Coastal Marine Institute

Labor Demand in the Offshore Oil and Gas Industry in the 1990’s: The Louisiana Case
Coastal Marine Institute

Labor Demand in the Offshore Oil and Gas Industry in the 1990’s: The Louisiana Case

Authors

Forrest A. Deseran
Louisiana Population Data Center
Louisiana State University

and

Linda Tobin
Department of Sociology
University of Louisiana, Lafayette

April 2003

Prepared under MMS Contract
14-35-0001-30660-19951
by
Louisiana State University
Baton Rouge, Louisiana 70803

Published by

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region

Cooperative Agreement
Coastal Marine Institute
Louisiana State University
DISCLAIMER

This research was supported by the Minerals Management Service (MMS) under MMS Cooperative Agreement No. 14-35-0001-30660. This report has been technically reviewed by MMS and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Service, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. It is, however, exempt from review and compliance with MMS editorial standards.

REPORT AVAILABILITY

Extra copies of the report may be obtained from the Public Information Office (Mail Stop 5034) at the following address:

U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
Attention: Public Information Office (MS 5034)
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394
Telephone Number: 1-504-736-2519
1-800-200-GULF

CITATION

Suggested citation:

# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>iv</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>METHODOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>FINDINGS</td>
<td>3</td>
</tr>
<tr>
<td>General Characteristics of Firms</td>
<td>3</td>
</tr>
<tr>
<td>Firm Services and Products</td>
<td>3</td>
</tr>
<tr>
<td>Air/Water Transportation Services</td>
<td>3</td>
</tr>
<tr>
<td>Ship/Boat Building</td>
<td>3</td>
</tr>
<tr>
<td>Metal Fabrication</td>
<td>4</td>
</tr>
<tr>
<td>Oil/Gas Services</td>
<td>4</td>
</tr>
<tr>
<td>Year Established and Number of Employees</td>
<td>5</td>
</tr>
<tr>
<td>Changes in Number of Workers</td>
<td>6</td>
</tr>
<tr>
<td>Organizational and Technological Changes</td>
<td>7</td>
</tr>
<tr>
<td>Changes in Interrelationships Among Firms</td>
<td>9</td>
</tr>
<tr>
<td>Perceptions of the Capacity of Local Communities of Supply Labor</td>
<td>10</td>
</tr>
<tr>
<td>Firms with Positive Impressions of the Labor Force</td>
<td>11</td>
</tr>
<tr>
<td>Negative Labor Impressions</td>
<td>12</td>
</tr>
<tr>
<td>Human Capital Deficiencies</td>
<td>12</td>
</tr>
<tr>
<td>Attitudinal/Motivational Deficiencies</td>
<td>14</td>
</tr>
<tr>
<td>Industry-Related Circumstances</td>
<td>16</td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td>17</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>20</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Year established and number of employees by type of firm. ........................................ 5
Table 2. Changes in total number of all workers and part-time workers in last 10 years by firm type. .......................................................................................................................... 6
Table 3. Changes in skill level of workers and problems finding qualified workers by firm type. .............................................................................................................................. 10
LABOR DEMAND IN THE OFFSHORE OIL AND GAS INDUSTRY IN THE 1990'S:
THE LOUISIANA CASE

INTRODUCTION

A surge in activity in the mid-1990s resulted in the Gulf of Mexico (GOM) being described as the “Silicon Valley” of the oil and gas industry (Simmons, 1996). Technological and corporate organizational changes, coupled with a steady increase in the global demand for oil, were driving a resurgence of oil and gas exploration in the GOM. According to industry reports at this time, both major and independent operators were making significant and long-term investments in the Gulf of Mexico. Communities along the Louisiana Gulf Coast were optimistic about another era of oil-related economic growth. However, despite the marked increase in oil and gas activity in the GOM during this period, there was no concomitant increase in local employment in the oil and gas industry.

The mid-1990s resurgence of oil exploration in the Gulf can be attributed in part to technological advances such as those that enable the offshore petroleum industry to extract oil from beneath salt in the previously mined shallow Gulf waters (Abernathy, 1996) and those that make deepwater development possible. Increased oil and gas exploration in the GOM can also be attributed to corporate organizational changes, which reduce the economic risks associated with offshore petroleum oil and gas exploration. These changes include the Deepwater Royalty Relief Act which provides tax breaks and other financial incentives for oil and gas exploration in deep water (over 200 meters), and cost-cutting strategies within the industry itself. Coupled with a steady increase in demand for oil, these changes were driving an increase in oil and gas activity in the GOM (Flatern, 1997).

Reports of oil and gas exploration activity in 1996 indicated that GOM federal offshore oil leases were at an 11-year high and that the oil output for 1996 would exceed 1986 levels (Oil and Gas Journal, 1996; The Daily Advertiser, 1997; Dodson and LeBlanc, 1997). However, data from the Louisiana Department of Labor for this period showed relatively little growth in oil and gas related employment. Although this slow growth in employment was attributed to a shortage of qualified workers (Darbonne, 1997), the reasons for the sluggish growth are unclear and were due to other factors as well, such as industry reorganization. The impetus of this study was to examine factors contributing to the slow employment growth during this period with increasing activity in the GOM. Because employment is initially a function of labor demand, and labor demand is a function of industrial structure, our focus was on the industrial determinants of employment opportunities.

Our plans were confounded when the high level of activity that the oil industry enjoyed up through 1997 took a rapid downturn in late 1997. The American Petroleum Institute reported that by 1999 oil production had its largest annual decline in a decade and the number of those
employed in the upstream sector dropped by 60,000 between 1997 to late 1999 (International Petroleum Encyclopedia, 2000).

This industrial slowdown became evident only after the fieldwork for the current project was well under way. The result of this downswing was that the core question driving the project became less relevant to the informants involved in the study. That is, for those from whom we obtained our data the availability of workers had become less pressing than the prospects of declining revenues and reducing the number of employees. Thus, what had started as an examination of the industry’s response to a high need for labor, had to be modified in mid-stream to more general questions dealing with changes experienced by firms in the oil and gas industry in the GOM and how these changes affect the demand for labor. More specifically, we address three central issues that may affect labor demand:

1. Organizational and technological changes in supporting the GOM oil/gas industry.
2. Changes in interrelationships among firms.
3. Perceptions of the capacity of local communities to supply needed labor to firms.

METHODOLOGY

Because there were no available secondary data sources to address the research questions listed above, we relied on qualitative field research methods to gain the information we needed. We used a non-interview technique referred to as “guided conversations” (Lofland and Lofland, 1995) conducted with representatives of firms in the oil and gas industry located in what Tolbert and Sizer have identified as the Lafayette and Houma Labor Market Areas (LMAs). Together, these LMAs include the following parishes: Acadia, Assumption, Evangeline, Iberia, Lafayette, Lafourche, St. Landry, St. Martin, St. Mary, Terrebonne, and Vermilion (Tolbert and Sizer, 1996). We concentrated our efforts in these LMAs because these areas were most directly affected by the previous cycle of offshore development and decline.

We developed a pool of prospective informants using a purposive sampling strategy (Fitchen, 1991). We began by developing an initial list of firms in the Lafayette and Houma LMAs based on business listings in local phone books and from such sources as the Petroleum Equipment Suppliers Association’s 1997/1998 Human Resource Contact Directory. Eligible firms included those directly involved in oil and gas exploration and extraction (i.e., production and drilling firms) and linked sectors. Initially, we used the categories that Gramling (1996) indicated are sectors most directly linked to offshore oil and gas extraction: metal fabrication, ship and boat building and repair, and water transportation. As part of our guided conversations, we solicited information about other firms linked to the industry and added those firms to our sample. As we will discuss in more detail in our findings, we expanded this categorical scheme to four categories. Overall, we felt that these methods yielded a sample that was representative of the population of firms servicing the oil industry in the Gulf of Mexico. Our confidence in the sample grew throughout the project as informants repeatedly confirmed the appropriateness of the list.
Although we had planned to conduct our guided conversations with CEOs of the selected firms, it soon became evident that personnel officers were often more accessible and typically were more knowledgeable about issues dealing with labor supply and demand. Hence, when appropriate, we spoke with personnel directors of the firms in our sample. In conducting the guided conversations, we used topical guidelines of the issues pertinent to labor demand in the oil and gas industry. Among the issues were (1) the nature of the organizational and technological responses to changes in the oil and gas industry and the global economy, (2) their relationships to other firms, and (3) perceptions of the capacity of local communities to supply needed labor.

Of 36 representatives of the firms identified using the sampling strategy described above, 34 resulted in completed directed conversations. Two representatives refused to participate. Of those that did participate, 27 allowed their conversations to be tape-recorded, which were then transcribed. The conversations of the remaining 7 respondents were recorded as notes taken by the field researchers.

**FINDINGS**

*General Characteristics of Firms*

**Firm Services and Products**

As mentioned above, we first identified firms as they conformed to the type of service or product they provide for the oil and gas industry as described by Gramling (1996): ship and boat building, metal fabrication, and water transportation. However, these categories were insufficient to capture the array of services and functions of the firms we found linked to the oil industry. In this regard, because of their similar functions, we included air transportation services with water transportation services. In addition, we created a new category, Oil/Gas Services, which includes a rather broad array of activities that we will describe below. A summary of the kinds of services provided in each category follows.

**Air/Water Transportation Services**

Perhaps the most easily categorized firms in our sample are those that provide water or air transportation for the industry. Our sample included five companies in this category. These firms provide support in the form of either helicopter transportation or water vessel transportation of equipment, supplies, and employees for offshore oil/gas production operations.

**Ship/Boat Building**

Eight of the firms we contacted were involved in ship and/or boat building. This category includes companies that construct vessels as well as repair them. Some of the firm representatives made the distinction between boat and ship building, which depends on the size of the vessel. For example, the representative of Firm #4 stated, “we don’t have any vessels under construction large enough right now to be considered a ship. So they are boats.” Although the oil industry was the major customer for these companies, a number of these firms have begun targeting a broader market. So, in addition to the construction of barges, lift boats,
and supply boats, some firms mentioned that they are building luxury boats, small recreational boats, and even contracting with the government (e.g., for Coast Guard vessels). In addition to construction, most of these operations also offer maintenance and repair services.

**Metal Fabrication**
The major activity of the firms in this category is oil-field iron and steel fabrication. These companies produce offshore oil platforms and related materials such as pipe lines and pressure control equipment. Six of the firms in our sample fell in this category.

**Oil/Gas Services**
The category of “Oil/Gas Services” incorporates a broad range of industry-related services and products that support GOM oil and gas production activities. This category remains crude and can be viewed as a residual category for services that do not fit neatly into our other three categories. What follows are examples of descriptions of firm activities provided by respondents (I = field researcher; R = respondent). As can be seen, the descriptions of oil company service range from relatively precise to rather diffuse.

Firm #11
R: The major activity of our company...we are offshore caterers so we are basically looking for cooks with experience. We call them stewards. We look for night cooks and bakers. Then we have people that are called utility hands which wash dishes, make beds, mop floors, and clean bathrooms and stuff like that. That is what our business is. We are a completely service oriented company.

Firm #14
R: The major activity is offshore on oil installations. Painting and sand blasting.

Firm #10
R: Welding, sandblasting, and painting.

Firm #21
R: We provide life boat services, wire line services, and electric line services.

Firm #20
R: ...we work on platforms. I guess marine construction service company is not the right word... We work on pipelines, we work on platforms, drilling rigs. We do anything that has to be done under water.

Firm #17
R: We provide labor...that is usually used on a production platform. Either as a production operator or a roustabout.

Firm #28
R: ...we rent specialized tools and equipment that is oil field related, including drill pipe, drill collars, tubing, blowout preventions, and torque turning equipment. We also
provide personnel to install and remove customer owned casing at well sites and operate company owned diesel driven hammers and welding machines.

Firm #22
I: By service, what kind of service do you provide?
R: Anything related to the oil field.
I: Anything?
R: Just about. There is very little we don’t do...from the beginning to production.

Year Established and Number of Employees

The oldest firm in our sample was established in 1940 and the newest in 1997. As can be seen in Table 1, the year firms were established is fairly evenly distributed across three time periods. Ten firms were established prior to 1960, ten were established relatively recently (since 1980), and twelve came into being between 1960 and 1979.

The number of employees currently employed by the firms also varies considerably, ranging from 17 to 1,800 workers. Based on the employment figures reported to us by our informants, the firms in our sample employed a total of about 14,800 workers in the GOM. Looking at per firm averages, the firms employing the largest number of workers were in the metal fabrication business (770.5) while oil and gas services companies accounted for the lowest average number of employees (267.5) (Table 1).

<table>
<thead>
<tr>
<th>Firm Characteristics</th>
<th>All Firms (N=34)</th>
<th>Oil/Gas Services (N=15)</th>
<th>Ship Building (N=8)</th>
<th>Metal Fabrication (N=6)</th>
<th>Air/Water Transport (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year Established</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre 1960</td>
<td>10</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1960-1979</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>After 1980</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>No Information</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>1969</strong></td>
<td><strong>1970</strong></td>
<td><strong>1966</strong></td>
<td><strong>1974</strong></td>
<td><strong>1968</strong></td>
</tr>
<tr>
<td><strong>Number of Employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;100</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>100-499</td>
<td>17</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>&gt;499</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>435.8</strong></td>
<td><strong>267.5</strong></td>
<td><strong>500.6</strong></td>
<td><strong>770.5</strong></td>
<td><strong>435.0</strong></td>
</tr>
</tbody>
</table>
Changes in Number of Workers

We asked respondents to estimate changes in the number of workers they employed during the last decade. While the numbers varied from firm to firm, overall the number of employees has increased for most firms. Twenty-two of the sampled firms experienced an increase in the number of employees, while only six reported a decrease (Table 2).

<table>
<thead>
<tr>
<th>Workforce Characteristics</th>
<th>All Firms (N=34)</th>
<th>Oil/Gas Services (N=15)</th>
<th>Ship Building (N=8)</th>
<th>Metal Fabrication (N=6)</th>
<th>Air/Water Transport (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>22</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Decrease</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No Change</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Part-time Workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Decrease</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No Change</td>
<td>30</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

When we asked about changes in the number of part-time workers, most firms indicated that they only hire full-time employees. However, the distinction is not always clear, as illustrated by this exchange (Firm #18).

I: What about the number...have you seen an increase or decrease in the number of full time workers you have at any given time? Do you have more full time workers or fewer full time workers than you used to?
R: No, it stays pretty stable. We don't normally lose. The only place we would lose is in our hourly people that come and go...
I: Are they part timers?
R: Yes and no. We don't guarantee hours so they can work at several places. In a way they are but in a way they are not.
I: As for as being part time?
R: Yes.

This definition of full-time employment was echoed by other respondents and is consistent with U.S. Department of Labor (2002) claim that, in the oil and gas service industry, “only 1 employee in 20 works fewer than 35 hours a week, because opportunities for part-time work are rare.”
Organizational and Technological Changes

One of the questions guiding our research is the extent to which firms have adjusted organizationally and technologically to changes in the oil and gas industry. We asked respondents to tell us about what they considered to be the major changes within the last two decades. Although responses varied, and no clear pattern seems to define the overall industry experience, it was clear that the industry has not remained static. Nearly one third of the 34 respondents reported they were less specialized in comparison to the 1980's. This could possibly be attributed to “being bought out” by another company (which happened to eleven of the firms in our sample) and/or to the acquisition of another company which helped them expand into other areas (reported by four firms). Being “bought out” was not always straightforward in outcome, as demonstrated by the following excerpts from our guided conversations.

Firm #10
I: I want to ask you about changes that might have occurred. Have there been any changes...in the company’s major activities?
R: At one time the company was involved in metal building fabrication and erection also but that was dropped. When the slowdown took place in the early 80s.
I: Ok.
R: Ever since then,...as a matter, of fact new ownership took place. The company was sold at that time in 1982 and the new owners concentrated strictly on oil field activities.
I: So it changed owners in ‘82 and they focused on the oil field?
R: Correct.
I: Did you...know what the consequences were of...just concentrating on the oil field rather than the general public?
R: Well,...for one thing, it was a way to reduce overhead. You didn’t have...to do the sales work on the industrial end of it with the building. They were able to eliminate a whole division there and operate with a little more stream line.

While the experience of Firm #10 was one of focusing activities and streamlining the business, we find mergers do not necessarily have a lasting impact on the mission or scope of the business.

Firm #30
R: [Our firm] in its early years has gone through several name changes through all these years but it bought the [firm xxx] company. They were the largest oil manufacturer in the world. [Firm xxx] owns [firm xxx]. In 1995 the company I am with which is now called [firm xxx] was spun off,...we merged with another offshore construction company called [firm xxx]. We were spun off and we are majority owned by [firm xxx].
I: That has been since 1995?
R: 1995, right.
I: Since they took over have you seen a lot of changes in the structure?
R: No.
I: So you pretty much maintained your own identity.
R: The joke is we all still act and smell alike. There is no difference what-so-ever.
I: Nothing has changed in your organizational structure?
R: No. We are a separate corporation. But for all practical purposes...the marine construction business we are involved in...all of that was spun off as one separate corporation so it all looks the same. Yes it has been restructured, we have a president, a board and what have you. Day in and day out activities are no different.

Mentioned numerous times in the conversations was the effect of the downturn on the industry in 1998. Of particular concern in this regard was the impact this has on the ability to keep an adequate workforce in anticipation of a resurgence in the industry.

Firm #31
I: How do you think changes in the industry have affected your company? If somebody said...what kind of changes have there been that...affected your company, what would come to mind?
R: It has affected us in trying to hire quality people. The industry has affected us in hiring quality people because when you drop from [a] 200 work force to 50 overnight and then have to gear back up a month later to 200. It is very difficult. When you have to gear up you are accepting because of nutrition to feed the work force you are accepting lower qualified person to do a certain criteria job. You have to.
I: I understand. Is your company now at that location having problems finding qualified workers?
R: No, because everybody else is laying off.

Firm #30
I: Have you seen an increase or decrease in the number of full-time employees?
R: Decrease.
I: Could you tell me a little bit about that. Is that perhaps due to the bust back in the 80s?
R: No, the cause was the bust of 1998.
I: 1998?
R: If you would have called me last year I would have told you we were above 3000.
I: So this year you have...?
R: It is activity based. The difference between now and the bust in the 80s is that the ship building industries in this area are currently doing very well. We are not in the ship building business. We have a lot of attrition to [the ship building industry] but it has helped us too. We like to see our guys remain employed. We just don’t have enough activity here right now.
I: So you have fallen from 3000 from 1997 to 2200 in 1998?
R: Yes. At the end of 98. We are in the construction business so that is not very low.

Four respondents spoke of the establishment of new managerial/administrative positions within their companies. “Running a tighter ship,” “increase in quality control,” and “to build a better company” were mentioned as consequences of these positions.

Also mentioned twice as a major change in the industry was the shift to deepwater activities. When asked about this shift, one respondent put it this way:
Firm #30
R: Yes, I would say and you really hit on the main thing... [It] went to the offshore from shallow waters to ultra deep waters. And, you want to talk about the greatest changes in the oil business, it has got to be that. We survive on the very deep waters.

Despite organizational adjustments to changes in the industry, most companies reported relatively little change in the focus of their operations.

Firm #20
R: Boy, this company changes on a daily basis. The changes are structural changes within the organization. Client needs--we change to adapt to client needs and requests.
I: [Given] what they intended to do when they were first established, have those activities remained pretty constant?
R: Yes. The core company as it was established is still the core company, which is diving services.
I: So that is what it has always been?
R: Yes. We have branched out from there to...remotely operated vehicles...things of that nature. We have changed but diving work is our core business. Probably will continue to be, unless something drastic happens.

Firm #31
R: Other than being bought out in 1997 by (Firm xxx), the organization is still pretty much the same as it was in 1977. It is still run by (two names),...those guys are still pretty much at the top of the chain.
I: Do you find that surprising or is that pretty normal in this case?
R: I find it very normal in this type of industry because in this industry it is who you know.

Two additional observations merit comment. First, only one company indicated that technology was driving down demand for labor (doing same amount of work with half as many people), yet this same company had increased the number of employees overall, and was finding it difficult to get enough qualified workers. Second, in terms of technological and organizational changes in processing activities, respondents frequently spoke in terms of licensing requirements, certification, increased demand for technological skills, safety training programs, and compliance with environmental laws. Clearly, companies were finding it increasingly difficult to comply with various regulations and associated paperwork.

Changes in Interrelationships Among Firms

The second question in our analysis has to do with changes in the interrelationships among firms. Our hunch was that changes in the industry would include a propensity to contract out functions that had originally been handled by the firms themselves. However, when we asked our informants about such activities, we were generally met with questions about what we meant by “contracting out.” Most respondents indicated little change in such activities. We were unable to discern if this was due to diversification and/or acquisitions. For example, two of the firms in
our sample were owned by a parent company where one was a shipyard and the other a ship repair facility.

In another example, one company was created for the sole purpose of building vessels for the other.

Firm #1
R: Actually we are in a very unique situation...our company is fully owned by [Firm #34]. They are our only client. They [go] to oil companies or vendors...that require specific custom-made vessels. Then they come to us....
R: Actually we were created from the ground up. We were created to give [Firm #34] clients the personal custom built vessels that they required. We have our own engineering department so everything we do is ours from scratch paper to design to marching the vessel. It is individually done for our client and done completely by our company.

However, this type of relationship was atypical. The majority of the firms we interviewed did not have built-in organizational ties.

Perceptions of the Capacity of Local Communities of Supply Labor

Central to our research interest was the question of how oil and gas industry firms viewed the viability of the local labor supply in Louisiana. In this regard, we asked whether firms hired workers from Louisiana or elsewhere, and if they felt that the local labor supply was adequate both in terms of skill level and availability. Table 3 summarizes the responses.

<table>
<thead>
<tr>
<th>Type of Firm</th>
<th>All Firms (N=34)</th>
<th>Oil/Gas Services (N=15)</th>
<th>Ship Building (N=8)</th>
<th>Metal Fabrication (N=6)</th>
<th>Air/Water Transport (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill Level of Workers</td>
<td>Increased</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Decreased</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>No Change</td>
<td>19</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Problems Finding Qualified Workers?</td>
<td>Yes</td>
<td>20</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>14</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

With few exceptions, respondents indicated that the skill level of workers had not improved over the last decade. They felt that skill levels either remained the same or decreased. Directly related to skill levels is the problem of finding qualified workers. Twenty of the firms in our sample indicated that finding qualified workers was problematic. We asked each respondent to
speculate about why they were (or were not) having problems finding qualified workers. The following excerpts from our data reflect both positive and negative assessments of the local labor force. We begin with examples of positive assessments.

**Firms with Positive Impressions of the Labor Force**

As revealed in these excerpts, one reason some firms were expressing little concern over availability of labor stemmed from the current downturn in the industry. However, even taking the current lack of activity into account, these firms saw themselves as attractive employers with relatively loyal employees. Their attractiveness lies in firms’ willingness to train employees and/or their proximity to rural communities to which workers are attached.

**Firm #30**

I: The majority of your workers do come from Louisiana?
R: Yes. We have Heberts and Boudreauxs all over the place.
I: So, would you say that finding qualified labor for your company is, or is not, a problem?
R: It has not been a problem. We are in a downturn right now which we anticipate to change back at some point in time. Will it be a problem then I couldn’t tell you. At the time everybody down here was really having a difficult time finding labor. We had our laborers. They had been here a long time. Everything is in good shape. Because of the downturn and people leaving us going into the ship building business... If the offshore business picks up next year I may have a different answer. As of now, we have not had a difficult time getting labor. That is contrary, I am sure, to what other people have said.

**Firm #1**

I: Why do you think finding qualified labor is, or isn't, a problem for you?
R: At the moment I would say it is not tragic. Others are laying off and we are hiring, and we do have a history and a back log of work and that attracts people. There is also the problem when things start taking an upswing... There are so many companies in the local area...that we have to get in the competition. It is the type of work force that will jump from job to job. If this week [competitors] are paying one thing and [we] are paying another, [workers] will go there. It becomes a battle over who is going to give the benefits or the pay which is really what they want. They have the pick of the litter. Of course you have Mississippi and Alabama who are also in competition.

**Firm #20**

I: Is your company having problems finding qualified workers now?
R: Yes...well, now, no. Now we are in the downturn.
I: So you are not looking to hire?
R: No we are not.
I: Let us say three or four months ago were you having trouble?
R: Yes, we were.
I: And those workers that you were having trouble finding...these were welders?
R: Welders and fitters. Skilled craft people rather than the college graduate.
I: Are most of your employees Louisiana residents?
R: Most are yes.

Firm #18
I: Why do you think finding qualified workers hasn't been a problem for you, or at least not at this time?
R: Because we have like a pool and we use...about 4 companies within the area that use the same type of workers and they go from one place to the other when things are slow.
I: I see. So, if they are working at some place last week, they could be at your company this week?

Firm #23
R: We are in the rural area so we basically have to train everyone. When we interview for our skill professions like machinists...or stuff like that, we look at their math scores before we even know we have a cut off on math scores. We have an agreement with the Ville Platte Vo Technical which is across the street which is real handy. We have done real well in training our folks because...you can’t get to Ville Platte unless you really want to. Most of our work force is locally grown and we have had real good luck. They tend to stay with us. They want to live here in Ville Platte they don’t want to leave.

Negative Labor Impressions

As shown in Table 3, the majority of the firms in our sample were less than positive about the labor situation in Louisiana. Although most respondents agreed that a “labor problem” exists, not all agreed on the root, or cause, of the problem. We found that our respondents’ viewpoints in this regard could be organized into three relatively distinct categories – human capital deficiencies, personal attitude/motivational deficiencies, and industry-related circumstances. The first two categories place the cause of the labor problem on individual characteristics and the third category is more structural, it relates to the cyclical history of the oil and gas industry.

Human Capital Deficiencies

The lack of specific skills and low educational attainment were cited by some as major impediments to finding adequate labor locally. The following excerpts are illustrative of this interpretation.

Firm #4
I: Would you say that you are having problems finding qualified workers for your company?
R: Yes.
I: What kind of workers?
R: People who have experience with aluminum materials and welding and fitting area.
I: Specifically in that area?
R: Yes.
I: Would you say that your labor needs are met by Louisiana residents?
R: No.
I: So do you feel like you have to...?
R: We do have a group of employees that live in Texas but they are on-site during the week.
I: So they are working like a 7 and 7?
R: They work more like four days a week and go home for three days.
I: How many employees are coming in from Texas?
R: About 50.
I: So you think...?
R: That is wrong I am sorry, about 30.
I: You feel that the problem is Louisiana related.
R: I think the problem is more because of our area... The jobs that we demand are [needed by] just a few other companies, but again, we are in a [specialized] area looking for the same type of positions. Therefore, our demand is high and [there is] a lot of competition between people that have particular skills.

Firm #21
R: Well, I think from what I have seen having been in Lafayette for a long time prior to coming to [firm name]. A lot of the skills that are needed today are not being taught in the classroom curriculum. Whether that be in a trade school or a major university.
I: Do you see that as having changed over the years, or has that always been a problem?
R: Back when the oil field was thriving in the late 70s there were a lot of trade schools that dealt more with welding certification and things of that nature. When the decline of the oil field came...in the early 80s, you saw those things go away and they have not been re-established.

Firm #16
I: You have told me that the company is having trouble getting qualified workers.
R: Underline qualified. A lot of jobs call for qualified divers, welders, fitters and you are just not finding those anymore.
I: Again, why do you think that is? Is it because there are so many jobs out there?
R: There is a lot of work for the technical skills and there are so few with those technical skills.
I: Why would [it be] so different now than say in the late 70s and early 80s?
R: I don’t know, we didn’t have the business then.

Firm #10
I: Have you seen any changes in the skill level of your employees?
R: Yes. The skill level is way down in new kids coming up.
I: Why do you think that is true?
R: I guess lack of experience is the main thing. They just don’t know how to work.
I: What does that mean for your company?
R: It means we have to spend a lot more in safety training,...a lot more time with them in the yard before we can send them out to customers so we don’t have accidents. It puts a burden on our company.
**Attitudinal/Motivational Deficiencies**

A recurrent perception among the respondents was that the “labor problem” had to do with attitudinal or dispositional characteristics of workers or potential workers. Those in the local labor pool were viewed as not understanding the rigors of work in the oil and gas industry, not wanting to work, or, in general, lacking a positive work ethic. Several mentioned the reluctance of workers to spend lengthy periods of time away from their homes. One respondent went on in some detail about the extent to which drugs have become a major problem with the labor force. These critical views of the current work force were often couched as a contrast to earlier generations of workers who were considered to be more hard working and loyal to their employers.

**Firm #21**  
I: What kind of workers are you having trouble finding?  
R: Most of ours are entry level helpers that are going to be anything from a deck hand on a boat to a helper in a wire line capacity. Meaning that they are going to assist an operator who is assigned a particular task. Finding individuals with those particular skills or individuals who truly understand what it means to work offshore. It is one thing to say you do that, but when you get stuck out there for 25 days and can't come home, it takes a different mind set to be able to accept that kind of work environment.

**Firm #11**  
I: Have you seen any kind of change in the skill level of your employees?  
R: I have seen a big change from the past in people wanting to work because it is hard to find people that actually want to work...  
I: You don’t see as many people that actually want to work?  
R: Yes. Like I said, if I could find 200 that want to work, I would be sitting good.  
I: Yes?  
R: You have all kind of excuses why they can’t make it to work.  
I: Do you think that is more of a problem now than it used to be?  
R: Oh, three times more.  
I: Do you know why?  
R: The only thing I can figure is...that one problem we have now that we didn’t have in the past is the problem with dope. There are a lot of people that are having a problem.  
I: So they have failed their drug test?  
R: Yes.  
I: Do you think that people fail drug test now because there are more people using drugs or because tests are more closely regulated and administered?  
R: I think right now that it is a little of both. There are more people using it because it is more available. Right now there are more tests being done because people are noticing when somebody has an accident so you check them out. They might have some kind of drug in their system that is not suppose to be there. Everybody is checking it more, and more, and more to safeguard employees not on drugs.
Firm #2
R: We had an apprentice program (first one established in Louisiana) that would allow high school kids to work toward...acquiring skills as welders or ship builders.
I: It is going pretty well then?
R: Well we have people who are participating in it, but you still go back to the same consideration. If you don’t find kids who are mature enough, focused enough to recognize that they are not going to go to college, and [who] recognize when they get out they don’t want to get a job flipping hamburgers. They have to be willing to put in the effort, and it is not a ticket out of school because they still have curriculum requirements to fulfill and then they have work requirements--on the job training...and they have to go through the shipyard. So it has been a success. It has been a success to the extent that we have gotten some kids who are involved who are progressive. It hasn’t been a success to the extent that we don’t have many kids involved. The numbers haven’t been there.
I: So your problems in finding workers are more...
R: Our biggest problem is finding people who are willing to want to work. People who want to acquire a skill or trade and who will avoid absenteeism problems. People who will come to work. That is the biggest problem we have.
I: I have heard that. Why do you suppose that is? Do they just not have a...
R: I guess the very trite or pat answer would be that, as parents, we haven’t instilled the work ethic into our kids. They expect things to be... I am going to make a general statement. It doesn’t apply to everyone but they want something for nothing.
I: Yes, and they don’t want to get dirty and they don’t want to work that hard perhaps?
R: When they start they want to go to the top.
I: Yes.
R: Right away. So their expectations are unrealistic.
I: So that problem, you don’t think, is necessarily a Louisiana problem?
R: Oh no.
I: How much do you go out of the state to hire professional or production people?
R: We have professionals that come in from out of state.
I: So you recruit for engineering type jobs?
R: Right.
I: Are most of your professional people recruited outside the state?
R: No, most of them are recruited in state.
I: The majority come from LSU and Southeastern?
R: Most of our professionals come from places like UNO.

Firm #3
I: Are your labor needs met by Louisiana Residents?
R: No, because people don’t want to work. I may end up having to go out of state to look for people with better work ethics, although it’s probably going to be the same everywhere.
I: Are your workers from Louisiana?
R: The “bust” may have scared people off. A lot of people lost their jobs and were out on the street; lost their homes, cars, etc. -- think they lost their work ethic too -- now they want to be taken care of, work less and fish more.
Industry-Related Circumstances

Although the respondent from Firm #3 suggests that laborers have lost their work ethic, this respondent also mentions the potential effects of the “bust” on the labor force. Placing the source of the labor problem on such structural factors was another recurring theme in the comments we received. Essentially, the argument is that the recurring busts and booms in the industry have pushed many workers out of the oil and gas industry or left a disillusioned residual labor pool.

Firm #29
R: Yes, lack of skilled craftsman. Because the oil industry is so volatile people don't stay. They get in and they say its not for me and I need something more secure and steady so they do something else. They go deliver water for Kentwood or they go work at the hospital or something like that.

Firm #31
R: Because the industry has burned the employee over and over again and they went into another industry. You can't keep hiring them, work them for a year and a half and two years, and lay them off for 6 months. That is what the industry has done. That is why you have a very difficult time getting anybody to come in this industry.

Firm #24
I: Is your company having problems finding qualified workers?
R: We have had that problem for a good while. We just try to deal with it. We try to train them to be skilled workers.
I: What kind of workers are you having trouble finding, sir?
R: Fitters and welders.
I: Why do you think that finding qualified labor has been a problem?
R: It is due to the business picking up and the number of people in the industry. It doesn’t do well and, then, it does well, and it out did the number of people that were interested in that industry.

It is important to reiterate that opinions about the “labor problem” varied considerably. Some firms were not experiencing problems and spoke of a relatively loyal and well skilled work force. Others found that securing adequate labor has become increasingly problematic and suggested that this is largely due to either a declining skill or educational level. Still others argued that the work ethic found in previous generations of workers has changed and that it is now difficult to find motivated employees. Finally, some of our respondents see the labor problem stemming from the volatile nature of the oil and gas industry itself. With a history of busts and booms, workers have become discouraged and moved on to other kinds of work.
SUMMARY AND CONCLUSIONS

The impetus for the research reported here was to empirically examine the demand side of labor in the oil and gas industry in the Gulf of Mexico (GOM) during a period of economic expansion. When we began the project, the oil and gas industry was experiencing an eleven-year high point in activity, yet growth in oil and gas related employment levels continued to be low. Although this slow growth in employment was attributed to a shortage of qualified workers, there was little evidence to support this supposition. Our intention was to shed some light on this slow employment growth.

However, the high level of production that the oil industry enjoyed up through 1997 took a rapid downturn beginning in late 1997. This became evident only after our fieldwork was under way. Hence, the core question driving our project dropped in relevance as the availability (or lack of availability) of workers became less of a pressing concern for the firms included in our study. This resulted in mid-stream modification of our questions about the current labor situation to a more general set of questions dealing with changes experienced by firms in the oil and gas industry in the GOM. In particular, we focused on the following three issues as they relate to labor demand.

1. Organizational and technological changes in supporting the GOM oil/gas industry.
2. Changes in interrelationships among firms.
3. Perceptions of the capacity of local communities to supply needed labor to firms.

Our data were derived using a qualitative research strategy. The information presented is largely in the form of excerpts from guided conversations with representatives of firms identified as playing a major role in supporting the oil and gas industry in the GOM. Our informants included either CEOs or personnel officers from the firms. The three issues mentioned above were the organizing stimuli for the guided conversations. Our sample of firms was drawn from two multi-parish labor market areas in Louisiana – Lafayette and Houma. We selected firms from existing listings in phone books and from lists published by professional groups. We also solicited names of firms from our respondents and added them to our sample in the course of the field work. In all, our sample included 36 firms, only two of which declined to participate.

One of the first tasks with our data was to place the firms in our sample into meaningful categories. This was not as straightforward as anticipated, revealing the diversity among the firms supporting the oil and gas industry in the GOM. We found that the companies fit roughly into four categories: air and water transportation, metal fabrication, ship and boat building, and oil and gas services. While the first three categories fit existing categorizations, the last category – oil and gas services – is a residual category which turned out to have the largest number of firms of any category. This category involves a wide span of services including, among other things, catering, painting, welding, electric line installation, tool rental, and labor supply.

Although many of our respondents reported that their companies were not hiring at the time of our field work, about two-thirds of them said that the number of employees in their firms had
increased over the last decade. And, contrary to trends in other industrial sectors, there was no apparent shift from full-time to temporary or part-time employees.

We examined how firms adjusted organizationally and technologically to changes in the oil and gas industry over the last two decades. Although no clear pattern seemed to define the industry experience, it was clear from our directed conversations that the industry did undergo change. Nearly one third reported that they were less specialized in comparison to the 1980's. This could possibly be attributed to “being bought out” by another company or through acquisition of a company which helped them expand into other areas. Despite the organizational adjustments mentioned by respondents, most companies maintained their core interests and activities, with relatively little change in the focus of their operations.

Another of our questions addressed changes in the interrelationships among firms. With few exceptions (a ship repair facility and a ship building company owned by the same parent company; a ship rental organization that created its own ship building company), our respondents mentioned very little change in the extent to which they contracted out for services or products.

In response to our queries about the ability of local communities to supply labor needs, fourteen indicated that they had no problems securing adequate labor, but significantly, twenty of the respondents told of problems with maintaining an adequate workforce. It should be added that most of those who reported little problem with the labor supply were concerned about the future viability of local workers for when the industry was again in an upswing.

The issue of the quality of workers brought out the most intense comments in the directed conversations, and these comments tended to be negative. Respondents’ reasons for the “labor problem” fell into three general categories: human capital deficiencies, attitudinal/motivational deficiencies, and industry-related conditions. Some respondents mentioned human capital deficiencies, such as a lack of job-related skills and low educational attainment, as being a major impediment to finding an adequate workforce. Several companies mentioned having to train their employees (at expense and burden to themselves), and two stated they work with vocational-tech and/or high schools in their area. Attitudinal and motivational deficiencies came up in the conversations several times. These respondents felt that the “labor problem” is at base a type of generational shift from a positive to negative work ethic (e.g., “people want more money for less work”, “there’s no loyalty to an employer nowadays”, “people don’t want to work”). Finally, there are those who attribute the local labor problem structural concerns. That is, the erratic behavior of the oil and gas industry, with its boom and bust cycles, has left discouraged and disgruntled workers, many of whom chose not to return to the industry.

Had we probed more, we may have reached a better understanding of specifically what companies are doing or plan to do in times of upswings. As it stands, none of our respondents mentioned any strategies for extending the workforce beyond the current state of affairs.

To conclude, our research reveals an industry that is concerned with the problem of supply and quality of labor in Louisiana, but one that has not reached consensus on the roots of the problem.
nor on how to deal with the problem. The upswings and downswings of the oil and gas industry clearly contribute to the instability of the labor supply. Although we were not able to directly address this issue with workers who are affected by these swings in the fortunes of the industry, it contributes to a type of fatalism amongst their employers. The assumption among our respondents is that little can be done about these intrinsic swings in the industry and by extension, little can be done about retaining those who are affected. Equally daunting to the industry is the human capital issue. With the exception of a few firms that were willing to train workers, or that had ties to schools, we heard no mention of strategies to increase the human capital resources of potential workers and hence raise the quality of the labor supply. Finally, although we found considerable sentiment that local workers lack a work ethic or motivation, we heard little about how this could be addressed.
REFERENCES


The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service’s (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the Offshore Minerals Management Program administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS Minerals Revenue Management meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.