could be further subdivided into northern and southern mainland sections. In general, communities to the north of the Intracoastal Waterway act as bedroom communities for the southern Virginia metropolitan areas of Virginia Beach, Norfolk, and Newport News⁸. Conversely, communities in the south tend to be associated with the service industries that support the Outer Banks tourism sector. In general, farms and rural residential development characterize the mainland portion of the county.

Due to the linear nature of the county, mainland development has occurred along a major north-south corridor running the length of the Currituck Sound. At Barco located just north of the Intracoastal Waterway, NC 168 from Virginia joins US 158 from Elizabeth City in Pasquotank County to the west. From this point US 158 becomes a five-lane thoroughfare to the Outer Banks, transporting throngs of vacationers at high speeds through the small inland communities of Coinjock, Grandy and Jarvisburg. At the southern extend of the mainland peninsula, US 158 turns east and connects to Dare County and the Outer Banks via the three-mile long Wright Memorial Bridge. In 1995, a second two-lane bridge was completed that ran parallel to the original Wright Memorial Bridge expanding capacity to four lanes. Because the Currituck Sound is so shallow, the bridge needed only to accommodate a 35-foot vertical navigation clearance and a 40-foot horizontal navigation clearance (U.S. Department of Transportation, 1998).

The Currituck portion of the Outer Banks is a narrow 25-mile strip of beach running from Virginia in the north to Dare County in the south. This region is only accessible via NC 12, a two-lane road that slowly meanders northward from Kitty Hawk in Dare County before terminating in Corolla in Currituck County. From Corolla, the "road" becomes four-wheel-drive access only and continues on to the northern most beach community of Carova three-miles south of the Virginia line.

At most points along the Currituck Outer Banks, the land is no more than half a mile from sound to ocean. This unique topography has had a significant impact on coastal development patterns. The ubiquitous million-dollar beach houses that now characterize the NC 12 corridor are a direct result of this limited supply of land. The majority of this development, however, is a relatively new phenomenon. As recently as the early 1960s, the "end of the road" was located in Duck, a community seventeen miles south of the current NC 12 terminus. In fact, the Currituck County portion of NC 12 would remain unpaved until 1984.

In the late 1960s and early 1970s development started to push steadily northward as county officials began the process of subdividing the Currituck Outer Banks. The area north of Corolla was partitioned to create (from north to south) Carova Beach, North Swan Beach, Swan Beach, Seagull and Ocean Beach. These five communities included space for 3,027 dwelling units. By 1979, four additional communities between Corolla and the Dare County line had been approved. From north to south they are:

⁸ Currituck County is located in the Virginia Beach-Norfolk-Newport News, VA-NC Metropolitan Statistical Area.

- Corolla Light: 522
dwelling units
- Whalehead Beach: 864
dwelling units
- Ocean Sands: 2,806
dwelling units plus 2 hotels
- Pine Island: 447
dwelling units plus a hotel

Since 1979, there have been at least seven additional subdivisions built on the Currituck Outer Banks. From north to south those are:

- The Villages of Ocean Hill: 291
dwelling units
- Ocean Hill: 113
dwelling units
- Monterey Shores: 608
dwelling units
- Buck Island: 137
dwelling units
- Crown Point: 81
dwelling units
- Spindrift: 31
dwelling units
- Currituck Shooting Club: 640
dwelling units plus a hotel

(U.S. Department of Transportation, 1998)

It is likely that this pattern of growth would have continued all the way to the Virginia line had the area north of Corolla not been designated as a protected area under the Coastal Barrier Resources Act (CBRA) of 1982. The goal of CBRA was to eliminate federal incentives that encourage the development of environmentally sensitive coastal areas designated as Coastal Barrier Resource Systems (CBRS) (U.S. Fish & Wildlife Service, 2007). For instance, under this legislation, federal funds cannot be used for disaster relief, community block grants, flood control, construction of new federal highways, construction of new infrastructure, and beach renourishment projects. Of particular note was the National Flood Insurance Program that disallowed the issuance of federal flood insurance to any properties completed after the CBRS effective date. Units completed prior to that date continued to be eligible for coverage under “grandfathered in” policies, however, if they were later substantially improved or damaged, the federal flood insurance policies would not be renewed. These measures simultaneously reduced federal expenditures, prevented the loss of human life and property from violent storms, and protected vulnerable coastal barrier island ecosystems.

However, despite being a powerful disincentive, the CBRA does not prevent non-federally funded development from taking place. It was, therefore, significant when, in 1984, the Nature Conservancy deeded several parcels of land north of Corolla to the U.S.

Fish & Wildlife Service for inclusion into their National Wildlife Refuge System. Unlike the areas described above, these refuges are completely off limits to development. The Currituck National Wildlife Refuge includes six separate parcels totaling 4,103 acres that, at points, span from sound to ocean, thus prohibiting any continuous northbound extension of NC 12.

Knotts Island, the third and final region, sits between the mainland and the Outer Banks, surrounded on three sides by the waters of the Currituck Sound. Although not technically an island, it is from the standpoint of Currituck County and North Carolina. In the same way the Outer Banks region is not accessible from Currituck County by land, Knotts Island can only be reached by driving south from Virginia on NC 615 or by taking a ferry from the mainland. The 8,219-acre Mackay Island National Wildlife Refuge dominates the region, accounting for nearly 80 percent of the island's landmass.

This area is also home to the county's two largest winemakers, Martin Vineyards and Moonrise Bay Vineyards, the heart of the Currituck County wine industry. Martin Vineyards also has an extensive orchard and farmer's market specializing in apples and peaches.

Mid-Currituck Sound Bridge

This geographic disconnect between the three regions of the county creates obvious logistical challenges for a number of diverse stakeholders. Mainland residents working on the Outer Banks can have, especially during the summer months, astonishingly long commute times. Just to the south of Coinjock, tourists traveling from Virginia to Corolla are separated by a distance of less than 10 miles; however, they will have to drive nearly 60 miles before they reach their final destination. Once at the beach, the Currituck Sound again acts to separate the tourists and their money from the mainland business community (Tom Wright, personal communication, October 20, 2006).

On the other hand, some would argue that this isolation has served to maintain the character and many of the physical amenities that bring visitors to the county on an annual basis. Residents of the Currituck Outer Banks need only look south to Kitty Hawk as an example of a once quaint beach community that has been transformed into a garish resort town complete with dozens of "tacky" surf shops and miniature golf courses (Pat Lewis, personal communication, July 20, 2006 and on October 18, 2006).

It is understandable then, why the issue of the Mid-Currituck Sound Bridge has sparked so much public debate since it was initially proposed more than 30 years ago. During this time, the controversial project has come to represent something much greater than itself. Depending on an individual's motivation, the proposed bridge has different implications for the county's future physical, economic and environmental development. On the surface, however, these issues are condensed and have served to gradually polarize the community into two distinct, intractable camps – those for the bridge and those against it.

As mentioned above, the first bridge to provide "convenient" access to the Currituck Outer Banks was the original wooden Wright Memorial [toll] Bridge completed in 1930. For the next several decades, growth on the Outer Banks was slow and the bridge was sufficient to handle demand. However, as development began to ramp up in the late

1960s and early 1970s, county officials began to recognize the potential need for, and desirability of, a Currituck Outer Banks-specific access route.

In the 1990 Currituck County Land Use Plan, county officials outlined seven compelling reasons for the construction of a Mid-Currituck Sound bridge:

1. Provide safe and timely evacuation of the Currituck Outer Banks, which in 1990 contained over 7,800 platted lots within 14 developments.
2. Provide enhanced emergency medical services. Long delays of several hours or more during peak traffic times are common on the Outer Banks.
3. Enhance law enforcement on the Outer Banks.
4. Improve transportation of school age children on the Currituck Outer Banks. Presently these children attend school in Dare County and face up to four hours of travel time per day.
5. Provide better access to governmental services, including the Health Department, Inspections, Planning and Public Works, to name a few.
6. Enhance revenues of businesses located on the mainland, particularly those related to the building trade.
7. Allow greater accessibility for service workers on the mainland. This would also benefit some of the counties west of Currituck who have high unemployment rates.

(Currituck County, 1991 p. 1.6.1)

After years of studies, public hearings and false promises, the proposed bridge is once again in the spotlight. The project has recently been turned over to the newly created North Carolina Turnpike Authority (NCTA) for development as a toll bridge (See Figure 5) (2007).

Figure 5: Proposed Mid-Currituck Sound Bridge



Source: North Carolina Turnpike Authority

The proposed three-lane bridge⁹ would be approximately seven miles in length and connect US 158 near Aydlott on the mainland, to NC 12 in Corolla on the Outer Banks. Preliminary costs for the project range between \$306 million and \$822 million¹⁰. The NCTA estimates that 60% of the project will be financed from tolls, leaving 40% to be financed by other, as of yet undetermined, public-private partnerships. The NCTA hopes to have the bridge completed and open to traffic sometime in the fall of 2013¹¹ (2007).

V. Currituck County: Strengths, Weaknesses, Opportunities and Threats

In order to more fully understand Currituck County's economic position, the following section investigates the strengths, weaknesses, opportunities and threats (SWOT) the county currently faces. The analysis explores the four key indices of human capital, physical capital, fiscal capital and social capital that will provide the foundation for the subsequent economic development policy recommendations.

Human Capital

This indicator refers to quantity and quality of the regional workforce and will describe and interpret data on the following statistics: population, net migration, employment and

⁹ The center lane would be reversible depending on traffic flow patterns.

¹⁰ In 2007 \$

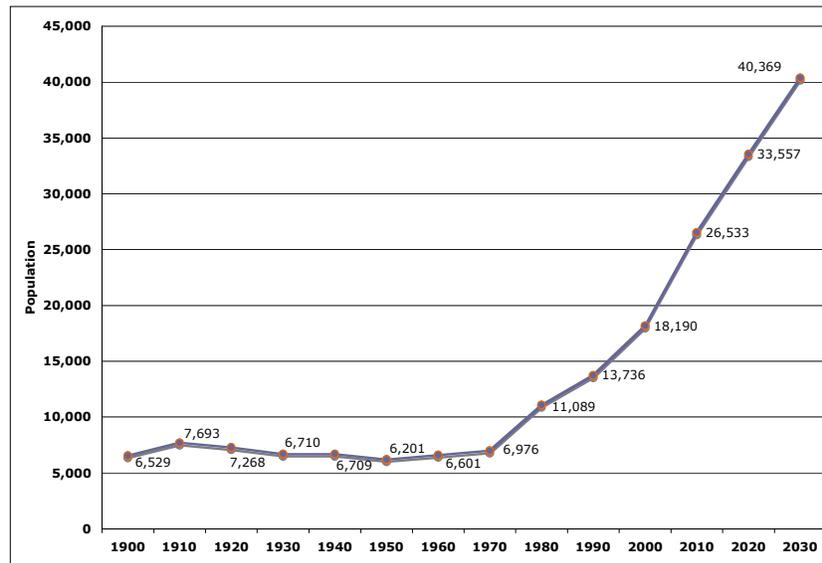
¹¹ Preliminary environmental and project development studies are underway and thus, the final project description, location, cost and completion date of the proposed bridge and roadway cannot be known.

unemployment levels, labor force population rates, commuting patterns, and educational attainment levels.

Population and Migration

In 2006, Currituck County had a population of 23,770 residents. While in absolute terms this not a heavily populated region, the rate at which it has been growing over the past several decades has been staggering (See Chart 1). In the 1970s the county’s population grew by almost 60%. The 1980s and 1990s experienced growth rates of around 24% and 33% respectively. During those same years, growth rates for North Carolina as a whole were on average 11% lower. From 2000 to 2006 Currituck County ranked 49th among the 100 fastest growing counties in the United States with an estimated growth rate of 30.7% (U.S. Census Bureau, 2007). It is important to note that, over roughly the same time period, the county’s labor force grew by a similar percentage indicating that the growth was largely attributable to a younger working class rather than a retired population¹² (Bureau of Labor Statistics, 2007).

Chart 1: Currituck County Population: 1990–2030



Source: U.S. Census Bureau

Net migration figures also indicate that Currituck County is faring better than the nation and region as a whole. Despite seven of the sixteen counties that make up the Northeast Partnership reporting negative net migration patterns for the years between 1995 and 2000, the region as a whole experienced a total of 2,052 in positive net migration due in large part to the growth of Currituck and Dare counties. From 2000 to 2004, Currituck County ranked 18th among U.S. counties with the highest average annual rates of net domestic in-migration (43.3%) (U.S. Census Bureau, 2007).

This strong growth rate is a positive indication of the county’s ability to attract fresh talent and the potential to capitalize on the skills they possess. This trend may also result

¹² From 2000 to 2005 the county’s population grew by 26.4% and the labor force grew by 26.0%.

in an expansion of the tax base. However, because the Hampton Roads, Newport News, Norfolk, Virginia Beach region bordering the county to the north has also been experiencing a population boom, Currituck is increasingly being viewed as a bedroom community. “As a result, the [county] is at risk of incurring public sector service costs sharply disproportionate to corresponding tax revenue increases” (Luger and Lane, 2005, p. 4). This may also be one of the reasons the county has experienced such a dramatic increase in housing values over the last several years.

Employment, Labor Force and Commuting

In 2005, in-county total employment was reported to be 5,382 individuals, a 28% increase over 2001 levels. In the same year, private sector employment was reported to be 4,247 individuals, an increase of 33% over 2001 levels. The difference between the total and private sector employment figures represents that portion of the county’s employment attributable to federal, state and local government personnel. In 2005, this public sector accounted for 24% of total employment as compared to 21% of total employment in 2001 (Bureau of Labor Statistics, 2007).

As shown below in Table 2, among private sector employers, the retail trade sector dominates as a percentage of the county’s 2005 total employment (26.7%) (Bureau of Labor Statistics, 2007). All together, the elements of a typical tourism-based economy including construction, retail trade, real estate and rental and leasing, and accommodation and food service make up 65.3% of the county’s employment. A more detailed examination of the industries that comprise Currituck County’s areas of greatest competitive advantage will be explored further in the following tourism sector analysis.

Table 2: Currituck County Employment by Industry in 2005

Base Industry: Total, all industries	4,247	100%
NAICS 11 Agriculture, forestry, fishing and hunting	77	1.8%
NAICS 21 Mining	ND	ND
NAICS 22 Utilities	ND	ND
NAICS 23 Construction	589	13.9%
NAICS 31-33 Manufacturing	110	2.6%
NAICS 42 Wholesale trade	140	3.3%
NAICS 44-45 Retail trade	1,134	26.7%
NAICS 48-49 Transportation and warehousing	ND	ND
NAICS 51 Information	29	0.7%
NAICS 52 Finance and insurance	72	1.7%

NAICS 53 Real estate and rental and leasing	515	12.1%
NAICS 54 Professional and technical services	93	2.2%
NAICS 55 Management of companies and enterprises	ND	ND
NAICS 56 Administrative and waste services	142	3.3%
NAICS 61 Educational services	ND	ND
NAICS 62 Health care and social assistance	ND	ND
NAICS 71 Arts, entertainment, and recreation	271	6.4%
NAICS 72 Accommodation and food services	535	12.6%
NAICS 81 Other services, except public administration	170	4.0%
NAICS 92 Public administration	ND	ND
NAICS 99 Unclassified	44	1.0%

ND: Not Disclosable

Source: Bureau of Labor Statistics

As noted above, this reliance on service sector industries means that the majority of the jobs in the county's economy are low-wage, unskilled, part-time positions with little to no room for advancement. This creates myriad problems for the county ranging from housing affordability issues to a deficiency of marketable skills needed for effective business recruitment.

As housing prices continue to spiral upward, fewer and fewer of those employed in Currituck County will be able to afford to live there, while those who can afford to live there, must commute outside of the county to do so. According to the U.S. Census Bureau's Residence County to Workplace County Flows, in 2000, of the 8,603 total workers in Currituck County, 66.5% commuted out of the county. Of those who commuted, 59.2% went to Virginia while 26.8% went to Dare County (2007). Wayne Leary, the former Director of Economic Development in Currituck County, believes that in recent years, the total number of out-commuters has increased to 75% (Personal communication, March 16, 2006).

In light of the geographic disconnect mentioned above, it is no surprise that commuting times in Currituck County are far above national averages. In 2000, the U.S. average commuting time was 25 minutes as compared to the county's 35-minute average (U.S. Census Bureau, 2007).

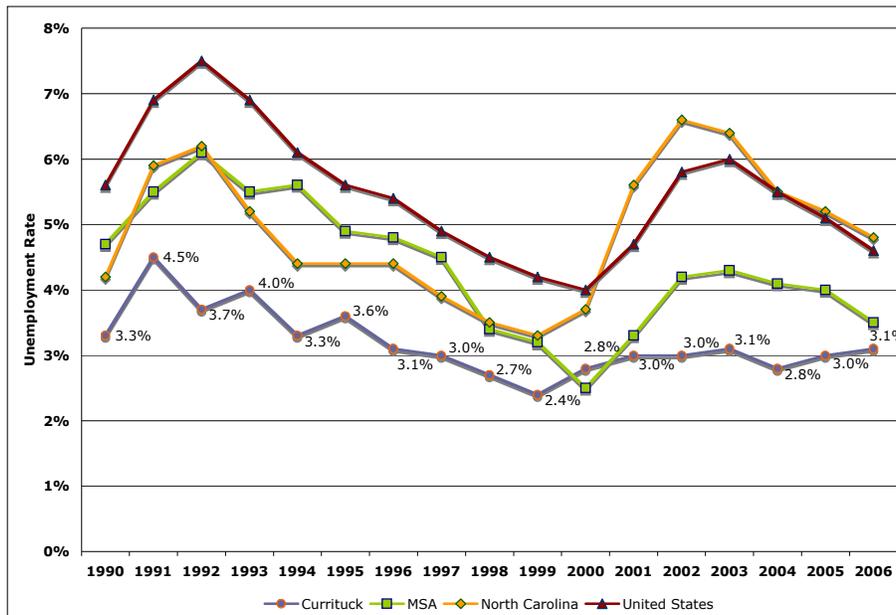
A high out-commute rate is correlated with leakage of potential retail sales and sales tax revenue to neighboring states/counties. The magnitude of the leakage is determined by calculating a retail pull factor. This ratio identifies the proportion of local sales captured by the local community as compared to the state or nation. A pull factor greater than 1

indicates that the local area captures a greater percentage of local sales as compared to the reference region. A pull factor less than 1 is indicative of a sub-par performance as compared to the reference region. In 2005, it was estimated that Currituck County had a pull factor of only 0.72, indicating that it was leaking 28% of the county’s proportional retail sales and sales tax revenue (\$10,299,573 in 2005) equating to a loss of almost \$3 million (North Carolina Department of Revenue, 2006).

Furthermore, as the number of Currituck County residents that travel outside the area to work rises, they become increasingly susceptible to firm closures in neighboring markets. Such was the case when the Ford Motor Company announced that they would be closing the Norfolk F-150 plant by 2008. Of the 2,433 employees that will lose their jobs, it is estimated that 20% of those live in northeastern North Carolina counties (Day, 2006).

Unemployment rates in the county have been below the Virginia Beach-Norfolk-Newport News, VA-NC MSA, North Carolina, and the United States as a whole (See Chart 2) (Bureau of Labor Statistics, 2007).

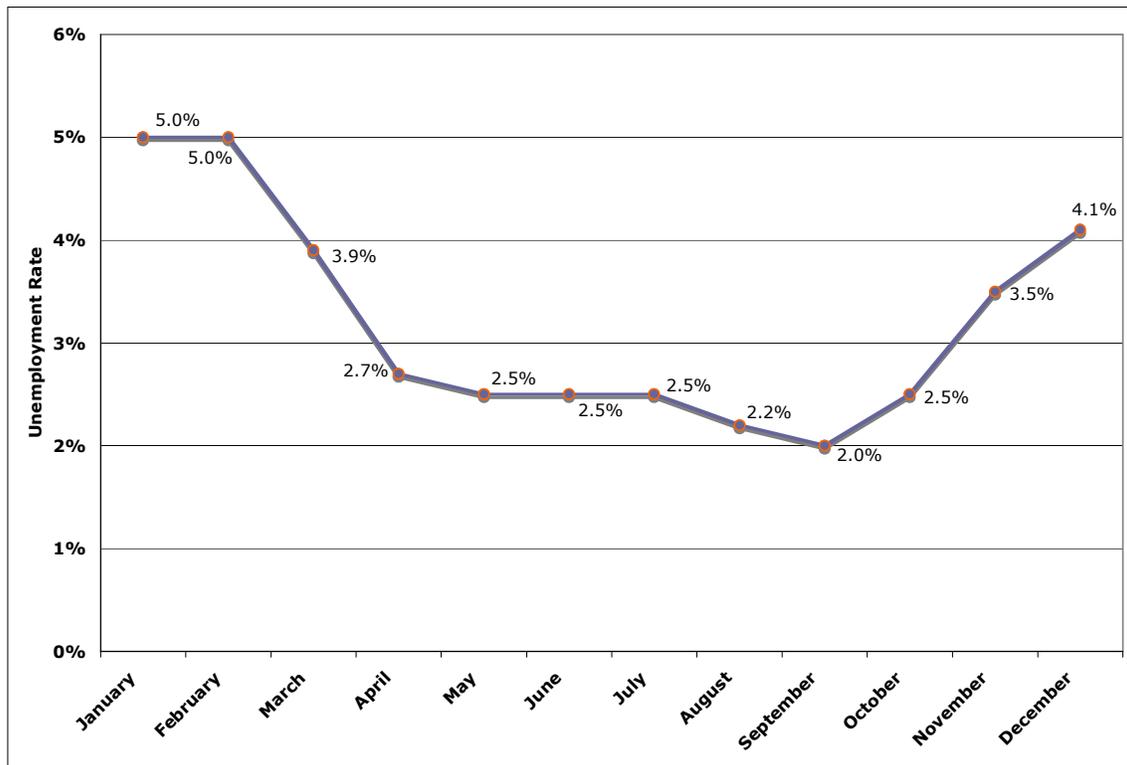
Chart 2: Average Annual Unemployment Rates: 1990–2006



Source: Bureau of Labor Statistics

It should be noted, however, that these are averages taken over each year. If examined on a monthly basis, the numbers tell a different story. Over the same 17-year time period, the average unemployment rate in January and February was 5.0%. By the middle of summer, on average, those rates fall to 2.5% (See Chart 3) (Bureau of Labor Statistics, 2007).

Chart 3: Average Seasonal Unemployment Rates: 1990–2006



Source: Bureau of Labor Statistics

This extreme seasonal unemployment variation presents a number of obvious challenges for a wide range of interest groups within the county. During the peak season, Currituck County is forced to import huge amounts of labor, typically from Eastern Europe, to fill the multitude of part-time positions. This results in a critical housing shortage as the seasonal labor force is often without transportation and must find accommodations within a short distance to work. It is not unusual for coastal apartments to have three times maximum capacity. This ubiquitous overcrowding puts a great deal of strain on public works and the surrounding environment.

During the off-season, the economy shuts down both literally and figuratively. Carolyn Fifield, the owner of the Corolla Light Inn, is one of the few Outer Banks business owners to stay open year-round. While she recognizes the importance of an off-season to her business, primarily as a quiet romantic getaway for the Dual Income No Kids (DINK) and “empty nesters” markets, she concedes that, without offering some degree of basic amenities, attracting these visitors will become increasingly difficult (Personal communication, October 18, 2006).

Education

In 2000, of the 16 member counties in the Northeast Regional Partnership, only five, including Currituck, had high school diploma or equivalency rates of 75% or better (77.6%). While this is still below the North Carolina (78.1%) and national (80.4%) averages, education levels are inextricably linked to labor force marketability and must

be the cornerstone of any comprehensive economic development initiative (U.S. Census Bureau, 2007).

Unfortunately, the county does not compete as well in terms of tertiary education levels. In 2000, the percent of U.S. residents with a bachelor's degree or higher was 24.4% compared to only 13.3% for Currituck County (U.S. Census Bureau, 2007). This number must improve if the county hopes to remain competitive in attracting industries in the new "knowledge" economy.

Physical Capital

This indicator encompasses a number of infrastructure related systems including transportation, water and sewer, educational institutions, residential housing stock, and the environmental/cultural assets of the region.

Transportation

Currituck County is ideally situated on the Eastern Seaboard mid-way between New York and Florida. This position gives it same-day trucking access to over one-third of the nation's consumer and industrial markets. Unfortunately, Interstate 95, the major north-south connector, passes through North Carolina over 100 miles to the west. This corridor is more efficiently accessed by traveling through southern Virginia to Richmond located just over 130 miles to the northwest.

As mentioned above, the county's major roads are NC 168 and US 158 on the mainland and NC 12 on the Outer Banks. NC 168 connects the northern half of the mainland with Virginia while US 158 is the western access point to Elizabeth City as well as connecting the southern half of the mainland with Dare County to the south. These roads primarily function as five-lane thoroughfares to the Outer Banks. NC 12 is a meandering two-lane beach access road that runs from Dare County to Corolla where it ends and the beach access route to Virginia begins. Due to the high levels of slab-foundation development along this corridor, storm-water run-off frequently causes significant flooding adding to traffic delays and crippling emergency response vehicles (John Wright, personal communication, October 20, 2006 and on March 14, 2007).

One of the most significant transportation-related economic development opportunities is the Currituck Regional Airport. This county-owned airport has over 500 available acres and is currently completing Phase I, which includes the expansion to a 5,500-foot runway capable of accommodating corporate jets seating up to 50 people. Phases II, III, and "Ultimate" are scheduled to be completed at intervals over the next 15 to 20 years. Wayne Leary, the former Economic Development Director and acting head of the Currituck Regional Airport firmly believes that having airport facilities that can handle these larger jets will be invaluable to the mission of attracting new businesses for the purposes of economic development (Personal communication, March 16, 2006).

Other regional aviation infrastructure includes the Norfolk International Airport and a landing strip on the Outer Banks. Located only 36 miles to the north, the Norfolk airport is the closest major airport to the Outer Banks, offering more than 200 arrivals and departures daily. The airport at Pine Island on the Outer Banks is accessible only with small Sea Air charter flights that run out of the Norfolk Airport.

In terms of water access, the county has no deep-water ports, but is accessible to the major shipping lanes that run into Norfolk, Virginia to the north. There is also one ferry that runs between the town of Currituck on the mainland and Knotts Island.

The county also has the Intracoastal Waterway that runs from Massachusetts to Florida and bisects the mainland at the town of Coinjock. This naturally beautiful thoroughfare, which caters to a predominantly affluent north- and south-bound boating community, has a great deal of untapped potential as a generator of mainland tourism revenue.

One establishment currently offering services to this market is the Midway Marina and Motel and Crabbies Restaurant, located on the northern banks of the waterway at Coinjock. At one time, this multi-use concern, providing gas, food, and lodging, was seen as “destination experience” for travelers making the north-south commute. However, in recent years, increases in state diesel taxes have priced this and many other North Carolinian marinas out of the fuel business. Owner, Terry Mills reports that, as a result of the increased diesel prices, the majority of travelers now buy gas in Virginia where it is cheaper and no longer have an incentive to stop and spend additional money at his restaurant and motel. He is concerned that if this trend continues, he will have to begin to cut back on longtime staff members. (Personal communication, October 19, 2006).

Finally, as mentioned above, the development of a mid-Currituck Sound transportation option will be essential for the continued development of the mainland as a part of the tourism destination circuit. This could be accomplished via the proposed bridge, a ferry or some other private entrepreneurial response such as a water-taxi service.

Water and Sewer

One of the biggest challenges facing Currituck County’s future development initiatives is the lack of a central water and sewer system. Water shortages are common in the county and recently led to a moratorium on construction lasting from June 2006 to February 2007. This restriction meant that those that had not applied for a building permit prior to June 2006 were not eligible for water connection. Although the county has a new reverse osmosis plant coming on-line in July 2009, water will continue to be an issue over the next several years.

Educational Institutions

A significant factor contributing to Currituck County’s low rate of higher educational attainment is the lack of any tertiary educational institutions within the county. The closest schools, Elizabeth City State University and the College of the Albemarle, are both located in Elizabeth City in Pasquotank County to the west where enrolment rates for Currituck County residents are negligible.

More importantly, there does not appear to be any coordination with the region’s tourism sector in terms of developing appropriate service-sector curriculum (Feser, 2000). There is a great deal of potential to begin offering courses in areas as diverse as the culinary arts, viticulture, hospitality/hotel management, sports health, advertising, retailing and transportation planning. By filling the gaps that currently exist in tourism-related education and training programs, Currituck County will be better equipped to expand existing businesses and attract new related industries. This policy will have the added benefit of increasing the skills, wages and quality of life for county residents.

Residential Housing Stock

The dichotomy that exists between the residential housing stock on the mainland and the Outer Banks is significant. The former is characterized by small, at times, run-down single-family homes or farm houses and a number of trailer parks, while the latter features gargantuan five to nine-bedroom beach mansions complete with elevators and home theaters. According to one real estate search site, the average listing price for homes on the Outer Banks is \$1.1 million and up while some areas on the mainland begin at \$242,000¹³ (Trulia, 2007).

While this discrepancy is impressive, it should be noted that, in comparison to other eastern North Carolina counties, even the lowest value is extremely high. In 2000, the U.S. Census Bureau listed the median home value for Northampton County, another member of the Northeast Partnership, at \$57,500. That same year, Currituck County's median home value was reported to be \$115,500 (2007). Subsequent to that time, Currituck County has experienced a boom in housing values that have resulted in extreme unaffordability for many residents. One real estate agent that sits on the Economic Development Board reported selling a double-wide trailer in 2006 for \$189,500 (Personal communication, Gerry Forbes, July 11, 2006).

The county's Unified Development Ordinance puts housing affordability further out of reach. This law mandates a minimum lot size of three acres (Currituck County, 1992). This applies to both single-family homes and multi-unit developments. With land prices closely tracking home prices, families looking to build a home in Currituck County are often unable to afford the additional acreage. Furthermore, the costs to developers looking to create residential subdivisions are facing prohibitively high land costs that cannot simply be passed on to the consumer.

If the county hopes to attract a capable workforce many of whom will be employed in the service sector, it will be vital that they address both the supply and demand sides of the affordable housing market.

Environmental/Cultural Assets

Without question, Currituck County's most valuable natural asset is the 25-mile stretch where the Atlantic Ocean hits the sands of the Outer Banks. However, as mentioned above, at one time, the county's most valuable natural resource was the Currituck Sound and the waterfowl population it supported. If Currituck County hopes to maintain a sustainable tourism economy, county officials must ensure that measures are in place to prevent the mistakes of the past from repeating themselves.

The county, in conjunction with the U.S. Fish and Wildlife service, has already taken some important steps to protect their sensitive natural ecosystems through the creation of two national wildlife refuges¹⁴ encompassing over 12,000 acres (2007). The county is also home to the Pine Island Audubon Sanctuary that includes approximately 6,000 acres

¹³ Week ending March 14, 2007

¹⁴ Currituck National Wildlife Refuge and Mackay Island National Wildlife Refuge

of dunes, shrub thickets, forest and marsh spanning from the ocean to the sound (National Audubon Society, 2007).

One of the county's most well known eco-attractions is the Corolla Wild Horses. Descendents of Spanish Mustangs, these horses freely roam the northern beaches and can be readily seen in the four-wheel-drive area north of the NC 12 terminus. A number of businesses on the Outer Banks provide guided tours, educating visitors about the ecology and the history of the area.

Apart from the waterfowl that made the region famous at the turn of the century, Currituck County is home to a vast number of other bird species. The county includes four stops along the North Carolina Birding Trail. This organization has separated the state into three main regions and then further sub-divided those regions into groups. Currituck County is located in the Northeast group of the Coastal region. (North Carolina Birding Trail, 2007). This elaborate network provides birding enthusiasts with a one-stop shop for information on regional site descriptions, species of interest and habitat as well as highlighting many of the local area's historical attractions.

Eco-tourism and heritage tourism are not mutually exclusive and thus, the opportunity exists for Currituck County to use its rich cultural history to create a comprehensive alternative tourism experience. The county has already begun to do this to some extent by creating the Currituck Heritage Park on the Outer Banks. This park features four main attractions including the newly restored historic Whalehead hunting club, the Currituck Beach Lighthouse and Light Keeper's House, the new Outer Banks Center for Wildlife Education and the Historic Corolla Village¹⁵.

One of the mainland's greatest tourism-related advantages over the Outer Banks is the availability of land. This resource has led to the development of six 18-hole golf courses¹⁶ along the county's US 158-corridor (Currituck Chamber of Commerce, 2007).

The availability of land has also led the county to begin producing grapes on a large scale to support a burgeoning Currituck wine industry. According to John Wright of Sanctuary Vineyards, the region has ideal growing conditions: rich soils and a temperate climate with warm days and cool nights caused by the incoming ocean breeze (Personal communication, October 20, 2006 and on March 14, 2007). This area is particularly good for growing the Muscadine grape, a species indigenous to the southeastern United States. Many of the vineyards including the two largest located on Knotts Island¹⁷, have begun to offer tours where visitors can learn about the process of winemaking, taste the local wines and have the opportunity to make a purchase.

Currituck County must be cautious, however, not to exceed a threshold of development that could lead to the destruction of either the area's environmental or cultural assets.

¹⁵ The Historic Corolla Village incorporates the Corolla Schoolhouse, built in the early 1900s, the Corolla Chapel, built in 1885, and a Life Saving Station, built in 1878, that was relocated from Kill Devil Hills.

¹⁶ The Carolina Club; The Currituck Club; Goose Creek Golf & Country Club; Kilmarlic Golf Club; Mill Run Golf Club; The Pointe Golf Club

¹⁷ Martin Vineyards and Moonrise Bay Vineyards

Fiscal Capital

This indicator encompasses all areas of county wealth and finance including public sector finances, personal income and household wealth and the industrial composition of Currituck County's economy.

Institutional Fiscal Capital

According to the latest proposed Annual Budget, the county's fiscal year 2006 – 2007 property tax base valuation was \$7.596 billion, up from \$1.502 billion in 1996. As is the case in most counties, property taxes make up the majority of general fund revenue. In fiscal year 2006 – 2007, the expected property tax collection will be in excess of \$21.6 million accounting for 46% of the total general fund revenue¹⁸. Within the county, the Outer Banks will account for almost 70% of this figure¹⁹ (Currituck County, 2006).

Currently, Corolla is undergoing proceedings to incorporate. If it were to succeed, it would create the 14th largest city in North Carolina in terms of assessed valuation. "It would have a tax value of \$4.3 billion – over 1 percent of the entire state's property tax base. Only Asheville, Concord, Fayetteville, Durham, Winston Salem, Gastonia, Greensboro, High Point, Charlotte, Wilmington, Chapel Hill, Cary and Raleigh have larger tax bases." Further, because Corolla only has a population of 678, it would result in a per capita tax valuation of \$7.5 million (Macaulay, 2007, p. 1).

Estimated occupancy taxes totaling \$6 million are expected to account for the second largest source of general fund revenue. The occupancy tax is a charge in addition to sales tax levied on room charges in hotels, motels and other "transient facilities", most notably beach houses. Effective beginning January 1, 2006, the occupancy tax rate increased to 6% (Currituck County, 2006). On beach houses that during the peak season can typically rent from between \$10,000 to \$15,000 per week, a 6% tax represents a significant windfall for the county.

The same legislation that increased the occupancy tax rate also changed the purposes for which the tax may be used (North Carolina General Assembly, 2004). As it now states, at least 50% of the net proceeds of the tax are restricted for tourism-related expenditures and at least two-thirds of the remaining 50% are to be spent on travel and tourism promotion. While the concept of travel and tourism promotion may be relatively straightforward, the activities covered under tourism-related expenditures are much less so. The language reads as follows:

Expenditures that, in the judgment of the Currituck County Board of Commissioners, are designed to increase the use of lodging facilities, meeting facilities, recreational facilities, and convention facilities in a county by attracting tourists or business travelers to the county. The term includes tourism-related capital expenditures and beach nourishment.

¹⁸ The fiscal year 2006 – 2007 property tax rate per \$100 assessed value is \$0.32.

¹⁹ 57% from Corolla and 12% from Carova

(S.L. 2004-95, Section 2, p.2)

As one Outer Banks business owner noted, this language leaves it up to the discretion of the County Commissioners to determine what activities are, and which are not, considered to be tourism-related expenditures (Douglas Brindley, personal communication, March 12, 2007). Furthermore, it says nothing about a timeframe regarding the expenditure of the collected funds. This ambiguity has left many Outer Banks businesses concerned that the County Commissioners will take tourism for granted and choose to either spend the money in other ways or not spend it at all.

As a tourism-based economy, sales tax is also a large part of the general revenue fund. In fiscal year 2006 – 2007, this figure is expected to top \$5 million (Currituck County, 2006).

In terms of revenue generation, the combination of property, occupancy and sales tax, places Currituck County in a significantly better position as compared to most other eastern North Carolina counties. Additionally, the dominance of the tourism sector means that there are fewer year-round residents requiring fewer expensive public services including primary and secondary education and health care.

Apart from taxes, a tourism-based economy generates myriad other fiscal benefits. During the “peak” season, generally considered to be June 15th through August 15th, it is estimated that between 50,000 and 60,000 vacationers per week descend on the Currituck Outer Banks.

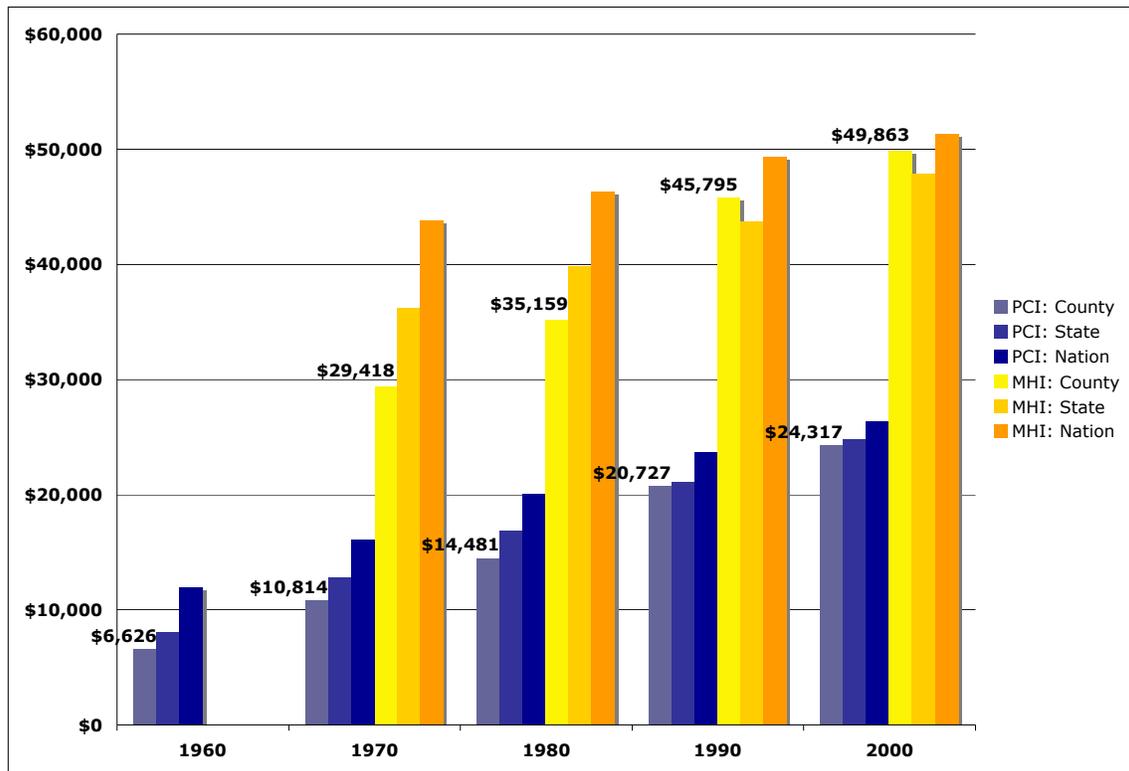
According to the North Carolina Department of Commerce, in 2005, Currituck County’s tourism revenues topped \$109 million. This figure represents a 186% increase from 1995 levels. More than 1,560 jobs were directly attributable to travel and tourism (2007).

Personal Income and Household Wealth

As shown in Chart 4, in terms of per capita income (PCI), since the 1960s, Currituck County has been consistently underperforming both the state and the nation. Data indicate, however, that during the 1990s both the county and the state began to make up some of that lost ground (U.S. Census Bureau, 2007).

Chart 4 also shows that, although Currituck County lagged way behind both the state and the nation in terms of median household income (MHI) in the 1970 decennial census, by 1990, had surpassed the state, and by 2000, was approaching national levels.

Chart 4: Per Capita Income and Median Household Income in 2007 \$



Source: U.S. Census Bureau

In 2000, poverty rates in the county (10.7%) were lower than the state (12.3%) and the nation (12.4%) as a whole (U.S. Census Bureau, 2007).

These figures seem to indicate that Currituck is a poor county getting steadily wealthier. However, this may have less to do with rising standards of living for existing residents as it does with an in-migration of new high-net-worth households. In 2000, Currituck County reported 419 households with incomes exceeding \$100,000 annually (Luger and Lane, 2005).

Economic Composition

As noted above, a select few tourism-related industry groups dominate the Currituck County economy including construction, retail trade, real estate and rental and leasing, and accommodation and food service. The two service-sector industries account for almost 40% of the local economy while the two sectors that are associated with building, selling and leasing vacation homes accounts for 26% of the county's economy.

This is important because these sectors typically do not pay livable wages. Based on average weekly wage data provided by the North Carolina Department of Commerce, the average annual wage for the Currituck County construction sector was \$31,252. The accommodation sector was only slightly more than a third as much, paying only \$11,544 a year on average (2007).

The Currituck County-specific tourism industries and the select NAICS codes associated with that sector will be discussed in detail in the following section.

Another significant contributor Currituck County’s economy is the public sector. According to the North Carolina Department of Commerce, all governmental employees including federal, state and local, accounted for 25% of the county’s employment in the first quarter 2006. This sector was reported to have an average annual wage of \$33,904 (2007).

Historically, the county was known for having a robust agricultural base. While this may have been the case in years past, the size of the agricultural sector and its impact on Currituck County’s economy has been steadily declining over the last several years (See Table 3) (Bureau of Labor Statistics, 2007).

Table 3: Currituck County Agricultural Sector Employment

Year	Employment		
	Sector	Total	Percentage
1997*	146	2,352	6.2%
1998*	158	2,566	6.2%
1999*	147	2,792	5.3%
2000*	143	3,015	4.7%
2001**	105	3,188	3.3%
2002**	120	3,678	3.3%
2003**	108	4,130	2.6%
2004**	77	4,204	1.8%
2005**	77	4,247	1.8%

* SIC 0A Agriculture, forestry, and fishing division

** NAICS 11 Agriculture, forestry, fishing and hunting

Source: Bureau of Labor Statistics

There are, however, two specific agricultural areas in which the county continues to have a distinct specialization. According to 2005 data, the NAICS 11142 Nursery and Floriculture Production and NAICS 111998 All Other Miscellaneous Crop Farming sectors both employ 35 individuals. While this may not be significant in terms of sheer numbers, the location quotients, one determinant of competitive advantage, are 5.97 and 21.11 respectively (Bureau of Labor Statistics, 2007). These figures indicate an extreme specialization for each of these sectors as compared to the nation as a whole.

The U.S. Census Bureau defines each of the two sectors as follows:

NAICS 11142 Nursery and Floriculture Production

This industry comprises establishments primarily engaged in (1) growing nursery and floriculture products (e.g., nursery stock, shrubbery, cut flowers, flower seeds, foliage plants) under cover or in open fields and/or (2) growing short rotation woody trees with a growing harvesting cycle of 10 years or less for pulp or tree stock (e.g., cut Christmas trees, cottonwoods).

NAICS 111998 All Other Miscellaneous Crop Farming

This U.S. industry comprises establishments primarily engaged in one of the following: (1) growing crops (except oilseeds and/or grains; vegetables and/or melons; fruits and/or tree nuts; greenhouse, nursery and/or floriculture products; tobacco; cotton; sugarcane; hay; sugar beets; or peanuts); (2) growing a combination of crops (except a combination of oilseed(s) and grain(s); and a combination of fruit(s) and tree nut(s)) with no one crop or family of crop(s) accounting for one-half of the establishment's agricultural production (i.e., value of crops for market); or (3) gathering tea or maple sap.

(U.S. Census Bureau, 2007)

These high location quotients *may* or *may not* represent a competitive advantage within Currituck County for these industries. If, however, it is determined that a specific regional characteristic or labor skill set is responsible for the relatively high location quotients, the county would be wise to pursue policy measures that encourage further development of both sectors.

Social Capital

By analogy with notions of physical capital and human capital – tools and training that enhance individual productivity – “social capital” refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.

(Putnam, 1995, p. 67)

Using this definition, it can be said of Currituck County that, although many of the social and institutional organizations have recently been put into place, the levels of cooperation and trust needed for the effective generation of social capital have yet to be sufficiently developed.

Over the last several years, Currituck County’s primary strategy for creating an atmosphere conducive to the generation of social capital has been to establish a number of departments, partnerships and advisory committees designed to solicit input from a wide range of diverse interest groups. The county hopes that, with time, these networks will build social and institutional relationships that will eventually lead to a competitive advantage for all local participants.

In 1991, the county formed the Economic Development Board, a public-private body that, along with the Economic Development Director, is charged with formulating strategic economic development initiatives and recommending projects to the Board of Commissioners (Currituck County, 2007).

In 2004, the passage of the occupancy tax legislation discussed above (S.L. 2004-95, Section 2) created the Tourism Development Authority (TDA), an elected body

responsible for the allocation of the county's occupancy tax revenue (Currituck County, 2007).

The county built on this tourism-related momentum by creating the Department of Travel and Tourism in March 2005. This body's main function is to work with the TDA and citizen groups to promote tourism in the county (Currituck County, 2007).

In October 2005, the county created the Tourism Advisory Board. This seven-member board is an elected body made of concerned citizens/business owners that represent the county's various tourism-related interests from all geographic areas. These individuals are to act as a liaison between the county and its citizens and generally advise the Tourism Development Authority, the County Manager, and the Department of Travel and Tourism in tourism-related matters (Currituck County, 2007).

Another less formal example of a recently formed tourism-related partnership is the Currituck Heritage Park, discussed above. Currently, this "partnership" is based on little more than proximity and a comprehensive pamphlet describing the Park's constituents. However, as trust develops and cooperation among the various entities grows, the potential exists to create a Currituck County cultural and eco-tourism epicenter where the whole will be greater than the sum of its parts.

One current proposal put forward by Douglas Twiddy, a long-time resident and avid Currituck County cultural advocate, calls for the development of a walking experience through the Park. With the help of his wife who heads the Corolla Coalition, he hopes to gain the support needed to personally finance the building of a hiking trail and boardwalk that takes visitors from the Whalehead Club and Wildlife Education Center, past the Currituck Lighthouse and Historic Corolla Village, through the marshes of the Currituck Sound and back to the Park. Along the way, he envisions opportunities for crabbing, bird watching and for learning about Currituck County's rich waterfowl hunting traditions (Personal communication, October 18, 2006).

SWOT Summary

The key components for each of the four capital groups have been summarized below in Table 4. This concise listing of Currituck County’s strengths, weaknesses, opportunities, and threats provides the basis for many of the conclusions and recommendations detailed in later sections.

Table 4: Currituck County SWOT Summary

Human Capital	Physical Capital
<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Strong positive population growth • Recent positive employment trends • Low overall unemployment rate <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Service-sector dominance • Negative commuting patterns • Low levels of educational attainment <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Spillover from Southern VA MSA • Seasonal labor availability • Development of service-sector curriculum <p><i>Threats</i></p> <ul style="list-style-type: none"> • Single, tourism-sector dominance • Reliance on Southern VA MSA economy • Deterioration of workforce competitiveness 	<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Currituck Regional Airport • Utility improvements underway • Natural ecosystems/Refuges <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Inadequate transportation infrastructure • Inadequate utility infrastructure • Lack of tertiary educational institutions • Lack of inland tourism attractions <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Mid-Atlantic orientation • Intracoastal Waterway • Value-added agri-/eco-tourism potential • Seasonal accommodation availability <p><i>Threats</i></p> <ul style="list-style-type: none"> • Affordable housing shortage/UDO • Environmental degradation • Natural disasters

Fiscal Capital
<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Property/opportunity/sales tax revenue • Fewer public service expenditures <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • High degree of retail sales leakage • Concentrated economic dependence <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Value-added agri-/eco-tourism potential • New-resident wealth • Increased entrepreneurial activities <p><i>Threats</i></p> <ul style="list-style-type: none"> • Mismanaged occupancy tax

Social Capital
<p><i>Strengths</i></p> <ul style="list-style-type: none"> • Established social institutions • Collaborative initiatives <p><i>Weaknesses</i></p> <ul style="list-style-type: none"> • Lack of community input • Political boundaries <p><i>Opportunities</i></p> <ul style="list-style-type: none"> • Alternative tourism experience • Winemaking industry <p><i>Threats</i></p> <ul style="list-style-type: none"> • Community polarization/insulation

VI. Currituck County: Custom Tourism Sector Analysis

As mentioned above, while there are common elements in every tourism sector, the exact industry make-up will be highly dependent on specific regional attributes. If Currituck County’s economic development officials wish to spend their limited resources most efficiently, they will need a better understanding of which industries make up their particular tourism sector, how those industries interact on a regional scale, and how best to address potential challenges or opportunities identified in this report.

The following analysis uses both bottom-up (qualitative) and top-down (quantitative) approaches. The first is based primarily on in-depth knowledge obtained from conducting over thirty interviews with individuals representing various interest groups and geographic locations between March 2006 and March 2007.

The second uses select employment data from the Bureau of Labor Statistics for the years between 2001 and 2005. Data were not obtained prior to this for reasons of availability

and industry standardization²⁰. In spite of this, instances of data suppression were still common, resulting from analysis being conducted at a county scale and at more detailed NAICS levels. In at least some instances, it is probable that there was little or no data to collect. Unfortunately, the extent to which that was the case cannot be known.

National and county employment data were collected for every industry at the two- and three-digit NAICS level. Depending on results, many three-digit sectors were further disaggregated in order to assess in which sub-sectors the employment was located. In some cases, industries were disaggregated to the six-digit NAICS sector.

Every individual NAICS code was then scrutinized to find a “best fit” for elements of the Currituck County Tourism Sector identified through interviews with key informants throughout the county. This is perhaps best signified by the inclusion of NAICS 339116 Dental laboratories. Among the components of this industry sector is, “Dentures, custom made in dental laboratories” (U.S. Census Bureau, 2007).

The choice to include this among Currituck County’s Tourism Sector came after a conversation with Patricia Sawyer, a former employee, who informed me that the Affordable Dentures office located in Moyock, is, in fact, so well known for providing affordable same-day dentures that it draws from a wide surrounding area. Often, elderly individuals who travel larger distances will choose not to make the long drive home and will stay in Moyock for the night. These out-of-state visitors inject money into the local economy through purchasing food, entertainment and lodging. Seeing an opportunity to tap into that market, in 1993, Patricia resigned from Affordable Dentures and opened Trisha’s Bed & Breakfast (Personal communication, March 13, 2007).

Location quotients were then calculated to determine which local industry groupings had a relative specialization compared to the nation as a whole. A location quotient is a measure of the ratio of an industry’s share of total local employment to that same industry’s share of total national employment. In the following equation, “ R_i ” would represent employment in the regional industry, “ R_t ” would represent the total employment in the region, “ N_i ” would represent industry employment at a national level and “ N_t ” would represent total national employment.

$$\text{Location Quotient (LQ)} = \frac{R_i / R_t}{N_i / N_t}$$

Source: McLean and Voytek. (1992).

²⁰ In 2001, the Quarterly Census of Employment and Wages switched the basis for reporting employment data from Standard Industry Classification (SIC) codes to North American Industry Classification System (NAICS) codes. Because there is not a one-for-one translation between the two reporting schemes, analysis between them is difficult and can often lead to data quality issues. For the sake of data availability issues and industry standardization, the choice was made to primarily deal with NAICS data.

If the resulting number is larger than 1, the local region has a disproportionate share of that specific industry. If, however, the number is less than 1, the region has less of a share of that industry than the nation as a whole. That is not to say that industries or groupings of industries, with location quotients less than 1 should be ignored. If an industry or sector displays significant growth in employment levels over the study period, it may be an emerging opportunity worthy of attention (McLean and Voytek, 1992).

By incorporating the techniques listed above, it was determined that the Currituck County Tourism Sector was made up of the following 41 NAICS industries:

Table 5: Currituck County Tourism Sector

NAICS CODE	INDUSTRY DESCRIPTION	LQ	'05 EMP
Base Industry: Total, all industries		1.00	4,247
NAICS 111332	Grape vineyards	ND	ND
NAICS 11411	Fishing	ND	ND
NAICS 11421	Hunting and trapping	ND	ND
NAICS 23611	Residential building construction	ND	ND
NAICS 238	Specialty trade contractors	2.12	376
NAICS 31212	Breweries	ND	ND
NAICS 31213	Wineries	ND	ND
NAICS 326191	Plastics plumbing fixture manufacturing	ND	ND
NAICS 339116	Dental laboratories	ND	ND
NAICS 4233	Lumber and const. supply merchant wholesalers	4.00	39
NAICS 42391	Sporting goods merchant wholesalers	ND	ND
NAICS 44211	Furniture stores	ND	ND
NAICS 4441	Building material and supplies dealers	ND	ND
NAICS 4451	Grocery stores	2.30	215
NAICS 44523	Fruit and vegetable markets	11.95	20
NAICS 44531	Beer, wine, and liquor stores	1.52	8
NAICS 4471	Gasoline stations	7.17	238

NAICS 45111	Sporting goods stores	4.03	34
NAICS 45322	Gift, novelty, and souvenir stores	8.13	67
NAICS 481	Air transportation	ND	ND
NAICS 483212	Inland water passenger transportation	ND	ND
NAICS 484	Truck transportation	1.03	55
NAICS 485	Transit and ground passenger transportation	ND	ND
NAICS 487	Scenic and sightseeing transportation	ND	ND
NAICS 488	Support activities for transportation	ND	ND
NAICS 492	Couriers and messengers	ND	ND
NAICS 531	Real estate	9.00	503
NAICS 53223	Video tape and disc rental	ND	ND
NAICS 532292	Recreational goods rental	ND	ND
NAICS 5411	Legal services	0.89	40
NAICS 5412	Accounting and bookkeeping services	0.24	8
NAICS 561591	Convention and visitors bureaus	ND	ND
NAICS 5617	Services to buildings and dwellings	1.02	68
NAICS 71391	Golf courses and country clubs	12.20	154
NAICS 71393	Marinas	ND	ND
NAICS 71394	Fitness and recreational sports centers	ND	ND
NAICS 71399	All other amusement and recreation industries	5.47	26
NAICS 72111	Hotels and motels, except casino hotels	ND	ND
NAICS 72119	Other traveler accommodation	ND	ND
NAICS 722	Food services and drinking places	1.34	467
NAICS 812332	Industrial launderers	ND	ND

ND: Not Disclosable

Source: Bureau of Labor Statistics

As mentioned above, there is a significant amount of data suppression. It is possible that some of the suppression is due to negligible levels of sectoral employment, as may be the case with, “Video tape and disk rental”. However, in some industries like “Residential building construction”, that is less likely to be true. As a sensitivity analysis, the Currituck County Tourism Sector was scaled back to include only three-digit NAICS sectors in an attempt to get a better percentage of data availability. The original model, shown in Table 5 above, has 60% data suppression (25 of 41 sectors). The revised three-digit model has only 38% data suppression (11 of 25 sectors) (See Appendix A). Unfortunately, what was gained in data quantity was lost in data quality as the resulting three-digit model is much less specific with regard to identifying the true drivers of the Currituck County tourism economy.

All of the sectors highlighted above have location quotients well over 1, indicating a relative local specialization in those industries, which *may* be indicative of a competitive advantage. It is important to realize, however, that the location quotient as an indicator has a number of significant limitations.

For instance, the data indicate that in 2005, the “Fruit and vegetable markets” and “Golf courses and country clubs” sectors had a significantly greater percentage of the local workforce employed in those areas than did the nation as a whole. The corresponding employment figures tell a vastly different story. Despite having nearly identical location quotients, the golf-related sector has more than seven times the number of employees. It is possible that the high location quotient observed in the “Fruit and vegetable markets” sector confirms a local competitive advantage, although it is likely that Currituck County simply has one large fruit and vegetable market (Morris Farms) that employs 20 individuals.

This works the other way as well. The 1.34 location quotient associated with the “Food services and drinking places” sector did not even warrant special attention (as compared to the other sectors). However, in 2005, 467 individuals were employed in that sector, accounting for 11% of Currituck County’s employment.

A further limitation of location quotients is that they only represent a snapshot in time. It is useful then to use data from multiple years as a way of measuring the changes in industry composition and local competitiveness. Location quotients were calculated not only for individual industries, but also for the tourism sector as a whole. By aggregating the various industries the extreme values at either end are tempered and the result is a more balanced picture of the locally defined tourism sector as compared to the nation.

Comparing location quotient data for the Currituck County Tourism Sector from 2001 to 2005 reveals that, over those four-years, the county only marginally lost in sector specialization with respect to the nation (0.03 location quotient decrease). This may have been due to a significant loss in competitiveness in the “All other amusement and recreation industries” sector that experienced a 5.43 decrease in location quotient. The “Real estate” sector also dropped in relative concentration by 1.93 to 9.00. The two most significant gains were in the “Lumber and construction supply merchant wholesalers” and “Gasoline stations” sectors, up 2.28 and 2.77 respectively (See Appendix B).

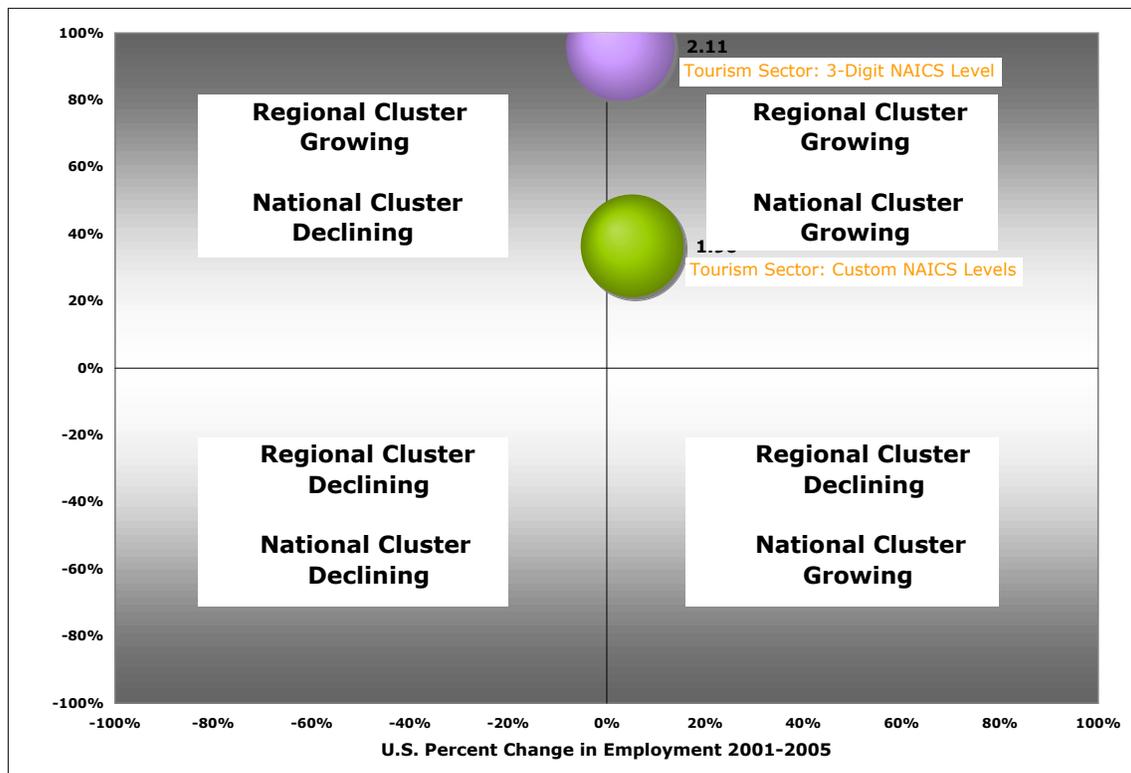
In terms of a shift in employment figures over the four-year period, the tourism sector realized a gain of 619 individuals, an increase of 36.4%. Over the same time period, for

the identically defined industry grouping, the United States gained only 5.3%. The county’s gain was due in large part to the “Gasoline stations” sector adding 120 employees (102%) and the “Specialty trade contractors” sector adding 100 employees over the four-year period (See Appendix C).

If this four-year shift is examined at the scaled back three-digit NAICS level, the location quotient for the Currituck County Tourism Sector increases by 0.65, to 2.11. Employment gains within the tourism sector are even more robust, increasing by 95.8% or 2,078 tourism-related jobs over the four-year period. In terms of employment levels, over the same time period, for the same three-digit NAICS tourism sector, the United States gained only 2.8%.

The framework for Chart 5, shown below, was borrowed from the Cluster Analysis section of the Northeast North Carolina Regional Partnership Vision Plan (Luger and Lane, 2005). Although the sectors being plotted are not “clusters” per se, the diagram is still useful in visually representing the percentage change in employment from 2001 to 2005 for both the national and county’s multi-digit “custom” and three-digit NAICS level Currituck County Tourism Sectors.

Chart 5: Currituck County Tourism Sector Competitive Position Shifts



Source: Regional Partnership Vision Plan: North Carolina’s Northeast Partnership

Source: Bureau of Labor Statistics

In general, the positioning of the sectors within the quadrants has the following significant meanings:

Top Left Quadrant: [Sector] employment is declining nationally but increasing in the local economy, suggesting some competitive advantage.

Top Right Quadrant: [Sector] employment is increasing nationally and locally. Whether the increase is the same, greater, or slower in the local [sector] compared to national trends may yield further insight.

Bottom Right Quadrant: [Sector] employment is increasing nationally but decreasing locally, indicating a loss of competitive edge in local [sector] businesses.

Bottom Left Quadrant: [Sector] employment is decreasing nationally and locally. As with the top right quadrant, comparing local and national employment rates might lead to further insight.

(Luger and Lane, 2005, p. 22-23)

In both cases examined above, the tourism sectors are positioned in the top right quadrant signifying that each grew regionally and nationally. As described above, however, the data show that they grew much more rapidly locally than nationally. To reiterate:

Multi-digit “Custom” NAICS, Currituck County Tourism Sector:

National Growth: 5.3%

Currituck County Growth: 36.4%

Three-digit “Scaled Back” NAICS, Currituck County Tourism Sector:

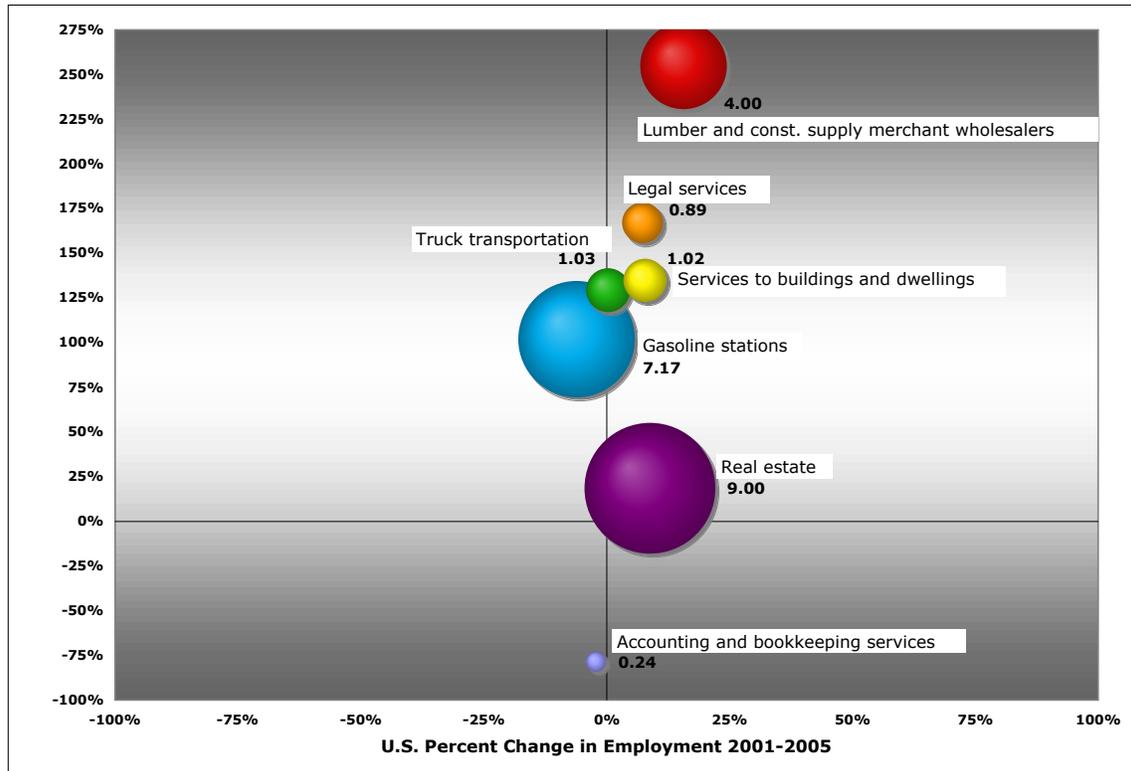
National Growth: 2.8%

Currituck County Growth: 95.8%

While the three-digit tourism sector is clearly outperforming both the nation and its more detailed counterpart, it is not the best representation of the tourism-related industries that exist in Currituck County. Thus, despite its data limitations, it is my contention that the “custom” sector is a more realistic and accurate model based on the observed industry mix.

The competitive position shifts were also calculated for the individual industries within the specified Currituck County Tourism Sector. The comprehensive results of this shift-share analysis are presented in Appendix D. Of the forty-one NAICS industries that comprise the “custom” tourism sector, seven were plotted using the same framework described above. Those results are presented in Chart 6, below.

Chart 6: Select Tourism Sector Industries Competitive Position Shifts



Source: Bureau of Labor Statistics

As was the case with the tourism sector as a whole, the majority of these seven select industries fall in the top right quadrant signifying that, over the four-year period, employment grew both locally and nationally. Of the two that did not, “Accounting and bookkeeping services” declined both nationally (-2.1%) and locally (-78.9%) while “Gasoline stations” declined nationally (-6.0%), but showed strong growth within the county (101.7%) (Bureau of Labor Statistics, 2007).

It is significant that the two fastest growing local industries, “Lumber and construction supply merchant wholesalers” and “Legal services”, pay significantly higher average weekly and annual wages (See Table 6).

Table 6: Select Industries Average Weekly and Annual Wages

Description	Average Weekly*	Average Annual*
Base Industry: Total, all industries	\$435	\$22,622
NAICS 4233 Lumber and const. supply merch. wsrs.	\$515	\$26,788
NAICS 4471 Gasoline stations	\$311	\$16,154

NAICS 484 Truck transportation	\$479	\$24,909
NAICS 531 Real estate	\$400	\$20,826
NAICS 5411 Legal services	\$567	\$29,474
NAICS 5412 Accounting and bookkeeping services	\$228	\$11,833
NAICS 5617 Services to buildings and dwellings	\$414	\$21,537

* In 2005 \$

Source: Bureau of Labor Statistics

Again, although these two industries do not account for a great deal of total employment in Currituck County, 39 and 40 employees respectively in 2005, they are growing exceedingly rapidly and are at least worth of attention by county officials investigating industrial recruitment options (Bureau of Labor Statistics, 2007).

A shift-share analysis was also conducted for the industries in the scaled back three-digit tourism sector. As noted above, while this will alleviate some of the data suppression issues, it will also be less accurate in terms of portraying the observed tourism-related industries in Currituck County. The four most notable of the twenty-five industries in the reaggregated three-digit tourism sector are shown below in Table 7.

Table 7: Select Three-Digit Industries Simple Shift Share: 2001–2005

Description	Shift-Share: 2001-2005	
	Currituck	Nation
NAICS 236 Construction of buildings	52.1%	9.1%
NAICS 238 Specialty trade contractors	36.2%	8.8%
NAICS 721 Accommodation	74.4%	-0.9%
NAICS 812 Personal and laundry services	450.0%	1.9%
TOTAL EMPLOYMENT: TOURISM SECTOR	95.8%	2.8%

Source: Bureau of Labor Statistics

The 450% growth rate in the “Personal and laundry services” industry represents an increase from 12 to 66 employees over the four-year period. While this may be a consideration for economic development officials from the standpoint of high relative growth, the wage rates associate with this industry are far below total private sector annual averages (Bureau of Labor Statistics, 2007).

On the other hand, the wages for the two industries in the construction super-sector, “Construction of buildings” and “Specialty trade contractors”, pay significantly higher

wages and despite more modest growth rates, may be more attractive as an industrial recruiting strategy (See Table 8) (Bureau of Labor Statistics, 2007).

Table 8: Select Three-Digit Industries Average Weekly and Annual Wages

Description	Average Weekly	Average Annual
Base Industry: Total, all industries	\$435	\$22,622
NAICS 236 Construction of buildings	\$777	\$40,420
NAICS 238 Specialty trade contractors	\$532	\$27,657
NAICS 721 Accommodation	\$326	\$16,930
NAICS 812 Personal and laundry services	\$210	\$10,898

* In 2005 \$

Source: Bureau of Labor Statistics

VII. Findings

Compared to many other rural eastern North Carolina counties, Currituck County is in a relatively healthy economic position. Over the last several decades the county has seen a dramatic rise in population, employment and capital investment levels. Unemployment rates are consistently tracking below regional, state and national trends. Topping \$7.6 billion, the property tax base on the Currituck Outer Banks alone is among the largest in North Carolina. When added to the \$11 million in estimated occupancy and sales tax revenues, the county’s fiscal position becomes quite strong. This is especially true when the economy is based on an out-of-state visitor stream that demands none of the most expensive services like public education and health care.

The county is also rich in both natural beauty and cultural heritage and has learned to carefully exploit both. Over 18,000 acres of nationally controlled wildlife sanctuaries have been created to preserve the region’s delicate ecosystems and the flora and fauna that inhabit them. The county also created the Currituck Heritage Park that incorporates a number of historical, cultural and educational alternative tourism experiences.

There are, however, a number of challenges alluded to above that must be addressed if Currituck County is to maintain economic prosperity over the next several decades. The status quo is quickly becoming undesirable and unsustainable. A heavy reliance on the tourism sectors leaves the county highly vulnerable to economic downturns and natural disasters. The majority of jobs in tourism-related industries is also almost entirely low-wage and requires few skills.

As housing and land costs continue to rise, these service-sector employees are increasingly faced with a difficult choice: live in the county and commute outside to work, or vice versa. This simple fact of life is resulting in the loss of millions in annual tax revenue and is costing thousands of commuters, time, money and quality of life.

Additional casualties of long commutes include the already overcrowded and inferior roadways as well as the environmentally sensitive regional ecosystems.

The combination of unaffordable housing, a low-skilled labor pool and substandard infrastructure also makes business retention, expansion and recruitment exceedingly difficult. Unfortunately, in the absence of any in-county tertiary educational institutions, it is unlikely that many will obtain the skills they will need on the “high road” of the new knowledge economy.

The seasonal nature of the tourism-related sectors creates volatile labor market demand and, in the peak summer months, can back up traffic for miles before the bridge, effectively shutting down the mainland’s only transportation corridor. From a public safety point of view, this situation is dangerous because it significantly impedes emergency response vehicles and clogs hurricane evacuation routes.

Unfortunately, there are no easy answers to these difficult problems. It is assured that no one-policy solution will be able to satisfy every stakeholder group. Rather, county officials should seek input from all community members in an attempt to reach a general consensus about where they would like to see Currituck County in the coming decades.

The following ten policy recommendations are based on observations, interviews and research conducted over the previous year.

VIII. Recommendations

The first five recommendations, while relevant for tourism-specific industries, are more general in nature and are intended to address issues concerning the whole of the Currituck County business environment.

1. Coalition building

As mentioned above, any successful policy initiative must begin by soliciting input from stakeholders representing the diverse geographic areas and industry sectors. While, technically, this may already be standard practice, almost every business owner consulted indicated that they felt they had been either actively or passively left out of decisions that directly affected them. This led them to believe that their input was neither important nor desired and tended to polarize them into issue-based camps (i.e. mainland versus the Outer Banks, development versus conservation, etc.) (Pat Lewis, Kyle Stock and Phyllis Cole, personal communication, July 20 and October 18, 2006 and March 12, 2007).

The county needs to also make a greater effort to help these individuals and groups to talk to each other. Communication between geographic or sectoral partners will aid local businesses in finding a voice and a forum for challenges as they arise. By building broad coalitions that span the Currituck Sound and single NAICS-industry sectors, the county may be able to avoid the concerns surrounding polarized special interest groups.

Tourism officials in particular should begin to develop partnerships with state, regional and local organizations concerned with the area’s overall tourism economy with the hope of promoting a comprehensive vision for northeast North Carolina and the Outer Banks.

Included among those regional actors are the North Carolina Division of Tourism, Film, and Sports Development, the Northeast Partnership, the North Carolina Coast Host, the Outer Banks Tourism Bureau (Dare County), and the Currituck Chamber of Commerce.

2. Infrastructure improvements

On more than one occasion, the county's lack of adequate infrastructure was named as the number one impediment to successful economic development initiatives. If the county is committed to fostering a business friendly environment, it must ensure that the services are in place to support them. These improvements include, but are not limited to, access to central water and sewer, effective storm-water management, garbage collection, the Internet, and ensuring sufficient levels of emergency response personnel (Cathy Davis, Joel Justice and David Palmer, personal communication, October 19, 2006 and March 13 and March 14, 2007).

Although each region of the county has its own special infrastructure needs. Careful attention must be paid to that utilized by the tourism industry, most notably, NC 12 along the Currituck Outer Banks. Traveling north through Dare County, visitors can clearly see wide sidewalks/bike paths used by joggers, rollerbladers and children on tricycles. Upon reaching the Currituck County line, the sidewalk abruptly ends²¹. Despite NC 12 being a treacherous road, families continue to use it in the same ways because they have no other choice.

It is essential that the county provide a means for these individuals to access shopping and cultural amenities safely, without the use of an automobile. Furthermore, the provision of an enjoyable environment on which to recreate will go a long way to improving the visitor's overall experience in the Currituck Outer Banks.

With respect to the Mid-Currituck Sound Bridge, because the Environmental Impact Statement is currently being prepared, I am hesitant to promote the project too hastily. However, environmental issues aside, from an economic development standpoint, this project could go a long way towards stimulating mainland business development. As the transportation route currently stands, there are few if any visitors willing to make the hour-long drive (without traffic) to shop on the US 158-corridor.

3. Modify Unified Development Ordinance

As noted above, this ordinance stipulates that each newly developed parcel be no less than three acres. In the event of a multi-unit development, although the built structure is not required to sit on three acres, there must be an adjacent parcel equal to the balance kept as open space. This scheme ensures that residential development is prohibitively expensive to all but a select group of families and firms. Furthermore, at service-sector wages, it is unlikely that anyone working in Currituck County could afford to live there.

²¹ A sidewalk does continue through the private development of Pine Island, but it is not advertised and ends at the terminus of that development.

If the aim is to conserve open space, the county should allow developers to buy land that is not necessarily adjacent to the developed lot. In this way, entire tracts of contiguous land could be kept in perpetuity as undeveloped open space while simultaneously allowing for some threshold of density needed to make public service provision cost-effective. The optional, non-adjacent acreage would inevitably be less expensive and would therefore allow a single-family to afford to build a new home within county limits.

This solution would also help to address both the issue of the affordable housing shortage and the retail and sales tax leakage to out-of-county or out-of-state governments.

4. Non-traditional tourism industry recruitment

As mentioned above, in order to protect itself from an uncertain future and ensure continued economic prosperity, Currituck County will need to look beyond the traditional tourism sector to other higher paying, non-seasonal industries that provide the skills necessary for area residents to be competitive on a regional scale. In selecting which industries to target with its limited financial resources, the county should focus on retaining existing sectors with observed competitive advantages while developing and strengthening competitiveness in emerging sectors.

In general, this means targeting industries within the non-traditional tourism sector that fall within the top left or right quadrants of Charts 4 and 5, above. It should be noted that, the following specific industry recruitment recommendations are merely suggestions that warrant further investigation by Currituck County economic development officials.

The first, NAICS 4233 Lumber and construction supply merchant wholesalers, demonstrated a significant growth rate between 2001 and 2005 (254.5%). While this industry only accounts for 39 employees in the county's economy, it has a location quotient of 4.0 and, from skills-match point of view, is strategically tied to the following two recommended industries. The industry also pays average annual wages (\$26,622) that are higher than the average annual wages for the total Currituck County private sector (\$22,622) (Bureau of Labor Statistics, 2007).

The second industry, NAICS 238 Specialty trade contractors, grew by 36.2% between 2001 and 2005. This industry also pays higher-than-average annual wages (\$27,657) and, in 2005, had a location quotient of 2.12. The most significant aspect of this industry is that, in 2005, it employed 376 individuals, or almost 9% of the total Currituck County private sector (Bureau of Labor Statistics, 2007).

Closely tied to the first two, the last recruitment recommendation, NAICS 236 Construction of buildings, had a four-year growth rate of 52.1%, a location quotient of 2.8, and accounted for 184 local employees, or 4.3% of the total Currituck County private sector. The most significant aspect of this industry is the average annual wage rate that is nearly double Currituck County's total private sector average (\$40,420) (Bureau of Labor Statistics, 2007).

5. New and existing business owner support

In nearly every one of the over thirty interviews conducted, business owners cited Currituck County's strict regulations and a total lack of technical assistance as a major impediment to operating a successful business within the county. Many individuals stated that if they had to do it over again, knowing what they know now, they would never have

opened a business in Currituck County. This is surprising considering the county's dedication, at least in theory, to promoting small business development and entrepreneurial activity (Ule Bennewitz, Terry Mills and Patricia Sawyer, personal communication, October 18 and October 19, 2006 and March 13 and March 14, 2007).

If Currituck County hopes to successfully recruit, retain and expand new and existing businesses to the area, both of these concerns must be addressed in full.

There needs to be a one-stop shop for new, particularly first-time, business owners where they can go and actually sit down with someone familiar with the technicalities of the permitting process, the inspection process and the myriad regulations in the ever-expanding county Code of Ordinances. Several business owners shared nightmarish stories about their own experiences in going through this process alone that, in many cases, almost bankrupted them before they even opened their doors.

Once businesses are over the initial hump, the county must continue to be vigilant in ensuring their continued success. The county should actively promote organizations like SCORE (Service Corps of Retired Executives) that provide professional management training aimed at reducing the number of business failures. Further, the county should partner with local banks to make certain that funds are available for renovations and expansions.

Finally, the county needs to examine the existing local codes and ordinances to determine which, if any, are negatively impacting businesses and streamline or remove those that it believes are having adverse effects. One oft cited regulation concerns signage along the U.S. 158- and NC 12-corridors. As a visitor to the county over the last year, I can attest to the fact that, even when I was specifically looking for an establishment, I often missed it the first time and had to turn around as a result of a lack of visible signage. In a tourism-based economy, concerned with mainland attraction development, the first step to getting visitors to pull off the road is letting them know that there is something to pull off for.

The second five recommendations are intended to address issues specific to the promotion of a sustainable tourism economy.

6. Reinvest occupancy tax in the Outer Banks

As noted above, the language in the occupancy tax legislation leaves it up to the discretion of County Commissioners to determine what qualifies as a "tourism-related expenditure". There are many business owners on the Outer Banks who feel as though county officials view this portion of the county as a "cash cow", one that can be repeatedly harvested with little expenditure required for upkeep and improvement (Douglas Brindley, John Summerton and Douglas Twiddy, personal communication, October 18, 2006 and March 12 and March 13, 2007).

Those same business owners cite a decrease in the number of repeat visitors and a changing visitor demographic as reasons why, they believe, the county's reluctance to reinvest in the Outer Banks is resulting in decreased levels of visitor satisfaction that may ultimately lead to irrevocable changes to both the character and natural environment of the region.

Currituck County must stop taking these visitors and the stream of revenue they generate for granted. While the development of mainland tourism attractions must be part of a

balanced strategy, there are a number of relatively minimal expenditures needed for improvements to Outer Banks infrastructure and services that would go a long way towards increasing visitor satisfaction levels and helping to secure the future of this revenue stream.

These include, but are not limited to:

- Improvements to NC 12 to reduce flooding from storm-water runoff;
- The construction of an uninterrupted pedestrian/bike path and the creation of retail and heritage walking/biking experiences;
- Increased trash collection and emergency services personnel and equipment;
- Provision of public beach access points, parking and restroom facilities;
- The development of family-oriented entertainment activity centers.

7. Address seasonality with annual events in non-peak months

The primary drivers of the Currituck County economy are the families that visit the beach on the Outer Banks. The temporal determinants of when families visit the beach are primarily a function of climate and school schedules. In North America that means summer. On the Currituck Outer Banks, as with many other beach towns, when the visitors stop coming, the town shuts down.

Exactly when that happens in Currituck County will vary slightly depending on whom you ask but, in general, businesses are open for Easter (beginning of April) and close after Thanksgiving (end of November), an eight-month period. Typically, beach vacations occur between Memorial Day (end of May) and Labor Day (beginning of September), a three-month period. In the beach vacation business, the difference between the two is known as the shoulder season. During this time, businesses must be open to accommodate the growing/dwindling crowds but, because they are not operating at capacity, many simply manage to break even (Margaret Allen, Phyllis Cole and Carolyn Fifield, personal communication, October 18, 2006 and March 12, 2007).

The Currituck Outer Banks will never be a year-round destination, but if the county can develop strategies focused on bringing more visitors to the beach during these shoulder months, they could help businesses to survive and increase occupancy and sales tax collections in the process.

One strategy would be to develop annual events during these slower periods that tap-into local culture and promote the county's distinguished history. The county has already made some attempt to do this, but for the most part, has scheduled these events in June, July and August when the visitors would already have been there.

The obvious choices would seek to utilize the county's agricultural and environmental resources. The county should look to partner with corporate sponsors who have a great deal more experience in marketing and promotion a can reach a much larger audience. One possibility may be to develop a waterfowl hunting and fishing-based "Outdoors" event/tradeshow sponsored by Cabela's or the Bass Pro Shop.

8. Develop agri- and eco-tourism markets

With much of the tourism-related infrastructure already in place, Currituck County should seek to diversify their attraction base to include both agri- and eco-tourism

opportunities. By expanding into these other areas, the county can provide a bit more balance to the regional economy and help to mitigate some of the risk inherent in reliance on a specific tourist attraction.

There are a number of activities one can participate in and be considered an agri-tourist but, in general, agri-tourism occurs when one chooses to take a vacation on a farm or ranch. With the recent rise of the natural and organic foods craze, this type of alternative tourism is becoming increasingly popular. Visitors are looking to have a “farm to fork” experience whereby they learn where their food comes from, how it is grown and who grows it. Often times, learning farms are set up that allow visitors to try their hand at planting, picking or milking. “Entertainment farms” provide activities for kids like corn mazes, “petting zoos” and pick-your-own berry patches.

In Currituck County’s case, a rich agricultural tradition mixed with a burgeoning winemaking sector and an increasing demand for agri-tourism activities, could make for a potential high-growth industry.

That being said, the county’s greatest alternative tourism market opportunity is in the development of a successful eco-tourism industry. As noted above, the Currituck Sound and the waterfowl it supported used to be the county’s main attraction. These days, the sound is viewed as more of an impediment, a body of water that stands in the way of an efficient route to the beach.

From an ecological standpoint however, estuaries, of which the Currituck Sound is a part, are among the most important and biologically diverse environments on the planet. While there are some private companies that utilize the sound for limited eco-tourism-related activities, this is largely an untapped natural resource that, if used responsibly, could become an immensely popular attraction.

The county could use the new state-owned Outer Banks Center for Wildlife Education in the Heritage Park as a base of operations to run naturalist-guided kayaking/canoeing eco-tours. These could be day trips or overnight camping adventures that educate users about the waterfowl hunting, decoy-making and fishing traditions of the Currituck Sound and how that relates to the ecology of an estuarine environment. Bird watching tours and blinds could be set up that cater to anyone from the casual avian enthusiast to the dedicated birder, hot on the trail of the Red-throated Loon, Piping Plover, or Horned Grebe²². Additionally, the county could assist Douglas Twiddy in the creation of his walking tour and boardwalk through Heritage Park and the surrounding marshes (Personal communication, October 18, 2006).

These are just a few of the dozens of possibilities that exist for turning the sound from an impediment to an asset. If used responsibly and treated with respect, the sound could usher in a whole new era of sustainable eco-tourism in the county and the region as a whole.

²² All three of these birds are listed as “Species of Interest” in the Currituck National Wildlife Refuge along the North Carolina Birding Trail (2007).

9. Develop tourism-related educational programs/institutions

There are a number of opportunities for Currituck County to develop educational programs or institutions that tie-in closely with the region's observed competitive advantages in areas like food service, agriculture and accommodation.

In Currituck and Dare Counties combined, there were a total of 149 "Full-service restaurants" (NAICS 7221) employing 2,879 individuals in 2005. In the same year, the Virginia Beach-Norfolk-Newport News, VA-NC MSA reported employing 450 "Chefs and Head Cooks (SOC code 351011) (Bureau of Labor Statistics, 2007). Currently, there are only three institutions in eastern North Carolina that offer training in the culinary arts: Eastern Carolina University in Greenville; Cape Fear Community College in Wilmington; and Lenoir Community College in Kinston. If Currituck County were to open a culinary institute or partner with one of the Elizabeth City institutions listed above to develop a Culinary Arts curriculum, they would be a first mover in this regard and be in an ideal position to supply top-quality chefs to the entire Outer Banks region from southern Virginia to Wilmington, North Carolina.

There are a number of other educational programs that could be developed in partnership with regional institutions that would be closely tied to the regional tourism industry including: viticulture, hospitality/hotel management and advertising and retailing.

These educational programs would serve to up-skill these workers leading to higher wages and an increased standard of living while simultaneously providing the county with a highly trained and qualified workforce to market to outside businesses and "creative class" citizens considering moving to the area.

10. Develop mainland tourism opportunities

As noted above, it is estimated that between 50,000 and 60,000 vacationers per week visit the Currituck Outer Banks during the height of the tourism season. Almost all of these visitors come from the Northeastern United States, meaning that, as it stands now, in order to get to the beach, these vacationers must travel the length of the Currituck County mainland. This is an incredible volume of weekly "fresh" customers that the county has, as of yet, not been able to tap to its fullest potential.

Unfortunately, as business owners along the U.S. 158-corridor will be the first to tell you, getting a customer to pull off the road to shop after six to eight hours of driving with the kids screaming in the back has very little chance of succeeding. This problem is compounded by the Saturday traffic that builds up before the bridge, adding hours to the journey and creating a strong disincentive for drivers to pull off and risk losing their spot in line (John Wright and Tom Wright, personal communication, October 20, 2006 and March 14, 2007).

If the county is going to successfully promote the mainland as an attraction there are three strategies it can pursue.

Bring them to the beach early.

Bring them back from the beach while they are here.

Bring them here for reasons other than the beach.

The first would involve creating a fun and comfortable environment on the mainland, most likely in Moyock, for visitors to come and stay on Friday night. In this way, the family could get the majority of the driving out of the way and get an early start in the morning to beat traffic over the bridge. This would entail creating amenities including hotels, restaurants and movie theaters capable of handling the increased flow. The denture-crowd would also benefit from having a good restaurant to go to or a movie to watch while they wait.

The second strategy entails incentivizing visitors to come back over the bridge while they are at the beach. The mainland has succeeded in a limited extent by offering golfing opportunities but, apart from that, the long drive is a significant deterrent especially considering families want to get as much use out of the beach house that is costing them between \$5,000 and \$15,000 per week. Furthermore, if shopping is the reason that they would come, it is much more convenient to continue south along the beach to Kill Devil Hills, Kitty Hawk and Nags Head in Dare County where there is far more density and variety of retail establishments.

In order for this strategy to succeed, the county would need to provide an easier way for visitors to get back to the mainland or create a niche market that is unavailable in Dare County. The Mid-Currituck Sound Bridge discussed above would certainly help this situation, but even if the project goes through (proponents are not holding their breath), the bridge would not be completed until 2013. If the county were to offer a water-taxi service across the sound, it may be enough to get beach-goers out of the house for a few hours for an adventure on the mainland. Of course, this would rely on public transportation services being available once they got there, which they currently are not.

Finally, the county could seek to promote the mainland as a destination apart from the beach. Many of the best possibilities here lie with developing the agri- and eco-tourism markets described above. Two of the most obvious mainland opportunities lie with the development of programs that focus on the county's rich agricultural traditions and ecologically diverse estuaries that bracket the county.

The Intracoastal Waterway is another potential mainland tourism destination. There are currently two marinas on either side of the waterway in Coinjock that could serve as the base of operations for fishing excursions on the sound or the ocean. Any build-up of these amenities may result in a resurgence of business from north- and south-bound waterway traffic that see the experience of staying in Coinjock as worth the extra cost of North Carolina diesel.

IV. Conclusion

As stated above, this study is primarily concerned with promoting the sustainable development of Currituck County's historically dominant tourism sector. Because the analysis chooses to ignore sectors and strategies that fall outside of that limited scope, this report does not represent a complete view of the Currituck County economy nor does it provide an exhaustive list of advisable economic development initiatives. As previously noted, Currituck County's continued economic prosperity will rely on the ability of county officials to plan for a diverse economic base that includes developing and building upon the region's competitive advantages in other, non-tourism-related industries.

With that said, if it were not for the nearly 25 miles of Atlantic coastline and the tourism sector it supports, it is likely that Currituck County would resemble many other poor rural eastern North Carolina counties. The county's tourism sector is responsible for generating tens of millions of dollars in annual revenue from the collection of property, occupancy and sales taxes. It is also the driving force behind two of the county's largest employment sectors, "Retail trade" and "Accommodation and food services", that accounted for nearly 40% of the county's total employment in 2005 (Bureau of Labor Statistics, 2007).

As mentioned above, there are dangers to an overdependence on a single sector. This is particularly true for the tourism sector that is typically comprised of seasonal, "low road" service-oriented industries. Therefore, any comprehensive economic development strategy must also seek to diversify the tourism sector itself.

With many of the skills and much of the physical infrastructure already in place, there is a great deal of potential for high value-added development in other tourism-related industries and activities. In choosing which industries to target, economic development officials should focus on those with high rates of observed growth in relation to the Northeast region, the state or the nation as a whole. There should also be an effort to concentrate on non-seasonal "high road" industries that will provide county residents with the wages and training needed to be competitive on a regional scale.

Targeted industry recruitment, however, is only one piece of the puzzle. To ensure its continued economic prosperity, Currituck County will also need to successfully address a number of unique challenges. Shortages in affordable housing stock, inadequate infrastructure, a lack of any tertiary educational programs/institutions, and a severe geographic disconnect are but a few of the many hurdles the county will have to face in the coming years.

Ten recommendations were made to Currituck County economic development officials that address some of these concerns. The first five, while relevant for tourism-specific industries, were more general in nature and intended to address issues concerning the whole of the Currituck County business environment. The second five were intended to address issues specific to the promotion of a sustainable tourism economy.

Above all, however, county officials must take steps to ensure that their beach-tourism economy is secure. This includes, but is not limited to, making transportation infrastructure improvements, creating and promoting family eco-activities and increasing emergency response personnel. Most importantly, this means striking a balance between development and the delicate natural ecosystems that support the industry.

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Interviews

Allen, Margaret on March 12, 2007

Real Estate Agent, Corolla Real Estate

Bennewitz, Ule on October 18, 2006 and on March 14, 2007

Owner, Weeping Radish Eco-Farm and Brewery

Brindley, Douglas on March 12, 2007

Owner/Real Estate Agent, Brindley Beach Vacation & Sales

Cole, Phyllis on March 12, 2007

Real Estate Agent, Prudential Resort Realty

Davis, Cathy on October 19, 2006

Owner, Corolla Book, Card & Gift Gallery

Economic Development Board, Currituck County on July 11, 2006

Fifield, Carolyn on October 18, 2006

Owner, Corolla Light Inn

Jordan, Rob on July 20, 2006

Partner, Corolla Jeep Rentals & Tours

Justice, Joel on March 14, 2007

Owner, Wood Savers Natural Exteriors, Inc.

Keifer, Sarah on April 7, 2006

Director of Planning & Inspections, Currituck County

Leary, Wayne on March 16, 2006

[Former] Economic Development Director, Currituck County

Acting head of the Currituck Regional Airport

Lewis, Pat on July 20, 2006 and on October 18, 2006

Corolla Manager, Ocean Atlantic Rentals

Meade, Sharon on July 20, 2006 and on October 20, 2006

Curator, Outer Banks Center for Wildlife Education

Mendan, Michael on July 20, 2006

Corolla Manager, Kitty Hawk Watersports

Miller, Shawn on October 19, 2006

Owner, Coyote Grill

Mills, Terry on October 19, 2006
Owner, Midway Marina & Motel

Palmer, David on March 13, 2007
Owner, Palmer Inn

Sawyer, Diane on April 7, 2006
Director of Travel & Tourism, Currituck County

Sawyer, Patricia on March 13, 2007
Owner, Trisha's Bed & Breakfast

Scanlon, Dan on July 10, 2006
County Manager, Currituck County

Schreffer, Vicki on October 19, 2006
Curator, Whalehead Club

Sisco, Shane on July 20, 2006
Employee, Corolla Outback Adventures

Stock, Kyle on October 18, 2006
Corolla Manager, Ocean Atlantic Rentals

Summerton, John on March 13, 2007
Real Estate Agent, Twiddy & Company Realtors

Rhodes, Jeanette on July 10, 2006
President, Currituck County Chamber of Commerce
Tourism Advisory Board, Currituck County on July 11, 2006

Twiddy, Douglas on October 18, 2006
Owner, Twiddy & Company Realtors

Wright, John on October 20, 2006 and on March 14, 2007
Owner, Sanctuary Vineyards

Wright, Tom on October 20, 2006
Owner, Cotton Gin

Wyett, Andrew on July 20, 2006
Employee, Back Country Outfitters & Guides

Zabloudil, Wes on October 18, 2006
Owner, Mustang Sally's

Appendix H: Regional Business/Industrial Parks

Location	Park Type	Contact Company	Total Acres	Available Acres
Elizabeth City, NC	Industrial	Albemarle Econ Development Commission		356
Chesapeake, VA	Industrial	Insignia Thalhimer Real Estate	53.3	53.3
Chesapeake, VA	Industrial	Chesapeake Dept of Economic Development	700	23.3
Chesapeake, VA	Mixed-Use	CB Richard Ellis	180	51
Chesapeake, VA	Industrial	Chesapeake Dept of Economic Development	30	15
Chesapeake, VA	Mixed-Use	Advantis Real Estate	200	7.3
Chesapeake, VA	Industrial	Chesapeake Dept of Economic Development	40	40
Chesapeake, VA	Mixed-Use	CB Richard Ellis	185	80
Chesapeake, VA	Industrial	L M Sandler & Sons, Inc.	93.5	30
Chesapeake, VA	Mixed-Use	Chesapeake Dept of Economic Development	331	130
Franklin, VA	Industrial	Isle of Wight Dept of Economic Development	231	231
Hampton, VA	Industrial	City of Hampton	100	14
Hampton, VA	Office	City of Hampton	700	250
Hampton, VA	Science/Research	City of Hampton	70	15
Norfolk, VA	Office	Norfolk Dept of Economic Development	64	12.4
Norfolk, VA	Mixed-Use	Norfolk Dept of Economic Development	30	30
Portsmouth, VA	Mixed-Use	Advantis Real Estate	86	36
Portsmouth, VA	Industrial	Portsmouth Dept. of Economic Development	60	5
Portsmouth, VA	Mixed-Use	Portsmouth Dept of Economic Development	125	125
Portsmouth, VA	Mixed-Use	Portsmouth Dept of Economic Development	60	18
Smithfield, VA	Mixed-Use	Isle of Wight Dept of Economic Development	60	30
Smithfield, VA	Industrial	Isle of Wight Dept of Economic Development	99	66
Suffolk, VA	Industrial	Suffolk Dept of Economic Development	208	28.8
Suffolk, VA	Mixed-Use	Suffolk Dept of Economic Development	150	121
Suffolk, VA	Mixed-Use	Suffolk Dept of Economic Development	460	442.5
Suffolk, VA	Science/Research	Suffolk Dept of Economic Development	150	5

Suffolk, VA	Mixed-Use	Virginia Commercial Real Estate Services	62	25
Suffolk, VA	Mixed-Use	Advantis Real Estate Services	260	260
Suffolk, VA	Mixed-Use	Suffolk Dept of Economic Development	57	57
Suffolk, VA	Industrial	Advantis Real Estate Services, Inc.	73	73
Suffolk, VA	Mixed-Use	CB Richard Ellis	250	140
Suffolk, VA	Office	Northgate LLC	50	46
Suffolk, V	Industrial	NAI Harvey Lindsay	464	100
Virginia Beach, VA	Industrial	City of Virginia Beach	1100	50
Virginia Beach, VA	Industrial	Oceana Development Corporation	25.9	21.7
Virginia Beach, VA	Mixed-Use	NAI Harvey Lindsay	190	50
Virginia Beach, VA	Mixed-Use	City of Virginia Beach	350	225
Windsor, VA	Mixed-Use	Isle of Wight Dept of Economic Development	89	35

Appendix I: Targeted Prospects

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