

Analysis of the Economic Impacts of the Titan Cement Plant

During their campaign to build public support for a cement plant in Castle Hayne, Titan Cement officials consistently reference the addition of jobs and economic input to the Cape Fear region as a boost to an economy still pulling itself out of the recession. However, the official projections from Titan fail to take into account all but the most basic effects of opening the plant. Below are summary points from two economic analyses which used data from a broader set of methods to estimate the full range of impacts to the Cape Fear regional economy.

From *The Impact of Cement Manufacturing on Economic Growth In the Cape Fear Region*, 2012, by Dr.'s Craig S. Galbraith and Curt H. Stiles, Professors of Economics at UNC Wilmington:

- The analysis shows that even given Titan's best-case hiring projections, New Hanover County will likely see only 48 jobs added.
- Previous studies have shown that "low technology" plants, like a cement plant, result in less net jobs than they actually hire, meaning that some jobs are driven out of the area¹.
- For New Hanover County, Titan could drive away as many as 70 existing jobs for every 100 people it employs.
- Titan would be unlikely to have many of the positive "ripple effects" that other industries such as information and professional services have, like the creation of a more skilled or educated workforce.
- Proximity to the ocean, scenic views, historic districts, architectural beauty, and cultural and recreational opportunities are the main drivers for attracting leisure visitors and second-home buyers to an area.
- The greatest promise of growth for the economy of the Cape Fear region lies in the amenities and professional services industries. Their continued growth depends on perceptions that can be negatively affected by the mere presence of heavy polluting industries, such as cement manufacturing facilities.

From *Economic Effects of the Introduction of Cement Manufacturing in the Wilmington MSA: A Review*, 2012, by Dr. Doug Wakeman, Professor of Economics at Meredith College:

- The Cape Fear region has a unique economy which depends heavily on tourism and residential development, industries which are driven by people's desires to enjoy the natural resources of the area. Analyzing a cement plant in the Cape Fear region is far different from examining a new automobile factory in Detroit, since New Hanover County has a strong tourism and amenities based economy, with relatively more to lose in terms of damage to visitors' perceptions.
- Titan's job creation and economic estimates were projected using an "IMPLAN analysis," a method preferred by industry because they are the easiest to perform and produce the largest values most favorable to industry. These studies are also the least meaningful, because they fail to net out expenses associated with the change.

- A 2011 health study estimated the impact on health care bills associated with Titan's air emissions for two pollutants over a five-month period. The estimates ranged from \$6 million to \$13 million for this period², which would very possibly exceed the total incomes from the creation of 100 cement jobs.
- New heavy industrial plants have a tendency to drive away business and residential development, as well as hurting future development.
- While the exact effects are impossible to know in advance, it is a virtual certainty that the impacts on commercial and recreational fishing, boating, paddling, birding, and other water sports will be negative and possibly quite significant.
- The operation of and location of the plant itself, at the heart of the riverine ecosystem, creates the potential for a large-scale environmental disaster, with a resulting negative impact on the ecosystem and the region's overall economy.

Additional information:

- Based on an analysis of the economic returns from conservation, the unique riverine resources and lands of the Cape Fear Region could generate over \$1.1 billion in ecosystem services over 30 years³, the minimum period of time Titan plans to operate. At risk from Titan's industrial emissions are the goods, services, and recreational benefits that those resources and ecosystems provide.
- Americans spent more than \$120 billion hunting, fishing, and wildlife watching in 2006. 71 million Americans spent over \$45 billion on wildlife watching alone⁴.
- In 2011, 140 full-time jobs were added due to tourism in the Cape Fear region, more than all the jobs that Titan Cement is projected to add⁵.
- Tourism in the Cape Fear region directly supports over 10,000 jobs⁵.
- Last year, tourist expenditures in the Cape Fear region generated more than \$49 million in local taxes and \$45 million in state taxes⁵.
- Ocean fishing along public piers on the North Carolina coast generated over \$150 million in economic impact, supporting over 1,700 jobs in 2010. Nearly half of those piers are located in the Cape Fear region⁶.
- Over 32,000 Coastal Recreational Fishing Licenses were sold to residents of the Cape Fear region in 2010, accounting for over 7% of the state's total⁷.

¹ Edmiston, K., 2004. The net effects of large plant location and expansions on county employment. *Journal of Regional Science*, 44(2) 289-319.

² ICF International, 2011. Air Quality and Health Impacts Assessment for Southeastern North Carolina.

³ The Trust for Public Land, 2011. North Carolina's Return on Investment in Land Conservation.

⁴ Harvard Magazine, June-May 2011. Endangered Species Economics.

⁵ NC Department of Commerce, 2012. <http://www.nccommerce.com/tourism/research/economic-impact/teim>.

⁶ NC Division of Marine Fisheries, January 2012. A Social and Economic Profile of Ocean Fishing Piers in North Carolina.

⁷ NC Division of Marine Fisheries, 2011 License and Statistics Annual Report.