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# An Economic Survey of the Gulf of Mexico Inshore Shrimp Fishery: Implementation and Descriptive Results for 2008

By

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# Executive Summary

Gulf of Mexico shrimp are harvested commercially from "inshore" state waters (waters within the jurisdictional boundaries of the individual states) and from "offshore" federal waters. This study examines the economic performance of active commercial shrimp harvesters who primarily operated in inshore waters of western Florida, Alabama, Mississippi, Louisiana, and Texas throughout 2008. It is designed to complement a similar economic data collection of commercial shrimp harvesters in offshore waters of the Gulf (those holding a federal shrimp permit).

The descriptive results of the Economic Survey of the Gulf of Mexico Inshore Shrimp Fishery for calendar year 2008 are presented, in addition to the survey's development, implementation, and data preparation. The data collection was designed by the Gulf States Marine Fisheries Commission (GSMFC) and the Louisiana Department of Wildlife and Fisheries (LDWF) to track the economic status and performance of vessels holding a state shrimp license for harvesting shrimp in the Gulf. A four-page, self-administered mail survey collected information concerning the shrimp harvesting business, vessel information, fishing effort, hurricane impacts, total revenue, trip costs, and other associated costs.

Throughout the spring of 2009, 1,868 vessels were randomly selected, stratified by state, from a population of approximately 3,765 vessels holding a state shrimp harvesting license for the Gulf. After two mailings and a reminder postcard, 591 surveys were returned. This represented a region-wide response rate of approximately 34%. The data was subsequently entered and cleaned yielding a total number of 313 eligible, complete, and economically reasonable observations used in the financial analysis. Data regarding vessel values, indebtedness, commercial shrimp harvesting activities, revenues, and expenses were combined to produce simple standardized financial statements, including a balance sheet, cash flow statement, and income statement for the average or typical vessel.

Based on the balance sheet of the harvesting business, average net worth or equity—the difference between the vessel assets and vessel liabilities—of the owner of an active vessel in the inshore fleet in 2008 was nearly $41,000. Average cash inflow—the sum of seafood revenues and government payments—was approximately $46,000. Cash outflow—the sum of all expenditures—averaged approximately $40,000. Net cash flow—the difference between cash inflow and outflow—was on average about $6,000 in 2008. Net revenue from operations—which evaluates the real profit or loss to the business by eliminating financing costs and extraordinary income and expenses—was negative $1,063 for the average inshore vessel.

Overall, the financial situation in 2008 was economically unsustainable for the average active inshore shrimp harvesting business. These results parallel similar research about the economic performance of the offshore fleet. Increasing fuel costs, increases in imported shrimp volume—which places downward pressure on domestic prices—as well as recent natural and manmade disasters continue to erode the economic vitality of the Gulf shrimp harvesting fleet.

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# 1. Introduction

This report presents descriptive results of an economic survey of the inshore shrimp fishery in the Gulf of Mexico (Gulf) for the calendar year 2008, and documents the survey's design, implementation, and data preparation. This study represents the first effort to systematically collect economic data for the inshore shrimp harvesting fleet for the entire Gulf, from the west coast of Florida through Texas. For the purpose of this study, the inshore shrimp fishery is defined as the population of commercial fishermen with a state shrimp license but without a federal Gulf shrimp moratorium permit. The federal permit is needed to shrimp in federal waters of the Gulf.[1] The survey and results reported here are complementary to a data collection conducted annually since 2006 by the NOAA Fisheries Service, Southeast Fisheries Science Center, focusing on vessels holding the federal permit.[2]

The penaeid shrimp fishery in the Gulf is the largest commercial fishery in the Southeast Region. It consists of a diverse inshore segment, primarily active in inshore state waters, and an offshore segment that consist of shrimp harvesters who primarily shrimp in offshore waters. The offshore fleet consists of large, otter-trawl vessels that generally operate on a full-time basis. In contrast, shrimp harvesting vessels fishing in inshore waters are usually small vessels, often operated part-time, and generally less sophisticated from a business perspective. The inshore fleet consists of a diverse set of vessels and operators, including recreational, artisanal, and commercial shrimp harvesters who use a variety of gears to catch food shrimp, bait shrimp, and other species.

Based on 2008 food shrimp landings and revenue data from the Gulf Shrimp System (GSS)[3], which includes only vessels active in the fishery, Table 1 compares vessels with and without a federal Gulf shrimp moratorium permit. Over 70% of the 4,121 active Gulf shrimp vessels identified in the GSS in 2008 did not have a federal permit, restricting them to shrimp harvesting in inshore or state waters. These vessels account for about 22% of total shrimp revenue. As is quickly apparent from the table, the federally permitted vessels differ substantially from the non-permitted vessels. At the vessel level, non-federally permitted vessels reported average annual revenue from Gulf shrimp of just $24,170. This contrasts with an average of $228,470 for federally permitted vessels. The higher revenue is due not only to more landings—on average, federal vessels landed more than five times as much as inshore vessels—but also to a higher price per pound of shrimp. In offshore waters the shrimp are usually larger and hence command a higher price per pound.

The estimated number of vessels (4,121) may understate the total population due to problems with the GSS. Some dealers report minor landings from multiple vessels consolidated into a single record. In these cases, the landings cannot be assigned to a specific vessel. Gulf-wide, consolidated records account for a little over 2% of total shrimp landings and revenue in 2008. Further, reporting coverage is probably less than 100%, as a substantial number of vessels, especially among inshore vessels, sell products directly to consumers or restaurants.

[1] Federal waters of the Gulf of Mexico, i.e. the U.S. exclusive economic zone, begin 3 miles off the coast of Alabama, Louisiana, and Mississippi, and 9 miles off the coasts of Florida and Texas.

[2] The 2008 results for the federally permitted Gulf shrimp fleet are available as a technical memorandum (NMFS-SEFSC-601), available at: www.sefsc.noaa.gov/socialscience/shrimp.htm

[3] More information about the GSS can be found at: www.sefsc.noaa.gov/fisheries/gulfshrimp.htm

**Table 1: The Gulf Inshore and Offshore Shrimp Fishery in 2008 According to the GSS[4]**

| (in USD) | "Inshore" (No Federal Permit) | "Offshore" (Federal Permit) | Total |
|---|---|---|---|
| # of Vessels | 2,896 | 1,225 | 4,121 |
| Average revenue per vessel ($) | 24,170 | 228,470 | 84,899 |
| Average landings per vessel (lbs) | 12,251 | 65,977 | 28,221 |
| Average price per pound (lbs basis) | 1.97 | 3.46 | 3.01 |
| Total revenue ($) | 78 million | 280 million | 358 million |
| Total landings (lbs) | 38 million | 81 million | 119 million |
| % of Total revenue | 22% | 78% | 100% |

The industry continues to face a range of factors that challenge the short-term and long-term future of the fishery. Given a myriad of difficulties, including high fuel costs and other input prices, and low shrimp prices due to competition from imports, the profit margin upon which Gulf shrimp harvesters make a living is at risk. To compound the issue, the recent natural and manmade disasters throughout the region have led to further substantial disruptions in all commercial fisheries.

Many fisheries management decisions are made with an abundance of biological data. While these are useful in describing ecological conditions, such as the state of the shrimp stock, they do not describe the condition of the human element, the commercial shrimp harvesters. Previous attempts to collect economic data in the inshore Gulf shrimp fishery, in particular cost data, have been constrained by their limited duration, restricted geographic scope, and the industry's resistance to being surveyed. The size and relevance of the inshore Gulf shrimp fishery to the regional economy make the systematic collection of economic data critical and long overdue. This report presents data collected from inshore shrimp harvesters throughout the Gulf and documents the current economic performance of the inshore shrimp fishery. Having such information in hand will enable fisheries managers, commercial shrimp harvesters, and others who utilize shrimp resources to form more fully informed conclusions and fisheries management decisions.

This data collection effort was developed by the Gulf States Marine Fisheries Commission (GSMFC) and the Louisiana Department of Wildlife and Fisheries (LDWF) in late 2008 in order to determine the economic condition of the fishery. As it is challenging to delineate the inshore and offshore sectors of the shrimp fishery, this data collection effort uses Gulf state commercial fishing license data files to create a potential inventory of the inshore fleet. Further, licensing and the quality of contact information are not consistent across states. As a result, collecting economic data from this segment is challenging. The data collection effort focused on collecting a limited amount of information that would still allow for informative financial and economic

[4] Gulf shrimp landings and prices are reported on a heads-off basis. All values are for Gulf food shrimp only, i.e., shrimp landed in ports on the Gulf of Mexico destined for human consumption. Shrimp landed in South Atlantic ports are excluded. Vessels that were inactive are excluded.

analyses. A self-administered, four-page mail survey was determined to be more convenient, less intrusive, less expensive, and less time-consuming than in-person interviews.

The survey collects information on the shrimp harvesting business, the vessel, fishing effort, catch, hurricane impacts, total revenue, trip costs, and other costs for the calendar year 2008. Random sampling, stratified by state, was used to ensure that the results are representative and can be extrapolated to the population of all state shrimp license holders. The survey was conducted in 2009. The reasons for non-response were determined through contacting a subset of individuals in the original sample who had not responded to the survey. Data entry and cleaning were conducted throughout 2010.

In Section Two, the accounting framework that guides the design of this survey is illustrated. The survey design, the questionnaire, the population and sampling frame, and the sampling design are then presented. Section Three documents the implementation of the survey, focusing on the outreach efforts, the implementation process, response rate, non-response survey, and preparation of the data. Financial and non-financial results are presented in Section Four by specific sections as they pertain to the survey questions and financial reports. Financial results are also reported in tabular format in the Appendix.

# 2. Design

In late 2008, the Economics Program at the Gulf States Marine Fisheries Commission, in close cooperation with the NMFS Southeast Fisheries Science Center and the Louisiana Department of Wildlife and Fisheries, began designing a program to collect economic data from state shrimp license holders throughout the Gulf. This is the first attempt at economic data collection throughout the entire region for the inshore shrimp fleet. This section describes the data collection methodology and should be consulted for information, details, and background on the survey design.

This study focused on collecting a limited number of broad financial variables from each respondent while maintaining the ability to answer meaningful economic questions. The study focused on collecting data from the harvesting sector only, i.e. data concerning the financial flows directly associated with owning and operating an inshore shrimp fishing vessel. Therefore, the basic unit of analysis is an inshore shrimp vessel, ignoring any processing, wholesale, or retail components. Shrimp harvesting operations are commercial, for-profit businesses, and as such, it was decided that only economic data would be collected, forsaking any demographic or social data that is tied to the vessel operators and owners.

## Financial Statements

The economic data collected was based on the accounting framework of financial flows and values associated with the productive activity of commercial shrimp harvesting. Given these data, three financial statements, the balance sheet, the cash flow statement, and the income statement were prepared to present a comprehensive overview of the financial and economic situation of the inshore shrimp fishery in the Gulf. By collecting data pertaining to revenue, expenditures (costs), and asset values, statistically valid financial statements were developed for a representative or "average" inshore shrimp harvesting vessel of the industry as a whole. The following sub-sections briefly explain the basic accounting framework used to create the financial statements.

### Balance Sheet

A balance sheet is a snapshot of a company's financial condition. A company's balance sheet has three parts: assets, liabilities, and the owner's equity. The asset side of a balance sheet lists company assets and their value at a given point in time. The liability side includes all financial claims against the assets (loans and other forms of debt) and equity, the difference between the value of all assets minus liabilities. Figure 1 illustrates this "balance." By collecting data about the value of the assets (market value of the vessel and gear) and about outstanding loans, the vessel owner's equity stake can subsequently be calculated.

| Balance Sheet (Point in Time) | |
|---|---|
| **ASSETS** | **LIABILITIES** |
| Vessel and Gear<br>(Current Market Value) | Loan Balance<br>(Amount Owed) |
| | ***EQUITY (+/-)*** |

**Figure 1: Balance Sheet Configuration**

While the balance sheet summarizes the financial condition at a single point in time, the cash flow statement and the income statement summarize a company's financial transactions over an interval of time. In a report for a particular year, these two financial statements present slightly different perspectives of the revenue earned during one accounting year and the expenses made in order to generate this revenue.

## Cash Flow Statement

The cash flow statement is a financial statement that shows the flow of money into and out of a company over a span of time, such as a year (Figure 2). Money accruing to the company is called cash inflow. Money leaving the company is called cash outflow, which includes the various costs of owning and operating a shrimp harvesting vessel. Transactions that do not directly create cash receipts and payments are excluded. The difference between inflow and outflow—the net cash flow—is useful in determining the short-term viability of a business. For the Gulf inshore shrimp harvesting industry, it was determined that three inflows (shrimp revenue, other fishing revenue, and government payments) and eleven cost categories (fuel, oil, ice, salt, groceries, other supplies, hired captains and crew, repairs and equipment, insurance premiums, loan payments, and overhead) would provide sufficient detail.

**Cash Flow Statement (Period of time)**

| INFLOWS/RECEIPTS | OUTFLOWS/PAYMENTS |
|---|---|
| Operating Receipt or Inflows<br>Revenue from Shrimp<br>Revenue from Other Seafood<br><br>Non-Operating Receipt or Inflows<br>Government Payments | Variable Costs Payments<br>Fuel<br>Oil<br>Ice<br>Salt<br>Groceries<br>Other Supplies<br><br>Labor Costs<br>Hired Captains and Crew<br><br>Fixed Costs Payments<br>Repairs & Equipment<br>Insurance Premiums<br>Loan Payments<br>(Interest & Principal)<br>Overhead |
| | ***NET CASH FLOW (+/-)*** |

**Figure 2: Cash Flow Statement Configuration**

## Income Statement

An income statement is intended to help owners and investors determine the true economic performance of a company over a specified period of time. The income statement is sometimes called the profit and loss statement. The income statement begins with the revenue generated from operations (sale of product or service) and subtracts all operating costs, including non-cash costs such as the value of the owner's labor and depreciation (Figure 3). The result is net revenue from operations. This is a measure of the true economic return to a productive activity. More relevant to the owners of a company is the net revenue before taxes, i.e. their actual profit or loss. This "bottom line" is calculated by subtracting financing costs (such as interest payments) and adding non-operating revenue, income, and costs to net revenue from operations.

In the case of the Gulf inshore shrimp industry, revenue generated from operations includes revenue from the sale of shrimp and other forms of seafood and excludes government payments. Operating costs include non-cash transactions such as depreciation and the value of the owner's

labor used to generate the year's revenue.[5] Depreciation and the value of the owner's labor are not explicit costs (in contrast to variables in the cash flow statement) and thus need to be estimated.

**Income Statement (Period of Time)**

| **REVENUE** | **EXPENDITURES** |
|---|---|
| Operating Revenue<br>Revenue from Shrimp<br>Revenue from Other Seafood | Operating Expenses<br>Fuel<br>Oil<br>Ice<br>Salt<br>Groceries<br>Other Supplies<br>**Owner-Operator's Labor**<br>Hired Captains and Crew<br>Repairs & Equipment<br>Insurance Premiums<br>**Depreciation**<br>Overhead<br><br>*Net Revenue from Operations* |
| Non-Operating Revenue<br>Government Payments | Non-Operating Expenses<br>Loan Interest Payments<br>Hurricane Repairs<br><br>***NET REVENUE BEFORE TAXES (+/-) ("Profit")*** |

**Figure 3: Income Statement Configuration**

## Questionnaire Development

The four-page questionnaire was developed in twelve separate sections of questions in English and translated into Vietnamese. Due to the nature of the license databases from which the samples were drawn, the unit of analysis in this report was the active commercial harvester who harvested shrimp in state waters in 2008. All sections of the survey instrument, except for the

[5] In contrast to the cash flow statement, the income statement excludes cash payments that are not operating costs directly associated with generating *that year's* revenue. This includes payments for new investments and principal repayments which both impact the balance sheet (assets and liabilities) but do not constitute economic income or costs.

ownership of commercial shrimp harvesting vessels, focused on the single vessel respondents used most frequently for commercial shrimp harvesting in 2008.

The questionnaire was developed into the following sections: ownership of commercial shrimp harvesting vessels, characteristics of the vessels, shrimp harvesting effort, seafood harvest and disposition, effect of the 2008 hurricanes, commercial fishing revenue, trip-related operating expenditures, captains and hired crew, repairs and maintenance, insurance coverage and premiums, loans and debt payments, and overhead expenditures. The survey instrument and supporting materials can be found in Appendix 3.

## Population and Sampling Frame

The population, which served as the basis for this research, included all individuals who harvest commercial shrimp in the state or inshore waters of the five states along the Gulf: Texas, Louisiana, Mississippi, Alabama, and the western portion of Florida. Deleting all duplicate records, and federal or offshore shrimp permit holders, from records obtained from individual states, resulted in a total target population consisting of 3,765 unique resident commercial shrimp harvesters (Figure 4 and Table 2). This population displays great variation across states in terms of the number of commercial harvesters, the species they harvest, the quantities of seafood they land, and the sale and distribution of their catch. Each state has different licensing requirements, regulatory systems, and harvesting seasons.

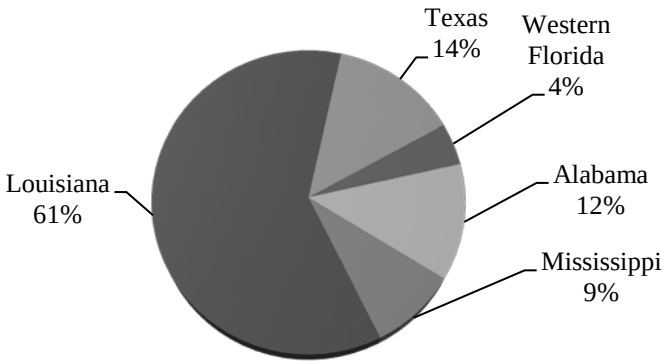


**Figure 4: Distribution of Inshore Shrimp Harvesting Target Population**

The sampling frame varied from state to state depending on licensing requirements, data availability, and other parameters. So that a sufficiently large sample would be drawn for each state, a 50% response rate, a normal distribution for sample parameters, and a 3% margin of error at the 95% confidence level were assumed. A simple random sampling technique was used for the states of Florida, Alabama, Mississippi, and Texas. Stratified simple random sampling was used for Louisiana. The remaining sample size was 1,868 inshore shrimp harvesters (Table 2).

**Table 2: Total Inshore Population and Sample Size by State**

| State | Total Population | Sample Size |
|---|---|---|
| Western Florida | 169 | 146 |
| Alabama | 467 | 325 |
| Mississippi | 333 | 253 |
| Louisiana | 2,288 | 800 |
| Texas | 508 | 344 |
| **Gulf of Mexico** | **3,765** | **1,868** |

## Western Florida

The state of Florida requires a saltwater products license to harvest and commercially sell any saltwater products. Licenses are issued in the name of the vessel or corporation. To harvest and commercially sell shrimp, a harvester is to possess a restricted species endorsement. The use of specific types of trawls is permitted for shrimp, calico scallops, jellyfish, and tropical ornamental species but prohibited for other species. Florida state waters extend nine nautical miles from the Gulf coast. The Florida Fish and Wildlife Conservation Commission Division of Marine Fisheries Management provided a list of all resident state shrimp license holders who reported shrimp landings. Non-resident and duplicate names and addresses were removed. Names and addresses on this list that also appeared on the list of 2008 Federal shrimp permit holders were also removed in an attempt to create a list of Florida resident shrimp harvesters who were active only in state waters. This list contained 169 inshore shrimp harvesters. A simple random sample was subsequently conducted to create a sample size of 146.

## Alabama

The state of Alabama requires a residential commercial shrimp license to harvest shrimp commercially from Alabama waters. Commercial shrimp licenses are issued in three classes according to the length of the vessel used to harvest shrimp: under 30 feet, 30 feet to 45 feet, and over 45 feet. The Alabama Marine Resources Division provided names and addresses for resident commercial shrimp license holders. Non-residents and duplicate names and addresses appearing on the Alabama Marine Resources records of licensed shrimp vessels were removed to produce a list of unique individual Alabama resident commercial shrimp harvesters. The list of Alabama resident commercial shrimp harvesters was also compared to the list of 2008 Federal shrimp permit holders. All names and addresses appearing on both lists were removed to create a list of 467 Alabama resident commercial shrimp harvesters that harvest shrimp in state waters. A sample of 325 was obtained by conducting a simple random sample.

## Mississippi

The state of Mississippi requires that each vessel used to harvest shrimp commercially from Mississippi state waters must have a license. Licenses are issued to vessels in three different length classes: under 30 feet, 30 feet to 45 feet, and over 45 feet. The Mississippi Department of Marine Resources provided names and addresses for commercial shrimp license holders. The records of vessels holding commercial shrimp licenses were examined to eliminate non-residents and duplicate licenses issued to individuals who owned and licensed more than one vessel. The remaining records of residents owning licensed commercial shrimp harvesting vessels were

compared to the list of 2008 Federal shrimp permit holders in order to determine duplicate names and produce a list of 333. A sample of 253 Mississippi resident commercial shrimp harvesters who harvested shrimp from state waters was obtained using a simple random sample.

**Louisiana**

The state of Louisiana requires that all persons who harvest or land commercial seafood in Louisiana state waters hold a commercial fishing license. This license is issued to one individual and is not linked to one vessel. Though there are no specific license requirements to harvest shrimp, licenses are required for each shrimp harvesting gear (shrimp trawl, butterfly net, or skimmer nets) onboard a vessel. Individual commercial harvesters with more than one shrimp harvesting gear onboard are required to hold multiple shrimp gear licenses.

The Louisiana Department of Wildlife and Fisheries used trip ticket harvest data to compile a list of all individual commercial license holders who landed shrimp in 2008. Non-residents and duplicate names and addresses were removed. The list was compared to the list of 2008 Federal shrimp permit holders to remove all records with matching names and addresses. The final list of Louisiana resident commercial fishermen who harvested shrimp in state waters in 2008 had 2,288 records. The list was stratified for individuals who landed less than 25,000 pounds, 25,000 to 49,999 pounds, 50,000 to 74,999 pounds, 75,000 to 99,999 pounds, and more than 100,000 pounds. In an effort to guard against an unrepresentative sample, a proportional sample of 35% was drawn according to the stratification of landings. A sample of 800 was selected, which included 562 individuals who landed less than 25,000 pounds, 121 who landed between 25,000 and 49,999 pounds, 57 individuals who landed between 50,000 and 74,999 pounds, 29 individuals who landed between 75,000 pounds and 99,999 pounds, and 31 who landed 100,000 pounds or more.

**Texas**

The state of Texas requires two licenses to harvest shrimp commercially in Texas waters: a commercial shrimp vessel captain's license and a commercial shrimp vessel license. There are three types of commercial shrimp vessel licenses: bay vessel licenses, bait vessel licenses, and Gulf vessel licenses. A list of inshore shrimp vessel licenses, which was condensed to one name per vessel for vessels which had both a bay and bait license, was obtained from the Texas Parks and Wildlife Department. The list was studied to remove duplicate records among Texas resident license holders who held licenses on more than one shrimp vessel. Non-residents of Texas were also identified by their mailing addresses and excluded from the Texas sample. The list was also compared to the 2008 Federal shrimp permit holders list to remove all records with matching names and addresses. A sample of 344 Texas shrimp vessel license holders was selected from a total population of 508.

# 3. Implementation

## Outreach

Staff from the GSMFC and LDWF consulted shrimp harvesters, seafood dealers, staff from state marine fisheries agencies, and other stakeholders in the commercial shrimp industry to notify them of the survey and to gain their assistance in the development of the questionnaire. Researchers met with shrimp harvesters and others in early 2009 at the following locations: New Orleans, Louisiana (January 15); La Porte, Galveston, and Rockport, Texas (February 2-3); Panacea and Apalachicola, Florida (February 9); Lafitte, Louisiana (February 11); Biloxi, Mississippi (February 13); and Bayou La Batre, Alabama (February 13). At each meeting, researchers explained the purpose of the survey and sought shrimp harvesters' perspectives on the format, organization, and wording of the survey. As a consequence of these consultations, significant revisions to the questionnaire were made.

Staff received support in promoting the survey from the Southern Shrimp Alliance, the Louisiana Shrimpers Association, the Southeastern Fisheries Association, and the National Alliances of Vietnamese American Service Agencies. Announcements and news stories publicizing the survey were included in the GSMFC newsletter, and a press release was distributed that appeared in several area newspapers and industry newsletters.

## Implementation Process

During April 2009, survey packages containing a cover letter, an information sheet, a four-page questionnaire, an offer to receive a $25 compensation card, and a postage-paid return envelope were mailed to 1,868 individuals in the Gulf in English and Vietnamese. The survey deployment was timed to coincide with the low shrimp season and the time business records are being consulted to prepare tax documents. About two weeks after the initial mailing, a reminder postcard was sent to those who had not responded. Two weeks after the reminder postcard, a second survey package was mailed to those who had not yet responded.

## Response Rate

There were a total of 115 non-deliverable surveys (Table 3). When these were omitted, the adjusted sample size for the Gulf was 1,753. A plurality (44%) of the adjusted survey sample resided in Louisiana. Approximately one-sixth (17%) were each from Alabama and (18%) from Texas. One-eighth (13%) were from Mississippi and 8% from western Florida.

A total of 591 questionnaires were returned for a raw response rate of 34% for the entire Gulf (Table 3). Raw response rates for individual states ranged from 21% for Texas to 44% for Louisiana. A number of questionnaires counted in calculating the raw response rate were not complete or usable for the financial analysis presented in this report.

**Table 3: Sample Size and Raw Response Rate by State**

| State | Original Sample Size | Non-Deliverable | Adjusted Sample Size | Returned Questionnaires | Raw Response Rate |
|---|---|---|---|---|---|
| Western Florida | 146 | 10 | 136 | 33 | 24% |
| Alabama | 325 | 20 | 305 | 91 | 30% |
| Mississippi | 253 | 26 | 227 | 60 | 26% |
| Louisiana | 800 | 34 | 766 | 339 | 44% |
| Texas | 344 | 25 | 319 | 68 | 21% |
| **Gulf of Mexico** | **1,868** | **115** | **1,753** | **591** | **34%** |

## Data Cleaning

Data from the 591 returned questionnaires were examined to define a sample of active, commercial shrimp harvesters who harvested shrimp primarily from state waters in 2008. One hundred five (105) responses were omitted as they were inactive, did not own a shrimp harvesting vessel, or did not conduct shrimp harvesting trips in 2008. Another nine (9) responses were omitted because they appeared to be primarily recreational or non-commercial shrimp harvesters. (A "non-commercial shrimp harvester" was defined as any respondent who reported seafood revenues of $2,000 or less and who consumed or gave away 90% or more of the shrimp harvested in 2008.) One respondent who reported commercial seafood revenues of more than $1,000, of which only a small portion (1% or less) was earned from shrimp landings, was omitted because he or she was considered only an "incidental shrimper." Fourteen (14) respondents were omitted because they appeared to be primarily Federal waters shrimp harvesters, having reported more trips in Federal waters than in state waters in 2008. When the aforementioned responses were omitted, there remained 462 respondents who commercially harvested shrimp primarily in state waters in 2008.

An additional 48 responses were omitted because they had incomplete data for cost, revenue, activity, or vessel market value variables. Finally, another 101 responses were omitted because they included values for costs and revenue that seemed too inconsistent to be considered valid responses, i.e., either cost or revenue were disproportionately large or small compared to the other. A typical example would be a response where estimated annual fuel expenditures alone exceeded total annual revenue. The omission of surveys that were not economically meaningful produced a sample of 313 responses that could be retained for the financial analysis. These 313 represent all respondents who provided questionnaires that were deemed sufficiently complete and economically meaningful as to be used in the construction of balance sheets, cash flow statements, and income statements. Of these, 6% were from western Florida, 8% from Alabama, 69% from Louisiana, 8% from Mississippi, and 9% from Texas (Figure 5).

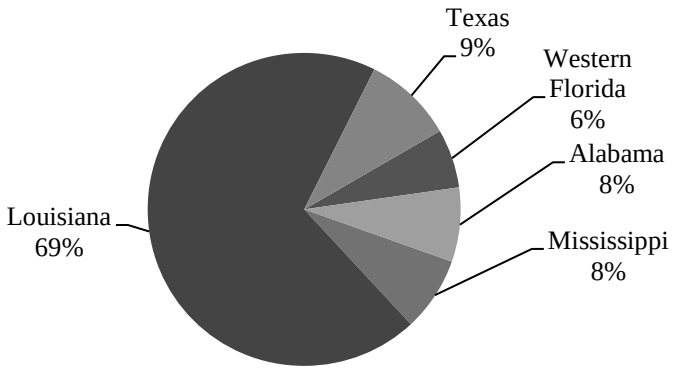


**Figure 5: Surveys Used in Financial Analysis by State of Residence**

## Non-Response Survey

A follow-up "non-response" survey was conducted to determine the reasons why inshore shrimp harvesters did not complete the original questionnaire. A one-page survey was mailed in October, 2009 to 697 individuals who did not respond to the 2008 Economic Survey of the Gulf of Mexico Inshore Shrimp Fishery. One hundred and sixty seven (167) questionnaires were returned, resulting in a response rate of 24%.

Like the respondents of the original inshore shrimp survey, most of the respondents to the follow-up survey were commercial shrimp harvesters. More than three-quarters (77%) of the respondents considered themselves "commercial harvesters" and 12%, "part commercial—part recreational" harvesters. Eleven (11%) of the respondents indicated that they were solely recreational harvesters. Eighty-five percent (85%) of those who identified themselves as commercial harvesters claimed that shrimp was the predominate type of commercial seafood that they harvested. The average number of shrimp harvesting trips taken in 2008 by respondents to the follow-up survey, which identified themselves as commercial harvesters, was 36 trips. This is similar to the average of 30 trips reported by respondents on the original survey.

Over one-fifth (23%) of the respondents said they thought that the original questionnaire was too long, too complicated, or both. Eleven percent (11%) stated they did not respond because they were not interested in participating in the survey. Nearly one-seventh (14%) indicated that they did not return the original survey because they were recreational shrimp harvesters, took no commercial shrimp harvesting trips in 2008, or some combination of both. More than one-fifth (21%) stated they were commercial harvesters and did not respond because they only took a few shrimp harvesting trips in 2008. A similar portion (22%) said they did not participate in the survey because their shrimp harvesting businesses were affected by hurricanes in 2008. Approximately one-third (35%) of the non-response survey respondents said that they did not remember receiving the original questionnaire. Other reasons for not responding to the survey included poor health, forgetfulness, and a lack of time.

# 4. Results

## Ownership of Commercial Shrimp Harvesting Vessels

Respondents were asked to identify how many commercial shrimp harvesting vessels they owned in 2008. Of the respondents included in the financial analysis, more than three-quarters (77%) owned only one vessel (Table 4). Nearly one-fifth (19%) owned two, and about 5% owned three or more vessels. Because a commercial harvester may own vessels that they do not actually use in the commercial harvest of seafood in a particular year, respondents were also asked to identify the number of vessels that they actually used to harvest shrimp commercially. The majority (87%) of respondents used only one vessel to harvest shrimp. Approximately eleven percent (11%) used two, and about 2% used three or more vessels to harvest shrimp commercially.

**Table 4: Number of Shrimp Harvesting Vessels Owned and Vessels Used to Harvest Shrimp**

| Number of Shrimp Vessels Owned | Number of Respondents | Percentage of Respondents | Number of Vessels Used to Harvest Shrimp | Number of Respondents | Percentage of Respondents |
|---|---|---|---|---|---|
| 1 | 240 | 76.7% | 1 | 272 | 86.9% |
| 2 | 59 | 18.8% | 2 | 34 | 10.9% |
| ≥3 | 14 | 4.5% | ≥3 | 7 | 2.2% |

For 89% of the respondents included in the financial analysis, the number of vessels used to harvest shrimp was equal to the number of vessels that they owned. For 11%, the number of vessels that they owned exceeded the number of vessels that they used for shrimp harvesting, implying that they possessed at least one vessel that they did not use to harvest shrimp commercially.

## Characteristics of Vessels

Respondents were asked to provide descriptive characteristics of the vessels they used most frequently for shrimp harvesting in 2008 (Table 5). Of the usable surveys, respondents' vessels ranged in length from 14 feet to 91 feet with an average of 35 feet.

**Table 5: Characteristics of the Vessels**[6]

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Length (feet) | 35 | 33 | 14 | 91 |
| Horsepower | 282 | 280 | 25 | 960 |
| Year Built, Purchased, or Acquired | 2000 | 2002 | 1956 | 2008 |
| Tenure of Ownership (years) | 9 | 7 | 1 | 53 |

More than half (51%) were between 30 feet and 45 feet, 33% were less than 30 feet, and a little less than 16% were more than 45 feet (Figure 6).

[6] The mean is the average of a set of numbers. The median is the middle number in a given set of numbers.

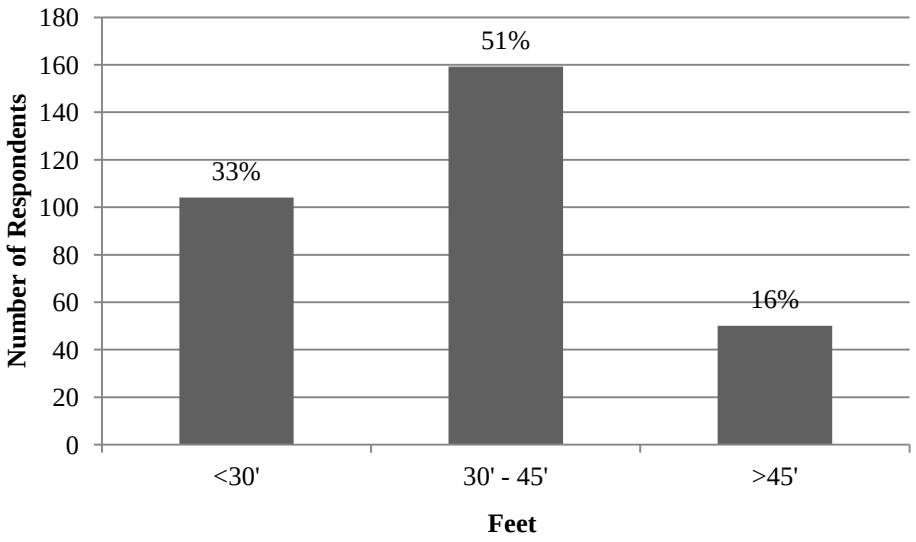


**Figure 6: Distribution of Length of Vessels**

Approximately, 71% of the vessels had a fiberglass hull (Figure 7), 10% were made of wood, and 9% were made of steel. A majority of the vessels in the "other category," accounting for 10%, were identified as having aluminum hulls in written responses.

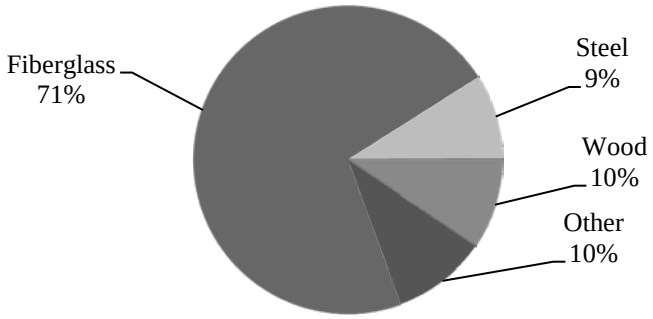


**Figure 7: Distribution of Hull Types of Vessels**

Many of the vessels used most frequently for shrimp harvesting in 2008 used diesel fuel (81%). The remainder, 19%, used gasoline engines. The average horsepower of these engines was 282 HP, and the median was 280 HP (Table 5). Approximately one-quarter (24%) were between 141 HP and 210 HP (Figure 8), 14% were between 211 and 280 HP, and 21% were between 281 and 350 HP.

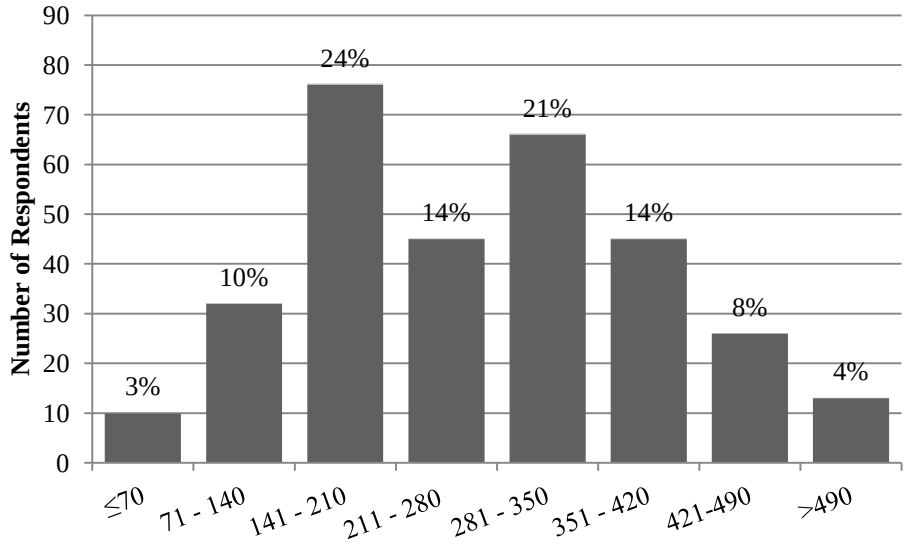


**Figure 8: Distribution of Horsepower of Vessels**

Many respondents who built or acquired used vessels may not have had appropriate documentation to provide accurate estimates of the ages of their vessels. Thus, the questionnaire asked respondents to identify, to the best of their knowledge, what year they built, purchased, or acquired the vessel they used most frequently for shrimp harvesting in 2008. The average year built, purchased, or acquired was year 2000 (Table 5). The "tenure of ownership" or the number of years that the respondent had possessed the vessel, could subsequently be calculated. The average tenure of ownership was nine years. Approximately 70% owned their primary inshore shrimp harvesting vessel ten years or less (Figure 9).

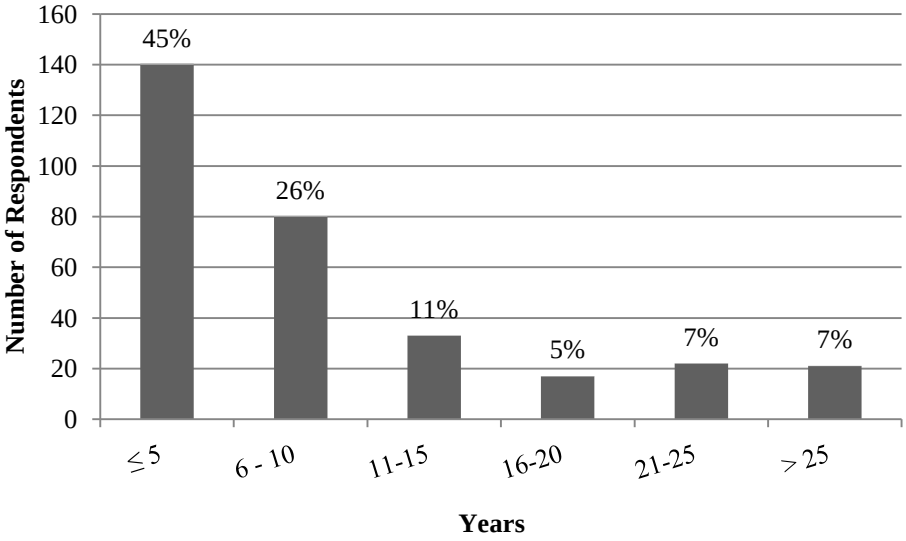


**Figure 9: Distribution of Tenure of Ownership of Vessels**

## Purchase Price and Market Value of Vessels

The average purchase price (or estimated value at the time of acquisition) of the primary vessel used for shrimp harvesting in 2008 was $43,845 (Table 6). The median purchase price was $28,000.

**Table 6: Purchase Price and Current Market Value of Vessels**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Purchase Price | $43,845 | $28,000 | $500 | $550,000 |
| Current Market Value (2008) | $45,798 | $30,000 | $2,000 | $300,000 |
| Difference between Market Value and Purchase Price | $1,953 | $0 | -$250,000 | $125,000 |

Purchase price values ranged from $500 to $550,000. Approximately one-quarter (24%) had an original purchase price of $15,000 or less. A little more than one-third (34%) had a purchase price between $15,001 and $30,000 and about 12% had a purchase price between $30,001 and $45,000 (Figure 10).

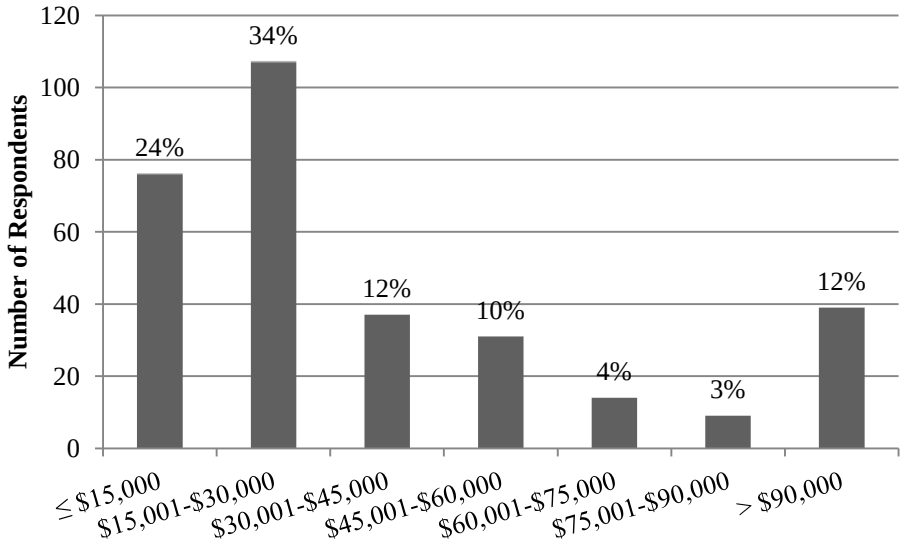


**Figure 10: Distribution of Purchase Price of Vessels**

Respondents were also asked to provide an estimate of the current market value of their primary shrimp harvesting vessel in 2008. The average estimated current market value was $45,798, and the median was $30,000 (Table 6). Current market values in 2008 ranged from $2,000 to $300,000. Approximately one-quarter (25%) had an estimated current market value equal to or less than $15,000, 27% had a current market value between $15,001 and $30,000, and 14% reported a value between $30,001 and $45,000 (Figure 11).

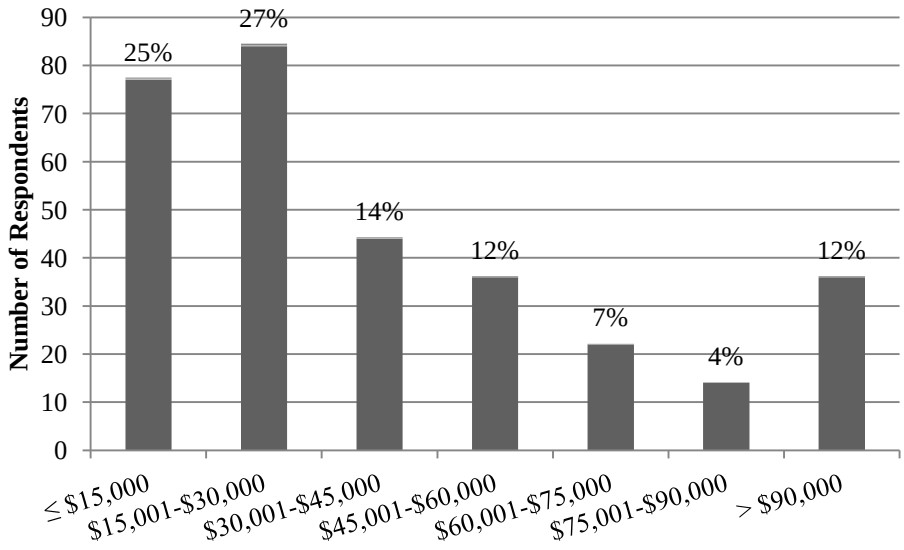


**Figure 11: Distribution of Current Market Value of Vessels**

The average difference between the estimated current market value and original purchase price was $1,953 (Table 6). The median difference was $0. Differences between current market value and purchase price ranged from negative $250,000 to $125,000. The current market value was greater than the original purchase price for 48% of the respondents, equal to the purchase price for 21% of the respondents, and less than the purchase price for 31% of the respondents.

### Loans or Debt on Vessels

As a measure of indebtedness among active commercial inshore shrimp harvesters, respondents were asked whether or not they had loan obligations in 2008 on their predominant shrimp harvesting vessel. Those who indicated that they did have loans on their vessels were asked the amount that they owed at the end of 2008, the average monthly loan payment, and the estimated annual interest rate.

Less than one-fifth (19%) of the respondents included in the financial analysis indicated having loans on their vessels in 2008. The average amount owed at the end of 2008 across all respondents in this analysis was $5,081 (Table 7). Among those carrying debt, the average amount owed, the remaining loan balance, at the end of 2008 was $27,418, and the median was $16,250.

## Balance Sheet

The balance sheet is a summary of a business operation's financial condition at a particular moment in time. It presents a comparison of the business's assets and its liabilities, debts, or claims against those assets. The firm's equity or net worth is equal to the difference between the collective value of the firm's assets and the amount of related debt. For shrimp harvesters in the Gulf inshore shrimp fishery, the principal asset is the commercial harvesting vessel. Loans on the vessel are the principal liability.

Based on the current market value of the vessel primarily used for shrimp harvesting, among the 313 respondents used in this financial analysis, the average asset value was $45,798, average debt (liabilities) was $5,081, and the average equity or net worth was $40,717 (Table 7). The median value of equity was $30,000.

**Table 7: Balance Sheet for the Average Vessel**

| **Assets** | | **Liabilities** | |
|---|---|---|---|
| Vessel and Gear for Most Frequently Used Vessel | | Loans on Most Frequently Used Vessel | |
| Average Market Value | $45,798 | Average Amount Owed | $5,081 |
| | | Average Equity | $40,717 |

Approximately one-sixth (18%) of the respondents used in the financial analysis had an estimated equity equal to or less than $10,000 (Figure 12). Approximately 38% had equity between $10,001 and $30,000, and 20% had equity between $30,001 and $50,000. Only one respondent had a negative equity estimate.

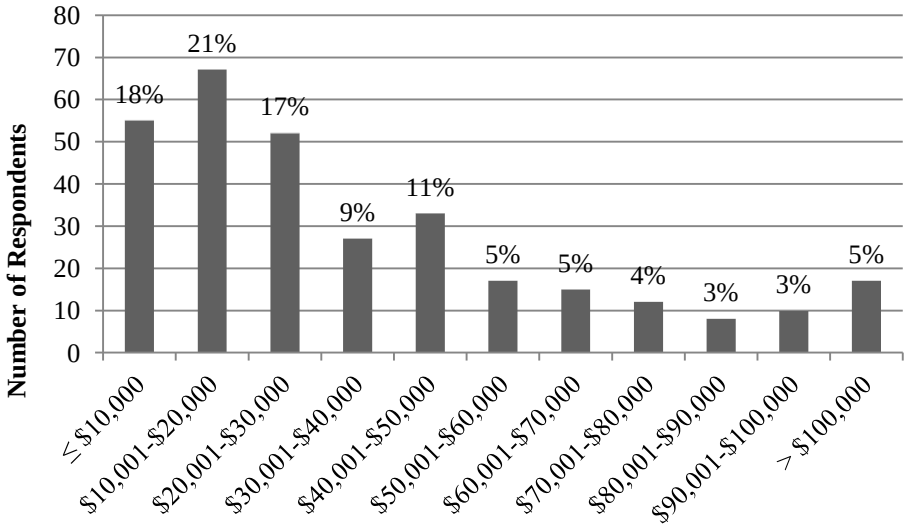


**Figure 12: Distribution of Equity in Vessels**

## Shrimp Harvesting Activity

The questionnaire contained three questions related to shrimp harvesting effort. The first question asked about the total number of shrimp harvesting trips taken in "inside state waters" (defined as inland to the coastline); in "outside state waters" (defined as coastline to Federal waters); and in Federal waters by the vessel used most frequently for shrimp harvesting in 2008. The second question asked about the total number of days per typical shrimp harvesting trip in each of the defined zones. The third question asked how many hours were spent actively shrimp harvesting on an average trip in inside state waters and outside state waters.

In 2008, the average number of trips taken with the vessel most frequently used for shrimp harvesting was 30 and the median was 19 (Table 8). The number of trips ranged between 1 and 200. The average inshore shrimp harvesting trip lasted 11 hours, as indicated by 305 respondents that provided responses.

**Table 8: Commercial Seafood Harvesting Activity**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Total Trips | 30 | 19 | 1 | 200 |
| Total Days at Sea | 55 | 36 | 1 | 200 |

Nearly half (49%) took 18 trips or fewer in 2008, 29% took 19 to 36 trips, and 11% took 37 to 54 trips (Figure 13).

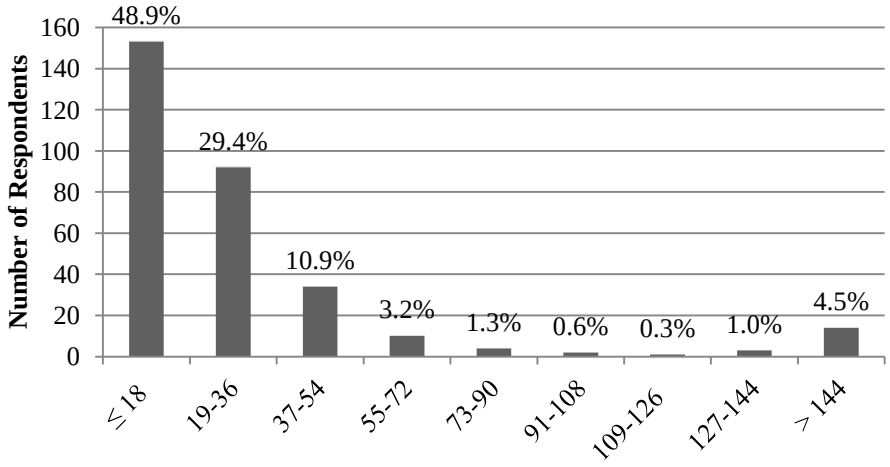


**Figure 13: Distribution of Shrimp Harvesting Trips Taken**

For each vessel, the average number of days per typical trip was multiplied by the reported number of trips to derive the annual days at sea. The average annual days at sea, for the vessel used most frequently for shrimp harvesting, was 55 (Table 8). The median was 36 days. The number of days at sea ranged between 1 and 200. Approximately 30% went to sea 18 or fewer days, 21% went to sea 19 to 36 days, and 11% went to sea 37 to 54 days (Figure 14).

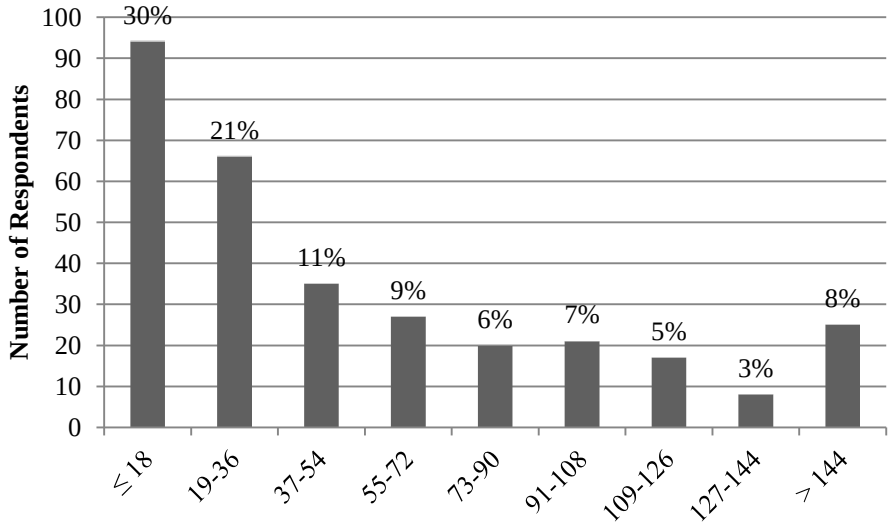


**Figure 14: Distribution of Days at Sea**

## Daily Trip-Related Operating Expenses

Respondents were asked to provide estimates of expenses for six trip-related items incurred during a typical day of shrimp harvesting in 2008. Two related questions asked respondents to estimate the average price of fuel (dollars per gallon) and the average amount of fuel (gallons per day) used on a typical day of shrimp harvesting in 2008. Reported daily trip-related operating expenses are presented in Table 9.

**Table 9: Daily Trip-Related Operating Expenses**

| Daily Expenditure | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Fuel | $200 | $175 | $10 | $700 |
| Oil | $11 | $8 | $0 | $90 |
| Ice | $24 | $20 | $0 | $150 |
| Salt | $9 | $6 | $0 | $150 |
| Groceries | $25 | $20 | $0 | $125 |
| Other Supplies | $17 | $10 | $0 | $253 |
| Total Daily Trip-Related Expenses | $286 | $269 | $13 | $841 |

Fuel was the single highest daily operating expense, with a daily average of $200 per day and a median of $175 per day. Each of the respondents included in this financial analysis reported daily fuel expenses. Average daily expenses on oil were $11, and the median was $8. Nearly 88% of the respondents included in this financial analysis reported expenses on oil.

Groceries, with an average daily expense of $25 and a median of $20, represented the second largest daily operating expense. Most of the respondents (93%) used in this financial analysis reported values for expenses on groceries. Daily expenses on ice averaged $24, with a median of $20. Again, most of the respondents (93%) included in this financial analysis reported expenses for ice.

Expenses on salt, a mineral used by many shrimp harvesters, averaged $9, while the median was $6. Nearly 70% of the respondents included in this financial analysis reported spending money on salt. The average daily expenses on salt among those reporting expenses on this item were $12.

Average daily expenses on other supplies were $17, and the median was $10. Approximately three-quarters (78%) of the respondents included in this financial analysis reported expenditures for other supplies. Average daily expenses on other supplies, among those having expenses in this category, were $22.

Cumulative daily operating expenses (the summation of daily expenses in all categories) were on average $286. Median cumulative daily operating expenses were $269. Approximately one tenth (11%) reported cumulative daily operating expenses of $100 or less, one-quarter (24%) reported cumulative daily operating expenses of $101 to $200, and one-quarter (25%) had cumulative daily operating expenses between $201 and $300 (Figure 15).

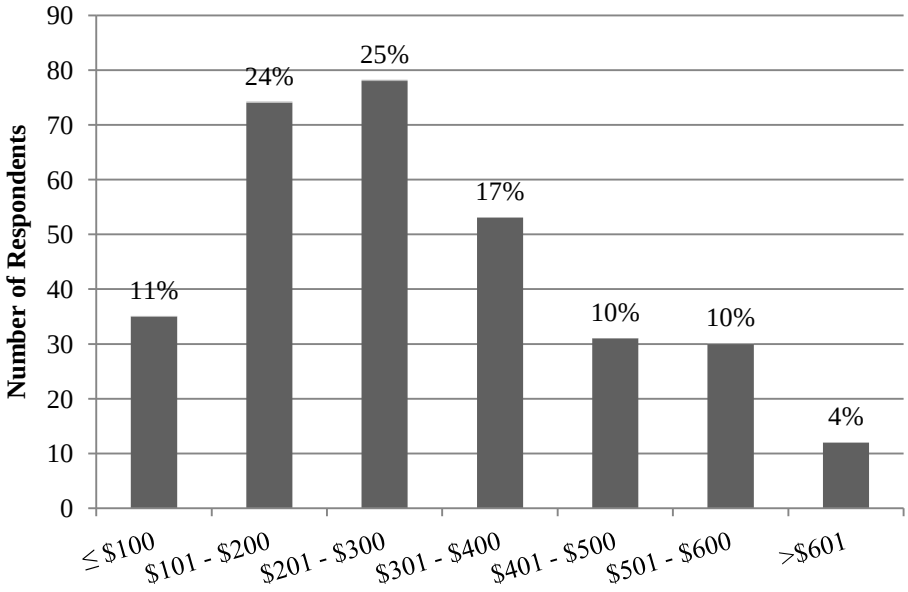


**Figure 15: Distribution of Total Daily Trip-Related Operating Expenses**

## Daily Trip-Related Fuel Expenses and Usage

As fuel was the principal daily expense for the primary shrimp harvesting vessel used by respondents in 2008, further analysis is provided for a better understanding of this cost category. More than one-quarter (29%) of the respondents reported daily fuel expenses of $100 or less (Figure 16). About one-third (35%) reported daily fuel expenses between $101 and $200, and 18% indicated that their daily fuel expense was between $201 and $300.

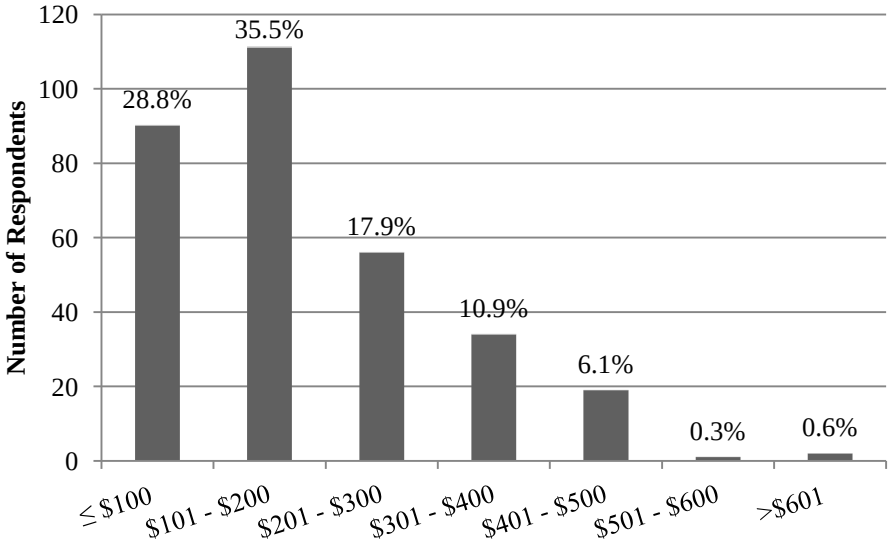


**Figure 16: Distribution of Daily Expenses for Fuel**

In a series of related questions, respondents were asked to estimate how many gallons of fuel they used in a typical day of shrimp harvesting in 2008 and the average price paid per gallon of

fuel. Average daily fuel use was 61 gallons per day, and the median was 55 gallons. Nearly half (48%) reported using equal to or less than 50 gallons per day and 43% reported using between 51 and 100 gallons per day (Figure 17). The average price per gallon was $3.33.

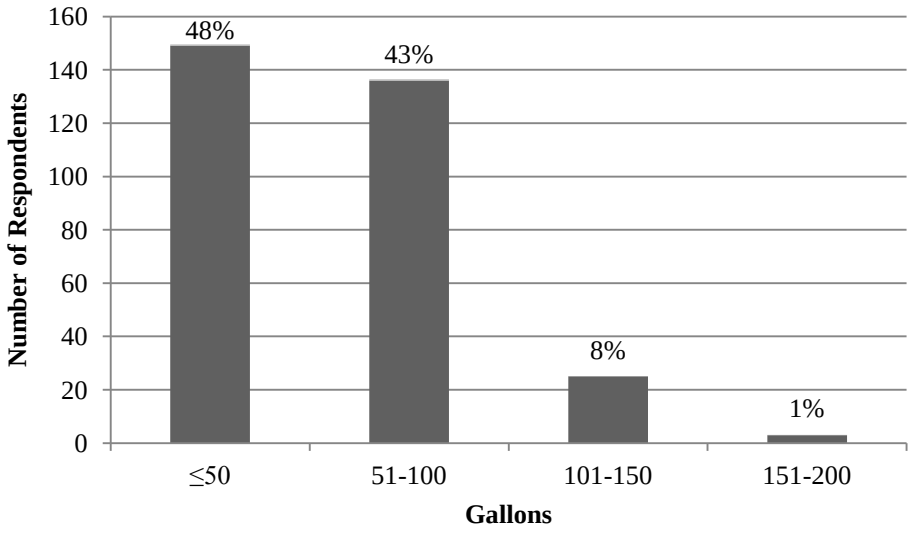


**Figure 17: Distribution of Estimated Daily Fuel Use**

## Annual Trip-Related Operating Expenses

Each of the daily trip-related operating expenditures was multiplied by the number of days at sea, which were reported by the respondents, in order to derive annual trip-related operating expenditures for fuel, oil, groceries, ice, salt, and other supplies (Table 10).

Respondents spent an average of $11,987 on fuel in 2008 with a median of $5,600. Expenditures on fuel constituted nearly three-quarters (73%) of cumulative trip-related operating expenditures in 2008 among the respondents included in this financial analysis. Annual expenditures on oil were $632 with a median of $220. Average annual expenditures on ice and salt were $1,186 and $483, respectively. For groceries, average annual expenditures were $1,296. Annual expenditures on other supplies were $879.

Cumulative annual trip-related operating expenditures in 2008 averaged $16,462. Median cumulative annual trip-related operating expenditures were $7,875. Total annual trip-related expenditures ranged from less than $100 to greater than $100,000.

**Table 10: Annual Trip-Related Operating Expenditures**

| Annual Expenditures | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Fuel | $11,987 | $5,600 | $52 | $88,200 |
| Oil | $632 | $220 | $0 | $9,600 |
| Ice | $1,186 | $528 | $0 | $8,100 |
| Salt | $483 | $140 | $0 | $10,000 |
| Groceries | $1,296 | $600 | $0 | $10,000 |
| Other Supplies | $879 | $320 | $0 | $15,620 |
| Total Annual Trip-Related Expenditures | $16,462 | $7,875 | $59 | $101,178 |

Two-fifths (41%) of the respondents included in this financial analysis had cumulative annual trip-related expenditures of $5,500 or less; one-sixth (17%) between $5,501 and $11,000; and 8% between $11,001 and $16,500 (Figure 18).

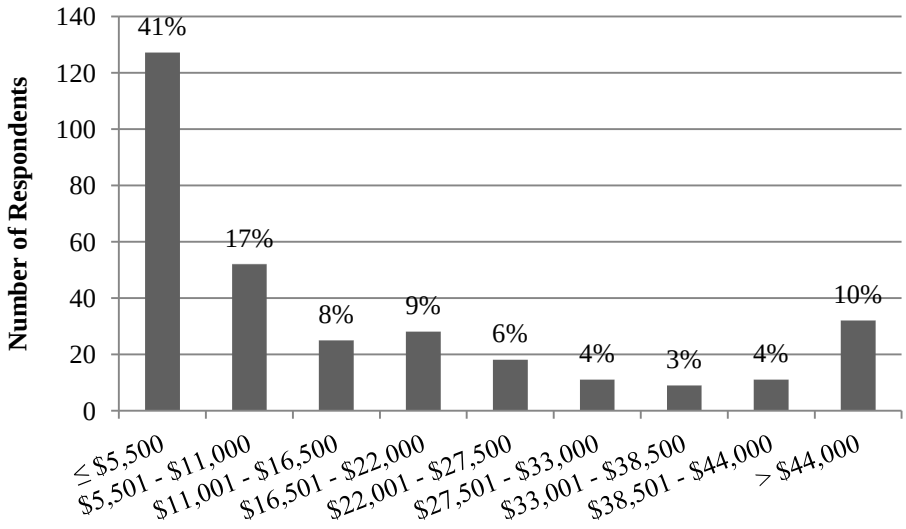


**Figure 18: Distribution of Annual Trip-Related Operating Expenditures**

Average annual fuel use was 3,604 gallons, and the median was 1,674 gallons in 2008. About one-third (34%) used 900 gallons or less; approximately 18% used between 901 and 1,800 gallons; and 15% between 1,801 and 3,600 gallons of fuel in 2008 (Figure 19).

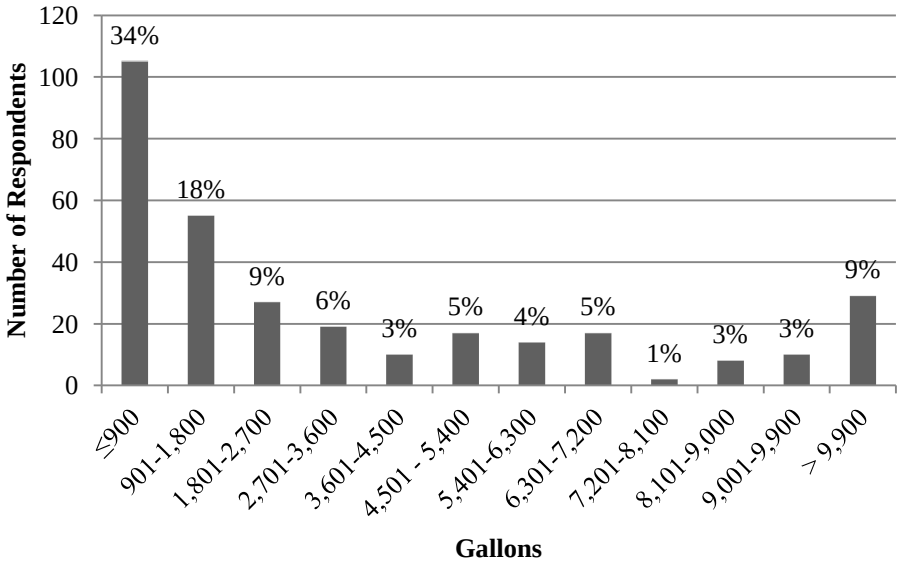


**Figure 19: Distribution of Estimated Annual Fuel Use by Vessels**

## Labor Costs

The questionnaire contained a section related to labor resources used to harvest shrimp on the vessel used most frequently for shrimp harvesting in 2008. The expenditures paid to labor among inshore shrimp harvesters are an important item to examine and a difficult one to quantify. Labor expenditures, for the purposes of this study, were grouped into two mutually exclusive categories: (1) cash expenditures related to the actual hiring of captains and crew and (2) non-cash expenses related to the owner's vessel time, i.e., the opportunity cost of the time owner-operators spent on their own vessels. Annual total labor expenditures, including wages paid to hired crew and the owner's vessel time averaged $12,845 (Table 11).

**Table 11: Annual Labor Costs**

| Annual Labor Cost | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Hired Captains and Crew (Cash Expenditure) | $5,629 | $0 | $0 | $61,000 |
| Owner's Vessel Time (Non-Cash Opportunity Cost) | $7,216 | $4,516 | $0 | $30,106 |
| Total Labor Costs | $12,845 | $7,516 | $0 | $84,687 |

Hired crew expenditures represent the expenditures paid to directly hire crew and captains. Approximately 49% of respondents reported hiring crew in 2008. In many instances, crew payments were expressed in dollar terms. In some instances, crew payments were articulated as a percentage of the catch. For these, crew payments were estimated by multiplying shrimp revenue by the percentage of catch attributed to crew. Among all respondents included in this financial analysis, average hired captain and crew expenditures were $5,629 (Table 11). Average crew costs for approximately one-third (33%) of these individuals ranged from $40 to $13,200 (Figure 20). Among those who reported hiring crew, average crew expenditures were $11,592 with a median of $6,600.

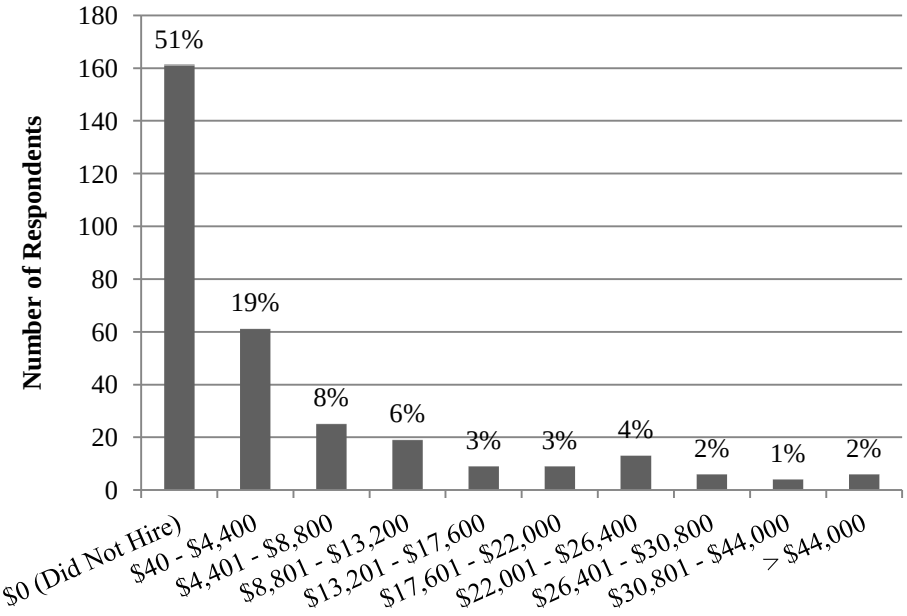


**Figure 20: Distribution of Annual Hired Crew Costs**

"Owner's vessel time" is a dollar estimate of the opportunity cost of the time that the vessel owners, who did not hire a captain, spent operating their own shrimp harvesting vessels in 2008. An estimate of owner's vessel time was calculated by multiplying the number of days that each owner-operator spent at sea times a proxy value of $150 per day, the estimated daily salary paid in 2008 to captains of vessels under fifty feet for the offshore shrimp fishery. Among all respondents included in this financial analysis, the average value of owner's vessel time in the inshore shrimp harvesting fleet was $7,216, and the median was $4,516 (Table 11). The distribution of the annual owner's vessel time in 2008 is presented in Figure 21. Owner's vessel time ranged from $1 to $4,400 for nearly 40% of the representative fleet, while, 21% had an opportunity cost that ranged from $4,401 to $8,800.

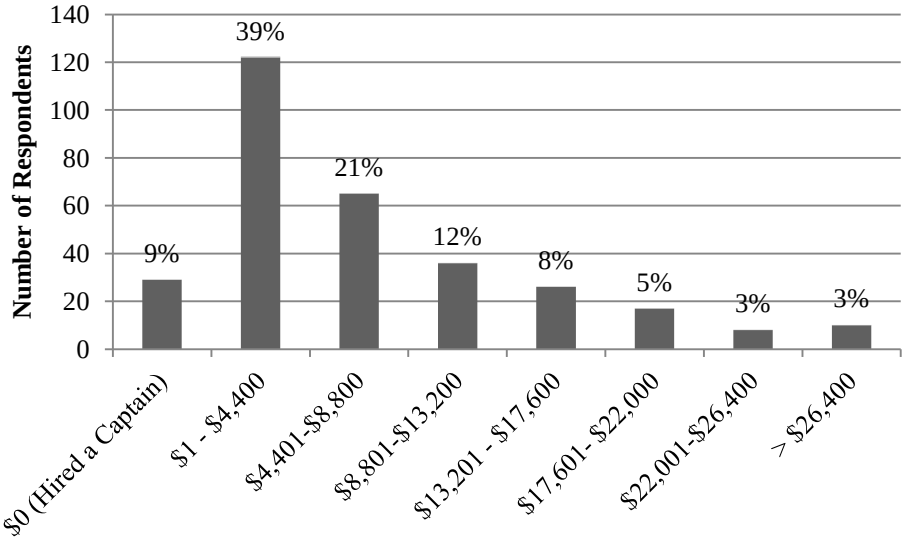


**Figure 21: Distribution of Annual Owner's Vessel Time (Non-Cash Opportunity Cost)**

## Fixed Costs

The questionnaire also contained questions pertaining to costs and expenditures that were largely classified as fixed cost items, that is, costs that do not generally vary as harvest or output varies. These fixed cost items included expenditures on non-hurricane-related repairs and equipment, hurricane-related repairs and equipment, loan interest and principal payments, insurance premium payments, and overhead expenditures. Table 12 presents the fixed cost expenditures in 2008. Among fixed cost categories, most was spent on non-hurricane-related repairs and equipment, on average $6,725, while overhead expenditures were reported to be $6,652, representing the second highest expenditures on fixed costs.

**Table 12: Fixed Cost Expenditures**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Repairs and Equipment (Non-Hurricane Related) | $6,725 | $2,500 | $0 | $80,000 |
| Repairs and Equipment (Hurricane-Related) | $2,775 | $0 | $0 | $51,228 |
| Loan Interest Payments | $336 | $0 | $0 | $8,960 |
| Loan Principal Payments | $1,129 | $0 | $0 | $46,020 |
| Insurance Premium Payments | $181 | $0 | $0 | $9,000 |
| Overhead Expenditures | $6,652 | $2,500 | $0 | $67,772 |
| Total Fixed Cost Expenditures | $17,798 | $11,000 | $0 | $98,620 |

Overhead expenditures were the most frequently reported fixed costs in 2008, as 85% of respondents reported a cost for this category (Figure 22). Non-hurricane-related expenditures represented the second most common cost as documented by 75% of respondents.

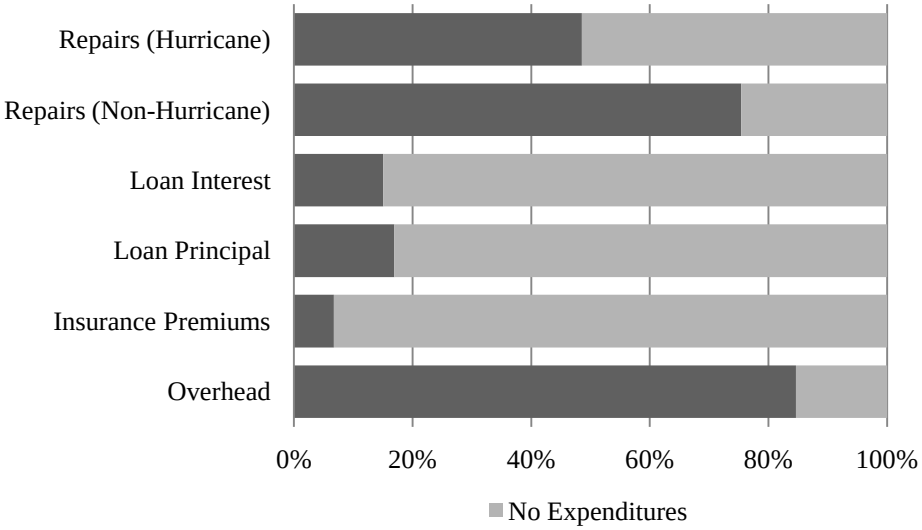


**Figure 22: Percentage of Respondents Who Reported Expenditures for Individual Fixed Cost Items**

### Repairs and Equipment

Respondents were asked to provide estimates for the amount paid in 2008 for vessel repairs, replacement, new purchases, or upgrades associated with the primary vessel used for shrimp

harvesting. This research split total repair and equipment expenditures in 2008 into two mutually exclusive categories: hurricane-related repairs and expenditures, and non-hurricane-related maintenance and repair expenditures.

Hurricane related repairs and expenditures were defined as the minimum of either the reported total costs to repair vessel and gear damages as a result of a 2008 hurricane or the reported total expenditures for vessel maintenance, repairs, upgrades, replacement, or new purchases. Average hurricane-related repair expenditures were $2,775 (Table 12).

About four out of five respondents (82%) included in this analysis reported that the vessel used most frequently for shrimp harvesting was affected by a hurricane in 2008. Sixty percent (60%) of those claiming that their shrimp harvesting vessel was damaged by a hurricane provided dollar estimates of repair costs associated with hurricane-related damages. Among these, average hurricane-related repair and equipment expenditures were $3,394 and median hurricane-related repair and equipment expenditures were $1,000.

Non-hurricane-related expenditures were estimated by subtracting hurricane-related expenditures from total expenditures for vessel maintenance, repairs, upgrades, replacement, or new purchases.

The estimated average cost for non-hurricane-related repairs and equipment across all respondents used in this financial analysis was $6,725 (Table 12). One-quarter (25%) of the respondents reported that they did not incur expenditures related to repairs and equipment in 2008 (Figure 22). Among the 75% who did report repair and equipment expenditures, the average cost was $8,919 with a median of $4,050.

About three-quarters (74%) of the 313 respondents included in this financial analysis had repair and equipment expenditures—both hurricane-related and non-hurricane-related— for minor maintenance and regular repairs, (Figure 23) and almost half (46%) had expenditures for major repairs. Likewise, 46% of respondents reported expenditures relating to new purchases and upgrades in 2008.

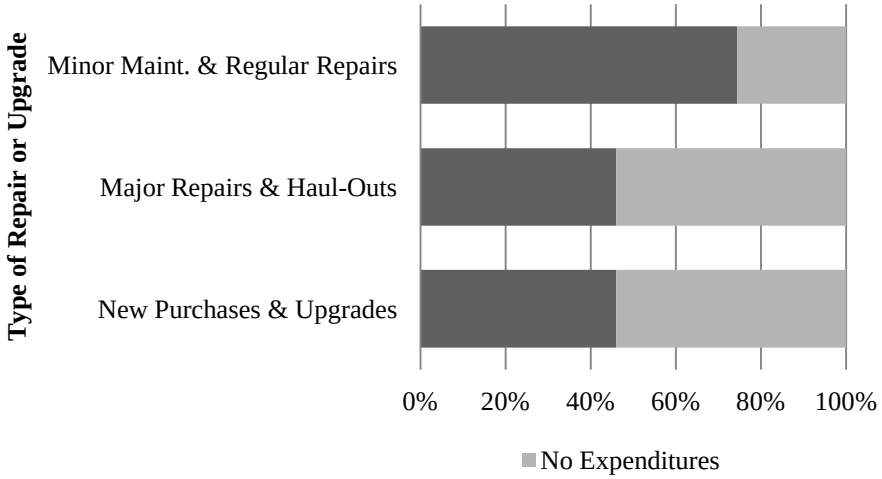


**Figure 23: Percentage of Respondents Who Reported Vessel Repair and Equipment Expenditures by Type**

Respondents were also asked to estimate the percentage of their total repairs and equipment expenditures – both hurricane-related and non-hurricane-related – that they spent related to engines, freezers, gear and trawls, electronics, hulls, and other items. For 281 respondents, the percentages added across categories summed to 100%. Based on this sub-sample, the average respondent spent 32% of their repair and equipment expenditures on engines, 1% on freezers, 29% on gear and trawls, 9% on electronics, 18% on hull repairs, and 11% on other repairs and equipment (Figure 24).

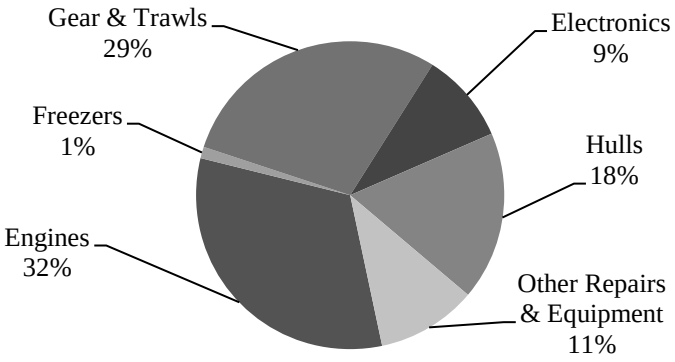


**Figure 24: Percentage of Repairs and Equipment by Category**

## Insurance Premium Payments

Only 7% of respondents included in this financial analysis carried insurance on the vessel used most frequently for shrimp harvesting in 2008. Average annual insurance premiums across all respondents were $181. Average insurance coverage was $6,097, which represents approximately 13% of the average vessel's current market value and 14% of the average vessel's purchase price.

Among those who actually carried insurance in 2008, average annual premium payments were $2,692. The average insurance coverage among those who had insurance was $90,881, which represents approximately 99% of the original purchase price of their vessels ($92,071).

## Loan Payments

Respondents were asked if they had loans at any time in 2008 on the vessels they used most often for shrimp harvesting. Those with loans were asked the amount they owed at the end of 2008, their average monthly loan payment, and the estimated annual interest rate. Less than one-fifth (19%) of respondents reported carrying loans. Average annual loan payments, calculated by multiplying average monthly loan payments by 12, were $1,465. Of this amount, an estimated average of $1,129 was for principal payments, and $336 was for interest payments. Among those who had loans, average annual principal payments were $6,093, interest payments were $1,816, and total loan payments $7,909.

## Overhead Costs

Respondents were asked to provide estimates for total overhead expenditures associated with the vessel they used most frequently for shrimp harvesting in 2008. Examples of overhead items included docking fees, permits and licenses, share of the rent, cellular telephone bills, and professional services. Respondents were asked not to include insurance premiums, loan payments, and income taxes in their assessment of overhead expenditures for this question. Average overhead expenditures were $6,652 with a median of $2,500. About 15% reported paying no overhead expenditures (Figure 22). Approximately 40% had overhead expenditures of $1,500 or less (Figure 25).

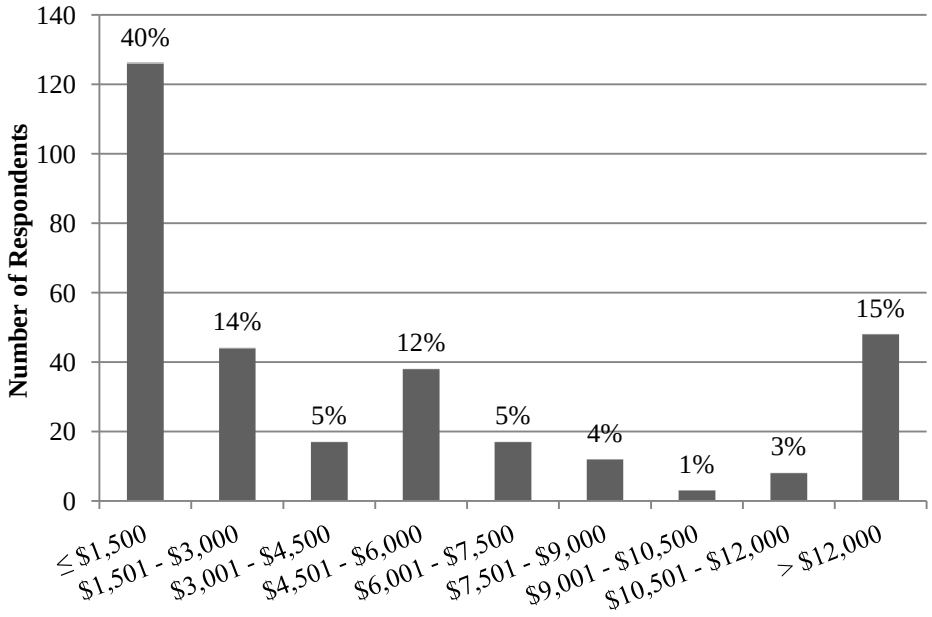


**Figure 25: Distribution of Overhead Cost Expenditures**

## Total Fixed Costs

The sum of repair and equipment expenditures, insurance premium payments, loan payments, and overhead expenditures—total fixed cost expenditures—averaged $17,798 in 2008 (Table 12). Median fixed cost expenditures were $11,000. Twenty-nine percent (29%) of all respondents included in this financial analysis had fixed cost expenditures of $5,500 or less in 2008 (Figure 26). Approximately one-fifth (21%) had fixed cost expenditures of $5,501 to $11,000, and 12% had fixed cost expenditures of $11,001 to $16,500.

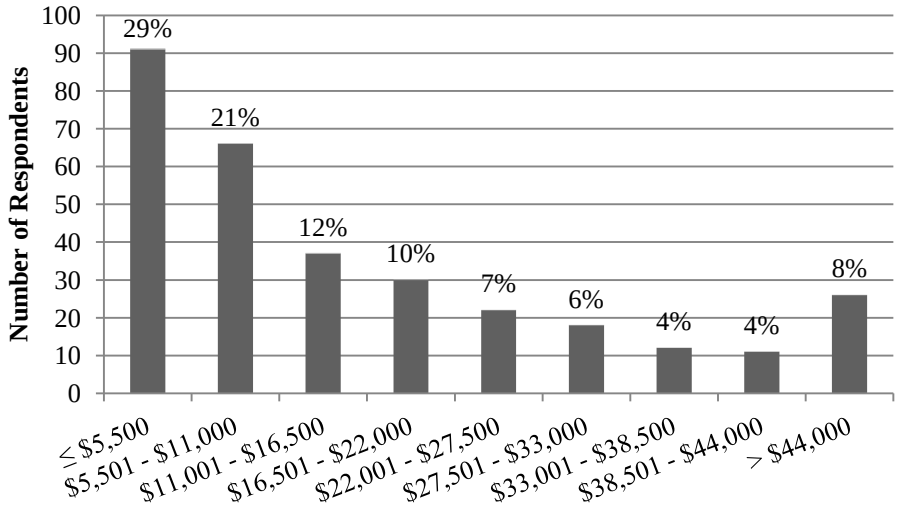


**Figure 26: Distribution of Annual Fixed Cost Expenditures**

## Total Cash Outflow

Cash outflow was calculated as the sum of cash expenditures during the year on trip-related operating expenditures (fuel, oil, ice, salt, groceries, and other supplies), payments to hired captains and crew, repair and equipment expenditures, loan interest and principal payments, insurance premiums, and overhead expenditures. Average cash outflows in 2008 were $39,890 with a median value of $25,700 (Table 13). Cash outflows ranged from $158 to $221,340.

**Table 13: Total Cash Outflows**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Fuel | $11,987 | $5,600 | $52 | $88,200 |
| Oil | $632 | $220 | $0 | $9,600 |
| Ice | $1,186 | $528 | $0 | $8,100 |
| Salt | $483 | $140 | $0 | $10,000 |
| Groceries | $1,296 | $600 | $0 | $10,000 |
| Other Supplies | $879 | $320 | $0 | $15,620 |
| Hired Captains and Crew | $5,629 | $0 | $0 | $61,000 |
| Repairs and Equipment (Non-Hurricane Related) | $6,725 | $0 | $0 | $80,000 |
| Repairs and Equipment (Hurricane-Related) | $2,775 | $0 | $0 | $51,228 |
| Loan Interest Payments | $336 | $0 | $0 | $8,960 |
| Loan Principal Payments | $1,129 | $0 | $0 | $46,020 |
| Insurance Premium Payments | $181 | $0 | $0 | $9,000 |
| Overhead Expenditures | $6,652 | $2,500 | $0 | $67,772 |
| Total Cash Outflows | $39,890 | $25,700 | $158 | $221,340 |

Thirty percent (30%) of 2008 total cash outflows, or $11,987, were payments for fuel; 24%, or $9,500, for repairs and equipment; 17%, or $6,652, for overhead expenditures; and 14%, or $5,629, for payments to hired crew (Figure 27).

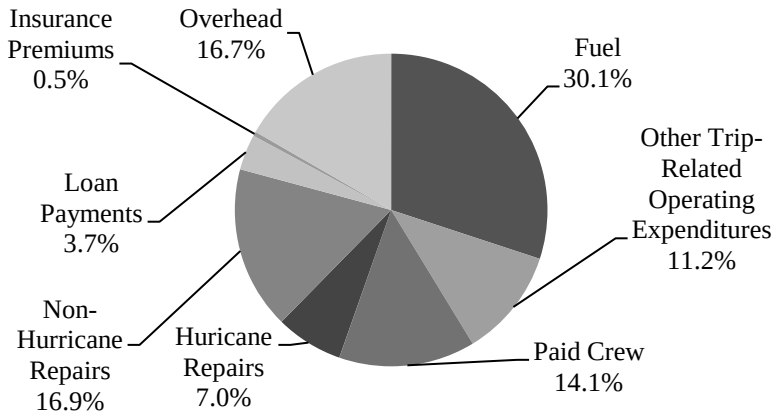


**Figure 27: Percentage of Total Cash Outflow by Expenditure Category**

Over one-third of the respondents included in this financial analysis (35%) had total cash outflows of $15,000 or less, one-fifth (22%) had total cash outflows of $15,001 to $30,000, and one-eighth (12%) had total cash outflows of $30,001 to $45,000 (Figure 28).

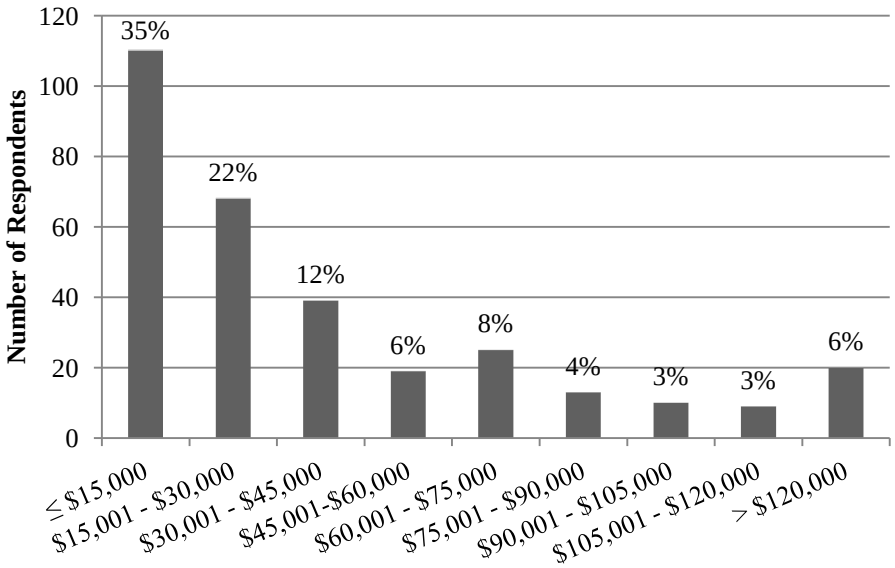


**Figure 28: Distribution of Total Cash Outflow**

## Revenue from Harvesting Commercial Seafood

Respondents were asked to estimate their 2008 total gross revenue from harvesting shrimp and other commercial seafood with the vessel they used most frequently for shrimp harvesting in 2008. Among the respondents included in this financial analysis, average gross revenue from all forms of commercial seafood harvested was $42,887 (Table 14). The median gross revenue from all forms of commercial seafood harvesting was $28,000. Total seafood revenue ranged from $250 to $286,444. Average gross revenues from other types of commercial seafood sales were $6,960.

**Table 14: Commercial Seafood Harvest Revenue**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Revenue from Shrimp | $35,927 | $19,506 | $250 | $286,444 |
| Revenue from Other Seafood | $6,960 | $0 | $0 | $158,109 |
| Total Revenue from Commercial Seafood | $42,887 | $28,000 | $250 | $286,444 |

Average gross revenue from shrimp harvesting was $35,927 (Table 14), and the median was $19,506. Among the respondents included in this financial analysis, gross revenue from the sale of commercial shrimp represented 84% of all gross revenue from commercial fishing in 2008.

The majority of respondents (64%) did not report earning revenue from seafood other than shrimp. Among the 36% who reported revenue from types of seafood other than shrimp, the average gross revenue from the sale of seafood other than shrimp was $19,109 and represented 35% of their total commercial seafood revenue.

**Revenue from Food and Bait Shrimp**

The questionnaire included a question that asked respondents to identify the percentage of their shrimp revenue that they earned from selling shrimp as food and the percentage earned from selling shrimp as bait. Responses for this item were analyzed for the respondents who were included in the financial analysis section of this report. After the omission of respondents for whom the stated percentages did not sum to 100%, 294 responses were retained for the examination of this question. Among these respondents, the average percentage of shrimp revenue generated from selling food shrimp was 89%, and the average percentage earned from selling bait shrimp was 11%.

**Disposition of Shrimp among Different Categories of Recipients**

The questionnaire included a question that asked respondents to estimate what percentage of their 2008 shrimp harvest was sold to four categories of purchasers (bait or tackle shops; dealers or processors; restaurants or stores; and consumers) and what percentage was not sold but given away or eaten. An analysis of this question was conducted for the 298 respondents for whom the stated percentages summed to 100%.

The average percentage of shrimp harvest sold to dealers or processors was 65% (Figure 29). The average percentage sold to bait and tackle shops was 6%, and the average percentage sold to restaurants and stores was 2%. The average percentage sold directly to the public was 17%, and the average percentage given away or consumed by the shrimp harvesters and their associates was 10%.

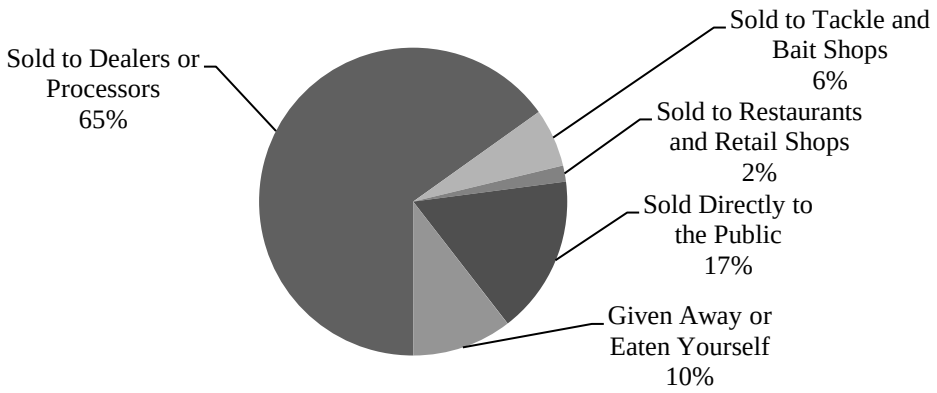


**Figure 29: Disposition of Shrimp Harvest among Different Categories of Recipients**

## Government Payments Related to Commercial Shrimp Harvesting

Respondents were asked to provide estimates of the total government payments associated with commercial fishing activities for the vessel they used most frequently for shrimp harvesting in 2008. The majority of respondents included in this financial analysis (56%) received no government payments associated with commercial fishing for their primary vessel. Across all respondents included in this financial analysis, average government payments were $2,798 (Table 15).

**Table 15: Government Payments Related to Commercial Seafood**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Government Payments | $2,798 | $0 | $0 | $21,216 |

Among the 44% of shrimp harvesters who received government payments, the average payment was $6,392, and the median was $6,000. Government payments ranged from $25 to $21,216 among these recipients.

## Total Cash Inflow

Cash inflows were calculated as the sum of gross revenues from the sale of shrimp, other commercial seafood, and government payments related to commercial fishing and associated with the primary vessel used for shrimp harvesting in 2008. Total cash inflows for 2008 averaged $45,684, and the median was $30,000 (Table 16). Cash inflows ranged from $250 to $286,444.

**Table 16: Total Cash Inflows**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Total Cash Inflow | $45,684 | $30,000 | $250 | $286,444 |

On average, $35,927, or over three-quarters (79%) of cumulative cash inflows, were attributed to commercial shrimp harvests in 2008 (Figure 30). Approximately one-seventh (15%) of total cash inflows, or $6,960, were a result of the harvest of commercial seafood other than shrimp. Average government payments were $2,798, which accounted for 6% of total cash inflows.

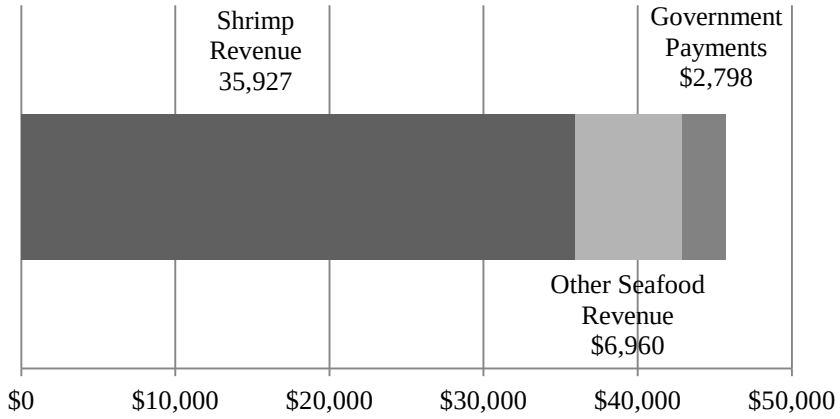


**Figure 30: Average Cash Inflows by Category**

Approximately one-third (36%) of the respondents included in this financial analysis had cash inflows of $15,000 or less, 15% had cash inflows of $15,001 to $30,000, and 9% had cash inflows of $30,001 to $45,000 (Figure 31).

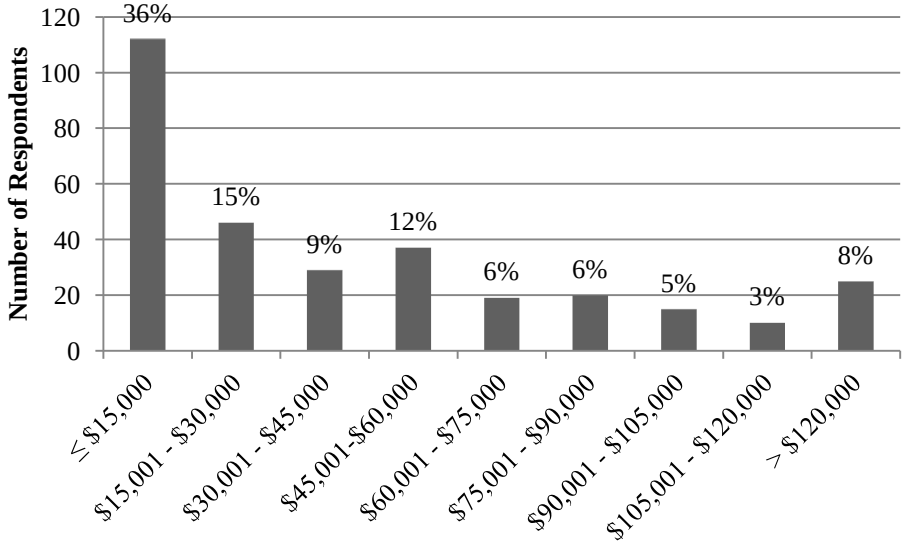


**Figure 31: Distribution of Total Cash Inflow**

## Cash Flow Statement

Net cash flow is the difference of cash inflows and cash outflows. A measure of the difference between funds received and funds paid out in one period, net cash flow is one of the most common measures used to evaluate basic economic performance of a business. Net cash flow does not consider non-cash expenses, such as depreciation or opportunity cost, nor does it distinguish between the portions of loan payments associated with principal repayment and the portion associated with interest expenses. Further, net cash flow is not a measure of solvency, as it does not consider net worth (equity) or debt burden (leverage) or the availability of credit,

liquid assets, or other financial resources that frequently play important functions in many businesses' operations.

Average net cash flow in 2008 among inshore shrimp harvesters was $5,795, which suggests that, on average, shrimp harvesters operating in inshore waters in the Gulf received more cash than they paid out over the course of the year (Table 17). Only a small majority (53%) of the respondents had positive net cash flows (cash inflows greater than cash outflows). The median net cash flow, $900, while positive, is sufficiently low as to suggest a precarious cash flow position for the many shrimp harvesters who were active in inshore waters of the Gulf in 2008. Further, it implies that nearly half (47%) of the respondents' net cash flows were negative, as cash outflows exceeded cash inflows in 2008.

**Table 17: Cash Inflows, Cash Outflows, and Net Cash Flows**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Cash Inflows | $45,684 | $30,000 | $250 | $286,444 |
| Cash Outflows | $39,890 | $25,700 | $158 | $221,340 |
| Net Cash Flows | $5,795 | $900 | -$63,390 | $184,953 |

Obviously, this single measure of central tendency applies "on average" and does not present a complete depiction of the economic condition of every shrimp harvester in the Gulf. Figure 32 presents the distribution of net cash flow. About one-seventh (15%) had cash flows that ranged from $0 to $5,500. Almost one-fifth (18%) had a net cash flow that ranged from negative $1 to negative $5,500.

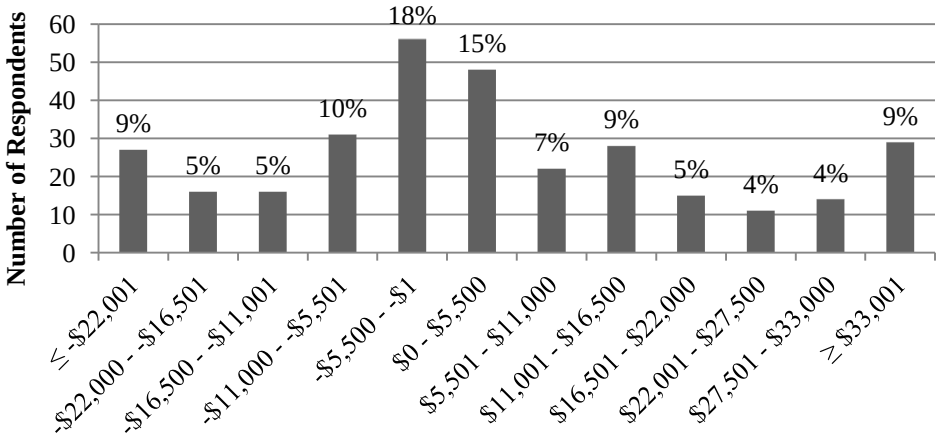


**Figure 32: Distribution of Net Cash Flow**

## Income Statement

The income statement (or profit and loss statement) is intended to give a more complete depiction of the true "profitability" than the cash flow statement does. The income statement includes revenue payments associated with production activity in 2008, cash expenses incurred in 2008, and non-cash expenses, such as depreciation and owner's vessel time, an opportunity cost of the time that owner-operators spent on their own vessels. The income statement also includes loan interest payments and excludes payments made on loan principal.

Through this research, all commercial seafood revenue is considered operating revenue from commercial harvesting activities in 2008. Most shrimp harvesters who harvest from inshore waters sell their catch to individual dealers or to markets at the end of their commercial harvesting trip and do not appear to store significant quantities of seafood harvested in one period for sale in later periods.

All trip-related expenditures (fuel, oil, salt, ice, groceries, and other supplies) were classified as operating expenses and are included on the income statement. Similarly, payments to crew, vessel insurance premiums, vessel repair and maintenance expenditures, and overhead expenditures are treated as operating expenses for the commercial harvesting enterprise.

Depreciation is a non-cash expense that is included in the income statement. Depreciation was estimated at 0.0237 times the estimated current market value of the vessel. This rate was based on the estimated depreciation rate among vessels of less than fifty feet in length in the federal Gulf shrimp fleet.[7] For the inshore vessel in this study, the average depreciation was estimated to be $1,085.

Owner's vessel time for owner-operators is an additional non-cash expense estimated for inclusion in the income statement. The majority of inshore shrimp harvesters indicated that they operated as owner-operators and, consequently, few of these individuals reported cash payments for captains' salaries whether they served as their own captains or hired a captain for their vessel.

This research presents two measures of net revenue derived from the income statement. The first examines all revenue or expenses/costs associated with the commercial harvesting vessel used most frequently for shrimp harvesting in 2008. This is equivalent to the owner's "bottom line" or profit and loss. The second approach examines only the revenue and expenses associated with the vessel's commercial harvesting operation—net revenue from operations. This approach does not include government payments as part of revenue or interest payments on loans as part of expenses. Nor does it include maintenance and repairs attributed to hurricanes in 2008.

**Method 1: All Revenue and Expenses**

All sources of revenue and government payments for 2008 averaged $45,684 (Table 18). Average expenses (including depreciation, non-cash owner-operator captains' wages, interest payments, and hurricane repairs) were $47,062.

**Table 18: Total Revenue, Total Expenses, and Net Revenue (Method 1)**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Total Revenue | $45,684 | $30,000 | $250 | $286,444 |
| Total Expenses | $47,062 | $29,705 | $1,083 | $228,450 |
| Net Revenue | -$1,377 | -$3,624 | -$79,016 | $180,213 |

Using method 1 to calculate net revenue, 79% of total revenue was generated by shrimp harvests, 15% was generated by other types of seafood harvested, and 6% was generated by government

[7] The 2008 results for the federally permitted Gulf shrimp fleet are available as a technical memorandum (Liese and Travis 2010), available at: www.sefsc.noaa.gov/socialscience/shrimp.htm

payments received as they related to the respondents primary shrimp harvesting vessel (Figure 33).

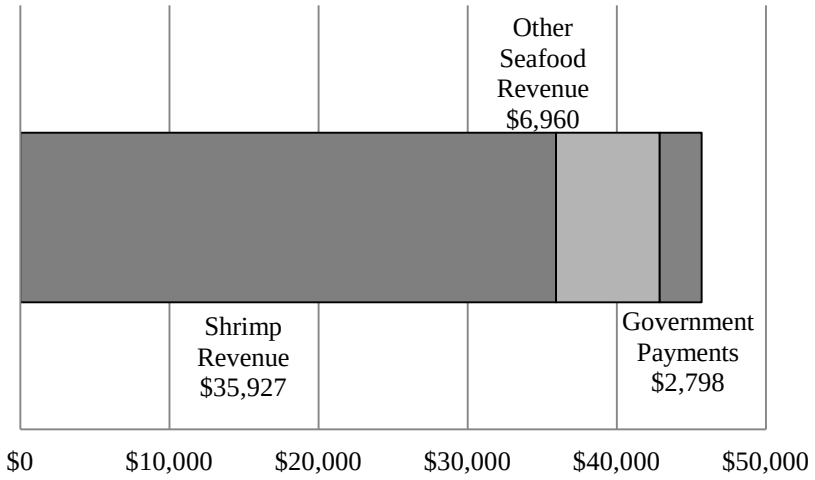


**Figure 33: Average Total Revenue (Method 1) by Item Category**

Figure 34 presents the average total costs using method 1, broken down by expense category, from largest to smallest. Fuel costs were reported as the largest cost and represented 25% of average total costs. Captain's pay, or the owner's vessel time, accounted for 15% of total average costs.

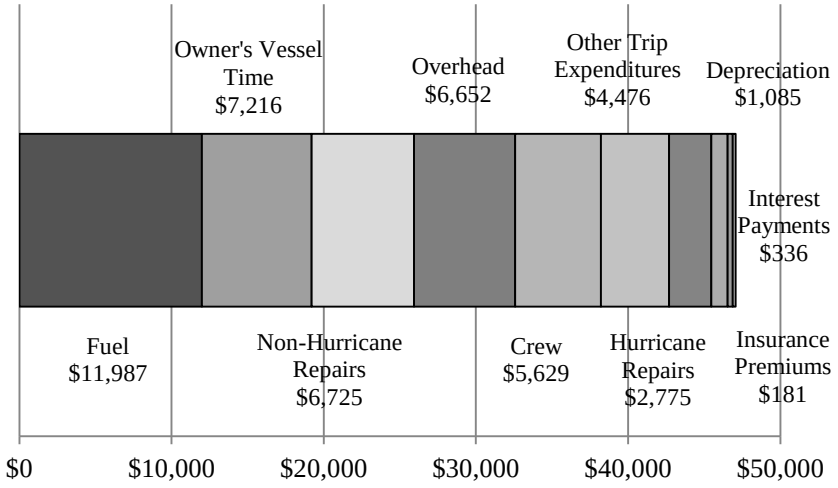


**Figure 34: Average Total Costs (Method 1) by Item Category**

Average net revenue across all respondents included in this financial analysis was negative $1,377, and median net revenue was negative $3,624. Three-fifths (60%) had negative net revenue under this assessment (Figure 35), and 40% had positive net revenue.

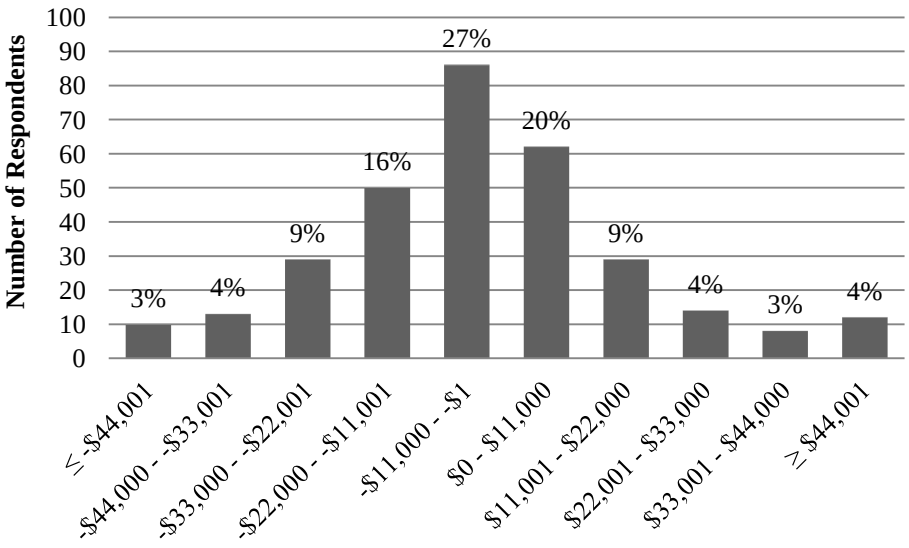


**Figure 35: Distribution of Average Net Revenue (Method 1)**

## Method 2: Operating Revenue and Expenses

A second measure of "profitability" examines only revenue earned and expenses incurred as a direct result of commercial seafood harvesting activities—net revenue from operations. Net operating revenue includes revenue from harvesting shrimp and other commercial seafood but excludes government payments. Net operating expenses do not include interest payments on loans (financing costs) or repairs and equipment expenditures that were related to hurricanes in 2008 (extraordinary expense). Using this method, average operating revenue was $42,887, while average operating expenditures were $43,950 (Table 19).

**Table 19: Revenue, Expenses, and Net Revenue from Operations (Method 2)**

| | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| Operating Revenue | $42,887 | $28,000 | $250 | $286,444 |
| Operating Expenses | $43,950 | $26,114 | $1,083 | $228,450 |
| Net Revenue from Operations | -$1,063 | -$3,486 | -$93,549 | $231,441 |

Using method 2, 84% of operating revenue was generated by shrimp harvests, and 16% was generated by other types of seafood (Figure 36). Government payments are not included, as they are considered non-operating revenue.

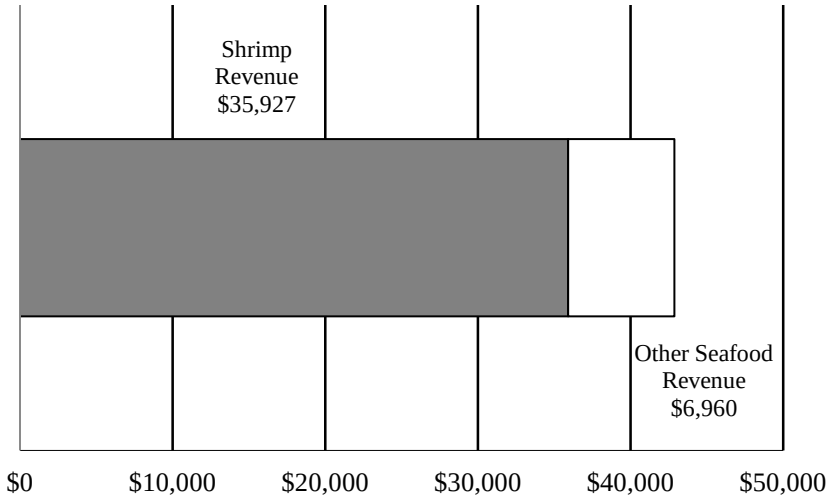


**Figure 36: Average Operating Revenue (Method 2) by Item Category**

Figure 37 presents the average operating costs using method 2, broken down by expense category, from largest to smallest. Fuel costs were the largest cost and represented 27% of average operating costs. Owner's vessel time accounted for 16% of total average costs. Hurricane repairs and interest payments are not included in operating expenditures under method 2.

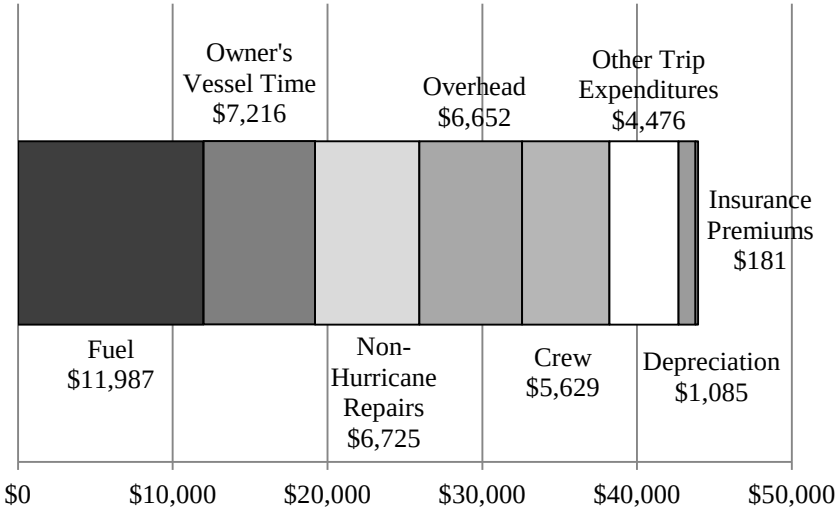


**Figure 37: Average Operating Expenditures (Method 2) by Item Category**

Average net revenue from operations (operating revenue minus operating expenses) was negative $1,063. Using method 2, nearly two-thirds (63%) of respondents experienced negative net revenue from operations in 2008 (Figure 38). Just over a third (37%) had positive net revenue from operations.

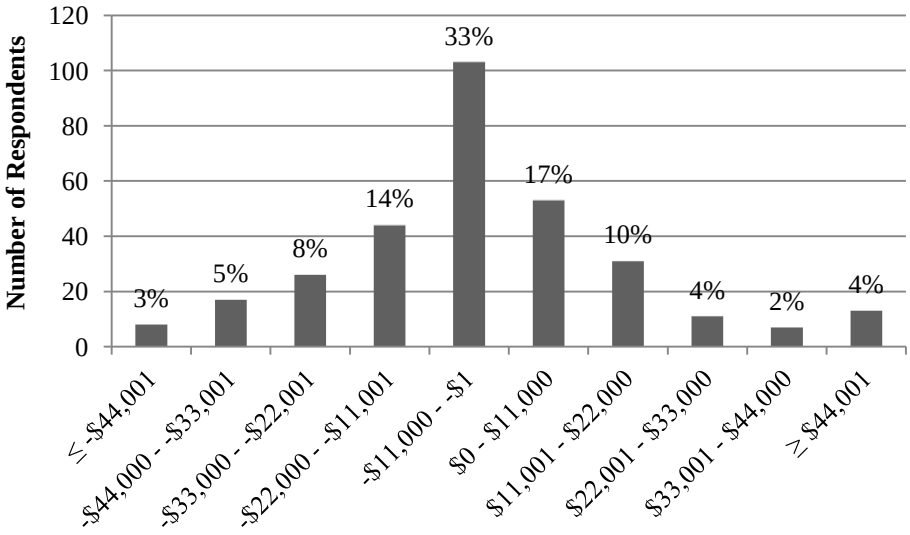


**Figure 38: Distribution of Net Revenue from Operations (Method 2)**

# 5. Conclusion

The Gulf of Mexico inshore shrimp fleet, the portion of the commercial shrimp fleet active only in state waters, consists of thousands of small businesses which harvest relatively moderate amounts of shrimp each. Based on the results for year 2008, these businesses—the inshore shrimp harvesters—are, on average, in a difficult economic situation.

Broadly speaking, inshore commercial shrimp harvesting vessels were owned and operated by independent businessmen and women who were active in the shrimp harvesting sector for a few months out of the year, as evidenced by the average of 55 total days at sea in 2008. On average, shrimp vessels were moderately-sized, fiberglass vessels, propelled by diesel engines and had an average market value of about $46,000. Because only one in five respondents carried a loan on their vessels, inshore shrimp harvesters had substantial equity in their vessels. Whether shrimp harvesters were able to acquire loans at affordable interest rates was not addressed by this research.

Less than one in ten vessels in the inshore shrimp fishery was insured in 2008. The total insured value amounted to approximately 13% of the collective market value of the inshore shrimp harvesting fleet. With the Gulf Coast's susceptibility to damaging hurricanes and a lack of insurance coverage, future hurricane repair expenditures may present significant financial difficulties to an already struggling inshore fleet. Further research is needed to determine if insurance is available to this fleet or if insurance is not affordable.

Fuel expense, which comprised more than one-quarter (27%) of operating expenses in 2008, was the single largest expense category. Other expense categories included overhead (15%), non-hurricane repairs and maintenance (15%), and payments made to hired captains and crew (13%).

Average net cash flow, considering all inshore shrimp harvesters from the smallest to the largest, was less than $6,000. The majority of inshore shrimp harvesters, however, had a net cash flow of less than $1,000. The net cash flow position of the inshore commercial shrimp fishery would be worse without non-shrimp sources of inflow, such as revenue from other forms of seafood and government payments.

These net cash flow estimates may actually overstate the returns to commercial shrimp harvesting in inshore waters insofar as they do not account for the opportunity cost of the owner-operators' time and effort. When owner-operators' vessel time was considered in the compilation of an income statement, average net revenue was negative.

The basic financial analyses presented in this report suggest that, from an economic perspective, the commercial inshore shrimp fishery was barely breaking even in 2008. Judging by these results, many inshore shrimp harvesters may have been drawing money from savings or other sources to keep their operations afloat. The year 2008, a period of high fuel prices, low shrimp prices, and two major hurricanes, may be atypical. Nevertheless, these results suggest that the Gulf inshore shrimp fishery is an industry that has undergone some measure of financial distress.

# Appendix 1: Tables with 2008 Financial and Economic Results (Averages)[8]

| (In USD unless otherwise noted) | Total Fleet | Hired Captain | Owner-Operator | w-FL | AL | MS | LA | TX |
|---|---|---|---|---|---|---|---|---|
| # of Observations | 313 | 29 | 284 | 19 | 24 | 24 | 217 | 29 |
| **Vessel Characteristics (2008)** | | | | | | | | |
| Length (feet) | 35 | 44 | 34 | 36 | 36 | 32 | 34 | 43 |
| Horse power | 282 | 318 | 279 | 237 | 239 | 216 | 297 | 294 |
| Year built, purchased, or acquired | 2000 | 2000 | 2000 | 1995 | 1999 | 2001 | 2001 | 1997 |
| Fuel type - Diesel | 81% | 97% | 80% | 95% | 79% | 67% | 81% | 90% |
| Hull material - Fiberglass (%) | 72% | 48% | 74% | 63% | 63% | 71% | 76% | 55% |
| Hull material - Steel (%) | 9% | 14% | 8% | 5% | 8% | 13% | 8% | 14% |
| Hull material - Wood (%) | 10% | 34% | 7% | 32% | 25% | 8% | 5% | 21% |
| Hull material - Aluminium (%) | 10% | 3% | 11% | 0% | 4% | 8% | 12% | 10% |
| State - w-Florida (%) | 6% | 24% | 4% | 100% | 0% | 0% | 0% | 0% |
| State - Alabama (%) | 8% | 10% | 7% | 0% | 100% | 0% | 0% | 0% |
| State - Mississippi (%) | 8% | 7% | 8% | 0% | 0% | 100% | 0% | 0% |
| State - Louisiana (%) | 69% | 28% | 74% | 0% | 0% | 0% | 100% | 0% |
| State - Texas (%) | 9% | 31% | 7% | 0% | 0% | 0% | 0% | 100% |
| **Commercial Shrimp Harvesting Effort (2008)** | | | | | | | | |
| Total trips | 30 | 64 | 27 | 99 | 28 | 26 | 22 | 57 |
| Total days at sea | 55 | 72 | 53 | 105 | 49 | 32 | 52 | 64 |
| **Balance Sheet (End of 2008)** | | | | | | | | |
| **Assets** - Market value of vessel | **45,798** | **53,414** | **45,021** | **38,368** | **46,375** | **28,063** | **50,216** | **31,810** |
| *Original value of vessel (when built, purchased, or acquired)* | *43,845* | *56,948* | *42,507* | *37,684* | *57,000* | *25,604* | *46,369* | *33,069* |
| **Liabilities** - Loan on vessel | **5,081** | **5,394** | **5,049** | **0** | **208** | **3,292** | **6,499** | **3,310** |
| *% of vessels with loan* | *19%* | *14%* | *19%* | *0%* | *4%* | *17%* | *24%* | *7%* |
| **Equity** - Owner's equity in vessel | **40,717** | **48,020** | **39,972** | **38,368** | **46,167** | **24,771** | **43,717** | **28,500** |
| *Insurance coverage (% of vessels / % of assets)* | *7% / 13%* | *7% / 26%* | *7% / 12%* | *16% / 21%* | *13% / 29%* | *4% / 3%* | *6% / 13%* | *0% / 0%* |
| **Vessel Operation (2008)** | | | | | | | | |
| Actively shrimping (%) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Owner-operator (%) | 91% | 0% | 100% | 63% | 88% | 92% | 96% | 69% |
| Annual fuel use (gallons) | 3,604 | 3,839 | 3,580 | 2,820 | 3,334 | 2,127 | 3,903 | 3,332 |
| Fuel price per gallon | 3.33 | 3.11 | 3.35 | 3.38 | 3.22 | 3.23 | 3.40 | 2.74 |
| Fuel efficiency (revenue generated per gallon used) | 12 | 16 | 11 | 21 | 10 | 9 | 11 | 14 |
| **Cash Flow (2008)** | | | | | | | | |
| **Inflow - Total** | **45,684** | **60,951** | **44,125** | **58,576** | **35,270** | **23,750** | **47,826** | **47,986** |
| Shrimp landings | 35,927 | 55,769 | 33,901 | 56,713 | 30,462 | 12,933 | 36,008 | 45,257 |
| Non-shrimp landings | 6,960 | 4,686 | 7,192 | 1,858 | 3,583 | 6,429 | 8,404 | 2,729 |
| Government payments received (shrimp related) | 2,798 | 497 | 3,032 | 5 | 1,224 | 4,388 | 3,414 | 0 |
| **Outflow - Total** | **39,890** | **57,730** | **38,068** | **48,892** | **38,125** | **25,880** | **40,685** | **41,091** |
| Fuel | 11,987 | 11,952 | 11,991 | 9,543 | 10,742 | 6,870 | 13,287 | 9,130 |
| Oil | 632 | 723 | 622 | 574 | 466 | 304 | 683 | 695 |
| Ice | 1,186 | 743 | 1,231 | 403 | 1,053 | 1,244 | 1,371 | 375 |
| Salt | 483 | 198 | 512 | 2 | 197 | 130 | 643 | 127 |
| Groceries | 1,296 | 1,515 | 1,273 | 1,237 | 1,088 | 581 | 1,462 | 852 |
| Other supplies | 879 | 1,749 | 790 | 1,038 | 1,148 | 328 | 895 | 881 |
| Crew & captain (hired) | 5,629 | 15,629 | 4,608 | 17,175 | 7,392 | 2,897 | 4,216 | 9,442 |
| Maintenance & repair (regular vessel and gear) | 6,725 | 6,829 | 6,714 | 8,288 | 5,838 | 4,424 | 6,845 | 7,438 |
| Maintenance & repair (2008 hurricane related) | 2,775 | 5,238 | 2,523 | 1,405 | 625 | 1,417 | 2,929 | 5,420 |
| Insurance | 181 | 372 | 161 | 199 | 396 | 35 | 195 | 0 |
| Overhead (excluding insurance & loan payments) | 6,652 | 11,515 | 6,156 | 9,027 | 9,080 | 5,035 | 6,532 | 5,323 |
| Interest payments made (on vessel loans) | 336 | 411 | 329 | 0 | 16 | 267 | 406 | 363 |
| Principal payments made (on vessel loans) | 1,129 | 854 | 1,157 | 0 | 84 | 2,348 | 1,220 | 1,044 |
| **Net Cash Flow** | **5,795** | **3,221** | **6,058** | **9,684** | **-2,855** | **-2,131** | **7,140** | **6,895** |

[8] Numbers may not necessarily sum perfectly in tables as a result of rounding.

| (In USD unless otherwise noted) | Total Fleet | Hired Captain | Owner-Operator | w-FL | AL | MS | LA | TX |
|---|---|---|---|---|---|---|---|---|
| # of Observations | 313 | 29 | 284 | 19 | 24 | 24 | 217 | 29 |
| **Income Statement (2008)** | | | | | | | | |
| **Operating Activities** | | | | | | | | |
| **Revenue (from commercial fishing)** | **42,887** | **60,454** | **41,093** | **58,571** | **34,045** | **19,362** | **44,412** | **47,986** |
| **Expenses** | **43,950** | **52,491** | **43,078** | **56,802** | **43,921** | **26,821** | **45,055** | **41,465** |
| *Variable costs - Non-labor* | *37.4%* | *32.2%* | *38.1%* | *22.5%* | *33.5%* | *35.2%* | *40.6%* | *29.1%* |
| Fuel | 27.3% | 22.8% | 27.8% | 16.8% | 24.5% | 25.6% | 29.5% | 22.0% |
| Oil | 1.4% | 1.4% | 1.4% | 1.0% | 1.1% | 1.1% | 1.5% | 1.7% |
| Ice | 2.7% | 1.4% | 2.9% | 0.7% | 2.4% | 4.6% | 3.0% | 0.9% |
| Salt | 1.1% | 0.4% | 1.2% | 0.0% | 0.4% | 0.5% | 1.4% | 0.3% |
| Groceries | 2.9% | 2.9% | 3.0% | 2.2% | 2.5% | 2.2% | 3.2% | 2.1% |
| Other supplies | 2.0% | 3.3% | 1.8% | 1.8% | 2.6% | 1.2% | 2.0% | 2.1% |
| *Variable costs - Labor* | *29.2%* | *29.8%* | *29.2%* | *45.0%* | *29.1%* | *26.9%* | *26.6%* | *38.3%* |
| Crew & captain (hired) | 12.8% | 29.8% | 10.7% | 30.2% | 16.8% | 10.8% | 9.4% | 22.8% |
| Owner's vessel time | 16.4% | 0.0% | 18.5% | 14.8% | 12.3% | 16.1% | 17.2% | 15.5% |
| *Fixed costs* | *33.3%* | *38.0%* | *32.8%* | *32.5%* | *37.4%* | *37.9%* | *32.7%* | *32.5%* |
| Maintenance & repair (regular vessel and gear) | 15.3% | 13.0% | 15.6% | 14.6% | 13.3% | 16.5% | 15.2% | 17.9% |
| Insurance | 0.4% | 0.7% | 0.4% | 0.4% | 0.9% | 0.1% | 0.4% | 0.0% |
| Overhead (excluding insurance & loan payments) | 15.1% | 21.9% | 14.3% | 15.9% | 20.7% | 18.8% | 14.5% | 12.8% |
| Depreciation | 2.5% | 2.4% | 2.5% | 1.6% | 2.5% | 2.5% | 2.6% | 1.8% |
| **Net Revenue from Operations (Method 2)** | **-1,063** | **7,963** | **-1,985** | **1,769** | **-9,876** | **-7,459** | **-643** | **6,521** |
| **Non-Operating Activities** | | | | | | | | |
| Maintenance & repair (2008 hurricane related) | 2,775 | 5,238 | 2,523 | 1,405 | 625 | 1,417 | 2,929 | 5,420 |
| Interest payments made (on vessel loans) | 336 | 411 | 329 | 0 | 16 | 267 | 406 | 363 |
| Government payments received (shrimp related) | 2,798 | 497 | 3,032 | 5 | 1,224 | 4,388 | 3,414 | 0 |
| **Net Revenue Before Taxes (Method 1)** | **-1,377** | **2,810** | **-1,805** | **369** | **-9,292** | **-4,755** | **-564** | **739** |
| *Owner's vessel time* | *7,216* | *0* | *7,953* | *8,406* | *5,422* | *4,307* | *7,734* | *6,447* |
| *Depreciation* | *1,085* | *1,266* | *1,067* | *909* | *1,099* | *665* | *1,190* | *754* |

# Appendix 2: Tables with 2008 Financial and Economic Results for Specified Ranges of Total Cash Inflows (Averages)

| *(In USD unless otherwise noted)* | | Respondents with Total Cash Inflows in Specified Ranges | | | | |
|---|---|---|---|---|---|---|
| | **Total Fleet** | **≤ $5,000** | **$5,001 - $20,000** | **$20,001 - $45,000** | **$45,001 - $80,000** | **> $80,000** |
| *# of Observations* | 313 | 63 | 64 | 60 | 64 | 62 |
| **Vessel Characteristics (2008)** | | | | | | |
| Length (feet) | 35 | 27 | 33 | 34 | 37 | 42 |
| Horsepower | 282 | 194 | 259 | 283 | 309 | 368 |
| Year built, purchased, or acquired | 2,000 | 2001 | 1999 | 2001 | 1999 | 2000 |
| Fuel type – Diesel | 81% | 52% | 80% | 87% | 92% | 97% |
| Hull material – Fiberglass (%) | 72% | 59% | 78% | 78% | 69% | 74% |
| Hull material – Steel (%) | 9% | 6% | 6% | 7% | 11% | 15% |
| Hull material – Wood (%) | 10% | 6% | 11% | 7% | 13% | 11% |
| Hull material – Aluminum (%) | 10% | 29% | 5% | 8% | 8% | 0% |
| State –w-Florida (%) | 6% | 5% | 8% | 2% | 3% | 13% |
| State- Alabama (%) | 8% | 6% | 14% | 7% | 6% | 5% |
| State- Mississippi (%) | 8% | 13% | 9% | 10% | 5% | 2% |
| State- Louisiana (%) | 69% | 70% | 56% | 75% | 73% | 73% |
| State- Texas (%) | 9% | 6% | 13% | 7% | 13% | 8% |
| **Commercial Shrimp Harvesting Effort (2008)** | | | | | | |
| Total trips | 30 | 10 | 19 | 27 | 44 | 53 |
| Total days at sea | 55 | 13 | 25 | 46 | 80 | 108 |
| **Balance Sheet (End of 2008)** | | | | | | |
| **Assets**- Market value of vessel | **45,798** | **21,310** | **35,477** | **42,595** | **52,380** | **77,642** |
| Original value of vessel (when built, purchased, or acquired) | 43,845 | 20,563 | 33,031 | 40,183 | 46,830 | 79,126 |
| **Liabilities** – Loan on vessel | **5,081** | **1,952** | **3,007** | **5,636** | **6,281** | **8,624** |
| % of vessels with loan | 19% | 14% | 9% | 30% | 19% | 21% |
| **Equity** – Owner's equity in vessel | **40,717** | **19,357** | **32,470** | **36,959** | **46,100** | **69,018** |
| Insurance coverage (% of vessels/% of assets) | 7% / 13% | 13%/18% | 8%/10% | 3%/4% | 3%/3% | 6%/26% |
| **Vessel Operation (2008)** | | | | | | |
| Actively shrimping (%) | 100% | 100% | 100% | 100% | 100% | 100% |
| Owner-operator (%) | 91% | 92% | 94% | 90% | 92% | 85% |
| Annual fuel use (gallons) | 3,604 | 576 | 1,140 | 2,511 | 5,259 | 8,574 |
| Fuel price per gallon | 3.33 | 3.23 | 3.08 | 2.94 | 3.22 | 3.55 |
| Fuel efficiency (revenue generated per gallon used) | 12 | 3.83 | 8.96 | 11.1 | 10.49 | 13.97 |
| **Cash Flow (2008)** | | | | | | |
| **Inflow – Total** | **45,684** | **2,324** | **11,722** | **30,368** | **59,985** | **124,862** |
| Shrimp landings | 35,927 | 1,979 | 8,199 | 21,308 | 46,993 | 101,770 |
| Non-shrimp landings | 6,960 | 226 | 2,016 | 6,570 | 8,153 | 18,051 |
| Government payments (shrimp related) | 2,798 | 119 | 1,508 | 2,490 | 4,839 | 5,041 |
| **Outflow - Total** | **39,890** | **9,947** | **13,435** | **25,830** | **52,663** | **98,043** |
| Fuel | 11,987 | 1,857 | 3,516 | 7,374 | 16,916 | 30,402 |
| Oil | 632 | 144 | 225 | 328 | 930 | 1,533 |
| Ice | 1,186 | 297 | 488 | 888 | 1,840 | 2,424 |
| Salt | 483 | 80 | 154 | 335 | 725 | 1,125 |
| Groceries | 1,296 | 309 | 426 | 802 | 1,920 | 3,029 |
| Other supplies | 879 | 182 | 406 | 585 | 1,181 | 2,046 |
| Crew & captain (hired) | 5,629 | 324 | 903 | 2,422 | 6,069 | 18,549 |
| Maintenance & repair (regular vessel and gear) | 6,725 | 2,362 | 2,238 | 3,744 | 8,950 | 16,377 |
| Maintenance & repair (2008 hurricane related) | 2,775 | 1,409 | 1,089 | 2784 | 3,484 | 5,162 |
| Insurance | 181 | 140 | 132 | 163 | 93 | 379 |
| Overhead (excluding insurance & loan payments) | 6,652 | 2,238 | 3,256 | 4,759 | 9,175 | 13,873 |
| Interest payments made (on vessel loans) | 336 | 131 | 210 | 394 | 375 | 580 |
| Principal payments made (on vessel loans) | 1,129 | 475 | 392 | 1,253 | 1,004 | 2,564 |
| **Net Cash Flow** | **5,795** | **-7,623** | **-1,713** | **4,538** | **7,322** | **26,819** |

# Appendix 2A: Disposition of Shrimp Harvest among Different Categories of Recipients for Specified Ranges of Total Cash Inflows (Averages)

| *(In USD unless otherwise noted)* | | Respondents with Total Cash Inflows in Specified Ranges | | | | |
|---|---|---|---|---|---|---|
| | **Total Fleet** | **≤ $5,000** | **$5,001 - $20,000** | **$20,001 - $45,000** | **$45,001 - $80,000** | **> $80,000** |
| *# of Observations* | 298 | 59 | 61 | 58 | 63 | 57 |
| **Percentage of Respondents' Shrimp Landings** | | | | | | |
| Sold to tackle and bait shops | 6% | 6% | 1% | 2% | 10% | 12% |
| Sold to dealers or processors | 65% | 44% | 57% | 75% | 72% | 78% |
| Sold to restaurants and retail shops | 2% | 2% | 2% | 1% | 3% | 0% |
| Sold directly to the public | 17% | 25% | 26% | 14% | 11% | 7% |
| Given away or eaten yourself | 10% | 23% | 13% | 8% | 5% | 2% |

# Appendix 3: 2008 Inshore Shrimp Economic Survey Packet

**GULF STATES MARINE FISHERIES COMMISSION**
P.O. Box 726 Ocean Springs MS 39566-0726
(228) 875-5912 • (228) 875-6604 Fax
*www.gsmfc.org*

Friday, March 27, 2009

<Primary_Mailing_Recipient>
<Street_Address>
<City, State, Zipcode>

Dear <Recipient's Name>:

As you may know, shrimpers in <state> and other states in the Gulf of Mexico are currently facing a variety of economic and financial challenges. Though there are many stories and some piecemeal information, there is no systematic measure of the economic performance of the commercial fishermen who shrimp in Gulf states' waters. Having a clear, unbiased source of economic information can help commercial fishermen, fisheries managers, and others in the seafood industry reach better, more informed decisions.

Good economic data will help people understand the challenges shrimpers face. It can also help us estimate the economic contribution shrimping makes to the regional economy and even measure the potential damages and losses of hurricanes and other events. Because they recognize the value of this information, many commercial shrimping and fishing associations, including the Southern Shrimp Alliance, the Southeastern Fisheries Association, and the United Commercial Fisherman's Association support this survey.

We are inviting you to assist in this effort by taking part in this survey, The 2008 Economic Survey of Gulf State Shrimp License Holders. Your name was randomly selected from <state>'s commercial fishing license file for participation in this survey. The questionnaire in this packet asks about your costs and returns for the shrimping vessel that you used most often for inshore *and nearshore shrimping* in **2008**. Please fill out the enclosed survey form to the best of your ability and return it as soon as possible in the enclosed postage-paid envelope.

The first 600 individuals who return the survey will receive a **$25 gift card**.

**This information will remain strictly confidential and your individual information will never be released to the public.** Any information that you provide will be combined with information from hundreds of other shrimpers throughout the Gulf of Mexico and will be completely anonymous.

Please contact Alex Miller at (228) 875-5912 or Jack Isaacs at (225) 765-2605 if you need help filling out the survey. We look forward to working with you.

Sincerely,

Alex Miller
Economist

Jack Isaacs
Economist

**Your information will be treated as STRICTLY CONFIDENTIAL.**

**Your information WILL NOT be released to anyone or any outside government agency, including the IRS.**

**We are interested only in INDUSTRY-WIDE impacts.**

**Your personal information WILL NOT be tied to you.**

**The responses in your survey will be COMBINED with the responses from hundreds of other shrimpers from every state in the Gulf of Mexico.**

**We will use statistical methods to estimate economic AVERAGES AND TOTALS for the *entire Gulf state waters' shrimp industry*.**

**The results of this research will be made AVAILABLE TO YOU.**

## Why we need to know… And what's in it for you.

Commercial fishermen, the seafood industry, and fisheries managers all need current information about the economic health of the shrimp fishery in order to make informed, well-educated decisions. With the information from this survey, *people like you* in the Gulf shrimping industry will have an unbiased economic report card that you can stand behind whenever you're discussing the economic well-being of the shrimp industry.

The confidential information from this survey will give us a better understanding of the profits (*or losses*) generated by the shrimp industry in Gulf states' waters. We will then be better able to calculate the value of the Gulf states' shrimp fishery to the fishermen themselves and to others in the region's economy.

Among other things, we can also report the following:

- Total number of jobs associated with the Gulf states' shrimp industry
- The amount of money Gulf states' shrimpers have invested and how much debt they are carrying
- The financial risk that Gulf states' shrimpers are exposed to
- The impact that fluctuating fuel prices have on the Gulf states' shrimping industry
- Potential damages and losses resulting from hurricanes and other events

# 2008 Economic Survey of Gulf State Shrimp License Holders

## Shrimping Business Questions for 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

1. How many commercial food or bait shrimping boats did you own in 2008? ..... ____ Boats

2. How many of your boats harvested and sold food or bait shrimp in 2008? ..... ____ Boats

3. What other activities below were part of your shrimping business in 2008? (Check all that apply)

☐ Shrimp processing ☐ Shrimp wholesale ☐ Shrimp retail ☐ Other _____

**Please answer all further questions about the shrimping boat used *most often* in 2008**

## Boat Information about the Shrimping Boat You Used *Most Often* in 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

4. What is the length of the boat you used *most often* for shrimping in 2008? ..... _____ Feet

5. What is the primary hull material of the boat you used *most often* for shrimping in 2008?

☐ Fiberglass ☐ Steel ☐ Wood ☐ Other _____

6. What is the total horsepower of the engines used to power this boat? ..... _____ HP

7. What is the primary fuel type used to run this boat? ..... ☐ Diesel ☐ Gasoline

---

8. Best estimate of the value of the boat you used *most often* for shrimping in 2008:

A) Market value of this boat anytime in 2008: ..... $ _____

B) Original purchase price (estimate value if gift or self-built): ..... $ _____

C) What year did you buy, build, or take ownership of this boat? ..... _____

## Fishing Effort Information about the Shrimping Boat You Used *Most Often* in 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

9. In 2008, please estimate how many of the following types of food or bait shrimping trips you took with the boat you used *most often* in 2008?

A) Inside shrimping trips in **State waters** (inland to coastline): ..... _____ Trips

B) Outside shrimping trips in **State waters** (coastline to Federal waters): ..... _____ Trips

C) Shrimping trips in **Federal waters** (outside of State waters): ..... _____ Trips

**Questions? Call Jack Isaacs at (225) 765-2605 or Alex Miller at (228) 875-5912**

10. In 2008, please estimate how many days you **usually** took for each of the following types of food or bait shrimping trips with the boat you used *most often* in 2008)?

A) Inside shrimping trip in **State waters**: .....Usually _____ days per trip
(inland to coastline)

B) Outside shrimping trip in **State waters**: .....Usually _____ days per trip
(coastline to Federal waters)

C) Shrimping trip in **Federal waters**:.....Usually _____ days per trip

---

11. On a **typical** day in 2008, please estimate how many hours your nets were in the water per day for each of the following types of trips in **state waters** (In other words, how many hours were you trawling per day)?

A) Inside shrimping trip in **state waters:** .....Usually _____ hours per day
(inland to coastline)

B) Outside shrimping trip in **state waters**: .....Usually _____ hours per day
(coastline to Federal waters)

**Catch Information about the Shrimping Boat You Used *Most Often* in 2008**

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

12. Please estimate the percentage of total money (fishing revenue) generated by this boat in 2008 from the following activities:

| | |
|---|---|
| Food or Bait Shrimping | _____% |
| Crabbing | _____% |
| Oyster Fishing | _____% |
| Other Types of Fishing | _____% |
| **Total** | **100 %** |

13. For 2008, please estimate what percentage of money generated by selling shrimp (shrimp revenue) by this boat was from:

| | |
|---|---|
| Shrimp sold as bait | _____% |
| Shrimp sold as food | _____% |
| **Total** | **100 %** |

14. For 2008, please estimate what percentage of food or bait shrimp this boat landed in each of the following states:

| | |
|---|---|
| Shrimp landed in Texas | _____% |
| Shrimp landed in Louisiana | _____% |
| Shrmp landed in Mississippi | _____% |
| Shrimp landed in Alabama | _____% |
| Shrimp landed in Florida | _____% |
| **Total** | **100 %** |

15. On average, what did you do with the food or bait shrimp caught by this boat in 2008?

| | |
|---|---|
| Sold to bait shops, tackle shops | _____% |
| Sold to shrimp houses, dealers, processors, or factories | _____% |
| Sold to restaurants or stores | _____% |
| Sold directly to the public | _____% |
| Given away or eaten yourself | _____% |
| **Total** | **100 %** |

**Questions? Call Jack Isaacs at (225) 765-2605 or Alex Miller at (228) 875-5912**

## 2008 Hurricane Impacts to the Shrimping Boat You Used *Most Often* in 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

16. Was the shrimping boat you *used most often* in 2008 affected by a hurricane in 2008?

☐ Yes ☐ No

**If Yes:** A) Please estimate the number of commercial shrimping days that you had planned on taking but ***did not*** take as a result of a 2008 hurricane: ....._____ days

B) Please estimate the number of days in 2008 the boat was inactive and under repair as a result of 2008 hurricane damage (if any): ....._____ days

C) Please estimate the cost to repair the damages to your boat and gear as a result of a 2008 hurricane (if any): .....$ _____

## 2008 Total Revenue for the Shrimping Boat You Used *Most Often* in 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

17. Total money received in 2008 for food or bait shrimp caught by the shrimping boat you used *most often* in 2008 (gross revenue): .....$ _____

18. Total money received in 2008 from all commercial fishing **OTHER THAN SHRIMP** for this boat in 2008 (gross revenue): .....$ _____

19. Total government (state and federal) payments related to commercial fishing received for this boat in 2008 (such as grant money, BRD money, disaster assistance, EDRP): .....$ _____

## 2008 Trip Expenses for the Shrimping Boat You Used *Most Often* in 2008

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

20. On a ***typical day of shrimping*** with this boat in 2008, what were your average operating costs in the following categories:

| | | |
|---|---|---|
| Fuel ..... | $ _____ | per day |
| Oil ..... | $ _____ | per day |
| Ice ..... | $ _____ | per day |
| Salt ..... | $ _____ | per day |
| Groceries ..... | $ _____ | per day |
| Other Supplies ..... (gloves, shrimp powder, etc.) | $ _____ | per day |
| **TOTAL COST** ..... | $ _____ | per day |

21. Typical amount of fuel used per day of shrimping in 2008: .... _____ gallons per day

22. Typical price per gallon of fuel in 2008: ..... $ ___. ___ ___

**Questions? Call Jack Isaacs at (225) 765-2605 or Alex Miller at (228) 875-5912**

**Other 2008 Expenses for the Shrimping Boat You Used *Most Often* in 2008**

*** Please do not leave anything blank! * * Please write "0" if an answer is zero or none! ***

23. Is the owner also the captain of this boat? ☐ Yes ☐ No

24. If owner is the captain, is the owner paid a captain's share? ☐ Yes ☐ No ☐ N/A

**If Yes**, total amount of captain's share in 2008: $_____

25. Total amount paid to **HIRED** crew (and captains) of this boat in 2008: $_____

26. A) Total amount that you paid in 2008 for boat maintenance, repair, replacement, new purchases, or upgrades: $_____

B) For the expenses paid above, please *estimate* what percentage came from the following categories:

| | |
|---|---|
| Engine | _____% |
| Freezer | _____% |
| Gear & Trawl | _____% |
| Electronics | _____% |
| Hull | _____% |
| **Total** | **100 %** |

C) These expenses included the following:

(Check all that apply)

☐ Minor maintenance or regular repairs
☐ Major repairs or haul-out
☐ New purchase or upgrade

27. Did you insure this boat in 2008? ☐ Yes ☐ No

**If Insured:** Average boat insurance premium **per month** in 2008: $ _____

Total coverage amount if boat is lost: $ _____

28. Did you have any loan(s) on your boat at any time during 2008: ☐ Yes ☐ No

**If Yes:** Total amount you still owed at ***end of*** 2008: $ _____

Average loan payment ***per month*** in 2008: $ _____

Estimated annual interest rate on loan in 2008: _____ %

29. **Total overhead expenses** in 2008 for this boat: **INCLUDING** docking fees, permits, share of rent, cell phone bills, professional services, etc... ***PLEASE DO NOT INCLUDE*** insurance premiums, loan payments, and income taxes $ _____

**Thank You!**

**Please mail this completed survey using the enclosed prepaid envelope to:**

**2008 Economic Survey of Gulf State Shrimp License Holders**
**P.O. Box 98000**
**Baton Rouge, LA 70898-9000**

**Questions? Call Jack Isaacs at (225) 765-2605 or Alex Miller at (228) 875-5912**

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NAME: _____

ADDRESS: _____

_____

TELEPHONE NUMBER: (_____) _____ - _____

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