GULF COAST COMMUNITIES AND THE FABRICATION AND SHIPBUILDING INDUSTRY: A COMPARATIVE COMMUNITY STUDY 2007 – 2011

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“Ship/Fab” Study

- Design: to describe the shipbuilding and fabrication industries, the services they provide, their labor demands and how they meet them, their environmental impacts, trends, dynamics, variation within the industries (e.g., large firms vs. small ones), geographic distribution, and demographic and socioeconomic significance.
- Community profiles: examine the industrial histories of cities that border the northern Gulf of Mexico and that have one or more important shipbuilding and ship repair, platform fabrication, or offshore-support industries.

Communities

1. South Texas (Brownsville/Port Isabel)
2. Coastal Bend (Corpus Christi/Ingleside/Aransas Pass)
3. Golden Triangle (Beaumont/Port Arthur/Orange)
4. Morgan City/Lafourche/Terrebonne
5. Pascagoula/Moss Point, MS
6. Mobile/Bayou la Batre, AL

Researchers

1. University of Houston Team – historical background on industry and communities
2. University of Arizona-BARA Team – ethnographic fieldwork and community profiling
3. University of Louisiana at Monroe Team – demographic analysis and statistical modeling

Industry Overview

1. Challenges of identifying and characterizing Gulf Coast ship/fab; industrial classification.
2. Broad-brush overview of the history of Gulf Coast shipbuilding and fabrication in national and international context.

Identifying/Characterizing the Ship/Fab Industries

- Offshore oil industry built upon a preexisting base of petroleum infrastructure and tapped into the region's engineering and construction experience, especially in shipbuilding and repair.
- Classic social impact assessment faces many challenges in addressing the impacts of offshore oil and gas in the Gulf region.

Industrial Classification Census of Manufactures

- Pre-1997: Standard Industrial Classification (SIC) code 3731, “Ship Building and Repair”

  > “establishments primarily engaged in building and repairing ships, barges, and lighters, whether self-propelled or towed by other craft … [and] the conversion and alteration of ships, the manufacture of offshore oil and gas, well drilling and production platforms (whether or not self-propelled)”

- Mobile drilling vessels were not broken out as a sub-category of the product group, “self-propelled ships, nonmilitary,” until 1972, at least twenty years after the first generation of mobile offshore drilling units (MODUs). ABS made first classification of MODUs in 1958
- Post-1997: North American Industrial Classification (NAIC) system, under which these sectors are now categorized as “Ship Building and Repairing,” NAIC 336611

MARAD (DOT) Classification of Shipbuilders

- First tier facilities or major shipbuilding bases (MSB)
  - Six remaining ("Big Six"), all owned by General Dynamics or Northrup Grumman
  - Two on Gulf Coast: New Orleans (formerly Avondale) and Pascagoula (formerly Ingalls)
- Second tier facilities
  - 14 active (56 inactive), 11 of which are Gulf Coast
- Small commercial shipbuilders and boat builders
  - 294 total nationwide
  - 19 active with significant construction records, 8 on the Gulf Coast
  - 56 other active, 34 on Gulf Coast or produce for Gulf market
- Historical Data – www.shipbuildinghistory.com (Tim Colton)

Industrial Classification

- Offshore fabrication business is technically included in the Census of Manufactures, but it is still difficult to identify and classify, both historically and currently
- Not until 1967 did the Census include “drilling platforms” as a separate category under the product group, “nonpropelled ships”
- Unfocused snapshot of this industry every five years
- Fabrication business varies along different dimensions, including size of operation, degree of specialization, company ownership and control, extent of work for foreign clients, and overseas operations
- Largely non-union workforces in both shipbuilding and fabrication

Gulf Coast Shipbuilding to 1945

- First half of 19th century
  - Early legislation reserving U.S. coastwise trade to U.S.-built vessels stimulated industry on Gulf Coast
  - Galveston, New Orleans, Pascagoula, and Mobile became major seaports for agricultural exports
- Late 19th century
  - Shift from wooden sailing craft to steamships undermined region's shipbuilding industry
- 1914–1945
  - U.S. government sponsored military and merchant shipbuilding incorporated the Gulf Coast to a much greater degree in national organization of the industry

Shipbuilding and Offshore Fabrication, 1945 – 1970

- Growth of shipbuilding and fabrication for offshore oil development during the fifteen years following the end of the war was an important mitigating factor in the sharp decline in employment and income for the shipbuilding industry as a whole in the United States.
- Vessel construction driven by on-demand, continually changing specifications. Liabilities for international shipbuilding – the lack of standardization and the separation of design functions from production functions – became assets for offshore industry.

Shipbuilding and Offshore Fabrication, 1945 – 1970

- From war surplus vessels and shrimp boats to purpose-built barge, tug, seismic and supply vessels
- Large fabricators – Brown & Root and J. Ray McDermott.
- Construction of MODUs
  - Risky, high-cost, specialized vessels
  - Long-term contracts from operators
  - Leading builders: Bethlehem Steel (Beaumont), R.G. LeTourneau (Vicksburg), and Levingston (Orange)
- Great 1960s boom

Shipbuilding and Offshore Fabrication, 1970 – 1986

- Mid-1970s – overcapacity in world shipbuilding; rise of Japan, Singapore, and Korea as leading shipbuilders
- Huge growth and expansion in Gulf Coast shipbuilding and fabrication
  - New Brownsville shipyards and Coastal Bend fabrication yards
  - Renewed boom in supply and workboat construction
  - Financial and legal problems
- Mid-1980s oil price collapse
  - Bankruptcies, downsizings, reorganizations, closed yards
  - Lost generation of skilled workers

Shipbuilding and Offshore Fabrication, 1986 – 2005

- Accelerated realignment of world shipbuilding capacity to Asia
- Construction of all three major types of MODUs joined migration away from the United States
- Fabrication of hulls for deepwater production facilities (TLPs, Spars, Semi-submersibles) overseas and towed to the Gulf
- Creation of niche markets for Gulf Coast shipbuilding and fabrication:
  - Offshore Support Vessels (OSVs)
  - Rig repair work and conversions
  - Specialized platform removal and decommissioning
  - Specialized fabrication and installation services