

# NATIONAL RECREATIONAL BOATING SURVEY

## *METHODOLOGY REPORT FOR THE 2013 PARTICIPANT SURVEY*

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## INTRODUCTION

In 2013, ICF Macro, Inc., an ICF International company (hereafter, ICF), conducted the Participant portion of the 2012 National Recreational Boating Survey (NRBS) on behalf of the United States Coast Guard (USCG). This project will provide data to support the 2012–2016 National Recreational Boating Safety (RBS) Program strategic plan. The National RBS Program’s primary goals are to reduce fatalities to specified levels for each upcoming year and to decrease personal injury and property damage, while cooperating with environmental and national security efforts related to recreational boating. Data collected for the National RBS Program enables the USCG to better identify safety priorities; coordinate and focus research efforts; and encourage consistency in the information that is collected, as well as the applied analysis methods that are used.

This report describes the methodology of the third component of the NRBS, the Participant Survey. The Participant Survey is conducted as a random digit dial (RDD) telephone survey, and it is used to determine the proportion of Americans who have participated in recreational boating during the reference year. More specifically, this report includes methodological information related to the following:

- Designing and testing the survey instrument
- Formatting the computer-assisted telephone interviewing (CATI) survey
- Designing the survey sample
- Fielding the CATI telephone survey in English and Spanish
- Overseeing all quality control procedures
- Weighting of survey data and calculating response rates

## ACKNOWLEDGEMENTS

Successful implementation of the National Recreational Boating Survey (NRBS) for the National RBS Program was possible thanks to the participation and support of many parties. In particular, we wish to thank Dr. Philippe Gwet of the USCG's Boating Safety Division for leading the project, and all of the recreational boaters who contributed their time to complete this important research effort.

## BACKGROUND

The mission of the USCG Boating Safety Division is “to minimize the loss of life, personal injury, property damage, and environmental impact associated with the use of recreational boats, through preventive means, in order to maximize safe use and enjoyment of U.S. waterways by the public.”<sup>1</sup> In support of this mission, the Boating Safety Division developed the National RBS Program. The National RBS Program seeks to develop a boater safety culture through outreach and education, regulation, and enforcement. Its primary goals for each upcoming year are to reduce fatalities to specified levels, and to decrease personal injury and property damage that could be associated with recreational boating, while cooperating with environmental and national security efforts.<sup>2</sup>

To measure progress toward these goals, the USCG publishes accident statistics and measures the effectiveness of boating safety programs. Safety statistics traditionally have been calculated as the number of casualties per 100,000 registered boats.<sup>3</sup> However, this method could be improved with an accurate measure of boaters’ exposure to hazards—that is, the number of hours boaters spend on the water. Using this exposure statistic as the denominator in assessing risk will allow the USCG to more accurately evaluate safety programs, and thus advance their goals.

The USCG contracted with ICF to design and conduct the NRBS. The NRBS is a critical tool for collecting the data that will allow calculation of exposure, as well as other boat and boating statistics. These data will be used at the national level to better identify safety priorities; coordinate and focus research efforts; and encourage consistency in the information that is collected, as well the methods used to analyze it. In addition, boating-related policies, as well as the nature of waterways in which boating takes place, can be very different from state to state. Therefore, designing the NRBS to produce state-level estimates of boating activity and operation—rather than grouping similar states—will allow safety advocates to better address the diverse needs of boaters in each individual state. Thus, a primary objective of the NRBS is to capture sufficient data for each state to yield precise state-level estimates on boating activities and behaviors; this information is critical to state program and policy development.

The specific analytic goals of the NRBS, in order of priority, are to measure the following:

- 1. Exposure**
  - a. Hours that boats and boaters are on the water
  - b. Hours that boats are in docked recreation
- 2. Boating participation and boat ownership**
  - a. Total annual participation overall
  - b. Total annual participation by boat type
  - c. Total boat ownership
- 3. Boating safety awareness and behaviors**
  - a. Participation in boating safety courses
  - b. Alcohol use and boat operation

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<sup>1</sup> [http://www.uscgboating.org/about/vision\\_and\\_mission.aspx](http://www.uscgboating.org/about/vision_and_mission.aspx)

<sup>2</sup> [http://www.uscgboating.org/assets/1/workflow\\_staging/News/489.PDF](http://www.uscgboating.org/assets/1/workflow_staging/News/489.PDF)

<sup>3</sup> [http://www.uscg.mil/proceedings/articles/22\\_Gwet\\_Haas.pdf](http://www.uscg.mil/proceedings/articles/22_Gwet_Haas.pdf)

4. **Economic impact of recreational boating**
  - a. Money spent on boats
  - b. Money spent on boat trips in communities
5. **Negative event incidence and risk**
  - a. Actual and reported accidents that cause injury and boat damage
6. **Boat statistics**
  - a. Features of boats, such as hull material and propulsion systems

The NRBS design is driven by a desire to achieve comprehensive population coverage and high quality measurement of a variety of boat features and boating activities. Therefore, the NRBS was designed as a system of three surveys—the Boat Survey, the Trip Survey, and the Participant Survey—which, together, will comprehensively measure boats and boating behaviors in the United States. The Boat Survey is an annual survey about recreational boats (registered and unregistered) in the United States. This survey collects information about how many and what kinds of boats are owned—along with information about how much money boat owners spend on their boats. The Boat Survey is supplemented by a monthly Trip Survey using a panel sample, since this is the best way to collect accurate data about the number and duration of trips taken on recreational boats. Finally, the Participant Survey is an annual population-based survey of U.S. residents regarding their boating behaviors. These three surveys are fielded across multiple years. *Exhibit 1* shows the program schedule of these surveys for 2011–2013. In addition, *Exhibit 2* illustrates the structure of the NRBS surveys and data collection methods.

This report describes the methodology used to implement the tasks for the 2013 Participant Survey.

**Exhibit 1: Survey Program Schedule, 2011–2013**

	Quarter	Boat Survey	Trip Survey	Participant Survey
2011	1			
	2			
	3			
	4	x		
2012	1		x	
	2		x	
	3		x	
	4		x	
2013	1			x
	2			
	3			
	4			

**Exhibit 2: Overview of the NRBS Surveys and Data Collection Methods**

Survey	Mode(s)	Sample Source(s)	Universe		Respondent	Analytic Goals
Boat Survey	Phone	Random Digit Dial (RDD)	Privately owned recreational boats in all states	Unregistered recreational boats in all states	Member of boat-owning household	2—Ownership and participation 4—Economic impact of boating 6—Boat statistics
				Registered recreational boats in all states	Member of boat-owning household	1—Exposure (2011 only <sup>4</sup> )
	Mail	Registry lists	Privately owned recreational boats	Registered recreational boats in states sharing lists	Registered boat owner	
Trip Survey	Web, phone	Panel	Privately owned recreational boats		Boat owner panelist	1—Exposure 3—Safety awareness and behaviors 4—Economic impact of boating 5—Negative events
Participant Survey	Phone	RDD	Boating participants	U.S. households	Any adult household member	2—Ownership and participation 3—Safety awareness and behaviors
				U.S. child (age <16) boating population	Any adult household member (proxy)	
				U.S. adult boating population	Adult boater	
		Rented boats		Adult boater: rented boat	1—Exposure 3—Safety awareness and behaviors 4—Economic impact of boating 5—Negative events	

<sup>4</sup> Exposure data was collected in the 2011 Boat Survey only; in future iterations, exposure will be collected via the Trip Survey.

## QUESTIONNAIRE DEVELOPMENT AND TESTING

ICF designed the Participant Survey questionnaire based on the USCG's research objectives, as well as on questions provided by an advisory committee that included experienced researchers at Michigan State University. The Participant Survey instrument was designed to measure the overall incidence of recreational boating participation. The instrument collected information about recreational boating participation by boat type, and participation in boating activities in the reference period. Household enumeration questions measured the overall incidence of recreational boating participation. To measure exposure in rented boats, such as kayaks and canoes, a section for rented recreational boat trip reporting was included. Finally, a section was included to assess boating safety and awareness behaviors of adults and children in the household.

## COGNITIVE PRETESTING

To test the NRBS survey instruments, cognitive researchers conducted two rounds of interviews in January 2010. Testing focused on survey structure, respondent understanding of the survey questions, and respondent recall. Nine cognitive interviews were conducted for the Participant Survey. *Exhibit 3* displays the demographic breakdown of the cognitive interview participants.

*Exhibit 3: Demographic Breakdown of Cognitive Interview Participants*

Characteristic		Participant Survey
Gender	Males	7
	Females	2
Age	>50 years	7
	≥50 years	2
Education Level	Less than a 4-year degree	2
	4-year degree	4
	Graduate degree	3
Boat Ownership	Yes	6
	No	3
Type of Boat Owned/Used	Human powered	2
	Motor boat	4
	Sail boat	3

## PRETEST FINDINGS AND RECOMMENDED CHANGES

All recommendations from the cognitive interviews were summarized and provided to USCG in a separate report (*National Recreational Boating Survey Cognitive Interviewing Report*, February 4, 2012). Within this section, we summarize key Participant Survey findings from that report, including the following:

- Adding interviewer probes to clarify what is being asked
- Restructuring questions so the survey flows better



- Incorporating respondent feedback on response options
- Reminding respondents all responses are confidential on potentially sensitive questions

All respondents understood what recreational boating is, and they could reliably recall their participation in recreational boating in the past year. When asked, “Did you or anyone else in your household spend any time on recreational boats in [previous year],” most respondents accurately included themselves. Only one respondent struggled with the family enumeration, saying that he was not sure if this included himself or just applied to the other people living in the household. Another was not sure what would be considered *living in the household* and wanted to know if people temporarily living in the house should be considered. To clarify, we added the following interviewer probe:

[IF NECESSARY: “We are asking about all people who have lived in your house in the past year, whether they still reside there or not.”]

One respondent noted that he felt that the reminder to include boating in kayaks and canoes as well as fishing from boats in his response (see iP1BTA, below) was duplicative of a similar reminder in the screener (see BT1, below).

BT1. Did you or anyone else in your household spend any time on recreational boats during [previous year]?

P1BTA. Remember that recreational boating includes boating in kayaks and canoes and fishing from boats. In [previous year], was there any day when you went out on the water in a recreational boat?

Those who volunteered that they owned a canoe or kayak also felt that being reminded to include these in this estimation of boat usage in the first part of question P1BTA was redundant. To streamline the flow of these questions, we removed, “Remember that recreational boating includes boating in kayaks and canoes and fishing from boats,” from the question text and included it as an interviewer probe:

[IF NECESSARY: “Remember that recreational boating includes boating in kayaks and canoes and fishing from boats.”]

To clarify that P1BTA is referring only to the respondent’s boating activity, we added the following interviewer probe:

[IF NECESSARY: “We’re interested in days when you personally were on the boat.”]

All respondents were asked questions about each member of their household. These questions included age, gender, and boating participation. During cognitive interviewing, two of the respondents were confused about the question sequence in the family participation loop. We modified the questionnaire so that participant age/gender was asked in one loop, and participant boating experience was asked in a second loop. This worked well, and most participants had no further difficulties with this series of questions.

All respondents reported owning at least one lifejacket, and several volunteered that they owned multiple types of life jackets (e.g., life vests, sport life jackets, and adult or child life jackets), and they gave totals for each. All but one was very confident in the quantity of lifejackets that they owned. The range of responses was 2–18 total lifejackets. One respondent asked if the question would be easier to

understand if it specified whether anyone in the household owned the life jackets, rather than asking at the household level. The question was modified from, “Does your household own any life jackets?” to, “Does anyone in your household own any life jackets?”

Respondents were asked to spontaneously generate a list of activities that they participated in while boating in 2009, and then to use the response choices we provided to indicate the same. *Exhibit 4* lists the response choices we presented and the answers that respondents spontaneously generated.

**Exhibit 4: Activities Participated in While Boating**

Answer Categories	Respondent Generated categories
<b>Cruising</b>	Cruise the Lake
<b>Sightseeing or Nature Observation</b>	Taking Pictures/Sightseeing
<b>Fishing or Crabbing</b>	Fishing
	Picnicking
	Fireworks
	Boat Parades
<b>Waterskiing, Wakeboarding, or Tubing</b>	Tubing/Wakeboarding/Kneeboarding/Waterskiing
<b>Swimming/Diving</b>	Swimming
<b>Racing</b>	Racing
	Sailing
	Socializing
	Dining
	Paddling
<b>Hunting</b>	Duck Hunting
	Commuting/Transit
<b>Fishing or Crabbing</b>	Crabbing
<b>Sunbathing</b>	Tanning
	Sleeping

Respondents offered feedback, presented below, on some of our response options.

**Relaxing alone or with friends:** Several respondents felt that this option described a more passive, quieter activity level than their customary socializing. Some examples of their activities included dining, dancing, “happy hour,” and socializing. It also did not describe sleeping, which users and owners of large boats reported as an activity. To capture more lively social activities, we added a new category called *Socializing* to the response options.

**Quiet Water Paddling:** Several respondents expressed confusion about the word *quiet*. One asked if it referred to the speed of the water or the noise generated during paddling. Another said, “No, I paddle, but it is never quiet.” We removed the word *quiet* to avoid respondent confusion.

Almost all respondents said that had been on boats where people had consumed alcohol. Respondents did not express discomfort with alcohol-related questions, although several noted that they felt that the topic might make other respondents uncomfortable. Several noted that boating while drinking was a violation of their state laws. Since the alcohol use questions may be sensitive for some respondents, we added an introductory reminder that all responses are confidential. Many respondents also said that the boat operator consumed alcohol, although their definitions of the operator varied. For powerboat owners and users, the operator typically was the person driving the boat, steering the motor, or both. Owners and users of kayaks said that they typically were the only ones in the boat, so they were the operator. For sailboat owners and users, the operator often was the person in command of boat motion, perhaps directing several people; this person may or may not have been steering. To clarify these issues, we added the following two interviewer probes:

[IF NECESSARY: “the operator is the person with primary responsibility for moving the boat”]

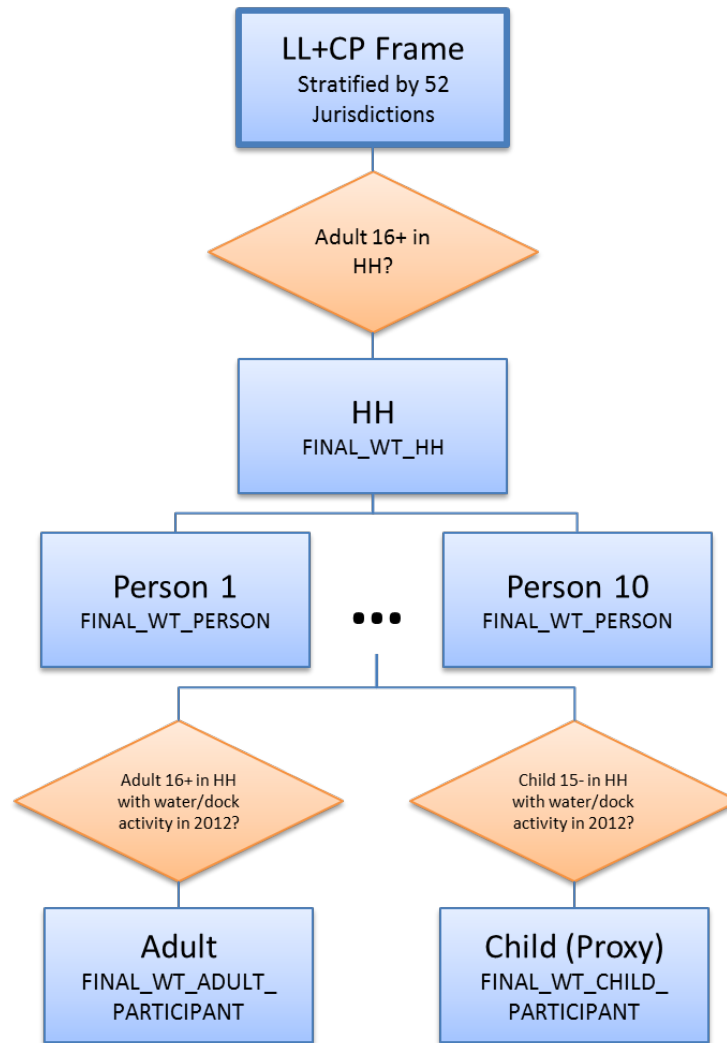
[IF NECESSARY: “while the boat was on open water”]

# SAMPLE DESIGN

## INTRODUCTION

The 2013 NRBS Participant Survey used a complex, stratified design to collect data about recreational boating participation in 52 jurisdictions, which included all 50 states plus the District of Columbia and Puerto Rico. Both landline (LL) and cell phone (CP) numbers were sampled via MSG Inc.'s Survey Genesys RDD system. As illustrated in *Exhibit 5*, the primary selection unit was a household (HH). Within a selected household, basic demographic and participation data were collected for up to 10 household members. When available, one adult participant (age ≥16) and one child participant were randomly selected from among the eligible (i.e., boating) household participants to provide detailed, person-level participation data.

*Exhibit 5: Sampling Stages in the 2013 NRBS Participant Survey*



## SAMPLING FRAMES AND STRATIFICATION

Two sampling frames were used: an RDD landline frame and an RDD cell phone frame. The frames were list-assisted to include 1+ blocks, and to exclude known businesses and nonworking numbers. Sample was allocated between the two frames to achieve a 75%/25% landline/cell distribution.

The sample was stratified by jurisdiction to ensure that the survey would produce accurate estimates at the state level. Specifically, sample was allocated to achieve a margin of error of  $\pm 5\%$  for household-level estimates within each jurisdiction. Sample allocation was optimized by taking into account household participation estimates from the “participation patch” in the 2011 Boat Survey. *Exhibit 6* shows the sample allocation and number of completed interviews in each jurisdiction.

*Exhibit 6: Sample Allocation and Completed Interviews by Jurisdiction*

Jurisdiction	Sample Allocation			Completed Interviews		
	LL	Cell	Total	LL	Cell	Total
<b>US</b>	<b>12,490</b>	<b>4,163</b>	<b>16,653</b>	<b>12,110</b>	<b>5,212</b>	<b>17,322</b>
Alabama	227	76	302	213	95	308
Alaska	287	96	383	267	131	398
Arizona	195	65	259	190	82	272
Arkansas	258	86	344	242	104	346
California	210	70	280	206	88	294
Colorado	238	79	318	234	96	330
Connecticut	248	83	330	233	98	331
Delaware	217	72	289	202	88	290
District of Columbia	202	67	270	188	86	274
Florida	257	86	343	240	105	345
Georgia	229	76	306	217	92	309
Hawaii	232	77	310	222	97	319
Idaho	262	87	350	249	104	353
Illinois	233	78	310	219	99	318
Indiana	259	86	345	247	102	349
Iowa	247	82	329	238	102	340
Kansas	218	73	291	211	95	306
Kentucky	255	85	340	240	105	345
Louisiana	240	80	320	231	94	325
Maine	288	96	384	266	118	384
Maryland	247	82	330	245	93	338
Massachusetts	253	84	337	245	101	346
Michigan	267	89	357	251	108	359
Minnesota	288	96	384	273	111	384
Mississippi	234	78	312	229	93	322
Missouri	260	87	347	252	103	355
Montana	277	92	369	260	110	370
Nebraska	246	82	328	240	103	343
Nevada	195	65	259	190	73	263
New Hampshire	282	94	376	283	104	387
New Jersey	211	70	282	202	84	286
New Mexico	177	59	236	171	75	246

Jurisdiction	Sample Allocation			Completed Interviews		
	LL	Cell	Total	LL	Cell	Total
New York	209	70	279	201	84	285
North Carolina	202	67	270	190	82	272
North Dakota	274	91	366	252	114	366
Ohio	245	82	326	233	93	326
Oklahoma	210	70	279	200	96	296
Oregon	254	85	338	241	106	347
Pennsylvania	234	78	312	237	100	337
Rhode Island	235	78	313	229	94	323
South Carolina	266	89	354	255	111	366
South Dakota	233	78	311	219	93	312
Tennessee	252	84	336	241	97	338
Texas	190	63	253	182	84	266
Utah	245	82	326	233	96	329
Vermont	281	94	374	267	116	383
Virginia	228	76	304	218	99	317
Washington	284	95	379	267	115	382
West Virginia	198	66	265	191	83	274
Wisconsin	288	96	383	278	118	396
Wyoming	263	88	350	264	107	371
Puerto Rico	163	54	218	316	185	501

## DATA COLLECTION

### INTRODUCTION

The 2013 Participant Survey was conducted as a dual-frame landline-cell RDD CATI study. Data collection began on February 6, 2013, and fielding ended on May 17, 2013. The following sections describe each phase of CATI data collection.

### TELEPHONE DATA COLLECTION

ICF programmed the CATI questionnaire using the CfMC Survent software package, which is designed specifically for programming and managing CATI studies. We use CfMC software to program all of our CATI surveys; it is a powerful questionnaire programming language that provides:

- Call management
- Quota controls
- Inbound calling capabilities
- Data back-up
- Monitoring
- Incidence tracking<sup>5</sup>

ICF's programmers have customized this package by adding a suite of database management and statistical analysis routines to support complex sampling, telephone sample management, and reporting requirements that are not met by the off-the-shelf product.

Upon completion of programming, ICF project managers rigorously tested the Participant Survey. Testing included:

- Developing scenarios to test all possible paths through the questionnaire
- Creating computer-simulated skip-checking programs
- Checking frequencies of randomly generated data
- Verifying frequencies of the data after the first day of interviewing, as well as periodically throughout fielding

To track quality indicators, we used our project management and documentation intranet site, iSite. Through iSite, we tracked key survey statistics and ran redacted reports of the survey data file and the telephone sample file to generate summary statistics on:

- Interviewer efficiencies (completes/hour, both on individual and project levels)
- All call dispositions
- Sample status (number of attempts, percent complete, and refusal rates)

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<sup>5</sup> Incidence is the proportion of the survey sample that is eligible to participate in the survey.

## INTERVIEWER TRAINING

Interviewers underwent a four-hour, project-specific training prior to data collection. This training covered:

- The survey's background and objectives
- The NRBS data collection system
- The types of questions in the Participant Survey
- Eligibility requirements
- Voluntary participation and confidentiality requirements
- Protocols for managing issues in data collection, such as privacy managers, language barriers, and refusals
- Interviewing techniques

Interviewers also were provided with a Frequently Asked Questions (FAQ) sheet for reference during interviewing. The training manual and FAQ are located in Appendix B: Telephone Interviewer Training Manual.

## LOADING THE SAMPLE

The Participant Survey sample contained a mix of cell and landline RDD records. Landline sample records were pre-screened to exclude businesses and non-working numbers. ICF released sample periodically throughout the fielding period. Sample management decisions were driven by carefully monitoring completed interviews and sample resolution across each jurisdiction. All records were resolved (i.e., dialed and assigned a final disposition).

## INFORMED CONSENT

During the interview, but before beginning the survey, the interviewer read an informed consent statement to the respondent. The consent statement described the interview, the types of questions that would be asked, the risks and benefits of participation, and participants' rights; it also provided contact information if the respondent had questions about any aspect of the study. The consent statement also indicated that participation was completely voluntary, and that participants could refuse to answer any question or discontinue the interview at any time. The interviewer entered a code via the keyboard to signify that he or she had read the informed consent statement and that the respondent had agreed to participate.

## HANDLING REFUSALS

Respondents sometimes decline participation in a study. We treat these events according to a predetermined, study-specific protocol. The protocol for refusal by a selected respondent or a non-selected respondent was to attempt one refusal conversion. After the initial refusal, the record was assigned a special sample type and allowed to cool off for ten days. After ten days, the record was assigned a different sample type and transferred to a refusal conversion study. These records then were attempted one time before a terminal disposition was assigned.



## HANDLING BUSY AND NO-ANSWER OUTCOMES

Lines that were busy were called back at 30-minute intervals. If the line remained busy, the number was attempted again on different calling occasions until the record was resolved.

## ATTEMPTING CALLBACKS

Sometimes, a willing respondent was unavailable to complete the interview during the initial contact. Other times, a selected respondent was unavailable to begin the interview. In such cases, we scheduled callback appointments. Our CATI system optimizes queuing for definite callbacks by continuously comparing station sample activity against the index of definite callback records. When a definite appointment time arrives, the system finds the next available station and delivers the record as the next call. The call history screen that accompanies each record informs the interviewer that the next call is a definite appointment, and it describes the circumstances of the original contact. This information gives the interviewer important historical cues that can lead to increased success in completing an interview.

## MANAGING INTERRUPTED INTERVIEWS

Interrupted interviews with willing respondents (e.g., due to respondent schedule/availability) were restarted using a callback strategy that prioritizes definite appointments. In suspended or interrupted interviews, the interviewer set an exact time for a callback and the interview began where it left off. If the interviewer who began the survey was available at the prescribed time, the CATI system sent the call back to that station. Delivering the callback to the same agent who began the interview maintains rapport and provides a personalized experience for the respondent.

## MANAGING CALL ATTEMPTS

ICF ensured adequate coverage of residential households through careful management of sample allocation, efficient scheduling of interview sessions, and a minimum of 10 attempts on all landline telephone numbers. For the landline sample, interviewers allowed five telephone rings for each call attempt. We attempted persistent “ring-no answers” a minimum of four times at different times and days. We called each number a minimum of 10 times over six calling periods, or until we achieved a completed interview. If we contacted a respondent on the last attempt, and we could not complete an interview, we made another attempt.

For the cell phone sample, we used a six-attempt protocol. We chose this lower-attempt protocol for the cell sample for several reasons. First, we are more likely to make contact with respondents on a cell phone than on a landline phone. Second, cell phone sample protocol did not include transfers to other household members, as for landline sample. Consequently, we completed more interviews on the first cell contact. Third, refusal conversion attempts (another call to address respondents’ concerns so that their initial refusal could be converted to a completed interview) were limited to one additional call. Therefore, fewer attempts were needed to obtain completed interviews from the cell phone sample as compared to the landline sample.

## CONDUCTING SPANISH INTERVIEWS

The telephone survey was available in both English and Spanish, and it was conducted by our regular staff of bilingual interviewers. When a bilingual interviewer reached a Spanish-speaking respondent, the interviewer explained the survey in Spanish and continued directly into the interview without interruption. When a non-Spanish-speaking interviewer contacted a Spanish-speaking household, the interviewer noted this language preference in the CATI record, and the system automatically routed the record to a bilingual interviewer for subsequent attempts. In every other respect, Spanish interviewing followed the same protocol as English interviewing. We recorded the interview language in the survey data.

## RECORDING CALL DISPOSITIONS

Dispositions are the result of each telephone call for each record in the survey sample (e.g., complete, definite refusal, nonworking number). The CATI system automatically stores dispositions of each call attempt on all records in the sample; this provides a complete call history for each record. The call history was displayed on the interviewer's screen during each attempt. Final dispositions for the telephone survey are provided in *Exhibit 7*.

### *Exhibit 7: Participant Survey—Telephone Dispositions*

Disposition	N	Percent
<b>(FRESH)</b>	19	0.00%
<b>002 - Definite Refusal - Selected</b>	1,554	0.45%
<b>003 - Definite Refusal - Non-Selected</b>	34,120	9.55%
<b>004 - Language Barrier</b>	404	0.10%
<b>006 - Physical/Mental Impairment</b>	83	0.00%
<b>008 - Nonworking Number</b>	58,306	16.30%
<b>009 - Fax Machine/Modem</b>	7,774	2.20%
<b>010 - Not A Residence</b>	18,461	5.20%
<b>016 - Household Unavailable</b>	426	0.10%
<b>017 - No Adults Associated With This Line</b>	697	0.20%
<b>029 – Less Than 16 Years Old</b>	9	0.00%
<b>032 – Not a Cell Phone</b>	998	0.30%
<b>061 - Complete</b>	17,322	4.80%
<b>075 - DIALER - Nonworking Number</b>	138,295	38.60%
<b>078 - DIALER - Fax/Modem</b>	1	0.00%
<b>094 - Dialed Maximum Attempts</b>	79,436	22.20%
<b>Grand Total</b>	357,905	100%

## INTERVIEWER MONITORING

Call center floor supervisors and Team Leads (quality assurance (QA) assistants) monitor interviewer performance, and they provide feedback to each interviewer through both formal and informal performance evaluations. Ten percent of all interviews were monitored throughout the fielding period. In addition, each interviewer on the Participant Survey was monitored at least once a week.

The QA team included the project manager, data collection manager, floor supervisors, and Team Leads. ICF's Team Leads conducted the majority of interviewer monitoring by tapping into interviewers' telephone lines and using the CATI system's monitoring module to follow the course of the interview on a computer screen. Interviewers were scored on several performance measures designed to reinforce proper protocol:

- Reading the introduction and persuading respondents to complete interviews
- Entering responses
- Reading questions properly and clarifying with respondents as needed
- Knowing the mechanics of CfMC and the survey instrument
- Reading and probing on open-ended questions
- Reading response lists in their entirety
- Pacing the survey appropriately to each respondent's needs
- Interviewing clarity and/or tone of voice
- Converting refusals on specific questions
- Presenting with professionalism overall
- Being neutral while interviewing, not leading respondent
- Dialing habits overall
- Positioning calls, leaving messages, and scheduling callbacks

Team Leads also ensured that interviewers:

- Coded incomplete interviews properly
- Left useful messages for the next interviewer
- Made every attempt to complete an interview on every contact

## **TOLL-FREE PROJECT HOTLINE**

Throughout fielding, a dedicated toll-free project hotline was available to address respondents' questions and concerns. The project hotline was staffed during regular business hours, Monday through Friday, from 9 a.m. to 5 p.m. EST. The telephone hotline greeted respondents with a prerecorded message that provided information about the survey and presented menu options. Menu options included prerecorded information about the survey and answers to FAQs, a voicemail box to leave a message for project staff, and the option to speak to a live agent to address questions or to complete the survey at that time.

## DATA WEIGHTING

### INTRODUCTION

Responses were weighted to make data representative of all U.S. households and the general population. As illustrated in Exhibit 5, the survey measured data at two levels of analysis: households and persons. Because of this, two datasets were created to facilitate weighting and analysis: a dataset with one record for each household and a dataset with one record for each person in the household's enumeration. The household-level dataset facilitates estimates about household recreational boating participation (via the household weight), whereas the person-level dataset facilitates estimates about individual recreational boating participation (via the person weight and the two participant weights). *Exhibit 8* provides a crosswalk between the survey datasets, units of analysis, weights, and relevant survey modules.

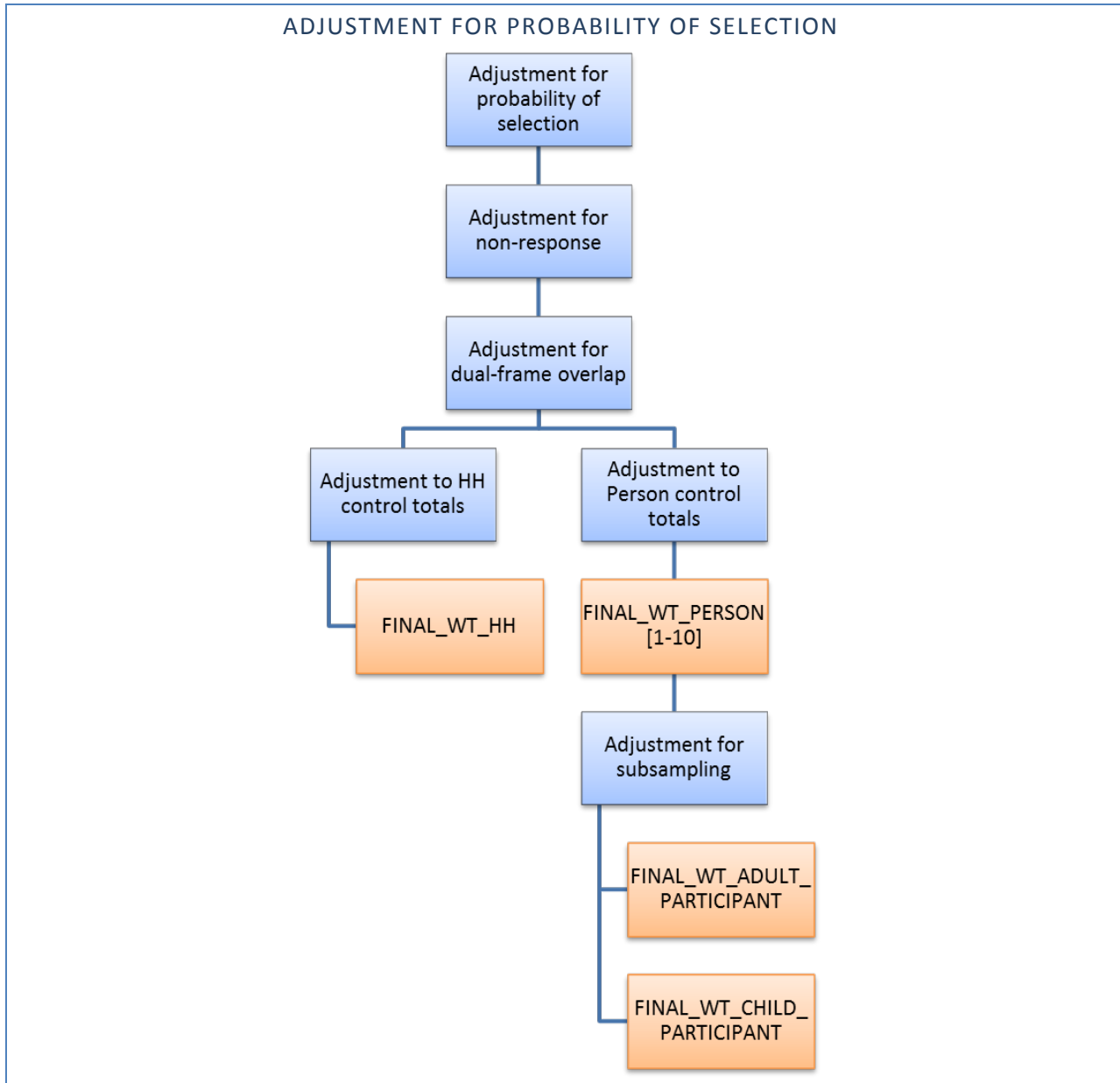
***Exhibit 8: Crosswalk between Survey Datasets, Units of Analysis, Weights, and Relevant Survey Modules***

Dataset	Unit of Analysis	Weight	Survey Modules
nrbs2013_weighted	Household	FINAL_WT_HH	<ul style="list-style-type: none"> <li>• Household Participation</li> <li>• Lifejackets in the Household</li> </ul>
nrbs2013_person_weighted	Person	FINAL_WT_PERSON	<ul style="list-style-type: none"> <li>• Household Participant Enumeration                             <ul style="list-style-type: none"> <li>○ Demographics</li> <li>○ Lifetime Participation</li> <li>○ Participation</li> </ul> </li> </ul>
	Adult Participant	FINAL_WT_ADULT_PARTICIPANT	<ul style="list-style-type: none"> <li>• Survey of an Individual Participant                             <ul style="list-style-type: none"> <li>○ Activities</li> <li>○ Boating Safety and Awareness Behaviors</li> <li>○ Rented Boat Trip Report</li> </ul> </li> </ul>
	Child Participant	FINAL_WT_CHILD_PARTICIPANT	<ul style="list-style-type: none"> <li>• Safety Behaviors of a Boating Child</li> </ul>

## WEIGHTING ADJUSTMENTS

Exhibit 9 illustrates the weighting plan for the Participant Survey.

Exhibit 9: Weighting Plan



For each jurisdiction (state) and frame (landline/cell), the probability that a phone number was selected from the frame equaled the number of selected records  $n$  divided by the number of phone numbers on the frame  $N$ . The base weight was the inverse of the selection probability,  $w_1 = N/n$ .

---

#### ADJUSTMENT FOR NON-RESPONSE

To account for possible differential response rates between landline and cell samples, this adjustment was computed within each jurisdiction and call type. The non-response-adjusted weight was the base weight  $w_1$  multiplied by the non-response adjustment, equal to the sum of the base weights divided by the weighted frequency of completed interviews  $l$ :  $w_2 = w_1 * \sum w_1 / \sum_{\epsilon l} w_1$ .

---

#### ADJUSTMENT FOR DUAL-FRAME OVERLAP

The dual-frame design increases the probability of selection for households that are in both the landline (LL) and cell (CP) frames. To account for this increased probability of selection, a dual-frame overlap adjustment was applied based on the eight telephone Use Groups ( $a_1$  through  $c_1$ ) shown in *Exhibit 10*.

**Exhibit 10: Telephone Groups for Dual-Frame Overlap Adjustment**

Telephone Group	Frame	Use Group	Condition
$a_1$	LL	LL Only	IF CALLTYPE = 1 AND CELL1A = 2
$b_{11}$	LL	CP Mostly	IF CALLTYPE = 1 AND DUAL1A = 1
$b_{12}$	LL	Even	IF CALLTYPE = 1 AND DUAL1A = 2
$b_{13}$	LL	LL Mostly	IF CALLTYPE = 1 AND DUAL1A = 3
$b_{21}$	CP	CP Mostly	IF CALLTYPE = 2 AND DUAL1A = 1
$b_{22}$	CP	Even	IF CALLTYPE = 2 AND DUAL1A = 2
$b_{23}$	CP	LL Mostly	IF CALLTYPE = 2 AND DUAL1A = 3
$c_1$	CP	CP Only	IF CALLTYPE = 2 AND LNDLINE = 2

Each of the resulting five Use Groups (LL Only, LL Mostly, Even, CP Mostly, CP Only) were first ratio-adjusted to the most recent (2011) National Health Interview Survey (NHIS) control totals for these groups by region.<sup>6</sup>

Next, weights for respondents in the overlapping Dual-Use Groups were adjusted to account for their higher probabilities of selection. Dual-Use Groups in the two frames were combined by estimating a compositing factor  $c$  based on the effective sample sizes of each pair of Dual-Use Groups (i.e.,  $b_{11}$  and  $b_{21}$ ,  $b_{12}$  and  $b_{22}$ , and  $b_{13}$  and  $b_{23}$ ). For each Use Group,  $i$ ,  $c = (n_{1i}/def_{f1}) / (n_{1i}/def_{f1} + n_{2i}/def_{f2})$ , which is the estimated proportion of dual-users in Use Group  $i$  in the landline frame.  $def_{fi}$  is a measure of the variability of respondent weights, such that  $def_{fi} = n_i \times \sum_{n_i} w_2^2 / (\sum_{n_i} w_2)^2$ . The dual-frame overlap adjustment for dual-use respondents is  $c$  for the landline frame and  $(1 - c)$  for the cell frame:

$$w_3 = \begin{cases} LL, w_2 * c \\ CP, w_2 * (1 - c) \end{cases}$$

---

#### ADJUSTMENT TO HOUSEHOLD CONTROL TOTALS

The dual-frame-adjusted weight  $w_3$  was ratio-adjusted to control totals for households by jurisdiction  $N_T$  from the 2010 US Census:  $w_{HH} = w_3 * N_T / \sum w_3$ . This is the final household weight on the household-level dataset, FINAL\_WT\_HH, used for household-level population estimates.

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<sup>6</sup> <http://www.cdc.gov/nchs/data/nhsr/nhsr061.pdf>

---

#### ADJUSTMENT TO PERSON CONTROL TOTALS

For the person-level dataset, the dual-frame-adjusted weight  $w_3$  for each household member was post-stratified to control totals for age and sex in each jurisdiction. The age categories used for post-stratification were 0–5, 6–10, 11–15, 16–34, 35–54, and  $\geq 55$ .<sup>7</sup> Control totals came from the U.S. Census Bureau’s 2012 Current Population Estimates. Post-stratification was implemented using a raking algorithm that iteratively matched the sample to independent control totals for age and sex within each jurisdiction. After several iterations, each dimension matched population control totals within tolerance (set at 1%).<sup>8</sup> The resulting weight is the final person weight on the person-level dataset, *FINAL\_WT\_PERSON*, used for person-level population estimates based on data collected about each member of the surveyed households.

---

#### ADJUSTMENT FOR SUBSAMPLING PARTICIPANTS

To account for the additional probability of selection of an adult and/or child participant among all eligible household members, an adjustment was applied to the final person weight; this adjustment was equal to the weighted sum of eligible adults *A* (or children *C*) in the household divided by the final person weight for the selected adult (or child):

$$w_{ADULT} = FINAL\_WT\_PERSON * \frac{\sum_{A \in HH} FINAL\_WT\_PERSON}{FINAL\_WT\_PERSON}$$
$$w_{CHILD} = FINAL\_WT\_PERSON * \frac{\sum_{C \in HH} FINAL\_WT\_PERSON}{FINAL\_WT\_PERSON}$$

These are the final selected participant weights on the person-level dataset, *FINAL\_WT\_ADULT\_PARTICIPANT* and *FINAL\_WT\_CHILD\_PARTICIPANT*, used for person-level population estimates based on data collected about the selected adult or child participant, respectively.

---

<sup>7</sup> The six “adult” age categories were collapsed to three categories due to occasional small sample sizes at the jurisdiction level.

<sup>8</sup> The raking algorithm was the IBF SAS Macro, version 2, developed by Izrael et al. of Abt Associates ([http://www.abtassociates.com/Expertise/Surveys-and-Data-Collection/Raking-Survey-Data-\(a-k-a--Sample-Balancing\).aspx](http://www.abtassociates.com/Expertise/Surveys-and-Data-Collection/Raking-Survey-Data-(a-k-a--Sample-Balancing).aspx)).

## QUALITY CONTROL FOR DATA COLLECTION

*Exhibit 11* describes several key areas of quality control for the Participant Survey.

### *Exhibit 11: Quality Control Procedures*

Survey Step	Quality Control Procedures
Testing the CATI program	<ul style="list-style-type: none"> <li>• Tested each response to each question, and each path through the survey</li> <li>• Reviewed frequencies from randomly generated data to ensure that the program was organizing data properly and recording values according to the survey specifications</li> <li>• Developed skip check program to check data against defined conditions specified in the Microsoft Word version of the questionnaire</li> </ul>
CATI quality assurance	<ul style="list-style-type: none"> <li>• Monitored at least 10% of all interviews</li> <li>• Monitored each interviewer at least once per week</li> <li>• Assigned supervisors to manage a team of no more than 10 interviewers</li> <li>• Participated in daily briefing call with call center management</li> <li>• Reviewed call center shift reports and internal project tracking reports daily</li> </ul>
Preparation of data files	<ul style="list-style-type: none"> <li>• Identified incomplete interviews and merged them back into the main datafile</li> <li>• Cleaned and, when applicable, back-coded open-ended responses</li> <li>• Assigned a final disposition to each record</li> <li>• Produced frequency tabulations for every question and variable to detect missing data or errors in skip patterns</li> </ul>



## RESPONSE RATE

The Participant Survey response rate calculation is based on AAPOR formulae, specifically AAPOR RR3:<sup>9</sup>

$$RR = \frac{I}{I + E + e(U)}$$

Where:

*I* = Complete Interview

*E* = Eligible Non-Interview

*U* = Unknown Eligibility

*X* = Ineligible

$e(U) = U * \frac{I+E}{I+E+X}$ , the proportion of Unknown Eligibility records estimated to be eligible

*N* = Total Records

The national response rate was 19.5%. Response rates and components by jurisdiction are presented in *Exhibit 12*.

### *Exhibit 12: Response Rates and Components by Jurisdiction*

Jurisdiction	RR3	I	E	U	e(U)	X	N
<b>US</b>	<b>19.5%</b>	<b>17,322</b>	<b>46,053</b>	<b>65,041</b>	<b>27,506</b>	<b>91,181</b>	<b>219,597</b>
Alabama	19.1%	308	828	1,224	479	1,766	4,126
Alaska	34.2%	398	521	1,054	244	3,046	5,019
Arizona	16.9%	272	868	1,065	468	1,453	3,658
Arkansas	22.5%	346	794	1,040	401	1,820	4,000
California	16.4%	294	909	1,415	591	1,679	4,297
Colorado	19.2%	330	870	1,209	520	1,592	4,001
Connecticut	20.1%	331	910	1,248	403	2,600	5,089
Delaware	19.4%	290	712	1,106	493	1,247	3,355
District of Columbia	16.7%	274	725	1,448	639	1,265	3,712
Florida	17.1%	345	1,020	1,481	650	1,746	4,592
Georgia	16.5%	309	933	1,683	631	2,073	4,998
Hawaii	22.4%	319	583	1,128	524	1,041	3,071
Idaho	22.6%	353	793	921	416	1,391	3,458
Illinois	16.4%	318	992	1,692	632	2,198	5,200
Indiana	20.3%	349	892	1,136	479	1,700	4,077

<sup>9</sup> Documentation for these response rates is available at [http://www.aapor.org/AM/Template.cfm?Section=Standard\\_Definitions2&Template=/CM/ContentDisplay.cfm&ContentID=3156](http://www.aapor.org/AM/Template.cfm?Section=Standard_Definitions2&Template=/CM/ContentDisplay.cfm&ContentID=3156)

Jurisdiction	RR3	I	E	U	e(U)	X	N
Iowa	20.2%	340	916	1,200	429	2,260	4,716
Kansas	22.1%	306	720	938	358	1,665	3,629
Kentucky	18.6%	345	972	1,234	534	1,728	4,279
Louisiana	19.6%	325	797	1,327	535	1,661	4,110
Maine	20.4%	384	965	1,005	535	1,183	3,537
Maryland	15.9%	338	974	1,622	808	1,323	4,257
Massachusetts	13.5%	346	1,229	1,845	990	1,361	4,781
Michigan	15.8%	359	1,217	1,714	692	2,326	5,616
Minnesota	18.6%	384	1,087	1,316	595	1,784	4,571
Mississippi	21.5%	322	739	989	436	1,344	3,394
Missouri	18.1%	355	1,032	1,243	574	1,616	4,246
Montana	26.1%	370	740	856	306	2,000	3,966
Nebraska	18.6%	343	1,028	1,239	469	2,250	4,860
Nevada	15.7%	263	846	1,380	566	1,597	4,086
New Hampshire	16.8%	387	1,164	1,453	747	1,465	4,469
New Jersey	15.0%	286	936	1,420	685	1,311	3,953
New Mexico	22.7%	246	534	721	303	1,076	2,577
New York	14.8%	285	984	1,410	653	1,471	4,150
North Carolina	17.8%	272	742	1,180	513	1,317	3,511
North Dakota	22.8%	366	903	868	334	2,029	4,166
Ohio	17.6%	326	959	1,407	570	1,887	4,579
Oklahoma	17.6%	296	905	1,239	480	1,902	4,342
Oregon	23.8%	347	699	851	413	1,107	3,004
Pennsylvania	16.1%	337	1,027	1,466	726	1,392	4,222
Puerto Rico	26.7%	501	913	1,853	460	4,281	7,548
Rhode Island	14.1%	323	1,066	1,725	902	1,266	4,380
South Carolina	18.8%	366	959	1,326	625	1,487	4,138
South Dakota	23.0%	312	817	774	230	2,666	4,569
Tennessee	19.9%	338	872	1,152	488	1,649	4,011
Texas	16.5%	266	801	1,354	545	1,583	4,004
Utah	21.3%	329	778	923	436	1,239	3,269
Vermont	23.2%	383	792	1,008	473	1,328	3,511
Virginia	19.3%	317	757	1,231	568	1,255	3,560
Washington	18.3%	382	1,020	1,348	686	1,354	4,104
West Virginia	19.0%	274	754	887	411	1,188	3,103
Wisconsin	18.9%	396	1,163	1,474	540	2,696	5,729
Wyoming	23.4%	371	896	1,213	321	3,517	5,997

## APPENDIX A: TELEPHONE SURVEY INSTRUMENT

## NRBS PARTICIPATION SURVEY

CALLTYPE=01 Landline Sample

CALLTYPE=02 Cell Sample

*/ //IF ANSWERING MACHINE & CALL HISTORY DISP <> (104,105,108, 115,116,160)/*

Hello, I'm calling on behalf of the US Coast Guard. We are conducting a survey about outdoor recreation in the United States. I'm sorry that I did not reach you and we will try you again soon.

*//IF CALL IS BEING RESUMED FROM A PREVIOUS SUSPEND/*

Resume. Hi, my name is \_\_\_\_\_, and I'm calling on behalf of the United States Coast Guard. We recently started a survey about outdoor recreation with someone in this household. May I speak with that person?

01 YES

02 NO, NOT AVAILABLE

99 REFUSED

PHONE SURVEY

*/ //ALL EXCEPT CALLBACKS FOR USERS SELECTED AT NEEDXFR (NEEDXFR=3)/*

*/ ///ASK ALL///*

INTRO1. Hello, my name is [full name]. I'm calling on behalf of the United States Coast Guard. We are conducting a survey about outdoor recreation in the United States. The survey takes a few minutes and helps guide safety programs in your area.

[IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

[IF NECESSARY: "This is not a sales call. I have nothing to sell either now or later. This is an important survey about your opinions."]

[IF NECESSARY: "Your number was selected randomly by a computer."]

[IF NECESSARY: "We are looking to speak with people with a wide range of boating experiences."]

[IF NECESSARY: "This survey is about safety for everyone who participates in recreational boating."]

01 YES

02 NO

*//IF LANDLINE SAMPLE, PROGRAM TO RANDOMLY SELECT ONE HH MEMBER TO BE SURVEYED. IF SELECTED RESPONDENT IS AVAILABLE CONTINUE, ELSE SCHEDULE CALLBACK.//*

*//IF CALLTYPE=02 AND INTRO1=01/*

*/*

*//IF RESPONDENT IS CONTINUING WITH THE INTERVIEW/*

CELL1. Have I reached you on a cellular telephone?

[Read only if necessary: "By cellular telephone I mean a telephone that is mobile and usable outside of your neighborhood".

INTERVIEWER: PLEASE CONFIRM NEGATIVE RESPONSES TO ENSURE THAT RESPONDENT HAS HEARD AND UNDERSTOOD CORRECTLY.

01 YES

02 NO /TERM ASSIGN DISP 32/

03 NOT A SAFE TIME

97 DON'T KNOW /TERM ASSIGN DISP 116, 003/

99 REFUSED /TERM ASSIGN DISP 116, 003/

*//IF CALLTYPE=02 AND CELL1=01/*

*//IF RESPONDENT IS USING A CELL PHONE/*

CELL2. Are you currently driving or doing anything else that would make it unsafe for you to be on the phone?

01 YES

02 NO

97 DON'T KNOW /TERM ASSIGN DISP 116, 003/

99 REFUSED /TERM ASSIGN DISP 116, 003/

*//IF CELL1 =03 OR CELL2=01/*

CSAFE. Thank you very much. When would be a better time to contact you for this survey?

01 CONTINUE → TERM BLOCK

/ ***/IF CELL2=02 OR (INTRO1=01 AND CALLTYPE=01)/***

AGEQUAL. Are you at least 16 years of age?

01 YES

02 NO ///IF CALLTYPE=02, TERM AS DISP017///

97 DON'T KNOW///TERM AS DISP 116,003///

99 REFUSED///TERM AS DISP 116, 003///

/ ***/IF CALLTYPE=01 AND AGEQUAL=02/***

AGEQUALa. May I speak to someone in the household who is 16 or older?

01 YES – TRANSFERRING (RESET TO INTRO1)

02 UNAVAILABLE – NEED TO SCHEDULE CB (GO TO TERM SCREEN)

99 REFUSAL (TERMINATE ASSIGN DISP 116 OR 003)

/ ***IF AGEQUAL IN (02,97,99) AND CALLTYPE=02***

THAGEA Thank you for your time, those are all the questions I have.

01 CONTINUE

/ ***/IF AGEQUAL=01/***

INFO. You are eligible to be interviewed. I won't ask for your name, address, or other personal information that can identify you. You don't have to answer any question you don't want to, and you can end the interview at any time. The interview will take about 5 minutes. The United States Coast Guard is doing this survey to help make Americans safer.

This interview may be monitored or recorded.

Any information you give me will be kept private, to the extent permitted by law. If you have any questions about this survey, I will provide a telephone number for you to call to get more information.

[INTERVIEWER PROVIDE AS NECESSARY: for more information call 1-888.316.8038]

[INTERVIEWER: Is respondent continuing with the interview?]

01 YES

02 NO /// TERM ///

---

## HOUSEHOLD PARTICIPATION

---

*/ /ASK ALL/IF RESPONDENT IS CONTINUING WITH THE SURVEY/*

**BT1** In this survey, we're interested in time people spent on ***recreational*** boats. That means boats that aren't used for purposes that make money. When I ask you about time spent on boats, please think about recreational boats. This could include boats that are rented—such as canoes—or boats that are privately owned by you or someone else.

For this question, please think about all time in recreational boats both on the water and when the boat was docked.

[IF NECESSARY: "Even if you do not boat, your responses are important. The survey is very short."]

Did you **or anyone else in your household** spend any time on recreational boats during INSERT PREVIOUS YEAR]?

[IF NECESSARY: "We are asking about all people who have lived in your house in the past year, whether they still reside there or not."]

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /ASK ALL /*

*/ /IF RESPONDENT IS CONTINUING WITH THE SURVEY/*

**BS1** Do you, or does anyone in your household own any boats? Please include canoes, kayaks, inflatable boats, and personal watercraft.

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /ASK ALL/*

*/ /IF RESPONDENT IS CONTINUING WITH THE SURVEY/*

**BT2** Did you **or anyone else in your household** fish from a boat during [INSERT PREVIOUS YEAR]?

- 01 YES
- 02 NO

97 DK  
99 REFUSED

/ ***/ASK ALL/***  
/ ***/IF RESPONDENT IS CONTINUING WITH THE SURVEY/***

**BT3** Did you or anyone else in your household use a kayak or canoe during INSERT PREVIOUS YEAR]?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

/ ***IF BT1=1 OR BT2=1 OR BT3=1 THEN CREATE VARIABLE ANYBOAT =1***

---

## END HOUSEHOLD PARTICIPATION

---

## HOUSEHOLD PARTICIPANT ENUMERATION

---

/ ***/ASK ALL/***  
/ ***/IF RESPONDENT IS CONTINUING WITH THE SURVEY/***

**PN** Including yourself, how many total people lived in your household at any time during [INSERT PREVIOUS YEAR]?

— RECORD NUMBER [RANGE=1-10]  
97 DON'T KNOW  
99 REFUSED

---

## DEMOGRAPHICS

---

/ ***/ASK ALL/***  
/ ***/IF RESPONDENT IS CONTINUING WITH THE SURVEY/***

**P1SEX** [ASK ONLY IF NECESSARY] To make sure the survey represents everyone, I need to ask. What is your gender?

01 MALE  
02 FEMALE  
99 REFUSED



/ ***/ASK ALL/***

/ ***/IF RESPONDENT IS CONTINUING WITH THE SURVEY/***

**P1AGEA** What is your age?

\_\_\_ ENTER AGE [RANGE=16-95]

95 OLDER THAN 95

97 DON'T KNOW

99 REFUSED

/ ***/IF P1AGEA=97, 99/***

/ ***/IF RESPONDENT DOES NOT GIVE THEIR AGE/***

**P1AGEB** Which of the following categories includes your age?

01 16 to 24

02 25 to 34

03 35 to 44

04 45 to 54

05 55 to 64

06 65 and over

97 DON'T KNOW

99 REFUSED

/ ***/IF ANYBOAT=1/***

**P1BTA** In [INSERT PREVIOUS YEAR], was there any day when you went out on the water in a recreational boat? We are asking only about your participation in boating.

[IF NECESSARY: "Remember that recreational boating includes boating in kayaks and canoes and fishing from boats."]

[IF NECESSARY: "We're interested in days when you personally were on the boat."]

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ ***/IF ANYBOAT=1***

**P1DOCKA** In [previous year], was there any day when you spent more than an hour on a recreational boat while it was not on the open water?

[IF NECESSARY: "Working on the boat, socializing, or doing any other activity while the boat was docked."]

[IF NECESSARY: "We're interested in days when you personally were on the boat."]

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

---

**MODULE: LIFETIME PARTICIPATION**

---

/ ***//ASK IF P1BTA NE 01 AND P1DOCKA NE 01/***

/ ***/IF RESPONDENT HAS NOT GONE OUT ON A BOAT IN OPEN WATER AND NOT SPENT TIME ON WHILE DOCKED/***

**P1LT** Have you ever participated in recreational boating?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

---

**END MODULE: LIFETIME PARTICIPATION**

---

/ ***/IF PN>1/***

/ ***/IF MORE THAN ONE PERSON LIVED IN THE HOUSEHOLD DURING THE REFERENCE PERIOD/***

NL. Please tell us about the other If PN=2 INSERT "person", ELSE IF PN>2 INSERT "people" who lived in your household during [INSERT PREVIOUS YEAR] and whether they have boated.

- 01 CONTINUE **[DONE]**

/ ***/IF PN>2/***

/ ***/IF MORE THAN TWO PEOPLE LIVED IN THE HOUSEHOLD DURING THE REFERENCE PERIOD/***

NL2. To make it easy, I'll ask about the people in your household from youngest to oldest.

- 01 CONTINUE **[DONE]**

---

## DEMOGRAPHICS

---

```
/ BEGIN DEMOGRAPHICS LOOP  
/ START COUNTER AT 2/  
/ WHILE COUNTER<=PN/  
/ VARIABLE NAMES ARE P2-PN AS IN P2SEX-P4SEX/
```

```
/ LOOP THROUGH GENDER/AGE FOR EVERYONE./
```

```
/ CREATE VARIABLE HHSEL AND ASSIGN SELECTED VALUE
```

```
/ 02 - THE OTHER PERSON IN YOUR HOUSEHOLD OR THE YOUNGEST PERSON IN  
YOUR HOUSEHOLD  
/ 03 - THE SECOND YOUNGEST PERSON  
/ 04 - THE THIRD YOUNGEST PERSON  
/ 05 - THE FOURTH YOUNGEST PERSON  
/ 06 - THE FIFTH YOUNGEST PERSON  
/ 07 - THE SIXTH YOUNGEST PERSON  
/ 08 - THE SEVENTH YOUNGEST PERSON  
/ 09 - THE EIGHTH YOUNGEST PERSON  
/ 10 - THE NINTH YOUNGEST PERSON
```

*IF THERE IS MORE THAN ONE PERSON IN THE HOUSEHOLD THEN WE ARE GIVING EACH PERSON A VALUE TO REFER TO (ENUMERATED ABOVE) AND LOOPING THROUGH THE NEXT SET OF QUESTIONS FOR EACH PERSON IN THE HH*

```
//IF PN>1
```

**PNSEX** What is [identifier]'s gender?

[IF NECESSARY: "For this question, we are asking only about [identifier]'s participation in boating"]

[IF NECESSARY: "Other than yourself"]

01 MALE  
02 FEMALE  
97 DON'T KNOW  
99 REFUSED

*/ /WHILE COUNTER<=PN/*

**PNAGEA** How old is he/she?

[IF NECESSARY: "We are asking about [identifier]"]

\_\_\_ ENTER AGE [RANGE=0-95]

95 OVER AGE 95

97 DON'T KNOW

99 REFUSED

*/ /IF PNAGEA=97, 99/*

*/ /IF RESPONDENT DOES NOT GIVE THEIR AGE/*

**PNAGEB** Which of the following categories includes his/her age?

[IF NECESSARY: "We are asking about [identifier]"]

01 0 to 5

02 6 to 10

03 11 to 15

04 16 to 24

05 25 to 34

06 35 to 44

07 45 to 54

08 55 to 64

09 65 and over

97 DON'T KNOW

99 REFUSED

*/ /END LOOP*

---

## **PARTICIPATION**

---

*/ /BEGIN PARTICIPATION LOOP*

*/ /IF BT1=1, BT2=1, OR BT3=1AND WHILE COUNTER<=PN/*

**PNBTA.** Now I'd like to ask you some questions about the {restore age and gender identifiers} in your household. In [previous year], was there any day when he/she went out on the water in a recreational boat?

01 YES

02 NO  
97 DON'T KNOW  
99 REFUSED

*/ IF BT1=1, BT2=1, OR BT3=1 AND WHILE COUNTER<=PN/*

**PNDKA.** In [previous YEAR], was there any day when he/she spent more than an hour on a recreational boat while it was docked?

[IF NECESSARY: "Working on the boat, socializing, or doing any other activity while the boat was docked."]

[IF NECESSARY: "when he/she was **not** preparing to launch the boat"]

[IF NECESSARY: "THIS QUESTION IS FOR THE x YEAR OLD x IN YOUR HOUSEHOLD"]

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

*/ //IF 97>PNAGEA > 15 OR PNAGEB IN (04,05,06,07,08,09)*

PN CELL1 Does he/she use a personal cell phone?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

---

#### **MODULE: LIFETIME PARTICIPATION**

---

*/ IF PNBTA NE 01 AND PNDKA NE 01 WHILE COUNTER <=PN*

**PNLT** Has he/she **ever** participated in recreational boating?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

*/END PARTICIPATION LOOP*

---

**END HOUSEHOLD PARTICIPANT ENUMERATION**

---

**BOATING SAFETY AWARENESS AND BEHAVIORS**

---

---

**LIFEJACKETS IN THE HOUSEHOLD**

---

/ */IF ANYBOAT=1/*

LFJ\_hhld Does anyone in your household own any life jackets?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

/ */IF LFJ\_HHLD=01/*

/ */IF SOMEONE IN HOUSEHOLD OWNS A LIFE JACKET/*

LFJNHH How many?

[IF NECESSARY: total jackets are owned by all the people in your household]

- \_\_\_ RECORD NUMBER [RANGE 1-50]
- 97 DON'T KNOW
- 99 REFUSED

---

**END LIFEJACKETS IN THE HOUSEHOLD**

---

**SAFETY BEHAVIORS OF A BOATING CHILD**

---

/ */CHRAN=A RANDOM PERSON FROM ALL RECORDS WHERE (PNAGEA<16) OR PNAGEB IN (01,02,03)) AND (PNBTA=1 OR PNDKA=1)/*

/ */ASSIGN AN IDENTIFIER-CHRAN*

/ *=PUNCH 02-10 TO HOLD SELECTED PERSONS AGE AND GENDER/*

/

CHSAFETY. I have a couple of questions about the [INSERT SELECTED CHILD AGE] year old child who boated in [INSERT PREVIOUS YEAR]. Has this child ever participated in a boating safety course?

[IF NECESSARY: "I mean the [INSERT SELECTED CHILD pnsex] child, the one who is the [INSERT SELECTED CHILD household enumeration identifier]" ]

- 01 YES
- 02 NO
- 97 DON'T KNOW

99 REFUSED

*/ IF CHRAN=02-10 CHRAN WAS FIRST TIME THIS YEAR ON WATER OR DOCKED RECREATIONAL BOAT/*

CHLFJ. How often did this child wear a life jacket while on board a boat during [INSERT PREVIOUS YEAR]? Would you say...

- 01 Always
- 02 Most of the time
- 03 Sometimes
- 04 Rarely
- 05 Never
- 97 DON'T KNOW
- 99 REFUSED

---

**END SAFETY BEHAVIORS OF A BOATING CHILD**

---

---

**END BOATING SAFETY AWARENESS AND BEHAVIORS**

---

---

**SURVEY OF AN INDIVIDUAL PARTICIPANT**

---

*/ AMONG HOUSEHOLD MEMBERS WHERE (PNDKA=1 OR PNBTA=1) AND (97>PNAGEA>=16 OR PAGEB IN (4,5,6,7,8,9) AND PNSEX NE 97, 99 RANDOMLY AND CALLTYPE=1 SELECT ONE AND CREATE VARIABLE SELIND =01-10 "THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS"*

*/ IF THERE ARE NO ELIGIBLE RESPONDENTS, SKIP TO END AND SELECTED=0*

*/ =01-10 "THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS" WHERE;*

*/ 01 THE PERSON ON THE PHONE*

*/ 02 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS03 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 04 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 05 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 06 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 07 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 08 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 09 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ 10 THE PNSEX AGED [PNAGEA OR PNAGEB] YEARS*

*/ ASK IF SELIND=02-10*

NEEDXFR. Thank you for your help. Now I need to talk to the [INSERT SELIND] to complete the rest of the survey.

Can you transfer me to [IF SELIND PNSEX=1 THEN "HIM" IF SELIND PNSEX=2 THEN "HER"]?

[INTERVIEWER IF TWO PEOPLE WITH SAME AGE OR SAME AGE RANGE, SAY "THE PERSON WITH THE MOST RECENT BIRTHDAY"]

[IF NECESSARY: "we randomly select one boating household member to complete the survey to make sure everyone is surveyed equally."]

01 SUCCESSFUL TRANSFER

02 Refuse to transfer // SUSPEND)//

03 CALLBACK TO COMPLETE (CALLBACK WITH SELECTED)

/ **///IF NEEDFXR=03///**

XFRNAME. Can you give me a name to ask for when I call back to speak to [if SELIND PNSEX=1 then "him", else "her"]?

[IF NECESSARY: "I just need a first name or some initials. Anything that will allow me to ask for the right person when I call back."][IF NECESSARY: "The survey is completely confidential. We won't use any information like your name for any purpose other than contacting you to complete the survey. "]

01 RECORD NAME—SCHEDULE CALLBACK

99 REFUSED(SUSPEND //

//IF XFRNAME=01//

XFRNAME2. RECORD NAME OR INITIALS. – SAVE NAME AND DISPLAY ON CALLBACK SCREEN FOR AGENT

/ **/ASK IF NEEDFXR=01 OR CALLBACK SELECTED RESPONDENT**

INTRO2 .

CALLBACK ONLY :[if XFRNAME ne "": "Hello, may I please speak with [XFRNAME]?"]. My name is [full name]. I'm calling on behalf of the United States Coast Guard. I'm conducting a survey about outdoor recreation in the United States.

[IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

01. YES

\*\*\*INTERVIEWER TYPE "SUSPEND" TO END THE CALL\*\*\*

[IF NECESSARY CALLBACK ONLY: "We recently called and spoke with someone else in your home about this survey. You were randomly selected to participate."]

[IF NECESSARY: "This is not a sales call. I have nothing to sell either now or later. This is an important survey about your opinions."]



[IF NECESSARY: 'Your number was selected randomly by a computer.']

/ **///IF INTRO2=01///**

AGEQ2. Are you at least 16 years of age?

- 01 YES
- 02 NO **///TERM AS DISP 29 (INELIGIBLE)///**
- 97 DON'T KNOW **///TERM AS 115, 002 (INELIGIBLE)///**
- 99 REFUSED **///TERM AS 115, 002 (INELIGIBLE)///**

/ **IF AGEQ2 IN (02,97,99)**

THAGEB. Thank you for your time, those are all the questions I have.

- 01 CONTINUE

/ **///ASK IF AGEQ2=01///**

INFOb. You are eligible to be interviewed. I won't ask for your name, address, or other personal information that can identify you. You don't have to answer any question you don't want to, and you can end the interview at any time. The interview will take about 5 minutes. The United States Coast Guard is doing this survey to help make Americans safer.

This interview may be monitored or recorded.

Any information you give me will be kept private, to the extent permitted by law. If you have any questions about this survey, I will provide a telephone number for you to call to get more information.

\*\*\*INTERVIEWER TYPE "SUSPEND" TO END CALL\*\*\*

- 01 CONTINUE

/ **/// IF INFOB=01**

USRINTRO In this survey, we're interested in time people spent on **recreational** boats. That means boats that aren't used for purposes that make money. When I ask you about time spent on boats, please think about recreational boats. This could include boats that are rented—such as canoes—or boats that are privately owned by you or someone else.

- 01 CONTINUE

*/ ///IF INFOB=01 AND SELIND <>01///*

BT. For this question, please think about all time in recreational boats both on the water and when the boat was docked.

In [INSERT PREVIOUS YEAR], was there any day when went you out on the water in a recreational boat?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ IF BT=01 AND SELIND <>01/*

DocK. In [INSERT PREVIOUS YEAR], was there any day when you spent more than an hour on a recreational boat while it was docked?

[IF NECESSARY: "Working on the boat, socializing, or doing any other activity while the boat was docked."]

IF NECESSARY: when you were **not** preparing to launch the boat

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /IF (((P1BTA IN (02,97,99) AND P1DOCKA IN (02,97,99) AND SELIND=01)) OR (BT IN (02,97,99) AND DOCK IN (02,97,99))) THEN THANK AND TERMINATE/*

*/ NOUSERBT. Thank you for your time, those are all the questions I have.*

*/ 01 CONTINUE*

*/ /SET TERMTYPE=NOUSERBT/*

*/ IF BT=1 OR ((PN=01 OR CALLTYPE=02 OR SELIND=01) AND P1BTA=01) THEN SAY/*

RECINTRO. The next questions are about all of your experiences on recreational boats in [INSERT PREVIOUS YEAR].

- 01 CONTINUE

*/*

*/ /BOATCATS COUNTOF (USEPWR-USEOTH)/*

*/ IF BT=1 OR ((PN=01 OR CALLTYPE=02 OR SELIND=01) AND P1BTA=01)*

During [INSERT PREVIOUS YEAR], in what types of boats did you go out on the water?

USEPWR. Did you go out on a power boat?

[IF NECESSARY: “A power boat refers to a boat of any size powered by a motor”]

USESAIL. Did you go out on a sailboat?

USEPWC. Did you go out on a personal watercraft such as a jet ski?

USECN. Did you go out on a canoe?

USEKY. Did you go out on a kayak?

USEOTH. Did you go out on something else?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ /IF USEPWR=01/*

In which of the following types of power boats did you go out on the water in 2011?

USECM. Did you go out on any cabin motorboats?

USEJB. Did you go out on any jet boats?

USEOM. Did you go out on any open motorboats?

[IF NECESSARY: “an open motor boat refers to a power boat without a cabin, including boats canopied or fitted with temporary partial shelters.”]

USEPTN. Did you go out on any pontoon boats?

USEHB. Did you go out on any houseboats?

[IF NECESSARY: “We mean time on a houseboat when it was actually in transit on the water.”]

USEAB. Did you go out on any airboats?

01 YES

02 No

97 don'T KNOW

99 REFUSED

*/ /IF USESAIL=01/*

In which of the following types of **sail** boats did you go out on the water in [INSERT PREVIOUS YEAR]. Did you go out on...

USEAX Any auxiliary motor sail boat

[IF NECESSARY: “A sailboat with a motor”]

01 YES

02 NO  
97 DON'T KNOW  
99 REFUSED

//IF USESAIL=01//

USES.L. Any sail only boats?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

/ ***/IF USEOTH=01/***

In which of the following types of **other** boats did you go out on the water in [INSERT PREVIOUS YEAR].

USEROW. Did you go out on any rowboats?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

//IF USEOTH=01//

USEIN. Did you go out on any inflatable boats?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

---

## **ACTIVITIES**

---

/ ***/IF BT=1 OR ((PN=1 OR CALLTYPE=02, OR SELIND=1) AND P1BTA=01) /***

What did you do on boats on the water during [INSERT PREVIOUS YEAR]?

[IF NECESSARY: "What types of activities did you engage in?"]

**/ROTATE LIST/**

UACTCRS CRUISING

UACTRLX RELAXING ALONE OR WITH FRIENDS

UACTSOC SOCIALIZING

UACTFSH FISHING OR CRABBING

UACTHNT HUNTING

UACTPDL WATER PADDLING

UACTRC RACING

UACTROW ROWING

UACTSCUB SCUBA DIVING OR SNORKELING

UACTOBS SIGHTSEEING OR NATURE OBSERVATION

UACTSBTH SUNBATHING

UACTSWM SWIMMING OR DIVING

UACTTOW WATERSKIING, WAKEBOARDING, OR TUBING

**UACTWTWR** WHITEWATER BOATING

UACTSAIL SAILING

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

**UACTOTH.** WERE THERE ANY OTHER ACTIVITIES THAT YOU PARTICIPATED IN AS A PART OF YOUR BOATING TRIP?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

**/ IF UACTOTH IN (01)**

**UACTX** What other activities did you participate in?

ENTER RESPONSE

---

**BOATING SAFETY AWARENESS AND BEHAVIORS**

---

---

**ALCOHOL**

---

*/ /IF BT=1 OR ((PN=1 OR CALLTYPE=02, OR SELIND=1) AND P1BTA=01) /*

PALC\_1. The next questions ask about activities you engaged in while on a boat in [PREVIOUS YEAR]. All your responses are confidential.

01 CONTINUE

ALC\_1. Alcohol includes beer, wine, malt beverages, and liquor. During [INSERT PREVIOUS YEAR], did anyone on a boat you were on drink any alcoholic beverages before or during the time when the boat was out on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ IF ALC\_1=1*

ALCOP\_1. During [INSERT PREVIOUS YEAR], did anyone who operated a boat you were on ever drink alcohol before or while operating the boat?

[IF NECESSARY: "the operator is the person with primary responsibility for moving the boat"]

[IF NECESSARY: "while the boat was on open water"]

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ /IF ALCOP\_1=1*

ALCIMP\_1. Can you think of any times during [INSERT PREVIOUS YEAR] when you thought the boat operator was impaired due to alcohol consumption?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

---

**END BOATING SAFETY AWARENESS AND BEHAVIORS**

**MODULE: RENTED BOATS**

**TRIP REPORT—FOR ADMINISTRATION 2013 FORWARD**

---

*/ /IF BT=1 OR P1BTA=1*

RNTINTRO. The following questions regard time you might have spent on boats you rented. This includes boats rented for fishing trips and canoe or kayak trips, but it does not include commercial trips such as whale watching expeditions.

During [INSERT PREVIOUS YEAR] was there any day when you spent time on the water in a rented boat?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ IF RNTINTRO=1*

PRENT. The next questions are about time you spent on boats you rented in [INSERT PREVIOUS year]

- 01 CONTINUE

*/ /BTTYPES=COUNTIF (RENTAB-RENTSL=1)/*  
*/ /IF RNTINTRO=1/*  
*/ /MULTIPUNCH/*  
*/ /BOATCATS COUNTOF (RENTPWR-RENTOTH)/*

PRENT1. During [PREVIOUS YEAR], what types of boats did you rent? Did you rent ...

MUL=6

- 01 A power boat, [IF NECESSARY: "A power boat refers to a boat of any size powered by a motor"]
- 02 A sailboat,
- 03 A personal watercraft such as a jetski,
- 04 A canoe,
- 05 A kayak, or
- 06 Something else?
- 97 DON'T KNOW

99 REFUSED

/ ***/IF PRENT1=01/***

TPpX. Which of the following types of **power** boats did you rent? Did you rent...

MUL=06

- 01 Any cabin motorboats
- 02 Any jet boats
- 03 Any open motorboats [IF NECESSARY: “an open motor boat refers to a power boat without a cabin, including boats canopied or fitted with temporary partial shelters.”]
- 04 Any pontoon boats
- 05 Any houseboats
- 06 Any airboats
- 97 DON'T KNOW
- 99 REFUSED

/ ***/IF PRENT1=02/***

TPsX. Which of the following types of **sail** boats did you rent? Did you rent...

MUL=2

- 01 Any auxiliary motor sail boat [IF NECESSARY: “A sailboat with a motor”]
- 02 Any sail only boat
- 97 DON'T KNOW
- 99 REFUSED

/ ***/IF PRENT1=06/***

TPOX. Which of the following types of **other** boats did you rent? Did you rent...

MUL=2

- 01 Any rowboats
- 02 Any inflatable boats
- 97 DON'T KNOW
- 99 REFUSED



---

## TRIP EXPOSURE

### STATES WHERE BOATED

---

*/ /SELECT RBTYPE RANDOMLY FROM THE SET OF BOAT TYPES ENDORSED AT  
/ PRENT1  
/ SET RBTYPE=RANDOMLY SELECTED PRENT1 VALUE  
/ IF PRENT1 IN (97,99) SET RBTYPE="BOAT"  
/ /IF RNTINTRO=1*

RENTTRIP. The next questions are about the last day you went out on a rented [RBTYPE]. Can you remember the last day you spent on the water in a [RBTYPE]?

01 YES  
02 NO  
97 DK  
99 REF

*/ /IF RENTTRIP=01 AND RBTYPE IN (2,6)*

HASMOT. Did the boat have a motor?

01 Yes  
02 No  
97 DON'T KNOW  
99 REFUSED

*/ /IF RBTYPE IN (1,3) AND RENTTRIP=01 THEN AUTOPUNCH HASMOT=1  
/ /IF RBTYPE IN (4,5) AND RENTTRIP=01 THEN AUTOPUNCH HASMOT=2  
/ /IF RENTTRIP=1  
/ /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

WLOC On this day, which of the United States was the boat launched from?

*/ /GO TO STATE FIPS (IN APPENDIX 1)*

*/ IF WLOC=96*

WLOC<sub>o</sub>. RECORD OTHER LOCATION

RECORD LOCATION \_\_\_\_\_

DK

REF

*/ /IF WLOC =01-56,72/*

*/ /IF RESPONDENT NAMED A LOCATION IN THE LIST/*

WOTHST1 On that day, did the boat go into states other than [INSERT STATE WLOC]?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ /IF WOTHST1=01/*

*/ /IF THE BOAT WENT TO MORE THAN ONE LOCATION/*

*/ /MULTIPUNCH/*

WOTHST2 Which ones?

*/ /STATE FIPS CODES FOR PROGRAMMING ARE BELOW/*

*/ /GO TO STATE FIPS (IN APPENDIX 1)//*

*/ IF WOTHST2=96*

OTHST2o. RECORD OTHER LOCATION

---

## PEOPLE ON THE BOAT

---

*/ /IF RENTTRIP=1*

*/ /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

WPPL Including you, how many people went on the boat that day?

[IF NECESSARY: "How many people did you have with you most of the time?"]

RECORD NUMBER [RANGE=1-96]

97 DON'T KNOW

99 REFUSED

*/ /IF 1 < WPPL < 97/*  
*/ IF THERE WAS MORE THAN ONE PERSON ON THE BOAT; THE RESPONDENT IS NECESSARILY OVER 16*

WKIDS How many children under the age of 16 were on the boat?

ENTER RESPONSE [RANGE=0-WPPL VALUE - 1]

97 DON'T KNOW

99 REFUSED

---

## BOAT HOURS

---

*/ /IF RENTTRIP=1*  
*/ /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

OVERNT Was that day part of an overnight trip on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ /IF OVERNT=01/*  
*/ /IF THE BOAT STAYED ON THE WATER OVERNIGHT, COLLECT THE SETOUT AND RETURN TIMES, WE'LL CALCULATE HOURS FROM THESE/*

LNCHT\_H. About what time of day did you set out?

\_\_ RECORD HOUR [RANGE 1-12]

97 DON'T KNOW

99 REFUSED

*/ /IF OVERNT=01/*

LNCHT\_M. ABOUT WHAT TIME OF DAY DID YOU SET OUT?

RECORD MINUTE [RANGE 0-59]

[IF NECESSARY: WAS THAT AM OR PM?]

/IF OVERNT=01/

LNCHT\_X

01 AM  
02 PM  
97 DON'T KNOW  
99 REFUSED

*/ /IF OVERNT=01/  
/ /IF THE BOAT STAYED ON THE WATER OVERNIGHT/*

DOCKDAY How many days later did the boat return to shore?

RECORD NUMBER [RANGE =1-90]  
97 DON'T KNOW  
99 REFUSED

*/ //IF OVERNT=01//  
/ /IF THE BOAT STAYED ON THE WATER OVERNIGHT/*

DOCKT\_H. About what time of day did the boat return to shore?

\_\_ RECORD TIME [RANGE 1-12]  
97 DON'T KNOW  
99 REFUSED

*/ ///IF OVERNT=01///  
/ /IF THE BOAT STAYED ON THE WATER OVERNIGHT/*

DOCKT\_M RECORD MINUTE [RANGE 0-59]  
[IF NECESSARY: WAS THAT AM OR PM?]

/IFOVERNT=01/  
DOCKT\_X  
01 AM  
02 PM  
97 DON'T KNOW  
99 REFUSED

*/ /IF OVERNT=01/  
/ /IF THE BOAT STAYED ON THE WATER OVERNIGHT/*

PREWHRS. I'm going to ask you some questions about the outing when the boat was out on the water. By "outing", I mean from when the boat left shore until it returned to shore.

01 CONTINUE

/ ***/IF OVERNT=02/***  
/ ***/IF IT WAS JUST A DAY TRIP/***

WHRS. On that day, how many hours did the boat spend on the water before it was moored, docked, or taken out of the water again? If the boat went out on the water more than one time that day, please tell me the total time the boat was on the water.

RECORD NUMBER [RANGE=1-24]

97 DON'T KNOW

99 REFUSED

/ ***/PUT A FLAG FOR PARTIAL COMPLETE HERE. TRIPS FOR WHICH HOURS DATA ARE AVAILABLE WILL COUNT TOWARD THE FINAL DATA./***

---

#### TYPES OF WATER

---

/ ***/IF RENTTRIP=1***  
/ ***/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT***  
/ ***/MULTIPUNCH***

WRTYPE. During this outing, did the boat go on any:

[READ LIST, MAY ENTER MULTIPLE RESPONSES]

01 Freshwater?

02 Saltwater?

03 Brackish water? [IF NECESSARY: "Brackish water is water where freshwater and saltwater are mixed."]

97 DON'T KNOW

99 REFUSED

/ ***/IF RENTTRIP=1***  
/ ***/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT***  
/ ***MULTIPUNCH***  
/ ***INTERVIEWER CODED***

WRBODY. What kinds of bodies of water did it go out on?

[DO NOT READ, SELECT ALL THAT APPLY]

01 LAKE

02 BAY

- 03 RIVER
- 04 CANAL
- 05 INTERCOASTAL WATERWAY
- 06 OCEAN
- 07 OTHER (SPECIFY)
- 97 DON'T KNOW
- 99 REFUSED

*/ IF WRBODY=07*

WBOTH PLEASE SPECIFY  
 ENTER OTHER SPECIFY \_\_\_\_\_

**END TRIP EXPOSURE**

**BOATING SAFETY AWARENESS AND BEHAVIORS**

**BOAT OPERATION**

*/ /LOAD VARIABLES PRIMOP, OWNSAFE, AND OWNEXP FROM THE BOAT SURVEY/  
 / /ASK IF RENTTRIP=1 AND 1<WPPL<97  
 / /IF WPPL=1, AUTOCODE WHOOP=01/  
 / /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

WHOOP. Did you personally operate the boat during this outing?  
 01 YES  
 02 NO  
 97 DON'T KNOW  
 99 REFUSED

*/ /IF WHOOP=1/  
 / /IF RESPONDENT PERSONALLY OPERATED THE BOAT/*

OPSAFE Have you ever taken a boat safety course?  
 01 YES  
 02 NO

97 DON'T KNOW

99 REFUSED

    /    /IF WHOOP=1/  
  /    /IF RESPONDENT PERSONALLY OPERATED THE BOAT/  
  /    /LOOP FOR EACH PERSON IN OPN/

OPEXP    How experienced in the operation of the boat are you? Would you say...

01    Very experienced

02    Somewhat experienced

03    Somewhat inexperienced

04    Very inexperienced

97 DON'T KNOW

99 REFUSED

    /    /IF WHOOP=1 AND 1<WPPL<97/  
  /    /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT AND  
  /    /MORE PEOPLE THAN THE RESPONDENT WERE PRESENT ON THE BOAT /

OPN    How many people, other than yourself, operated the boat during this outing?

    RECORD NUMBER (RANGE=0-WPPL-1)

97 DON'T KNOW

99 REFUSED

  /    ////START LOOP FOR EACH PERSON IN OPN/  
  /    /VARIABLE NAMES ARE OP1-OPN AS IN OP1-OP4/

OPAGE1-OPAGE\_X    How old was the first person other than you who operated the boat?

01    5 or younger,

02    6 to 10

03    11 to 15

04    16 to 17

05    18 to 24

06    25 to 34

07    35 to 44

- 08 45 to 54
- 09 55 to 64
- 10 65 and over
- 97 DON'T KNOW
- 99 REFUSED

***//IF WPPL-WKIDS=1 AND OPAG01-OPAGX IN (04,05,06,07,08,09,10)//***

OPCHK01 – OPCHK05. I would like to confirm how old the other person was, other than you, who operated the boat. You said the person was between the ages of [INSERT OPAG VALUE], is that correct?

- 01 Correct
- 02 No, incorrect /GO BACK TO OPAG01/

***/ ///ASK OF ALL///***

OPEXP1-OPEXP\_X How experienced in the operation of the [RBTYPE] was the [identifier] operator? Would you say...

- 01 Very experienced
- 02 Somewhat experienced
- 03 Somewhat inexperienced
- 04 Very inexperienced
- 97 DON'T KNOW
- 99 REFUSED

---

## **ALCOHOL**

---

***/ /IF RENTTRIP=1***  
***/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT***

PALC. The next questions ask about activities you engaged in on that day. All your responses are confidential.

- 01 CONTINUE



*/ /IF RENTTRIP=1*  
*/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT*

ALC. Alcohol includes beer, wine, malt beverages, and liquor. During this outing, did anyone on the boat drink alcohol before or during the time when the boat was out on the water?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /IF RENTTRIP=1*  
*/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT*

ALCop. During this outing, did anyone who operated the boat drink alcohol before or while operating the boat?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

---

## **LIFE JACKETS**

---

*/ /ASK IF RENTTRIP=1*  
*/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT*

LFJBT. Were there life jackets on the boat during this outing?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /IF LFJBT=01/*  
*/ /IF THERE WERE LIFE JACKETS ON THE BOAT THAT DAY/*  
*/ /RANGE=1-50/*

LFJBTN. How many?

\_\_\_ RECORD RESPONSE [RANGE=1-50]

97 DON'T KNOW

99 REFUSED

*/ /IF RENTTRIP=1*

*/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT*

LFPBT. Were there life preservers or throwable devices on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ /IF LFPBT=01/*

*/ /IF THERE WERE LIFE PRESERVERS OR THROWABLE DEVICES/*

*/ /RANGE=1-50/*

LFPN. How many?

\_\_ RECORD RESPONSE [RANGE =1-50]

97 DON'T KNOW

99 REFUSED

*/ /IF RENTTRIP=1 AND LFJBT=01*

*/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT*

LFJSLF. Did you wear a lifejacket all the time on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ IF 1 <= WKIDS <= 96 THEN ASK*

How many children were on the boat who were:

WKIDS            less than 6 years old

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97      DON'T KNOW

99 REFUSED

WKID10 6 to 10 years old

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97 DON'T KNOW

99 REFUSED

WKID15 11 to 15 years old

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97 DON'T KNOW

*/ 99 REFUSED IF SUM OF (WKID5 + WKID10 + WKID15) NE WKIDS VALUE AND (WKID5 <> 97,99 AND WKID10 <> 97,99 AND WKID15 <> 97,99) THEN*

CORRECT Earlier you said there were /WKIDS VALUE/ children on the boat, and now I have recorded a total of /SUM/ on the boat. How many children were on the boat?

1 WKIDS VALUE /GO BACK TO WKID5/

2 SUM VALUE /FORCE WKIDS = SUM/

*/ /IF WKID5>0 THEN ASK LJKID5/*

*/ /IF ONE OR MORE CHILDREN ON BOAT UNDER SIX YEARS OLD/*

LJKID5 How many of the children who were less than 6 years old wore a lifejacket all the time while on the boat?

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97 DON'T KNOW

99 REFUSED

*/ /IF WKID10>0 THEN ASK LJKID10/*

*/ /IF ONE OR MORE CHILDREN ON BOAT AGED 6 TO 10*

LJKID10 How many of the children who were 6 to 10 years old wore a lifejacket all the time while on the boat?

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97 DON'T KNOW

99 REFUSED

*/ /IF WKID15>0 THEN ASK LJKID15/  
/ /IF ONE OR MORE CHILDREN ON BOAT AGED 11 TO 15/*

LJKID15 How many of the children who were 11 to 15 years old wore a lifejacket all the time while on the boat?

RECORD NUMBER [RANGE 0-WKIDS VALUE]

97 DON'T KNOW

99 REFUSED

*/ /IF  
/ RENTTRIP=1 AND (WPPL>WKIDS+1 OR (WKIDS=97,99 AND WPPL>1) AND LFJBT=1  
AND WPPL<>97,99  
/ /ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT  
/ AND THE TOTAL NUMBER OF PEOPLE IS GREATER THAN THE RESPONDENT + THE  
CHILDREN*

LFJAD Not including you, how many of the people aged 16 and over wore lifejackets all the time they were on the boat?

\_\_ RECORD NUMBER [RANGE=0 TO WPPL - 1 - [WKIDS IN (97,99) ? YES: 0 NO: WKIDS\_1]]

997 DON'T KNOW

999 REFUSED

---

#### MODULE: REASONS FOR LIFEJACKET USE

---

*/ /IF LFJSLF=2 AND RANDUNIFORM<.1 /  
/ ASK OF 10% OF RESPONDENTS WHO DIDN'T WEAR A LIFEJACKET ALL THE  
TIME*

LFJWHYA. You indicated that you did not wear a lifejacket all the time while on the boat. Can you tell me why that was?

01 RECORD RESPONSE

97 DON'T KNOW

99 REFUSED

//IF LFJWHYA=01

LFJWHY\_O. ENTER RESPONSE

/ */IF SUM OF WKIDS5+WKIDS10+WKIDS15=WKIDS AND  
 [LJKID5+LJK10+LJK15]<WKIDS AND WKIDS<>0,97,99 AND LJKID5<>97,99  
 AND LJK19<>97,99 AND LJK15<>97,99 AND RANDUNIFORM<.1 AND  
 LFJBT=1/*  
 / *ASK OF 10% OF RESPONDENTS WHO REPORT THAT ANY CHILD DIDN'T  
 WEAR A LIFE JACKET ALL THE TIME.*

LFJWHYC. You indicated that someone under 16 didn't wear a lifejacket all the time while on the boat. Can you tell me why that was?

RECORD RESPONSE

97 DON'T KNOW

99 REFUSED

//IF LFJWHYC=01//

LFJYC\_O. ENTER RESPONSE

---

## END MODULE: REASONS FOR LIFEJACKET USE

### OTHER SAFETY EQUIPMENT

---

/ */IF RBTYPE NOT IN (4,5) AND RENTTRIP=1*  
 / */ASK IF BOAT TYPE IS NOT CANOE OR KAYAK/*

Which of the following were on the boat during this outing? Was there...

SFFA A first aid kit

SFHOOK Equipment for reaching someone in the water

SFEXT A fire extinguisher

SFVDIST Visual distress signals such as flares

SFSDIST A sound signal such as a horn

SFEPIRB An Emergency Position Indicating Radio Beacon-EPIRB

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

---

## USAGE OF SAFETY EQUIPMENT

---

- / ***/IF ANY OF SFFA-SFEPIRB =1***
- / ***/IF THERE WAS ANY SAFETY EQUIPMENT ON THE BOAT***
- / ***/SINGLE PUNCH***

SFUSE. You indicated that you had a [INSERT all SFFA – SFRB=01]. For safety purposes, did you have to use any of those items during this outing?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

- /
- / ***/IF SFUSE=01 AND THERE WAS MORE THAN ONE OF SFFA-SFRB=01/***
- / ***MULTIPUNCH – MUL=6/***

SFUSED. Which ones?

[DO NOT READ, SELECT ALL THAT APPLY]

- 01 FIRST AID KIT
- 02 EQUIPMENT FOR REACHING SOMEONE IN THE WATER
- 03 FIRE EXTINGUISHER
- 04 VISUAL DISTRESS SIGNALS
- 05 SOUND SIGNALS
- 06 EMERGENCY POSITION INDICATING RADIO BEACON-EPIRB
- 97 DON'T KNOW
- 99 REFUSED

---

**END SAFETY AWARENESS AND BEHAVIORS**

**NEGATIVE EVENT INCIDENCE AND RISK**

**NEGATIVE EVENTS**

---

/  
/ *ASK IF (HASMOT=1 OR RBTYPE=2) AND RENTTRIP=01*  
/ */ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACCLVA. During this outing, did the boat collide with another vessel?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

/ *//IF ACCLVA=01/*

*/IF THE BOAT COLLIDED WITH ANOTHER VESSEL/*

ACCLVB. During this outing, how many times did the boat collide with another vessel?

- \_\_ RECORD RESPONSE [RANGE=1-10]
- 97 DON'T KNOW
- 99 REFUSED

/ *//IF ACCLVA=01/*

ACCLVC. During this outing, how many times did you or someone else report to the authorities that the boat collided with another vessel?

- RECORD RESPONSE [RANGE=0-MIN(10,ACCLVB VALUE)]
- 97 DON'T KNOW
- 99 refused

/ *ASK IF (HASMOT=1 OR RBTYPE=2) AND RENTTRIP=01*  
/ */ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACAGDA. During this outing, did the boat run aground?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ //IF ACAGDA=01/  
/ //IF THE BOAT RAN AGROUND/*

ACAGDB. During this outing, how many times did the boat run aground?

\_\_ RECORD RESPONSE [RANGE=1-10]  
97 DON'T KNOW  
99 REFUSED

*/ //IF ACAGDA=01/  
/ //IF THE BOAT RAN AGROUND/*

ACAGDC. During this outing, how many times did you or someone else report to the authorities that the boat ran aground?

\_\_ RECORD RESPONSE [RANGE=0- MIN(10,ACAGDB VALUE)]  
97 DON'T KNOW  
99 refused

*/ ASK IF (HASMOT=1 OR RBTYPE=2 ) AND RENTTRIP=01  
/ ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACCLFA. During this outing, did the boat collide with a fixed or submerged object?

01 YES  
02 NO  
97 DON'T KNOW  
99 REFUSED

*/ //IF ACCLFA=01/  
/ //IF THE BOAT COLLIDED WITH AN OBJECT/*

ACCLFB. During this outing, how many times did the boat collide with a fixed or submerged object?

\_\_ RECORD RESPONSE [RANGE=1-10]  
97 DON'T KNOW  
99 REFUSED

*/ //IF ACCLFA=01/  
/ //IF THE BOAT COLLIDED WITH AN OBJECT/*

ACCLFC. During this outing, how many times did you or someone else report to the authorities that the boat collided with a fixed or submerged object?

\_\_ RECORD RESPONSE [RANGE=0- MIN(10,ACCLFB VALUE)]  
97 DON'T KNOW  
99 refused



*/ ASK IF (HASMOT=1 OR RBTYPE=2) AND RENTTRIP=01*  
*/ /ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACFLDA. During this outing, did the boat capsize, flood, or swamp?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ //IF ACFLDA=01/*  
*/ //IF THE BOAT CAPSIZED, FLOODED, OR WAS SWAMPED/*

ACFLDB. During this outing, how many times did the boat capsize, flood, or swamp?

- \_\_ RECORD RESPONSE [RANGE=1-10]
- 97 DON'T KNOW
- 99 REFUSED

*/ //IF ACFLDA=01/*  
*/ //IF THE BOAT CAPSIZED, FLOODED, OR WAS SWAMPED/*

ACFLDC. During this outing, how many times did you or someone else report to the authorities that the boat capsized, flooded, or swamped?

- \_\_ RECORD RESPONSE [RANGE=0- MIN(10,ACFLDB VALUE)]
- 97 DON'T KNOW
- 99 refused

*/ ASK IF (HASMOT=1 OR RBTYPE=2) AND RENTTRIP=01*  
*/ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACOBA. During this outing, did anyone fall overboard?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ //IF ACOBA=01/*  
*/ //IF SOMEONE FELL OVERBOARD/*

ACOBB. During this outing, how many times did anyone fall overboard?

- \_\_ RECORD RESPONSE [RANGE=1-10]
- 97 DON'T KNOW
- 99 REFUSED

*/ //IF ACOBA=01/  
/ //IF SOMEONE FELL OVERBOARD/*

ACOBC. During this outing, how many times did you or someone else report to the authorities that someone fell overboard?

\_\_ RECORD RESPONSE [RANGE=0- MIN(10,ACOBB)]

97 DON'T KNOW

99 refused

*/ ASK IF (HASMOT=1 OR RBTYPE=2 ) AND RENTTRIP=01  
/ASK IF BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/*

ACSKIA. During this outing, was there a waterskiing accident?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

*/ //IF ACSKIA=01/  
/ //IF THERE WAS A WATER-SKIING ACCIDENT/*

ACSKIB. During this outing, how many times was there a waterskiing accident?

\_\_ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

*/ //IF ACSKIA =01/  
/ //IF THERE WAS A WATER-SKIIER ACCIDENT/*

ACSKIC. During this outing, how many times did you or someone else report to the authorities that there was a water-skiing accident?

\_\_ RECORD RESPONSE [RANGE=0- MIN(10,ACSKIB VALUE)]

97 DON'T KNOW

99 REFUSED

---

## DAMAGE TO PEOPLE AND VESSELS

---

*/ IF ANY OF (ACCOLVA, ACAGDA, ACCOLFA, ACFLDA, ACOBA  
, ACSKIA ) =1*

PRE3. Did any of these incidents involve:

01 CONTINUE

*/ IF ANY OF (ACCLVA, ACAGDA, ACCLFA, ACFLDA , ACOBA , ACSIKA) =1*

ACCDMG. Damage to vessels or other property of \$2,000 or more or complete loss of any vessel?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ IF ANY OF (ACCLVA, ACAGDA, ACCLFA, ACFLDA , ACOBA , ACSIKA ) =1*

ACINJR\_1. An injury requiring medical treatment or first aid?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/IF RENTTRIP=1/*

---

### **ECONOMIC IMPACT OF RECREATIONAL BOATING**

---

ECOINT. Next, I'd like to talk about all the time you spent away from home that included the outing on the water we've been talking about. These questions are about the time from when you left your house until you returned home again, which I'll refer to as the 'trip'.

01 CONTINUE

*/ /IF RENTTRIP=1*

*/ /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

TRPDIST. How many miles did you travel by land on this trip to reach the place where the boat was kept or was launched? [IF NECESSARY: Your best guess is fine.]

- RECORD MILES [/RANGE 0-996]
- 997 DON'T KNOW
  - 999 REFUSED

---

**MODULE: BOAT EXPENDITURE COROLLARY QUESTIONS**

---

*/ /IF RENTTRIP=1*  
*/ /IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT*

STYAWY. Other than your time spent on the water, did you stay away from home with your boat for more than one day on this trip?

- 01 YES
- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /IF STYAWY=01/*  
*/ /IF RESPONDENT STAYED WITH BOAT FOR ONE OR MORE DAYS/*  
*/ /RANGE=0-996/*

STYN. How many nights was your boat either docked overnight, or on land overnight, while you were away from home on this trip?

- RECORD NUMBER [RANGE=0-996]
- 997 DON'T KNOW
  - 999 REFUSED

*/ /IF STYAWY=01/*  
*/ /IF RESPONDENT STAYED WITH BOAT FOR ONE OR MORE DAYS/*  
*/ /MULTIPLE*

STYL. Other than your time spent on the water, what type of lodging did you use on this trip? Did you stay...

[READ LIST, SELECT ALL THAT APPLY]

- 01 With friends or family
- 02 At a bed and breakfast
- 03 At a hotel or motel
- 04 At a campground
- 05 On board the boat
- 97 DK
- 99 REF

*/ /IF STYL=05/  
/ /IF RESPONDENT STAYED ON THE BOAT/*

STYOBTN. Other than your time spent on the water, how many nights did you stay onboard the boat?

RECORD NUMBER [RANGE=1- MIN(996,STYN VALUE)]

97 DON'T KNOW

99 REFUSED

*/ /IF STYAWY=01/  
/ /IF RESPONDENT STAYED WITH BOAT FOR ONE OR MORE DAYS/*

TRPDYS. How many total days did you take the boat out on the water on this trip?

RECORD NUMBER [RANGE=1- MIN(996,STYN VALUE + 1)]

97 DON'T KNOW

99 REFUSED

*/ /IF RENTTRIP=1 AND RBTYPE =2  
/ MULTIPLE*

LCH. At which types of launch sites or ramps was the boat launched on this trip? Was it launched at...

[READ LIST, SELECT ALL THAT APPLY]

01 A launch site operated by a state boating or fishing agency.

02 A launch site operated by a county or local government

03 A launch site operated by a federal agency

[IF NECESSARY: "such as the National Park Service, NOAA, U.S. Forest Service, Army Corps of Engineers, Fish and Wildlife Service, Bureau of Reclamation"]

04 launch site at a marina or dry stack

05 A privately owned/operated launch site

97 DK

99 REF

*/ /IF RENTTRIP=1 AND HASMOT=1/  
/ IF THERE IS A VALID TRIP AND THERE IS A MOTOR*

TRPMT. Were the boat's motors or engines operated during this trip?

01 YES

- 02 NO
- 97 DON'T KNOW
- 99 REFUSED

*/ /IF TRPMT=01/  
/ /IF MOTORS OR ENGINES WERE OPERATED DURING THIS TRIP/  
/ /RANGE=1-997/*

TRPMT. Approximately how many hours did you operate the motors or engines on this trip?

- RECORD NUMBER [RANGE=001-996]
- 997 DON'T KNOW
  - 999 REFUSED

---

## END MODULE: BOAT EXPENDITURE COROLLARY QUESTIONS

---

### TRIP EXPENDITURES

---

*/ /IF RENTTRIP=1*

PREEX. The next questions concern money you spent on this trip on things other than the boat itself.

- 01 CONTINUE

*/ /IF 20 < TRPDIST < 997 /*

PREEX1. Think about money you spent within 20 miles of your home while preparing for the trip. We'll ask you about money you spent traveling to and near the launch site in a moment.

- 01 CONTINUE

*/ /IF RENTTRIP=1*

PREEX2. How much did you spend for this trip [if TRPDIST>20 then "**before you left home for the trip**"] on ...

- 01 CONTINUE

*/ /IF HASMOT=01 AND RENTTRIP=01/  
/ /IF BOAT HAS A MOTOR/*

EXNFL Boat fuel and oil:

- \$\_\_\_ RECORD NUMBER [RANGE=0-996]
- 997 DON'T KNOW

999 REFUSED

*/ /IF RBTYPE NOT IN (4,5) AND TPOX NE 2 AND RENTTRIP=01*  
*/ /IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/*

EXNDCK Temporary dockage or marina fee:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF RBTYPE NOT IN (4,5) AND TPOX NE 2 AND RENTTRIP=01*  
*/ /IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/*

EXNLCH Pump-out and launch fees:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF 0 <= TRPDIST <= 20/*  
*/ /IF THE QUESTION INCLUDES TIME AFTER THEY LEFT HOME*

EXNML Restaurant meals and drinks:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF RENTTRIP=1*

EXNGRC Groceries, take-out food and drinks:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF RENTTRIP=1*

EXNGS Auto gas and oil:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF 0 <= TRPDIST <= 20/*  
*/ /IF THE QUESTION INCLUDES TIME AFTER THEY LEFT HOME*

EXNSHP Shopping and souvenirs:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF 0 <= TRPDIST <= 20/*  
*/ /IF THE QUESTION INCLUDES TIME AFTER THEY LEFT HOME*

EXNRC Recreation and entertainment:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

*/ /IF STYAWY=1 AND 0 <= TRPDIST <= 20/*  
*/ /IF THE QUESTION INCLUDES TIME AFTER THEY LEFT HOME*  
*/ AND THEY STAYED AWAY FROM HOME*

EXNLDG Lodging expenses (e.g., hotel, camping, and B&B):

\$\_\_ RECORD NUMBER [RANGE=0-9996]

997 DON'T KNOW

999 REFUSED

*/ /IF 20 < TRPDIST < 997 /*  
*/ /IF THEY WENT FURTHER THAN 20 MILES TO START THE TRIP*

PRE7. The next questions concern money you spent after you left home for the trip.

After you left home, how much did you spend on...

01 CONTINUE

*/ /IF HASMOT=01 AND PRE7=01/*  
*/ /IF BOAT HAS A MOTOR/*

EXFFL Boat fuel and oil:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED



*/ /IF RBTYPE NOT IN (4,5) AND TPOX NE 2 AND PRE7=01*  
*/ /IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/*

EXFDCK Temporary dockage or marina fee:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW  
999 REFUSED

*/ /IF RBTYPE NOT IN (4,5) AND TPOX NE 2 AND PRE7=01*  
*/ /IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/*

EXFLCH Pump-out and launch fees:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW  
999 REFUSED

*/ /IF PRE7=01/*

EXFML Restaurant meals and drinks:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW  
999 REFUSED

*/ /IF PRE7=01/*

EXFGRC Groceries, take-out food and drinks:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW  
999 REFUSED

*/ /IF PRE7=01/*

EXFGS Auto gas and oil:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW  
999 REFUSED

*/ /IF PRE7=01/*

EXFSHP Shopping and souvenirs:

\$\_\_ RECORD NUMBER [RANGE=0-996]  
997 DON'T KNOW

999 REFUSED

/ ***/IF PRE7=01/***

EXFRC Recreation and entertainment:

\$\_\_ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ ***/IF STYAWY=1 AND PRE7=01/***  
/ ***AND THEY STAYED AWAY FROM HOME***

EXFLDG Lodging expenses (e.g., hotel, camping, and B&B):

\$\_\_ RECORD NUMBER [RANGE=0-9996]

997 DON'T KNOW

999 REFUSED

---

## END ECONOMIC IMPACT OF RECREATIONAL BOATING

---

### MODULE: CLOSING

---

/ ***//IF CALLTYPE=02/***

LNDLINE. Do you have a landline telephone in your home that is used to make and receive calls?

[READ ONLY IF NECESSARY: "By landline telephone, we mean a "regular" telephone in your home that is connected to outside telephone lines through a cable or cord and is used for making or receiving calls. Please include landline phones used for both business and personal use."]

01 YES

02 NO

97 DON'T KNOW / NOT SURE

99 REFUSED

/ ***/IF CALLTYPE=01/***

CELL1a. Do you personally use a cell phone?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ /IF CELL1A =01 OR LNDLINE=01/

ASK OF LANDLINE SAMPLE WHO ALSO USE A CELL PHONE AND OF CELL SAMPLE WHO ALSO USE A LANDLINE

DUAL1a. Of all the telephone calls that you receive, are...

- 01 ALL OR ALMOST ALL CALLS RECEIVED ON CELL PHONES
- 02 SOME RECEIVED ON CELL PHONES AND SOME ON REGULAR PHONES, OR
- 03 VERY FEW OR NONE ON CELL PHONES
- 97 DON'T KNOW
- 99 REFUSED

CLOSE. That's the last question I have for you today/tonight. Thank you again for helping me with this research project for the US Coast Guard. Good bye.

01 continue

---

//IF CLOSE=01 SET DISPOSITION 61

# Appendix 1: State FIPS Codes

---

*/ FIPS CODES FOR PROGRAMMING ARE BELOW/*

01 ALABAMA	23 MAINE	72 PUERTO RICO
02 ALASKA	24 MARYLAND	44 RHODE ISLAND
04 ARIZONA	25 MASSACHUSETTS	45 SOUTH CAROLINA
05 ARKANSAS	26 MICHIGAN	46 SOUTH DAKOTA
06 CALIFORNIA	27 MINNESOTA	47 TENNESSEE
08 COLORADO	28 MISSISSIPPI	48 TEXAS
09 CONNECTICUT	29 MISSOURI	49 UTAH
10 DELAWARE	30 MONTANA	50 VERMONT
11 DISTRICT OF COLUMBIA	31 NEBRASKA	51 VIRGINIA
12 FLORIDA	32 NEVADA	53 WASHINGTON
13 GEORGIA	33 NEW HAMPSHIRE	54 WEST VIRGINIA
15 HAWAII	34 NEW JERSEY	55 WISCONSIN
16 IDAHO	35 NEW MEXICO	56 WYOMING
17 ILLINOIS	36 NEW YORK	88 THE BOAT WAS NOT IN THE UNITED STATES
18 INDIANA	37 NORTH CAROLINA	96 OTHER (SPECIFY)
19 IOWA	38 NORTH DAKOTA	97 DON'T KNOW
20 KANSAS	39 OHIO	99 REFUSED
21 KENTUCKY	40 OKLAHOMA	
22 LOUISIANA	41 OREGON	
	42 PENNSYLVANIA	

## APPENDIX B: TELEPHONE INTERVIEWER TRAINING MANUAL

# National Recreational Boating Survey (NRBS) (Participant Survey) Interviewer Training Manual

Conducted by ICF Macro

<b>Background to the Survey</b> .....	<b>1</b>
<b>Why Recreational Boating Data is Necessary</b> .....	<b>2</b>
<b>Overview of the Data Collection System - National Recreational Boating Survey (NRBS)</b> .....	<b>3</b>
<b>What you must know about this survey prior to calling</b> .....	<b>4</b>
<b>Other Survey Details</b> .....	<b>7</b>
<b>Survey Issues</b> .....	<b>7</b>
In-Language Administration .....	7
Special Interviewer Types .....	7
Refusals .....	7
Hang-ups .....	8
Language Barriers.....	8
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## BACKGROUND TO THE SURVEY

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The United States Coast Guard (USCG) is one of the five armed forces in the U.S. and the only military organization within the Department of Homeland Security. For over 200 years, the USCG has safeguarded our Nation's maritime interests around the world. Their ultimate goal is to develop a "safety culture" among the recreational boating public through educational outreach, regulation, and enforcement (when appropriate). The USCG's presence and duties are felt on local, regional, national, and international levels, and they offer a wide range of services that ensure the safety, security, and environmental protection for our Nation (USCG.mil).

On an average day, the USCG...

- Saves 12 lives,
- Responds to 64 search and rescue cases,
- Screens 720 commercial vessels and 183,000 crew and passengers,
- Investigates 13 marine accidents,
- Inspects 29 vessels for compliance with air emissions standards,
- Performs 28 safety and environmental examinations of foreign vessels, and
- Responds to and investigates 10 pollution incidents. (USCG.mil)

Recreational boating is a very popular leisure activity in the United States; between the 1960s and 1990s, this industry has experienced dramatic increases in participation and facility development. Recreational boating also represents a major source of economic stimulus and community development. While more and more Americans enjoy boating on oceans, lakes and other bodies of water, recreational boating agencies, organizations, and different industry sectors are confronting a wide range of complex issues and challenges related to this popular American pastime.

As the Federal Government's designated National Recreational Boating Safety Coordinator, the USCG has developed a **National Recreational Boating Safety Program (or RBS)** as required and authorized by Chapter 131 of Title 46, State Recreational Boating Safety Programs legislation. This program's primary goal is to ensure boating safety by implementing programs that minimize loss of life, personal injury, and property damage through preventive means. These programs also seek to balance the public's recreational use of U.S. waterways with environmental and national security efforts. (USCG.mil) To support these program objectives, the USCG maintains close working relationships with international, national, state, and local government agencies; the boating public; boating-related industries and organizations; and centers of education and research. A main focus of the National Recreational Boating Safety Program is to encourage greater State participation in boating safety efforts and to encourage uniformity in these efforts across States. As coordinator of this program, the USCG supports

safety initiatives in every jurisdiction, including States and U.S. Territories, by making available timely, relevant information on the boating activities that occur in each jurisdiction. (USCG.mil)

Partnering with State Boating Law Administrators, the boating information provided by the USCG enables each State agency to customize and implement safety initiatives that address the unique needs of boaters in each jurisdiction. Since policies about boat operation, as well as the waterways where boating takes place, vary from State to State, reporting individual State-level estimates of boating activity and operation (rather than grouping similar States) is needed so that safety advocates can better address the diverse needs of boaters in each respective State.

Therefore, a primary objective of the data collection effort is to capture sufficient data for each State in order to yield precise State-level estimates of boat use, operator age, boating safety instruction levels, and safety measures taken.

**Client:** U.S. Coast Guard (USCG)  
**What:** National Recreational Boating Safety Program  
**Program purpose:** Encourage greater State participation and uniformity in boating safety efforts, and permit States to assume a larger role in: Boating safety education, Assistance, and Enforcement activities.

## WHY RECREATIONAL BOATING DATA IS NECESSARY

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To carry out the National Recreational Boating Safety Program, and garner more participation from States, the USCG contracts with, and allocates funds to, eligible States who are approved to develop and implement their own State-run recreational boating safety programs. To make sound decisions when allocating Safety Program funds, the USCG needs updated information on a number of factors impacting boater safety including:

- Overcrowding and congestion of waterways;
- Increasing numbers of recreational vessels operating on those waterways and their geographic distribution;
- The availability and geographic distribution of recreational boating facilities in and among States applying for Federal funds; and
- State marine casualty and fatality statistics for recreational vessels.

Recreational boating agencies, State agencies, and other boating-related organizations face several challenges related to recreational boating. If reliable boating data are not collected, the USCG will not be able to:

- Measure the effectiveness of various boating safety programs;
- Identify and satisfy recreational boater needs;



- Improve the effectiveness of the boating safety programs by setting well-defined goals and developing targeted strategies in support of those goals; and
- Make prudent resource allocation decisions and provide program oversight using the most meaningful performance measures.

## OVERVIEW OF THE DATA COLLECTION SYSTEM - NATIONAL RECREATIONAL BOATING SURVEY (NRBS)

To support the USCG’s National Recreational Boating Safety Program, the USCG has contracted with ICF Macro to administer the **National Recreational Boating Survey** (hereafter, called the NRBS). The NRBS measures two populations in the United States:

- **Recreational boat owners**, and
- **Recreational boating participants**.

The National Recreational Boating Safety Program includes three discreet surveys (*Boat, Trip, and Participant*). This manual specifically addresses the Participant Survey.

**Figure 1** illustrates the NRBS multi-stage structure including survey modes, sample source and universe, targeted respondent, and analytic goals.

**Figure 1 - Overview of the NRBS Data Collection System**

Survey	Mode(s)	Sample source(s)	Universe	Respondent	Analytic Goals	
<b>Participant Survey</b>	Phone	RDD	Boating participants	U.S. households	Any adult household member	2- Ownership and participation 3- Safety awareness and behaviors
				U.S. child (<16) boating population	Any adult household member (proxy)	
				U.S. adult boating population	Adult boater	
			Rented boats		Adult boater: rented boat	1-Exposure 3-Safety awareness and behaviors 4-Economic impact of boating 5-Negative events

## WHAT YOU MUST KNOW ABOUT THIS SURVEY PRIOR TO CALLING

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### ***Who is the client?***

- USCG: the United States Coast Guard.
  - Within USCG, specifically, this survey is being conducted for the Boating Safety Division
- Questions, concerns, complaints, etc. about USCG or this survey can be directed to:  
Matthew Brenner, Associate  
ICF Macro  
(919) 293-1653  
If needed, Matt will pass along client contact information to the respondent.

### ***How long is the survey?***

- The survey is approximately 5-10 minutes in length.

### ***What is the purpose of the survey?***

The Participant Survey is an annual population-based survey of US residents regarding their boating behaviors. It is a goal of the survey to determine the proportion of all Americans who have participated in recreational boating during the reference year. A boating participant is defined as someone who has participated in any activity on any privately-owned recreational or rented boat during the reference period, whether the boat was docked or not.

Within this universe, the NRBS is concerned with two further populations:

- Children who boat, and
- Adults who boat.

An adult is defined as being at least 16 years old. Including all adults ages 16 or older is important for safety estimates since people who are 16 years old are permitted to operate motor boats unsupervised in many states (United States Coast Guard, 2008).

### ***What sorts of questions are asked? What is the survey about?***

- Boat ownership;
- Recreational boating participation among household members;
  - Types of activities and duration of participation on privately-owned or rented boats
- Boating Safety Awareness and Behaviors
- Rental boat trip information
- Demographics

### ***How will the data be used?***

- The information we collect supports the following complex issues and challenges:
  - Addressing safety to reduce the number of deaths, the number and severity of injuries, and the amount of property damage associated with the use of recreational boats;
  - Identifying the changing demographics that influence recreational boating participation levels, behaviors, and expectations;
  - Assessing boating needs and forecasting boating participation;
  - Developing new boating products, facilities, and services in response to changing preferences of existing and potential boaters;
  - Developing policies and regulations that enhance both the quality (e.g., safety, environmental protection) and sustainability of boating; and
  - Coordinating the investments and combined efforts (e.g. recruitment, boater safety, service enhancement) of different recreational boating agencies, organizations, and businesses.
- Several Federal agencies are expected to use the NRBS statistics. Among these are the National Transportation Safety Board (NTSB), the National Oceanic and Atmospheric Administration (NOAA), the U.S. Army Corps of Engineers (USACE), and the U.S. Department of Agriculture (USDA) Forest Service.
- Many other institutions have also expressed interest in using the NRBS results. Some of these include the Department of Natural Resources of nearly all States, the National Marine Manufacturers Association (NMMA), the National Association of States Boating Law Administrators (NASBLA), the U.S. Sailing Association, the Recreational Boating and Fishing Foundation, and more.

So—the information we are collecting is very important to many different organizations and some large government agencies!

### ***Where are we doing the survey?***

- This survey is conducted throughout the United States (including Alaska and Hawaii), and in Puerto Rico.

### ***Who are we calling and who is eligible?***

For the Participant Survey portion, there are up to three survey subjects:

- Any household member (boating or non-boating),
- A boating child, or
- A boating adult.

The qualified household member is anyone over the age of 16. That person is required to enumerate the household members and provide information on whether each has boated recently. He or she need not personally have boated in the target period. The enumeration data support participation estimates and also subject selection for the next two phases.

Data for the child will be collected by proxy. There are only two questions in this section, and both concern topics that an adult household member should be able to report on: safety behaviors. A random child is selected from the set of household boating participants who are under 16 years of age. The household member answers questions regarding this child.

A boating adult is randomly selected from the set of household boating participants who are 16 and over. If the household member and the boating adult are not the same person, the survey requires a transfer to the boating adult.

***Does the respondent have to participate?***

- **NO.**
- Participation is completely voluntary.
- People can choose to answer, or not answer, any of the questions.

***Is this information confidential? YES.***

- All ICF Macro employees, including interviewing staff, sign an assurance of confidentiality form to protect the confidentiality of all data collected throughout the period of survey performance.
- During the survey introduction, an assurance is made that answers provided are strictly confidential and will be used for general management policy decisions and statistical purposes only.
- Verbal consent will be elicited from participants before they take the survey. A call-back telephone number will be provided to anyone who wishes to speak with a supervisor or the client.
- In addition, you should discontinue a call if they feel someone is listening on another line. Such discontinued calls will result in an unscheduled call-back at a later date.
- Survey data and all identifying information about respondents will be handled in ways that prevent unauthorized access at any point during the study. To maintain confidentiality, only a sub-string of the telephone numbers associated with each completed call will be included in the final data, so a respondent's answers cannot be connected to a specific person or telephone number. Telephone data will also be housed on a secure server.

***How can anyone verify this survey effort is legitimate?***

- Respondents may call the ICF Macro verification line at 888-316-8038.
  - Upon calling this number, respondents will be given the option of either pressing “1” to hear a recording with information about the study, or pressing “2” to leave a voicemail.

*This voicemail should be checked once per shift by going to iSite → Links → Voice Mail (Prod) and choosing “nrbs” as the project.* Each instance of a message should be documented to track messages received and outcomes taken by staff.

## OTHER SURVEY DETAILS

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**Number of Completes:** 16,640 total interviews – 320 interviews x 52 markets

**Fielding Schedule:** February 4, 2013 – April 14, 2013

**Type of Dialing:** Predictive for landline; manual for cell

**The Participant Survey will also include:**

- A survey version programmed in Spanish;
- A caller ID pulsed out to each respondent’s caller ID box;
- Programmed display messages to leave on answering machines and privacy managers, and
- Interactive Voice Response (IVR) to manage inbound calls from respondents.

## SURVEY ISSUES

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### In-Language Administration

We are fielding the survey in English and Spanish.

### Special Interviewer Types

This study will use special interviewer types for refusals and for interviews conducted in Spanish. Below is a complete list of the interviewer types.

- “2” – Initial Spanish refusal with a “cool off period”
- “4” – Refusal converter
- “5” – Spanish
- “6” – Spanish Refusal Converter
- “7” – Met protocol
- “8” – Initial refusals with a “cool off period”
- “9” – Records on the internal “DO NOT CALL” list

### Refusals

The Participant Survey has a **two-refusal** policy with landline and cell respondents.

This means:

- Many initial refusals are made due to poor timing of the call. If a landline or cell phone respondent refuses to participate the first time, we will re-contact the record a second time, under the special interviewer type for refusal conversions, preferably at a different time of day to ensure that the individual understands the importance of the study. One refusal is a soft, initial refusal. If the respondent refuses a second time, it will be considered a “hard” refusal, and the number is automatically taken out of calling by the computer. ***However, if a respondent mentioned that the household does not participate in boating, please capture that response.***
- Note that once a record moves to refusal conversion, it will first move to special interviewer type 8 for a “cool-off” time. After the “cool-off period” is over, the record will move to special interviewer type 4 where it is ready to be called by a refusal converter.
- If the respondent, at any point, swears at you, becomes irate, threatens to sue the company, or says he or she will contact the USCG to lodge a complaint, the record should be dispositioned as a hard refusal. Hard refusals will be taken out of dialing immediately.

### Hang-ups

Hang-ups at any point in the introduction are to be considered hang-ups and dispositioned as such. If the respondent hangs up **before** you say you are calling on behalf of the USCG, and are able to explain why you are calling (“We are gathering information about the recreational boating practices of U.S. residents”), the call should be dispositioned as a hang-up. *A hang-up does not count as a refusal*, thus a record can be dispositioned with a hang-up and not be removed from dialing. If the respondent hangs up **after** you say you are calling on behalf of the USCG, and you explain the purpose for the call, the call should be dispositioned as a refusal.

### Language Barriers

If the respondent does not speak English, you should disposition the call as a language barrier. This record will be set to special interviewer type 5, where it will receive another attempt from a Spanish-speaking interviewer to determine if the interview may be completed in Spanish. If the record is given a second language barrier disposition, the record will be removed from dialing.

### Answering Machines

You may be prompted to leave a message about the study on respondent answering machines or voicemail. The CATI script is automated to prompt you to leave this message. You will leave up to one message if we did not have an opportunity to communicate the study’s purpose during previous call attempts. The automated message reads as follows:

**"Hello, I'm calling on behalf of the U.S. Coast Guard. We are conducting a survey about outdoor recreational activities. I'm sorry that I did not reach you, and we will try you again soon."**

### **Privacy Managers**

Occasionally, it is not possible to complete a telephone call because of call-blocking device or a privacy manager system. If the dialer should give you a call that has a privacy manager or call-blocking device on it, do the following:

- If you have the option to say a name, say, "Calling on behalf of the U.S. Coast Guard".
- If you have the option to press a specified number to indicate you are not soliciting, press the specified number.
- If you are presented with no options and simply told there is call-blocking device or a privacy manager, then disposition the call as a privacy manager.

### **Call Attempts**

Each landline number will be called a minimum of 10 times over three calling periods or until a completed interview is achieved. Each cell phone number will be called at least 6 times. If a respondent is contacted on the last call, and an interview cannot be completed, another attempt will be made.

## **INTERVIEWING PROCESS AND TECHNIQUES**

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The response rate measures the extent to which interviews were completed from among the telephone numbers selected for the sample. The higher the response rate, the lower the potential for bias in the data (bias occurs if some members of the population are more or less likely to be included than others). We have a limited number of records from which to get completed interviews.

***You are the primary people responsible for achieving high response rates.*** The way to meet this goal is to use your best calling skills on every interview, to become successful in dealing with resistance and refusals, to know and use the strict protocols for dispositions, and to make call-backs to reach respondents.

***Some important concepts to remember when making calls...***

#### ***Verbatim.***

- It is vital that questionnaire items be read exactly as written. This reduces misunderstanding about what a question means.
- Reading verbatim means that everyone gets the same question asked the same way no matter who the interviewer is. This makes the data reliable; it does not matter who, when, or where the question gets asked.

***Use Your Best Voice and Phone Manner.***

- The first 15 seconds of the introduction can mean success or resistance.
- Be focused, courteous, friendly, pleasant, and professional.
- Maintain an even tone of voice. Speak as clearly as possible, and talk directly into the mouthpiece.
- Read the script with good expression, and in a natural, conversational manner.
- Listen carefully to the person with whom you are speaking and adjust your volume, pace, and expression accordingly.

***Importance of Pace.***

- Give the introduction enough time. You may have read the introduction hundreds of times, but the person with whom you are speaking has never heard it before.
- Just “reading the words” is not enough. You must think about communicating with the person who is on the phone.
- Approach introductions with confidence, and be patient and polite at all times. Remember:
  - Always match your pace to that of the respondent.
  - Respondent pace may vary throughout the questionnaire.
  - Respondents located in different geographic areas may have different paces. Be aware of this from the moment you greet each respondent—and match your pace accordingly.

***Keep the Interview Focused.***

- It is your responsibility to keep the survey focused on the issues and topics covered by the questionnaire.
- For some people, especially the elderly and those who live alone, your telephone call may be the only social interaction they have had that day. As a result, some respondents may become very chatty. It is your responsibility to redirect them, ever so gently, to the purpose at hand.
- When the respondent begins to elaborate or tell a story, as politely as possible, interrupt the story and direct the respondent back to offering an answer to the item with these kinds of prompts:
  - “So, would your response be . . . (strongly agree, etc.)?”
  - “Should I mark your response . . . (strongly agree, etc.)?”
- If you are uncomfortable being that abrupt, you can try instead to say —
  - “We have just a few more questions, let me make sure that I understood that your response to \_\_\_ (state question again), would be... (strongly agree, etc.)?”



(If you aren't close to the end of the survey you can say "We have a few more questions **in this section...**")

### ***Ending the interview.***

- At the end of a survey, you should always thank respondents for participating. Let them know how much we appreciate their time and their answers. Leave the respondents feeling like they have done something of value—because they have.
- At the end of a call, respondents should feel good about the interaction with ICF Macro—even if it did not turn into a completed interview. Respondents should feel that they were treated with respect, courtesy, and that they were listened to. Respondents should not have felt pressured, threatened, or more anxious as a result of our contacts.

### **WHAT TO AVOID**

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- A hostile, sarcastic, or aggressive tone of voice;
- Judgmental attitude;
- Showing dismay or horror;
- Anger or frustration with a respondent;
- Excessive concern for a respondent;
- Excessive chattiness;
- Commenting on a respondent's answer;
- Suggesting an answer to a respondent;
- Insisting that a respondent complete an item; and
- Providing incorrect or inaccurate information.

### ***Your responsibilities as an interviewer include:***

- Clearly understanding the nature and content of the questions before starting the interview.
- Being familiar with all instructions and procedures.
- Ensuring the interview is conducted with the correct respondent.
- Being courteous, friendly, respectful, and professional to all respondents.
- Striving for maximum efficiency without sacrificing quality.
- Meeting both quality and quantity performance standards and complying with ICF Macro's policies and procedures.

## GENERAL SURVEY TRAINING INFORMATION

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**Overcoming respondent resistance and discouraging refusals.** This is often a key element in conducting surveys. You are expected to smoothly and professionally handle any respondent objections or complaints. As soon as the complaint/objection is overcome, you should move immediately to the next question in the survey. Avoid arguments and also avoid asking yes/no questions like “Don’t you want to help me with this survey?” Yes/no questions allow respondents an easy way of saying “NO.” Instead say, “Most people find this survey interesting and the results will be used to improve safety programs for residents in your area. Let’s begin the survey now, and we’ll resume later if we can’t finish.”

**Recording answers without error.** It is imperative that you record each respondent’s answers exactly as he or she provides them. Use the [Shift 6] back-up function to review the answer to the last question if you think you have made an error.

**Proper probing and clarifying imprecise or confusing responses.** A respondent will sometimes give vague answers like “I don’t know, either agree or strongly agree.” You must know when to probe for exact information. If this happens and you have already read the full response scale to the respondent, please probe with something like, “I’m sorry, I need to record one response, would that be “agree or strongly agree”?”

**Obtaining complete answers.** You may have to probe to obtain complete answers to some questions.

**Maintaining respondent confidentiality.** It is very important that respondent confidentiality be respected at all times. You are not to discuss any information or opinions collected in the course of conducting interviews. *If you are unsure if something is confidential or not, please discuss directly with your supervisor.*

**The following are some tips to keep in mind when conducting this survey:**

- Speak directly into the mouthpiece.
- Use a low pitch voice; do not raise or elevate your voice.
- Know respondent selection procedures and persuade respondents to continue or set appointments for us to call back.
- Do not let your voice trail off at the end of a sentence.
- Move smoothly and directly from the introduction script to the first question.
- Put the respondent at ease by reading the questions in a friendly, natural manner. Never sound bored, sarcastic, or uninterested in the respondent’s answers.
- Know the questionnaire, and be prepared to probe on some questions. Be prepared to answer the respondent’s questions—remember you can type “special” at any time to get to the help screen!
- Do not rush the respondent. Do not read a series of questions rapidly.

- Ask all questions as they appear on your monitor. Do not skip or change the wording of any questions.
- Record answers with the highest degree of accuracy possible.  
Probe if you don't fully understand the respondent's answer or if the response isn't specific enough to answer the question. Avoid probes beginning with the word "why." Instead use neutral phrases such as, "Please explain why you feel that way" or "Please elaborate on that".
- Read the script with an objective tone, and don't lead the respondent to pick a particular answer by reading the question in a particular way.

## Handling Challenges

### *Reassuring Respondents*

You are expected to handle any respondent objections, questions, or complaints smoothly and professionally. Remain polite, respectful, professional, and informative. This is the best way to reassure a respondent who is hesitant and obtain cooperation from a respondent who expresses objections. Answer a respondent's questions in a *courteous, confident manner*.

For example: Some callers will **look to you for cues on how to answer the questions**. If someone asks you to tell them what something means *do not influence them with your own interpretations*. Instead, turn the question back to them by saying something like:

*"This survey is about your answers so please respond to whatever you think the term means. There are no right or wrong answers."*

If the respondent insists that he or she does not know how to answer the question, then mark the response as "don't know" and move on to the next item. Do not tell the respondent that you are entering the "don't know" response; rather, just mark the response and keep going.

### *Be Prepared to Deal with Difficult Situations*

You will build up a repertoire of phrases to use in difficult situations that arise during an interview. Here are some suggestions for dealing with difficult situations.

Types of Respondent	Strategies to Maintain Control
<b>The respondent rushes you</b>	<ul style="list-style-type: none"> <li>• Say, "We have only about (X) minutes left until the end of the survey. We can go through this quickly if we both focus on the questions."</li> <li>• Say, "It is possible to suspend the interview and complete it at another time. All the information we've collected so far will be saved."</li> <li>• <u>Read verbatim</u>. Do not allow a respondent who is in a hurry to compromise the interview. You can say something like "I'm sorry, I'm required to read</li> </ul>

	[questions/responses] in full as they appear to me on my screen.”
<b>The respondent is chatty (you get a life history on every question)</b>	<ul style="list-style-type: none"> <li>• Say, “We might get to some related questions in a little while. By the end of the interview, if there’s anything we haven’t covered, you can tell me then.”</li> <li>• Listen politely, wait for this person to take a breath or pause. Then repeat the question or read the next question.</li> </ul>
<b>The confused respondent: the respondent does not seem to understand the question</b>	<ul style="list-style-type: none"> <li>• Repeat the entire question verbatim. Pay attention to clarity, pace, expression, and phrasing. Pick out the main idea and emphasize these words.</li> <li>• Use the prompts on the screen, if any.</li> <li>• Use a probe (in accordance with study protocols).</li> </ul>
<b>The confused respondent: the respondent does not give an answer that fits the answer choices</b>	<ul style="list-style-type: none"> <li>• Repeat the answer choices or scale.</li> <li>• Repeat the question.</li> <li>• Use an appropriate probe, as suggested in survey protocols.</li> </ul>
<b>The distracted respondent</b>	<ul style="list-style-type: none"> <li>• Listen carefully, and try to figure out why the respondent is distracted.</li> <li>• Re-read the question verbatim, and re-read the choices.</li> <li>• Offer to suspend (this sometimes helps the person focus better) and call back at another time.</li> <li>• Say, “Would you like to take a minute to (turn down the TV, deal with a crying baby, answer the door, etc.)?”</li> </ul>
<b>The argumentative respondent (once you are in the survey questions, this is rare)</b>	<ul style="list-style-type: none"> <li>• Say, “These are the questions the Coast Guard considers important.”</li> <li>• Say, “Remember, you can refuse to answer any question. All your answers are confidential.”</li> </ul>
<b>The abrupt respondent: the respondent has answered the question previously, or interrupts before hearing the entire question</b>	<ul style="list-style-type: none"> <li>• Say, “I have to read every question as it comes up on my screen so that everyone who participates in this survey answers the same questions.”</li> <li>• Say, “I have to read every question in full.”</li> </ul>
<b>The emotional respondent</b>	<ul style="list-style-type: none"> <li>• Maintain focus and listen.</li> <li>• Adjust your pace and tone of voice, if necessary.</li> <li>• <u>Do not assume</u> that the respondent cannot continue.</li> <li>• <u>Do not comment</u> on emotional remarks.</li> <li>• Get supervisor assistance if you need it.</li> </ul>

All of these strategies help you stay in control of the interview. When done smoothly and confidently, with a pleasant voice and manner, these techniques can also help you *to build rapport with the respondent*.

### ***Maintain Neutrality***

You must make every effort not to influence the respondent's opinions, suggest answers, or lead the respondent to a specific answer. You should be *non-judgmental and objective*. Nothing in your words or manner should imply criticism, surprise, approval, or disapproval of either the questions or a respondent's answers. Even responding with "okay" can clue a respondent to a reaction. Read the script in an even, neutral tone, and *avoid reacting in any way* to the respondent's answers.

A neutral approach to each interview *helps the respondent to feel comfortable* answering the questions truthfully and completely. The questionnaire is designed to elicit a free flow of truthful, accurate answers. A respondent *must feel free* to say what he or she thinks and feels *without being influenced* by anything you might say.

### ***Avoid Leading***

The survey questions are carefully written, revised, and then tested. In most instances, it should be sufficient to read the question and obtain an answer on the first try.

If the respondent is having trouble answering the question within the choices given, re-read the question and the answers. It is your job to get the *respondent to commit to an answer*. Use neutral probes, if necessary. You want the answer to *come from the respondent*, and not from anything you have suggested or influenced.

Here are some forms of leading: You must *never* say these things:

- "I don't suppose you've been boating in the past year?"
- "So you said it's been 2-3 years since you went boating. Is that more like 3?"

These examples of leading also demonstrate paraphrasing the script, and not *reading verbatim!*

### **Converting Refusals**

As with all surveys, some respondents will not want to participate. In order to effectively address participants' concerns and frustrations, here are some key phrases you can use:

- We want to give everyone a chance to participate in this survey.
- The U.S. Coast Guard is conducting this survey to gather information on boating activities of people in the U.S. The information collected will be used to improve boating safety programs in your area, as well as contribute to recreational boating policy decisions.

- Your participation, along with that of many others, will help the Coast Guard better understand boating participation levels and improve recreational boaters' overall safety and boating experience.
- Nothing is ever reported in any way that can identify you. The company I work for, ICF Macro, is very strict about guarding confidentiality. All results are only reported in group form.
- This is not a political group or business. Nobody will try to sell you anything as a result of your participation.
- Most people find the survey interesting. We could begin, and if you don't have time to finish it now, we can call later at your convenience.

### *General Refusal Conversion Information*

Here are a few things to keep in mind about refusals and your approach to them:

- Respondents are sometimes rude and hostile for reasons that have nothing to do with your skill as an interviewer or you as a person. Don't take these reactions personally.
- Rather than reacting to a respondent's anger or resistance, remain calm and listen. Use what you are hearing to address the respondent's objection.
- Refusal conversion skills get better with practice. Make the effort at refusal conversion every time you encounter resistance.
- Adapt your approach to the particular respondent.
- Project a confident, reassuring manner while conveying a genuine interest in the respondent. For example, if the respondent is in the middle of cooking dinner, apologize for calling at an inconvenient time, and offer to call back later. This will convey your willingness to accommodate the respondent and acknowledge the importance of the respondent's time.
- It is very important to document the reason for the initial refusal because this information may help convert a refused interview into a completed interview on a later call.
- Use the information in the message field (from the initial refusal) to prepare specific responses and approaches on the present call.
- Distinguish between a refusal and an appointment. "I don't have time to talk right now," may indeed mean that the person is busy. In this case, try to set an appointment for a call-back time.
- If a respondent seems willing to participate, but is concerned about the survey's legitimacy, explain the purpose of the survey and provide the verification number.



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