BOEM ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

BOEM OCS Region: Gulf of Mexico

Title: Geographic Units for Socioeconomic Impact Analysis in the Gulf of Mexico Region (GM-09-01-04)

Planning Area: Gulfwide

Total Cost: $439,876 **Period of Performance:** FY 2009-2012

Conducting Organization: Coastal Marine Institute; Louisiana State University

BOEM Contact: Kristen Strellec

Description:

Background: The BOEM defines the analysis area for potential socioeconomic impacts as that portion of the GOM coastal zone whose social and economic well-being (population, labor, and employment) is directly or indirectly affected by the OCS oil and gas industry. In this description of the socioeconomic environment, sets of counties (and parishes in Louisiana) are grouped for analysis. Currently, BOEM develops these groupings based on intercounty commuting zones that have been developed for the U.S. Given the unique commuting patterns related to offshore employment and its unique work schedules (e.g. two weeks on and two weeks off), alternative methodologies for developing geographic areas for social impact analyses are being examined to determine the best approach(es).

Objectives: This study uses industrial cluster analysis, regional input/output analysis and modeling, and geographic information systems in an interdisciplinary effort to identify geographic areas where significant socioeconomic impacts, either negative or positive, are likely to occur. The study is designed as an interactive and iterative exercise involving both an interdisciplinary research team from Louisiana State University (LSU) and BOEM staff. The primary objective is to delineate Economic Impact Areas (EIAs) in the Gulf of Mexico (GOM) states that are based on a clear, explicit, empirical rationale, reflective of the onshore effects of the offshore oil and gas industry, and able to more clearly guide and support social impact assessments of industry operations and activities.

Methods: The project is organized into three semi-independent research components. Each component consists of a research team that uses specialized methodologies to address specific project goals. Component one will conduct industrial cluster mapping as a "first cut" identification of areas where significant impacts from the OCS program might be reasonably anticipated; component two shall use multiple regional economic tools like the input/output model to evaluate alternative classifications of OCS-impacted regions, such as those identified in component one of the study, and to identify the unique functional relationships within and among these areas that may be attributable to OCS activity; and the third component shall develop and test indicators of economic development and of such other aspects of development (social participation, human health, and environmental health), and use these indicators to validate new regions

identified by the other two components, to describe socioeconomic characteristics within and among these regions, and to compare regional development between counties that have high OCS activities and those that have low or no OCS activities. These component efforts shall be coordinated and their results synthesized through regular bimonthly meetings.

Products: A final report publication.

Importance to BOEM: A better understanding of the onshore geographical distribution of socioeconomic impacts as a result of OCS activity will facilitate better compliance with the goals of the National Environmental Policy Act (NEPA).

Current Status: Several group meetings have been conducted, and a website has been established for project team members to post presentations, findings, administrative reports, and items of interest. The PIs have identified many differences and similarities among the economic areas, labor market areas, and counties that document the distortion of data at the county level under the existing geographic classifications. The Economic Modeling team has begun to identify possible regions based on trade flows of goods and services and patterns of commuting to work between counties. Specifically, results indicate that for the trade data (whether all trade or oil and gas industry specific trade clusters), there are more regions created that cross state boundaries than the regions based on commuting patterns. Identification of the final make up of regions for EIA analysis is yet to be determined. The next steps involve placing demographic and economic characteristics associated with each of the newly created regions and comparing against the baseline on shore area regions defined by BOEM. This will help define patterns of similarity and dissimilarity when making final suggestions concerning regional inclusion. The study was delayed temporarily to improve the final product and is now proceeding according to schedule.

Final Report Due:	September 2012
Publications:	N/A
Affiliated WWW Sites:	None
Revised date:	January 2012
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