

**An Economic Analysis of the Wanchese Seafood Industrial Park:
An Update to the 2005 Study**

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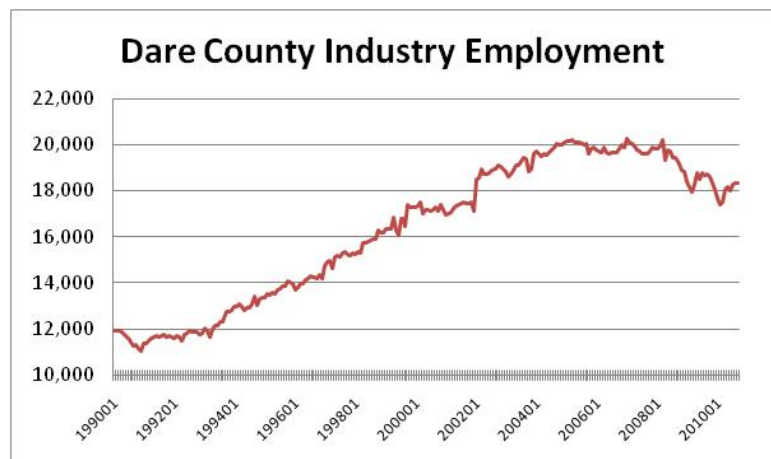
An Economic Analysis of the Wanchese Seafood Industrial Park: An Update to the 2005 Study

A study conducted in 2005¹ evaluated the Wanchese Seafood Industrial Park on Roanoke Island. The goals of that study included identifying the business environment of each employer in the Park, as well as the size, scope, and focus of each of the businesses. In addition, the study estimated the economic impact of the Park on Dare County (where the Park is located), on the surrounding sixteen county Economic Development Region (NC Northeast's Partnership), and on the state of North Carolina.

At the time of the study, the businesses in the Park provided an estimated 390 full-time-equivalent (FTE) jobs. Relatively few of these positions were part-time or seasonal. The workforce ran the gamut from highly educated, skilled workers to low skilled workers whose jobs required little more than hard work and sweat. Businesses themselves employed between one and 100 people.

Businesses in the Park fell into one or multiple categories, including boat building (large yachts and smaller sport fishing boats); marinas; charter fishing; fish packing; broadcasting (one "niche" broadcasting company whose programming specifically targeted fishermen and vacationers in Dare County); and regulation and administration (federal and state government agencies primarily engaged in the administration, regulation, and enforcement of programs that have a direct impact on the Park).

Since the 2005 study, the economy has changed for the nation, North Carolina, and Dare County. The latest figures for the US show that the nation lost 8.75 million jobs during the 2008-2009 recession². Industry employment reports from the Employment Security Commission of North



¹ Miley, Gallo & Associates, LLC, "An Economic Analysis of the Wanchese Seafood Industrial Park," July 21, 2005

² Monthly nonfarm industry employment from the US Bureau of Labor Statistics.

Table 1

Employment Change in Dare County					Employment Change in North Carolina				
From a 2009 Employment Base					From a 2009 Employment Base				
	Absolute Change		Percent Change			Absolute Change		Percent Change	
	from 2004	from 2000	from 2004	from 2000		from 2004	from 2000	from 2004	from 2000
Total Federal Government	-7	-22	-2.83%	-8.40%	Total Federal Government	6140	427	10.02%	0.64%
Total State Government	33	18	6.79%	3.59%	Total State Government	13361	22334	8.00%	14.13%
Total Local Government	130	386	6.52%	22.21%	Total Local Government	29430	59982	7.20%	15.87%
Total Private Industry	-1564	775	-9.17%	5.26%	Total Private Industry	-1642	-128201	-0.05%	-3.92%
Total All Industries	-1408	1157	-7.12%	6.72%	Total All Industries	47288	-45460	1.25%	-1.17%
Natural Resources and Mining	-2	-3	-20.00%	-27.27%	Natural Resources and Mining	-1856	-3255	-5.42%	-9.13%
Construction	-540	-328	-35.88%	-25.37%	Construction	-26626	-38826	-12.14%	-16.78%
Manufacturing	-273	-205	-37.71%	-31.25%	Manufacturing	-130901	-310460	-22.59%	-40.90%
Trade Transportation and Utilities	-448	-39	-10.26%	-0.99%	Trade Transportation and Utilities	-8432	-36672	-1.11%	-4.66%
Information	-50	-68	-18.87%	-24.03%	Information	-2812	-14268	-3.81%	-16.73%
Financial Activities	202	719	7.81%	34.72%	Financial Activities	8665	23351	4.58%	13.39%
Professional and Business Services	-346	-423	-23.71%	-27.54%	Professional and Business Services	35674	6846	8.19%	1.47%
Education and Health Services	199	579	12.19%	46.25%	Education and Health Services	119595	233981	14.86%	33.89%
Leisure and Hospitality	-273	550	-5.33%	12.81%	Leisure and Hospitality	41769	68727	11.74%	20.90%
Other Services	73	180	14.96%	47.24%	Other Services	-4728	-5151	-4.79%	-5.20%
Public Administration	139	185	9.07%	12.44%	Public Administration	20762	22280	9.53%	10.30%
Unclassified	na	na	na	na	Unclassified	na	na	na	na

Source: Tables prepared by BBR from ESC of NC Employment and Wage Data

Carolina³ show that the state lost 8.1 percent of its employment from peak to trough. Employment also was hit hard in Dare County, as this local economy lost 2,901 jobs over its recession cycle. Additionally, the local downturn preceded the national recession. Local employment loss began in January 2007, over a year before the state started to lose jobs.

The loss of employment in Dare County and in the State since 2000 and also since 2004 is presented in Table 1. The change is presented in relation to the 2009 employment base, the latest available year with complete data.

In Dare County, significant losses occurred between 2004 and 2009 in construction; trade, transportation, and utilities; and, professional and business services. Significant losses also were realized in manufacturing and in the leisure and hospitality industry. With the exception of manufacturing, most of these losses were related to the local relationship to tourism such as second home construction, retail sales, and restaurants.

The state was relatively unaffected by many of the industry losses found in Dare County, since the statewide economy is much larger and losses can be more readily absorbed within its relatively more diversified economy. However, construction in North Carolina did slow (as seen nationally) and manufacturing employment declined. In fact, between 2000 and 2009, North Carolina lost nearly 41 percent of its manufacturing jobs. While the state has lost “only” 22.6

³ Employment and Wage Data (monthly employment by industry from the unemployment insurance program data.)

percent since 2004, the absolute loss of jobs in manufacturing (130,901) was nearly five times the size of the next largest job-losing industry (construction fell 26,626).

The Wanchese Seafood Park Impact: Comparison to 2005

Given the downturn in manufacturing activity described above, it should come as no surprise that the Park has lost manufacturing employment since the 2005 study. As shown in Table 2, the majority of the Park's losses (166 jobs) were associated with boat building – where the soft or nonexistent demand helped force these manufacturers to cut back or shut down operations. It also is likely that some of the boatbuilding jobs were lost due to management

Table 2
Park Employment

Industry	2009	2004	Change
CONSTRUCTION	1	0	1
SHIPBUILDING AND RELATED	62	228	-166
MARINAS AND RELATED	51	66	-15
BROADCASTING	4	17	-13
FISH PACKING AND RELATED	8	9	-1
CHARTER FISHING AND RELATED	61	40	21
REGULATION AND ADMINISTRATION	16	30	-14
TOTAL	203	390	-187

Sources: Previous Study and Park Administration

difficulties. Additionally, the Park provided employment opportunities in 2004 that were not manufacturing related. There were losses associated with these industries as well. For example, the drop in jobs at marinas was largely the result of a slowing economy. Broadcasting losses were the result of office downsizing as the previous company was sold to new owners. The drop in regulation and administration jobs was the result of the NC Division of Marine Fisheries' moving off site to another location.

The news for the Park is not totally bleak. For example, one existing boatbuilder is expanding operations, as the demand for its specialty product remains solid. Plus, this manufacturer seized the opportunity to expand into the "marina and repair" business over the period. As the national, state, and Dare County economies expand over the coming years, the Park should capture some of the growth and replace many of its lost jobs. However, recruitment activity at the Park is such that the new jobs could be in industries completely different from before.

The Economic Activity Impact Comparison

The 2005 study showed a significant impact from Park Activity. As one can see on the following page in Table 3, the Employment Impact in Dare County was 584. This means that in addition to the 390 job direct impact, there were an additional 194 jobs created in support of Park activities.

Table 3 also provides employment multipliers. The total effect multiplier describes the interrelationships of the industries in the Park to other businesses in the county and the expenditures resulting from increased incomes of households (i.e., the workers and their families). The interpretation is straightforward: for each job at the Park an additional 1.497 jobs were created elsewhere in the county due to the inter-industry relationships and the household spending of workers. The Park impact also was modeled for NC's Northeast Region⁴ and for the entire state. These modeling efforts are presented below Dare's results in Table 3. In NC's Northeast, 618.4 jobs were created via direct and indirect hiring. North Carolina's Employment Impact was 704.6. The multiplier for this relationship in NC's Northeast was 1.586, while the total effect multiplier for the state was 1.807.

Impact Type	Employment Impact	Total Effect Multiplier
<u>2005 Study (Old Model)</u>		
Dare	584.0	1.497
NC's Northeast Region	618.4	1.586
North Carolina	704.6	1.807
<u>2005 Study (New Model)</u>		
Dare	621.4	1.593
NC's Northeast Region	652.9	1.674
North Carolina	795.3	2.039

IMPLAN was used to produce the impacts in both studies. The structure of the model changed over the two periods, so the results may not be strictly comparable.

An updated and revised IMPLAN model was used to produce parallel impacts using the most recently available (2009) structure of the economy with the inputs used within the 2005 study. As one additionally can see in Table 3, the current IMPLAN model produces a corresponding combined impact of 621.4 jobs and a multiplier of 1.593 for Dare County. This translates into an indirect impact of 231.4 jobs, or 1.593 jobs created for each job at the Park. Using the NC's Northeast model, an additional 262.9 jobs were created through a 1.674 multiplier. For North Carolina, 405.3 indirect and induced jobs were created via a multiplier of 2.039.

Holding all factors constant, one would believe that the larger relative impacts are due to the different economic structure of the updated economic factors in the model (i.e., the Dare County 2005 multiplier of 1.497 while the new multiplier is 1.593). However, differences in the specific models also could contribute to the differences.

⁴ The sixteen counties in NC's Northeast Region include Beaufort, Bertie, Camden, Chowan, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrrell, and Washington.

Finally, one could make dollar comparisons between the two modeling efforts. However, due to inflation and the different modeling methodologies, we have limited the comparison to jobs. Still, the dollars in the new modeling effort are higher.

The Wanchese Seafood Park Impact: Current Employment Modeling

In the previous section, we described an updated modeling effort using a consistent approach and an identical level of employment and job classification. The updated effort helped demonstrate the potential Park’s impact in Dare County once the economy has recovered. This section provides an impact analysis using current employment and a more detailed job classification than was previously used. Twelve categories were used in this analysis⁵, but disclosure issues prevent the publication of the categorical details. The parameters for compensation were developed using five digit detail data from the NC Employment Security Commission. Where possible, Dare County data were used. Where disclosure constraints

Table 4
Wanchese Seafood Industrial Park
Comparative Impacts for Current Employment

Impact Type	Employment	Labor Income	Value Added	Output
Dare County				
Direct Effect	203.0	\$10,920,590	\$12,915,869	\$27,089,214
Indirect Effect	48.7	\$1,540,001	\$2,793,385	\$4,579,239
Induced Effect	65.8	\$2,085,034	\$4,310,947	\$6,893,697
Total Effect	317.4	\$14,545,625	\$20,020,201	\$38,562,150
Total Effect Multiplier	1.56	1.332	1.550	1.424
NC's Northeast Region				
Direct Effect	203.0	\$9,844,918	\$11,851,533	\$28,455,770
Indirect Effect	49.8	\$1,548,172	\$2,477,673	\$4,347,851
Induced Effect	68.8	\$2,001,875	\$3,882,110	\$6,439,448
Total Effect	321.6	\$13,394,965	\$18,211,316	\$39,243,070
Total Effect Multiplier	1.58	1.361	1.537	1.379
North Carolina				
Direct Effect	203.0	\$10,381,650	\$12,477,911	\$28,125,655
Indirect Effect	72.0	\$3,197,050	\$5,075,877	\$8,867,348
Induced Effect	104.1	\$3,893,297	\$7,036,251	\$11,689,691
Total Effect	379.1	\$17,471,997	\$24,590,039	\$48,682,693
Total Effect Multiplier	1.87	1.683	1.971	1.731

Source: BBR using the IMPLAN model. The dollars are presented in 2010 dollars while the model used 2009 factors.

⁵ The current IMPLAN model includes the following industries: Commercial Fishing; Construction other new nonresidential structures; Seafood product preparation and packaging; Boat building; Wholesale trade businesses; Retail Stores – Miscellaneous; Scenic and sightseeing transportation and support; Radio and television broadcasting; Personal and household goods repair and maintenance; Other state and local government enterprises; Federal Non-Military Employment & Payroll; and, Federal Military Employment & Payroll.

prohibited the use of local data, statewide totals were used instead.

The result of the modeling effort for the current employment level of 203 is presented in Table 4. Plus, we have added the multipliers for Labor Income, Value Added, and Output. Dare County's multiplier for Labor Income is 1.332. The Value Added multiplier, at 1.55, is similar to the employment multiplier, while the Output multiplier is 1.42. Importantly, all multipliers for Dare County are above those found in the 2005 study.

Another important effect that cannot be overlooked in an impact study is associated with increased tax revenues. The IMPLAN model for Dare County suggests that the collection of 4.75 million dollars (for the Federal Government, State Government, and Local Government) is included in the impacts associated with Park activity. For the North Carolina model, the associated impact is 5.56 million. It should be noted that the tax impact methodology produced by IMPLAN has not been thoroughly studied by the BBR staff. Thus, the data should be viewed with caution. Still, it is important to realize that such impact exists and should be taken into account in evaluating the benefits of economic activity. In other words, it is not only the jobs and businesses that benefit from the increased activity at the Wanchese Seafood Park, but the government sector benefits as well.

Summary

The nation has experienced an enormous loss in jobs over the past few years. Only now is the economy beginning to recover. Still it will be a long time before employment rebounds to pre-recession levels and before unemployment is significantly reduced.

The Wanchese Seafood Industrial Park did not escape the downturn. Still, the Park provides a significant impact to the local economy. Plus, the Park provides a targeted location for economic development, particularly because it has space for immediate occupancy – and because it currently has sufficient support services to help maintain existing industries and to promote new economic development.