

BOEM ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

BOEM OCS Region: [Gulf of Mexico](#)

Planning Area: Gulfwide

Title: Characteristics and Possible Impacts of the Aging Workforce Transition on the Outer Continental Shelf Oil and Gas Industry in the Gulf of Mexico Region (GM-09-01-02)

Total Cost: \$196,247

Period of Performance: FY 2009 - 2012

Conducting Organization: [Coastal Marine Institute](#), Louisiana State University

BOEM Contact: [Sindey F. Chaky](#)

Description:

Background: The oil and gas industry is a primary contributor to state and local economies in the Gulf of Mexico Region. The U.S. Energy Information Administration projects that the worldwide demand for energy produced by oil and natural gas will double over the next 20 years. To support energy demands, significant physical infrastructural investments have been made. However, comparable efforts to shore up the human infrastructure of the oil and gas industry have not been made. As a result, population and industry trends suggest a looming workforce crisis that will be triggered by an inevitable wave of retirement among our nation's oldest workers. Almost half of the U.S. workforce is projected to be over the age of 55 by 2020. This aging trend is more pronounced for skilled and semi-skill workers, and significantly so for the oil and gas industry where the average age of retirement is 55 years.

A second contributor to the aging workforce crisis is the low levels of employment replacement, particularly among the skilled and semi-skilled trades that are vital to oil and gas production and exploration companies. Since the collapse of oil prices in the 1980's, across sectors and occupational groups, fewer people are being trained for and entering careers in the oil and gas industry. Although some companies have recently taken steps to offset spiraling replacement rates by working to retain and recruit new hires, the lengthy on-the-job training models common in the industry forecast a ten-year time lag before the newest hires cultivate the professional expertise and experience needed to operate independently in their fields. Until then, labor shortages associated with this "missing generation" will only intensify as the Baby Boom generation approaches retirement, taking with them valuable institutional knowledge and skill.

The workforce transitions associated with population aging and labor shortages indicate a workforce crisis that will challenge OCS oil and gas production and exploration companies. As a result, these transitions also threaten the social and economic

foundations of the employees, families, and communities that so heavily depend on the industry.

Objectives:

- determine the scope and impact of the workforce trends on current and anticipated business planning and productivity specific to the GOMR;
- assess common, as well as unique, business strategies for managing the aging and labor shortage trends;
- examine relationships among company characteristics (e.g., average age, size, and functional composition) and management practices;
- assess differences in impacts and practices across sectors and occupational groups; and
- discuss potential impacts of these workforce transitions on employees, families, and communities in the GOMR.

Methods: The project will employ a mixed-method research design to examine employment practices and the impacts of the aging workforce transition in two contrasting OCS industry sectors, oil and gas exploration and production companies in the GOMR. Data will be gathered in two phases to inform three general workforce themes: (1) company characteristics (e.g., workforce age, occupational groups, functions, and sectors); (2) current labor trends (e.g., skill shortages, personnel placements, retirements), and (3) anticipated changes to business plans, production, and/or practices related to personnel management. Data literature and discussions with industry experts and personnel will be recorded, coded, and synthesized to identify modal themes, and then analyzed to detect consistencies and differences across companies, communities, sectors, and occupations.

The discussions with industry experts were temporarily postponed due to the Gulf oil spill. In the meantime, contractors developed a policy capture methodology for collecting information about the "public view" of labor management practices in the 200 oil and gas exploration and production companies identified for inclusion in the workforce aging project.

Products: The deliverables for this project are:

1. Quarterly and annual reports
2. Database of all project data
3. Peer-reviewed journal article about aging workforce
4. Professional conference presentation - preliminary results
5. Cooperative agreement proposal for continued research
6. Presentation to BOEMRE at Information Transfer Meeting

7. Graduate student master's thesis proposal
8. Project summary to be disseminated to business leaders and industry workshop
9. Final Report

Importance to BOEM: The project will address the BOEM goal to provide a scientific analysis of the social and economic impacts of the aging workforce crisis on GOMR companies and communities, and to help resource managers make informed decisions about how to prepare for these transitions as they become more salient in years to come.

Current Status: The preliminary data analysis from the supplementary policy capture study described above has been concluded. Findings from the interim policy capture methodology revealed that fewer than half of the websites coded provide the public or potential recruits information about hiring, training, and retention priorities. Specific findings along with literature review and data collected earlier in the study will be presented in a manuscript discussing potential labor practices associated with aging issues in the oil and gas industry. Discussions with industry experts were conducted during 2011 and a Draft report will be submitted to BOEM in July, 2012.

A research symposium authored by the researchers was accepted for presentation at the national meeting of the Society for Industrial and Organizational Psychology (SIOP) in Chicago, IL, Spring, 2011. At the meeting, Tracey Rizzuto, Claire Taylor, and Jared LeDoux presented "Age and Career Development in a Changing World of Work."

Final Report Due: November 2012

Publications: Tim Slack and Tracey Rizzuto, "Aging and Economic Well-Being in Rural America: Exploring Income, Poverty, and Employment Challenges," *Aging in Rural America*, (forthcoming)

Affiliated WWW Sites: N/A

Revised date: January 2012

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