

# ATTACHMENT J.1.1

## STATEMENT OF WORK

### FOR-HIRE SURVEY (FHS)

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## **1. Background**

The National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA Fisheries) is required to conduct surveys of marine recreational fishing. The For-Hire Survey specifically gathers information on fishing effort (number of angler trips) and catch by marine recreational anglers fishing on for-hire (charter boat and headboat) vessels.

Catch, effort, and participation statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, the fishing effort, and the seasonal and geographical distribution of the catch and effort are required for the development of rational management policies and plans. Recreational fisheries data are essential for NOAA Fisheries, the Regional Fishery Management Councils, the Interstate Fisheries Commissions, State resource management agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries. The allocation of many fishery resources depends on the results of these surveys.

The FHS consists of two independent, yet complementary surveys, a vessel-directory telephone survey to assess fishing effort, and an access-point intercept survey to assess catch per-unit of effort. Data from the two surveys are combined to estimate total fishing effort and catch by species. The work specified in this Statement of Work is for conduct of the telephone survey portion of the FHS.

The telephone survey portion of the FHS will be conducted for all Atlantic Coast states from Maine through Georgia from 2005-2007. It should be noted that during this period, the FHS will overlap with other charter and headboat monitoring programs. These other programs include the Northeast (Maine-Virginia) Vessel Trip Reporting Program (VTR), the Southeast Regional Headboat Survey (SERHS), various state logbook programs, and the Marine Recreational Fisheries Statistics Survey (MRFSS). In some cases, these programs have been integrated with the FHS to reduce reporting burden. NOAA Fisheries will provide information on each of these other programs upon request.

## **2. General Requirements**

The contractor shall be responsible for conducting the FHS on a 10-month basis (March through December, or waves 2-6) on the Atlantic coast north of Florida, except for Maine and New Hampshire, where it will be conducted on an 8-month basis (March through October, or waves 2-5).

The contractor shall be responsible for all data collection tasks described in the FHS Statement of Work, including but not limited to:

1. Hiring, training, deployment and supervision of interviewers.
2. Survey administration, including selection of specific sampling units to be interviewed.

3. Establishment of a toll-free telephone number for vessel contacts during FHS administration.
4. Mailing of notification letters and logsheets to captains selected to be included in the following week's sample.
5. Collection of specified fishing effort information by surveying vessel representatives through Computer Assisted Telephone Interviewing (CATI).
6. Collection of specified fishing effort information by allowing responses by toll-free fax and a PIN-protected website.
7. Acceptance of Vessel Trip Reporting (VTR) program logsheets via fax for survey completion where overlap occurs with this program.
8. Making modifications to the CATI programs to accommodate changes to the survey instrument.
9. Editing of every entered variable for possible coding or key-entry errors identifiable as out-of-range, illogical, or unreasonable, and correcting all such errors identified in the data bases to produce error-free data.
10. Document all data edits and corrections.
11. Preparation of two-month progress reports (wave reports), as well as an annual final summary report of the data collection procedures and results.
12. Attendance and participation at three data review meetings per year.
13. Participation in bi-weekly conference calls with NOAA Fisheries.
14. Accommodation of states wishing to conduct the telephone survey portion of the FHS.
15. Timely delivery of error-free electronic databases to NOAA Fisheries
16. Updating the vessel directory with current information collected through contacts with vessel operators, provided by NOAA Fisheries, or provided by the contractor conducting the access-point intercept survey.
17. Coordination of the FHS with NOAA Fisheries and entities conducting the access-point intercept survey.

### **3. Sampling Design**

#### **3.1 Sample Frame**

The sampling unit for the FHS is a for-hire vessel. The sample frame is constructed from a comprehensive directory of for-hire boats for all states, from Maine through Georgia. The vessel directory consists of a vessel identifier (vessel name or registration number), the name, address and telephone number of an identified vessel representative (captain or owner), as well as a variety of accessory information, such as eligibility, activity, and cooperation status (Appendix A provides complete variable descriptions and formats for the vessel directory). NOAA Fisheries shall provide the most current vessel directory to the contractor.

To be included in the sample frame, a vessel must be active in the for-hire fishery, and have complete contact information, including a vessel identifier (either vessel name or number), at least one telephone number for a vessel representative, and the county and state in which the vessel operates. Vessels that do not meet these criteria remain in the

vessel directory, but are not included in the sample frame. Periodically, contact information for these vessels will become available, through dockside interaction or some other means. In addition, new vessels will be identified from license files, advertisements, field contacts, etc.. Such updates will be provided to the contractor at least one week prior to sample selection for each data collection period. The contractor shall be responsible for updating the vessel directory with new information, as well as documenting all changes and updates prior to sample selection.

The contractor shall also be responsible for updating the vessel directory with information collected throughout the course of the telephone survey. Such updates will include, but are not limited to, information concerning the eligibility, activity and cooperation status of vessels. If a representative indicates that a vessel never participates in for-hire fishing, that vessel shall be coded as ineligible, such that it will not be included in future sampling frames. If a representative indicates that a vessel is inactive (out of season, being fixed, etc.), the vessel shall be coded as such, and the wave and month in which activity will resume shall be recorded. Inactive vessels are not included in the sampling frame. The contractor shall be responsible for restoring the activity of the vessel at the appropriate time. If a representative refuses to participate in the survey (hard refusal), the vessel shall be coded as non-cooperative. Such vessels remain in the sample frame, but are not contacted (automatically coded as refusal) if selected for sampling. Non-cooperative vessels shall remain as such for four months following the initial refusal, after which time they shall be re-coded as cooperative. Upon subsequent refusals, the vessel shall be coded as non-cooperative for a period of six months.

The contractor shall incorporate information obtained during the telephone survey into subsequent weeks' sampling activities within a wave. For example, if a representative reports that a vessel is inactive (and will be inactive for ten weeks) during the first week of a sampling period, that vessel should not be contacted during subsequent weeks within the sampling period. Rather, it should be coded as inactive for all weeks that it was selected within that period. Similarly, if a vessel representative provides new contact information, that information should be immediately incorporated into the vessel directory, and used for all subsequent contacts.

### **3.2 Sample Selection**

Sampling is stratified by vessel type (headboat and charter boat), state, and week, within two-month sampling periods (waves). Sampling is without replacement within strata (vessel type/state/week). However, replacement sampling is permissible among strata within a wave. For example, a vessel may be selected multiple times within a wave. Sample weeks are distributed among waves for administrative purposes, as well as for consistency with other sampling programs (see Table 3, Weekly Wave Assignments, for the distribution of sample weeks among waves). The sample frame will be created prior to the start of each wave, and sample will be drawn for all weeks within the wave (i.e. sample will be drawn for all weeks within a wave prior to the start of each wave).

NOAA fisheries shall supply the contractor with a SAS program that produces the sample frame (from the vessel directory), as well as the sample draw for each stratum within a wave. In preparation for the sample draw, the frame is sorted by permit category, county and descending vessel length category, in that order (these are accessory variables in the vessel directory). After randomly sorting vessels within each permit/county/vessel length category, the frame is sampled by identifying a random start point and selecting every *n*th vessel, such that sampling requirements are met on one complete pass through the sample frame.

Output from the sample draw program includes a sample frame (“good list”) for each state, the sample draw for each stratum, and a list of vessels that were omitted from the frame as a result of ineligibility or incomplete contact information (“bad list”). All outputs from the sample draw program shall be delivered to NOAA Fisheries, as well as the contractor responsible for conducting the intercept survey, at least three weeks prior to the start of each wave. Appendix A provides variable descriptions, formats and naming conventions for the sample frame and sample draw files.

### **3.3 Sample Sizes**

Currently, vessels are sampled at a rate of 10% (rounded to next highest whole number) within each stratum, with a minimum sample size of 3 vessels. These rates are subject to change as the survey progresses. Table 1 shows the distributions of charter and head boats by state based on current information, as well as estimated weekly sample sizes. Table 2 shows estimated sample sizes by state and wave.

The approximate sample sizes shown are provided only to facilitate preparation of cost estimates. These allocations are provisional and subject to revision. NOAA Fisheries will submit delivery orders with actual sampling distributions at least one month prior to the start of each wave.

### **3.4 Inter-Agency Add-Ons**

In previous surveys, states and other Federal organizations have funded supplemental sampling to improve state-level estimates, or supplemental questions to address specific management needs. The contractor shall work in a cooperative manner with such entities to implement these add-ons. These efforts shall be implemented as either an additional delivery order to the NOAA Fisheries contract, or by direct contract between the entity and the contractor. NOAA Fisheries will provide the FHS Contractor with a list of state fishery agencies and interstate fisheries commissions.

Proposed modifications to the survey, by any entity other than NOAA Fisheries, must be approved by NOAA Fisheries, in writing, prior to implementation. Data resulting from any add-on questions or additional sampling paid for by an entity other than NOAA Fisheries, and collected through the For-Hire Survey, shall be included in the data bases provided to NOAA Fisheries.

NOAA Fisheries will not accept add-on samples obtained by any contractor other than the For-Hire Survey Contractor.

#### **4. Data Collection Design**

##### **4.1 Data Collection Procedures**

Data collection shall be conducted on a weekly basis during all weeks within each wave. A week is defined as Monday through Sunday. All weekly dialing should be completed during the week following a specified week of fishing (Monday-Sunday). Respondents should be asked to report angler and vessel fishing activity for the prior week that ended on a Sunday. This approach results in a recall period of 7-14 days for all respondents. Table 3 contains the 2005 assignment of weeks per wave.

All interviewing shall be done through a Computer Assisted Telephone Interviewing (CATI) system. The FHS Contractor is responsible for purchasing and maintaining their own CATI system software and hardware (not included in the cost of this contract). The contractor is responsible for adapting the questionnaire to work on their systems. The FHS Contractor will be responsible for maintaining the computer programs necessary for accurate CATI data collection throughout the contract period, and for modifications to the programs when there are changes made in the questionnaire.

##### *4.1.1 Vessel Notification*

The contractor shall mail an advance letter to the representative of each selected vessel one week prior to the week for which the vessel was selected to report (sample week). The letter will notify the representative of the vessel's selection for the survey, the week for which he or she will be asked to provide data, and the week in which the interview will take place. Representatives will also be provided with web, fax and phone contact information, as well as instructions for completing the survey through alternative reporting modes (Section 4.1.3). A legal-size logsheet with the basic questions that will be asked during the survey will be included with the mailing. An example advance letter is included in Appendix B. All advance materials will be provided to the FHS Contractor electronically.

##### *4.1.2 Dialing Procedures*

Once a vessel has been selected, at least ten attempts must be made to contact that vessel's representative. Telephone calls must be made during the time of day that maximizes the potential to contact vessel operators. All first attempts should be made the first day, and repeat attempts should be distributed among weekend/weekday and day/evening time periods as listed below. At least five additional attempts must be made to reach each representative once a phone contact with a co-resident has been made. When each number is dialed, the telephone should be allowed to ring five times before being classified as a "no answer." Interviewers should continue to attempt to

contact vessel representatives until they have conducted an interview, determined that the boat is no longer operating, or made ten attempts. The contractor shall document the results of each attempt for each sampled vessel.

The pattern of dialing for each number should include at least one daytime attempt and three night attempts. The time separating day and night is 5:00 p.m (local time for the area being called). No calls should be attempted after 9:00 PM (local time). Once a vessel representative is contacted, future calls to that individual should be made on an appointment basis if the interview cannot be completed at the time of initial contact. Respondents at the contact number should be questioned as to the best time to call back in order to interview the eligible respondent(s).

When a given vessel is selected for telephone sampling, the telephone interviewer should first attempt to contact the principal representative at each of his/her listed phone numbers. If it is determined for certain that the principal representative will not be available during the dialing period (ie. sick, on vacation), the interviewer should attempt to contact one or more other known owners or operators of the vessel in question (using additional phone numbers or contacts from the vessel directory) during the week. During such situations, 10 total attempts should be made to contact a representative of the vessel.

Although repeated attempts to contact an individual vessel representative may occasionally result in a final outcome of “no answer”, “busy” or “answering machine”, the percentage of such results should not exceed 25 percent of the total calls attempted in any state/wave combination. This means the FHS Contractor may need to exceed the minimum number of ten attempts to control for this factor. In the past, this type of non-response ranged from 15-25 percent in low activity waves and 20-30 percent in high activity waves.

#### *4.1.3 Alternate Reporting Options*

To maximize response rates, NOAA Fisheries offers alternative response options. Vessel representatives shall be permitted to fax completed logsheets (legal-size, included with notification materials) to a toll-free fax line, which shall be maintained by the contractor (Appendix C). If a logsheet is accepted as complete for a sampled vessel, further attempts to contact the vessel shall be discontinued for that sample week. Every effort shall be made to avoid re-contact of a vessel once it has reported via fax. In 2004, approximately five percent of sampled captains utilized the fax option.

Vessel representatives shall also have the option of submitting data via an online tool developed specifically for the FHS. The tool is PIN protected through a unique sample identification number, assigned once the draw has been completed for that wave, and included in the advance mailing. Near real-time sample monitoring is required with this option, so that attempts to contact a vessel representative by telephone are discontinued following completion of an online survey. Every effort shall be made to avoid re-contact of a vessel once they have reported via the web. In 2004,



approximately five percent of sampled captains utilized the web option. It is anticipated that web reporting will increase as vessel representatives become more aware of its availability.

NOAA Fisheries will provide the software and database structure for the webtool. The contractor must be able to host both the webtool and the administrative component (this requires PHP support with sessions enabled).

Throughout the course of this contract, other reporting options may be developed, including state-specific reporting options. The contractor shall work cooperatively with NOAA Fisheries and state agencies to develop and implement such reporting options.

#### **4.2 Survey Instrument**

The following instructions apply to the 2005-2007 For-Hire Survey questionnaire. NOAA Fisheries reserves the right to make changes in data items for regional or annual customization, and in order to improve response rates or accuracy of the responses. NOAA Fisheries will submit any questionnaire changes to the contractor at least 30 days before the beginning of the dialing period for each wave. All questionnaires must be approved by NOAA Fisheries.

The current FHS questionnaire is included in Appendix D. NOAA Fisheries will provide the contractor with CATI executables of the 2004 telephone survey instrument.

#### **4.3 Data Collection Staff**

The contractor shall be solely responsible for hiring, training and supervising persons to serve as interviewers for the FHS. All calls shall be made by experienced telephone interviewers, trained and supervised by the contractor.

The contractor should consider using a small, core set of interviewers to conduct the FHS, and have the same interviewer responsible for a certain set of captains for a wave, or even across waves. Some vessel operators will be called repeatedly throughout the year and perhaps even within a wave, depending upon the size of the fleet in a particular state. This repeated calling may result in increased resistance to being interviewed if interviews are thought to be formal and impersonal. Having the same interviewer conduct repeated contacts with an individual should help establish a rapport with respondents, and familiarity with those captain's operations may help the interviews flow more smoothly and take less time.

#### **4.4 Interviewer Training**

The FHS Contractor shall be responsible for providing interviewer training for the telephone data collection. Training programs shall be designed to ensure quality and consistency of interviewing methods, questionnaire use, coding method, and quality checks of data. The level of training and content of the training programs must be

approved by NOAA Fisheries.

An extensive training session must be held for all personnel who have not previously worked on the survey. This training must cover general telephone interviewing procedures, as well as procedures specific to the FHS. Training sessions must include a general overview of the background, purpose and design of the FHS, and the uses of the data. The introduction shall be sufficient to allow interviewers to respond to general questions regarding the FHS. This includes an understanding of the sampling procedures and minimum sample sizes for FHS (e.g. Why am I being called again? How was I selected? Why are you calling me now when we don't start fishing until July?)

Questions and discussion should be encouraged to ensure that all interviewers understand the design and overall purpose of the survey. Interviewers should be briefed on the existence of other programs in various states and regions that monitor charter and head boats (NOAA Fisheries will provide a list of other reporting requirements for the areas covered by the FHS). The overview must be followed by an item-by-item explanation of the data collection instrument, and a review of all materials used to conduct the interviews. Subjects addressed in the telephone survey training sessions must include, but not necessarily be limited to:

1. An introduction to the objectives, goals, design, and operation of the FHS Survey addressing:
  - a. Unit of sampling.
  - b. Method and importance of systematic random sampling of the "charter" and "head" boat strata for weekly interviews.
  - c. Eligibility of vessels and vessel operator respondents.
  - d. Recording respondents' level of cooperation.
  - e. Definitions.
  - f. Assuring confidentiality of responses.
  - g. Awareness of weekly sampling quotas and tolerances.
  - h. Requirement of supervision and monitoring.
2. Proper procedures for conducting an interview, including:
  - a. Recording call attempts and completions.
  - b. Screening respondents for eligibility.
  - c. Setting appointments and making callbacks.
  - d. Overcoming respondent resistance and discouraging refusals.
  - e. Recording answers correctly into the CATI System database.
  - f. Using county, site and species look-up lists.
  - g. Proper probing to clarify imprecise or confusing responses.
  - h. Reading the questionnaire verbatim, in a manner that respondents can easily understand.
  - i. Obtaining complete verbatim answers.
3. Directory update/correction probing

- a. When appropriate to ask for additional vessel/contact information.
- b. How to probe “offscript” and obtain specific information.

Each training session must contain periods of role-playing to ensure good interviewing technique. All trainees must conduct practice interviews with supervisors to allow first-hand criticism of interviewing technique.

All interviewers, including those employed during previous waves, must receive a final briefing before the start of each wave's dialing period. This briefing will refresh techniques established in previous waves, review the basic details of the survey, explain the exclusions in questionnaires that are applicable to that wave, and point out any changes. Interviewers shall be kept informed of developments in the recreational fisheries being surveyed, and shall be able to refer respondents to the NOAA Fisheries staff for further information. Questions are strongly encouraged during these final briefings.

Interviewers will be provided with copies of the Privacy Act policy, the explanation of why a charter or head boat vessel operator may be reporting to multiple entities, the URL for the MRFSS web site, and all other necessary documents and forms.

#### **4.5 Quality Control of Data Collection**

##### *4.5.1 Management of Dialing*

The contractor shall be responsible for ensuring that all dialing requirements and protocol are met according to specifications outlined in the SOW. The contractor shall provide reports summarizing data collection activities, and detailing dialing results by day and interviewer at the Government's request.

##### *4.5.2 Management / Supervision of Interviewers*

Project supervisors must oversee the operation of the FHS. These individuals must be experienced in telephone interviewing and be knowledgeable about the MRFSS, the FHS, and of other charter and headboat monitoring programs. Supervisors must also have effective skills in managing and motivating personnel. Supervision shall include direct observation of interviewer procedures, silent monitoring of in-progress interviews, and/or taping of calls followed by comparison to entered data. Additional training or remedial action shall be taken whenever appropriate.

All of the interviews completed by each new interviewer on the first day of work must be tracked to ensure that the interviewer is following procedures correctly and has good interviewing technique. After the first day, 10 percent of each interviewer's work must be validated each wave through silent interview monitoring or recording of telephone calls for later comparison with entered data.

During silent monitoring, supervisors should have the capability to visibly observe the data that is being entered while listening to the interview. At no point shall the supervisor interrupt the interview. Following the interview, the supervisor should provide feedback to the interviewer and give suggestions to help improve interviewing technique.

The contractor must provide the capability for NOAA Fisheries staff, or others designated by NOAA Fisheries staff, to perform silent monitoring of FHS interviewing and callbacks from a remote phone. If the FHS monitoring is done through some other method, the contractor shall provide this information to NOAA Fisheries staff on request and allow them to view the data (may be hard copy or separate data file).

Results of all supervisory activities must be fully documented. This includes documenting results of interview validation and follow-up counseling or instruction, and describing circumstances necessitating additional training or other remedial action.

## **5. Survey Data Preparation**

### **5.1 Data Entry**

The contractor shall use a CATI system for data entry during all FHS telephone interviewing. The contractor may propose other forms of automation to replace or supplement CATI, or to improve support activities. The contractor shall be responsible for compiling data from all modes of reporting into a single database for delivery to NOAA Fisheries. This may require development of a supplemental data-entry tool for transcription of faxed log-sheet data.

### **5.2 Databases and Record Formats**

FHS interview datasets contain information for all vessels selected for inclusion in the survey, regardless of the result of the interview or activity of the vessel. Each record consists of vessel and trip information. If a vessel reports multiple trips during a sample week, then the dataset will contain multiple records for that sample week / vessel combination. Such records are linked to a vessel by a unique, seven-digit vessel identification number (vessel ID). A single interview dataset, consisting of survey data for all sample weeks within a wave, shall be delivered for each wave. Specific variable names, formats and codes for the FHS interview datasets are included as Appendix E.

The dialing results database contains the outcome of each dialing attempt for each vessel selected in a week. Weekly data should be compiled into one database for the wave. Appendix E contains the variable names, formats and codes for the dialing results database.

### **5.3 Data Editing**

The FHS Contractor shall be responsible for delivering error-free data on the specified

delivery date. Error-free data is defined as data that passes through NOAA Fisheries quality assurance program with no errors detected. NOAA Fisheries will provide an error-checking program to the FHS Contractor.

Error checking should be accomplished through either the use of table look-ups during data entry, or by running editing routines on datasets following data entry for the wave. All codes should be controlled by the CATI system to the extent possible, such that only valid, documented values can be incorporated into the datasets. Every data element must be checked for data entry errors, reasonableness in falling within an acceptable range, use of valid codes, and logic in relation to other data elements. These checking programs will continue to evolve as we gain experience in conducting the FHS.

The FHS Contractor must examine questionable records identified by the error-check program. This may require a callback to the vessel or checking with the interviewer. In addition, possible errors may also be found during periodic data review meetings. Such records must be examined and resolved by the contractor.

Those records questioned, and corrected or verified, should be reported to NOAA Fisheries on spreadsheets listing the key information to identify the record (vessel id) and the value questioned, the resolved or corrected value, and the reason for the correction. If outlier analysis is used to question the recorded responses the outlier (limit) values should be included on the spreadsheet. This documentation shall be included with each wave's deliverables.

If errors are found during data review meetings, the FHS Contractor shall be responsible for correcting the data within one month of the end of the meeting.

## **6. Reporting Requirements**

### **6.1 Delivery of Datasets**

Interview datasets and dialing results datasets shall be delivered following the delivery schedule in Section F. Updated vessel directories, sampling frames (both "good" and "bad" lists), and sample draw files shall be delivered at least three weeks prior to the start of each wave. All datasets shall be delivered as SAS transport files (file extension .xpt)

The datasets should be accompanied by documentation that shall include, but not necessarily be limited to the following:

- a. Characteristics of the files (e.g.. record formatting characteristics; number of records in each file; data format);
- b. A description of file content including the project name; year and wave of data; date generated; person to be contacted; and other pertinent descriptive information.

## 6.2 Wave Reports

The FHS Contractor shall prepare and submit reports of survey activities and results for each wave of data collection. These reports are to be provided to NOAA Fisheries on a bimonthly basis according to the delivery schedule in Section F. These data are useful for tracking trends in dialing success, as well as identifying anomalies in the data. The contractor shall deliver three bound hard copies, and an electronic copy of each wave report. In addition, certain data (primarily dialing results) will be required in a database format (MS-Access, SAS, spreadsheet) that allows manipulation of the data at the state level. All deliverables are the property of the government and may be passed on to other contractors during future procurement actions. Examples of wave report tables can be downloaded from: <ftp://cusknmfs.noaa.gov/mrfss/tmp/rfq/>

Wave reports shall include, but not necessarily be limited to, the following:

1. Overview narrative.
2. By week and state:
  - a. Total vessel quotas,
  - b. Respondents
    1. Numbers and percent of active eligibles
    2. Numbers and percent of inactive eligibles
    3. Numbers and percent of ineligibles
  - c. Non-respondents
    1. Numbers and percent due to refusal
    2. Numbers and percent due to language barrier
    3. Numbers and percent due to inability to contact
    4. Average number of attempts to contact non-respondents
    5. Numbers and percent with no contact possible (directory contains number but number disconnected, wrong number, etc)
3. Vessel directory summary by state:
  - a. Number of vessels in the directory
  - b. Number of vessels in the directory with complete enough data for sampling purposes (good list)
  - c. Number of vessels in the directory with incomplete data for sampling purposes (bad list)
  - d. Number of vessels in the directory that are inactive (directory indicates that vessel operator indicated no plans to be active the entire wave)
  - e. Number of vessels in the directory that are ineligible (no longer operating as a for-hire vessel, freshwater)
  - f. Missing items that placed vessels on bad list
    1. Vessel id (vslidflg)
    2. Ineligible (elig\_flg)
    3. State flag (rare after the survey is operational for a few months)

4. No phone number (fon\_flag)
  5. Business/port county (ncst\_flg - county of operation missing or non-coastal)
4. Distribution of interview variables by state:
    - a. Status codes by Dialing results
    - b. Attempts by Result
    - c. Vessel Type by Area Fished
    - d. Time trip started by Time trip ended (by vessel type)
    - e. Vessel Type by Day of Trip
  5. Validation results, including:
    - a. Number of calls validated by state and wave
    - b. Number and percent of errors found by error type (coded wrong answer, misunderstood respondent)
  6. Overview of results of any of the flexible questions that may be exercised by subregion (to be determined mutually); and
  7. Recommendations and proposals for changes to address problems in the conduct of the telephone survey.

### **6.3 Annual Reports**

An annual report that provides an overview of data collection procedures and results is required for each year of the contract. The contractor shall deliver three bound hard copies, and an electronic copy of each annual report. All deliverables are the property of the government and may be passed on to other contractors during future procurement actions. The annual report shall include, but is not limited to the following:

1. Annual summary of the tables provided in the wave reports,
2. Description of data collection procedures and results, including description of any changes throughout the sampling year,
3. Description of the coding and editing procedures,
4. Description of other quality control measures and procedures, such as silent monitoring and call-backs,
5. Listings of the FHS edit checking programs, and
6. Listing of FHS sample draw programs.

Other required deliverables (some mentioned previously in this SOW):

1. Electronic executables of all CATI versions of all questionnaires, including flex questions.
2. Electronic working copies of all data editing, quality control, and sample draw programs.
3. Hard copies and electronic files of all manuals, forms, and training presentations

- used in each year of the survey, including any revisions.
4. Any other specially-designed software developed for tracking of assignments, quota monitoring, etc; however, if widely available commercial software is used, only examples of that use would be required. If a web application is designed or modified, that application would need to be provided electronically.
  5. Documentation of validated or edited records resulting from error checking routines.

## **7. State Subcontracting**

In 2003 and 2004, several states conducted the telephone survey using state personnel. NOAA Fisheries wishes to continue to extend this opportunity to state agencies. To facilitate state participation, NOAA Fisheries has modified the web-reporting tool to allow state subcontractors to directly submit all required data, including both trip and call attempt (call administration) information. It is our expectation that this will increase efficiency and reduce burden on the contractor for accommodating such states. NOAA Fisheries will provide the FHS Contractor with all web-reporting software.

In order to simplify the subcontracting arrangement, each state subcontractor will be required to complete the following tasks:

- 1) Mail advance materials. The FHS Contractor will print all logsheets and supply the required materials to the state subcontractors for the advance mailing. States that wish to alter (i.e. personalize) the advance letter must receive final approval from NOAA Fisheries 14 days before the first mailing.
- 2) Serve as the primary FHS contact for their state (e.g. field questions, set up call appointments with respondents, etc.)
- 3) Administer telephone survey using FHS webtool according to requirements set forth in the FHS SOW.
- 4) Submit data on contacts and validation through FHS webtool.
- 5) Update state vessel directory and current wave's sample with information collected through the telephone survey.
- 6) Validate interview data according to the requirements set forth in the FHS SOW.

The FHS Contractor will complete remaining tasks, including administration of the web applications, edit checking, compiling state submitted data, and data delivery. The contractor shall be responsible for ensuring that all survey protocol, data quality standards and timelines specified in this statement of work are met.

## **8. MRFSS Definitions**

**Fishing Modes:** FHS is structured around two types or "modes" of fishing.

1. Head boat mode includes fishing on boats that are licensed by the U.S. Coast Guard to carry more than 6 passengers. On such boats fishing space and



privileges are usually provided for a fee. Head boats are generally large, they may carry from 7 up to 150 paying passengers, and anglers usually pay on a per-head basis for the opportunity to fish on them. The vessel is operated by a licensed captain (guide or skipper) and crew. However, headboats may also occasionally take “charter” trips, where passengers pay as a group to hire the captain and crew for the trip. In some areas of the country head boats are called party boats or open boats. These boats are usually not launched until a specified number of anglers have paid and boarded. Anglers on these trips usually do not know all of the other anglers on the boat. Head boats predominantly engage in bottom fishing. Head boats may make half-day, full-day, or overnight trips.

2. Charter boat mode includes fishing on boats that are only licensed by the Coast Guard to carry up to six passengers. Charter boats are generally smaller in size than head boats, and they are usually hired, or “chartered,” by a group of anglers. They are operated by a licensed captain and crew, and the participants are usually part of a pre-formed group. Thus, charters are usually closed parties (i.e. closed to participants other than those who are part of the pre-formed group). A subset of charter boats are also called guide boats, which are small boats fishing inland waters with two to three clients. Charter boats can engage in a full range of fishing techniques, including trolling, bottom fishing, and drift fishing. Charter boats may make all-day or half-day trips.

**Fishing Trip:** A fishing trip is defined as fishing during part or all of one waking day in one mode. Fishing trips should be considered to be waking days, as opposed to calendar days. A trip beginning in the evening but ending past midnight would be considered one trip.

**Marine Recreational Fishing:** FHS collects data on fishing in marine (or salt) waters by recreational anglers who are fishing for finfish, not shellfish, and whose trips begin and end anywhere in the United States.

**Large Pelagic Species (LPS):** Highly migratory species (HMS) including tunas, sharks, billfish, dolphin, wahoo, amberjack or similar offshore species.

**Regions and Subregions:** The FHS is conducted in the following Regions and subregions:

**Region II - Northeast**

Subregion 4. **North Atlantic** [Maine, New Hampshire, Massachusetts, Connecticut and Rhode Island].

Subregion 5. **Mid-Atlantic** [New York, New Jersey, Delaware, Maryland, and Virginia].

**Region III - Southeast**

Subregion 6. **South Atlantic** [North Carolina, South Carolina, and Georgia,].

**Wave:** FHS is structured around two-month sampling periods called "waves."

- January-February = Wave 1
- March-April = Wave 2
- May-June = Wave 3
- July-August = Wave 4
- September -October = Wave 5
- November-December = Wave 6

**Week:** For the FHS, sampling within waves is conducted on a weekly basis. A week is defined as Monday through the following Sunday.

**Ineligible Vessel:** An ineligible vessel is a vessel that does not do any for-hire fishing. Such vessels are not removed from the directory during the survey year. However, they are coded as ineligible in the vessel directory so they will not be included in the sampling frame.

**Inactive Vessel:** An inactive vessel is one that is currently not actively participating in for-hire fishing, but remains a member of the for-hire fleet. For example, most vessels are inactive due to repairs, or the seasonal fishing in their state. Inactive vessels are not included in the sample draw. To determine when to resume calling, we record the month and year of their expected return.

**Non-cooperative Vessel:** A vessel is designated non-cooperative when the designated vessel representative refuses to cooperate with the annual survey effort (e.g. hard refusal – "Take me off your list.") This is not to be used when someone refuses the weekly survey (e.g. "I don't have time right now."). These vessels are still drawn, but not contacted, as prescribed in section 3.1.

## Tables

**Table 1. Estimated vessel contacts by stratum**

State/Subregion	Charter	Est Weekly CH sample	Headboats	Est Weekly HB sample	Total Est Weekly Sample
Connecticut	110	11	3	3	14
Maine	115	12	4	3	15
Massachusetts	610	61	22	4	65
New Hampshire	60	6	8	3	9
Rhode Island	160	16	4	3	19
<b>North Atlantic Subregion</b>	<b>1055</b>	<b>106</b>	<b>41</b>	<b>16</b>	<b>122</b>
Delaware	150	15	3	3	18
Maryland	650	65	15	3	68
New Jersey	630	63	51	6	69
New York	415	42	52	7	49
Virginia	255	26	8	3	29
<b>Mid-Atlantic Subregion</b>	<b>2100</b>	<b>210</b>	<b>129</b>	<b>13</b>	<b>223</b>
<b>Northeast Region</b>	<b>3155</b>	<b>316</b>	<b>170</b>	<b>17</b>	<b>333</b>
Georgia	125	13	0	0	13
North Carolina	460	46	16	3	49
South Carolina	220	22	8	3	25
<b>South Atlantic Subregion</b>	<b>805</b>	<b>81</b>	<b>24</b>	<b>6</b>	<b>87</b>
Puerto Rico					0
U.S. Virgin Islands					0
<b>U.S. Caribbean Subregion</b>					<b>0</b>
<b>Southeast Region</b>					<b>0</b>
<b>Total</b>	<b>3960</b>	<b>396</b>	<b>194</b>	<b>23</b>	<b>419</b>

**Table 2. Estimated Contacts by Wave**

STATE	WAVE						Annual Total
	1	2	3	4	5	6	
Connecticut		126	126	112	126	126	616
Maine			131	116	131		377
Massachusetts		585	585	520	585	585	2,860
New Hampshire			81	72	81		234
Rhode Island		171	171	152	171	171	836
<b>North Atlantic Subregion</b>		<b>882</b>	<b>1,094</b>	<b>972</b>	<b>1,094</b>	<b>882</b>	<b>4,923</b>
Delaware		162	162	144	162	162	792
Maryland		612	612	544	612	612	2,992
New Jersey		621	621	552	621	621	3,036
New York		437	437	388	437	437	2,134
Virginia		257	257	228	257	257	1,254
<b>Mid-Atlantic Subregion</b>		<b>2,088</b>	<b>2,088</b>	<b>1,856</b>	<b>2,088</b>	<b>2,088</b>	<b>8,120</b>
<b>Northeast Region</b>		<b>2,970</b>	<b>3,182</b>	<b>2,828</b>	<b>3,182</b>	<b>2,970</b>	<b>15,131</b>
Georgia		113	113	100	113	113	550
North Carolina		441	441	392	441	441	2,156
South Carolina		225	225	200	225	225	1,100
<b>South Atlantic Subregion</b>		<b>779</b>	<b>779</b>	<b>692</b>	<b>779</b>	<b>779</b>	<b>3,806</b>
Puerto Rico							
U.S. Virgin Islands							
<b>U.S. Caribbean Subregion</b>							
<b>Southeast Region</b>	<b>0</b>	<b>779</b>	<b>779</b>	<b>692</b>	<b>779</b>	<b>779</b>	<b>3,806</b>
<b>Total</b>	<b>0</b>	<b>3,749</b>	<b>3,960</b>	<b>3,520</b>	<b>3,960</b>	<b>3,749</b>	<b>18,937</b>

**Table 3. Weekly Wave Assignments**

2005			2006			2007		
Date	Week	Wave	Date	Week	Wave	Date	Week	Wave
Jan 3 - Jan 9	1	Wave One	Jan 2 - Jan 8	1	Wave One	Jan 1 - Jan 7	1	Wave One
Jan 10 - Jan 16	2		Jan 9 - Jan 15	2		Jan 8 - Jan 14	2	
Jan 17 - Jan 23	3		Jan 16 - Jan 22	3		Jan 15 - Jan 21	3	
Jan 24 - Jan 30	4		Jan 23 - Jan 29	4		Jan 22 - Jan 28	4	
Jan 31 - Feb 6	5		Jan 30 - Feb 5	5		Jan 29 - Feb 4	5	
Feb 7 - Feb 13	6		Feb 6 - Feb 12	6		Feb 5 - Feb 11	6	
Feb 14 - Feb 20	7		Feb 13 - Feb 19	7		Feb 12 - Feb 18	7	
Feb 21 - Feb 27	8		Feb 20 - Feb 26	8		Feb 19 - Feb 25	8	
Feb 28 - Mar 6	9	Wave Two	Feb 27 - Mar 5	9	Wave Two	Feb 26 - Mar 4	9	Wave Two
Mar 7 - Mar 13	10		Mar 6 - Mar 12	10		Mar 5 - Mar 11	10	
Mar 14 - Mar 20	11		Mar 13 - Mar 19	11		Mar 12 - Mar 18	11	
Mar 21 - Mar 27	12		Mar 20 - Mar 26	12		Mar 19 - Mar 25	12	
Mar 28 - Apr 3	13		Mar 27 - Apr 2	13		Mar 26 - Apr 1	13	
Apr 4 - Apr 10	14		Apr 3 - Apr 9	14		Apr 2 - Apr 8	14	
Apr 11 - Apr 17	15		Apr 10 - Apr 16	15		Apr 9 - Apr 15	15	
Apr 18 - Apr 24	16		Apr 17 - Apr 23	16		Apr 16 - Apr 22	16	
Apr 25 - May 1	17	Apr 24 - Apr 30	17	Apr 23 - May 29	17			
May 2 - May 8	18	Wave Three	May 1 - May 7	18	Wave Three	Apr 30 - May 6	18	Wave Three
May 9 - May 15	19		May 8 - May 14	19		May 7 - May 13	19	
May 16 - May 22	20		May 15 - May 21	20		May 14 - May 20	20	
May 23 - May 29	21		May 22 - May 28	21		May 21 - May 27	21	
May 30 - June 5	22		May 29 - June 4	22		May 28 - June 3	22	
June 6 - June 12	23		June 5 - June 11	23		June 4 - June 10	23	
June 13 - June 19	24		June 12 - June 18	24		June 11 - June 17	24	
June 20 - June 26	25		June 19 - June 25	25		June 18 - June 24	25	
June 27 - July 3	26	June 26 - July 2	26	June 25 - July 1	26			
July 4 - July 10	27	Wave Four	July 3 - July 9	27	Wave Four	July 2 - July 8	27	Wave Four
July 11 - July 17	28		July 10 - July 16	28		July 9 - July 15	28	
July 18 - July 24	29		July 17 - July 23	29		July 16 - July 22	29	
July 25 - July 31	30		July 24 - July 30	30		July 23 - July 29	30	
Aug 1 - Aug 7	31		Jul 31 - Aug 6	31		Aug 30 - Aug 5	31	
Aug 8 - Aug 14	32		Aug 7 - Aug 13	32		Aug 6 - Aug 12	32	
Aug 15 - Aug 21	33		Aug 14 - Aug 20	33		Aug 13 - Aug 19	33	
Aug 22 - Aug 28	34		Aug 21 - Aug 27	34		Aug 20 - Aug 26	34	

2005			2006			2007		
Date	Week	Wave	Date	Week	Wave	Date	Week	Wave
Aug 29 - Sep 4	35	Wave Five	Aug 28 - Sep 3	35	Wave Five	Aug 27 - Sep 2	35	Wave Five
Sep 5 - Sep 11	36		Sep 4 - Sep 10	36		Sep 3 - Sep 9	36	
Sep 12 - Sep 18	37		Sep 11 - Sep 17	37		Sep 10 - Sep 16	37	
Sep 19 - Sep 25	38		Sep 18 - Sep 24	38		Sep 17 - Sep 23	38	
Sep 26 - Oct 2	39		Sep 25 - Oct 1	39		Sep 24 - Sep 30	39	
Oct 3 - Oct 9	40		Oct 2 - Oct 8	40		Oct 1 - Oct 7	40	
Oct 10 - Oct 16	41		Oct 9 - Oct 15	41		Oct 8 - Oct 14	41	
Oct 17 - Oct 23	42		Oct 16 - Oct 22	42		Oct 15 - Oct 21	42	
Oct 24 - Oct 30	43		Oct 23 - Oct 29	43		Oct 22 - Oct 28	43	
Oct 31 - Nov 6	44	Wave Six	Oct 30 - Nov 5	44	Wave Six	Oct 29 - Nov 4	44	Wave Six
Nov 7 - Nov 13	45		Nov 6 - Nov 12	45		Nov 5 - Nov 11	45	
Nov 14 - Nov 20	46		Nov 13 - Nov 19	46		Nov 12 - Nov 18	46	
Nov 21 - Nov 27	47		Nov 20 - Nov 26	47		Nov 19 - Nov 25	47	
Nov 28 - Dec 4	48		Nov 27 - Dec 3	48		Nov 26 - Dec 2	48	
Dec 5 - Dec 11	49		Dec 4 - Dec 10	49		Dec 3 - Dec 9	49	
Dec 12 - Dec 18	50		Dec 11 - Dec 17	50		Dec 10 - Dec 16	50	
Dec 19 - Dec 25	51		Dec 18 - Dec 24	51		Dec 17 - Dec 23	51	
Dec 26 - Jan 1	52		Dec 25 - Dec 31	52		Dec 24 - Dec 30	52	