NATIONAL RECREATIONAL BOATING SURVEY

METHODOLOGY REPORT OF THE 2012 TRIP SURVEY

DECEMBER 13, 2013

Submitted by:

ICF Macro, Inc.
126 College Street
Burlington, VT 05401

Submitted to:

Dr. Philippe Gwet, Mathematical Statistician
United States Coast Guard
Boating Safety Division CG-BSX-21
2703 Martin Luther King Jr. Ave, SE
Washington, DC 20593-7501

TABLE OF CONTENTS

INTRODUCTION

In 2012, ICF Macro, Inc., an ICF International company (hereafter, ICF), conducted the Trip portion of the 2012 National Recreational Boating Survey (NRBS) on behalf of the United States Coast Guard (USCG), which will provide data to support the 2012–2016 strategic plan of the National Recreational Boating Safety (RBS) Program. 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 second component of the NRBS: the Trip Survey. The Trip Survey is a panel study of recreational boaters that samples individual boating trips to measure exposure, safety behaviors, expenditures, and negative events. More specifically, this report includes methodological information related to the following:

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

This report also describes some challenges encountered during the study, and offers suggestions for refining the survey in future iterations.

ACKNOWLEDGEMENTS

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".[1] In support of this mission, the Boating Safety Division developed the National RBS Program. The National RBS Program seeks to develop a safety culture among boaters 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.[2]

To measure progress toward these goals, the USCG publishes accident statistics and measures the effectiveness of boating safety programs. Safety statistics have traditionally been calculated as the number of casualties per 100,000 registered boats.[3] 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 in 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 in order 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 course
   b. Alcohol use and boat operation

---

[1] http://www.uscgboating.org/about/vision_and_mission.aspx
[2] http://www.uscgboating.org/assets/1/workflow_staging/News/489.PDF
[3] http://www.uscg.mil/proceedings/articles/22_Gwet_Haas.pdf

4. Economic impact of recreational boating
   a. Money spent on boats
   b. Money spent in communities on boat trips
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 Participation Survey—which, together, will comprehensively measure boats and boaters in the United States. The Boat Survey is an annual survey of 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.

This report describes the methodology used to implement the tasks for the 2012 Trip 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 (Survey Versions 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[4])
	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 (<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

---

[4] Exposure data was collected in the 2011 Boat Survey only; in future iterations of the NRBS, exposure will be collected via the Participant Survey.

QUESTIONNAIRE DEVELOPMENT AND TESTING

ICF designed the Trip Survey questionnaire on the basis of the USCG's research objectives, as well as questions provided by an advisory committee that included experienced researchers at Michigan State University. The Trip Survey instrument was designed to fulfill four primary analytic goals by examining overall patterns of the following:

- Exposure
- Safety awareness and behaviors
- Economic impact of boating
- Negative events experienced while boating

To meet each goal, the Trip Survey included sections to collect information about docked days, days spent on the water, alcohol use before and during boating, knowledge and use of safety equipment, trip expenditures, and negative event incidence and risk.

COGNITIVE PRETESTING

To test the NRBS survey instruments, cognitive researchers conducted two rounds of interviews in January 2010. A total of nine cognitive interviews were conducted for the Trip Survey. Respondents recruited to test the Trip Survey were drawn from those respondents who also tested the Boat Survey instrument, since the survey design calls for the panel sample for the Trip Survey to be recruited from those completing the Boat Survey. This allowed the team to test the Trip Survey with respondents who were already familiar with the general purpose and format of the survey system.

Exhibit 3 displays the demographic breakdown of the participants.

Exhibit 3: Demographic Breakdown of Participants

Characteristic		Boat Survey
Gender	Males	8
	Females	1
Age	>50 years	5
	≥50 years	4
Education Level	Less than a 4-year degree	2
	4-year degree	4
	Graduate degree	3
Boat Ownership	Yes	9
	No	0
Type of Boat Owned/Used	Human powered	3
	Motor boat	3
	Sail boat	3

Testing focused on survey structure, respondent fatigue, respondent understanding of the survey questions, and respondent recall.

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 Trip Survey findings from that report, including the following:

- Clarifying survey terminology
- Moving the selection of docked trips to after the water trips
- Reformulating several loops so that they asked about all items (e.g., safety equipment, children on the boat) first and then asked for information about each relevant item
- Limiting questions about docked trips to reduce fatigue
- Skipping some questions for canoes, kayaks, and other low-investment boats
- Rewording the introduction to the trip expenditures question

While we found that respondents were able to understand the questions asked in the Trip Survey, the use of certain terms proved confusing for some respondents. For example, two respondents who kept their boats on the water during the boating season were confused by the word "stored" used in reference to the location where the boat is when people are not on it. One person said that this might be better phrased "docked" or "moored." Because "stored" is appropriate for some kinds of boats kept on land, the word was changed to "kept" for testing in later interviews. Further testing found that "kept" seemed to be comprehended by owners of all kinds of boats. For clarification, the question was changed to include "was the boat kept or stored on land or in the water?" and a note for the interviewer was displayed—"[IF NECESSARY: Where was the boat when people were not on it?"]—to avoid respondent confusion.

During the cognitive interviews, it was discovered that the placement of the docked day questions before water trip questions was causing confusion and the survey would flow better if structured differently. Since boat owners expect to take their boat out on the water, it is more intuitive to ask the water trip questions before asking about docked days. During cognitive testing, one respondent became confused and reported number of days on the water rather than docked days in this section, because she was expecting to answer questions about using her boat on the water. To avoid any respondent confusion, the docked day series was asked after the water trip series.

Respondent fatigue is a problem common to lengthy surveys and was evident during cognitive testing. To reduce respondent fatigue, particularly in the safety equipment and children on the boat loops, the survey flowed better when all the gate questions were asked first, and then a second question was presented about all the endorsed items. To streamline the children on the boat and safety equipment loops, respondents were first asked how many children under the age of 16 were on the boat. If respondents indicated there were children under the age of 16 on the boat, they were asked how many children were less than 6 years old, 6 to 10 years old, or 11 to 15 years old. Respondents were then asked about life jacket use only for the age ranges specified. To further reduce fatigue, the docked days section was consolidated to only the most important questions. In the interviews, several respondents became fatigued by the time they reached the series on the docked trips. This series as originally written was somewhat repetitive. In the interest of collecting the best possible data, only questions about the

location, number of people on the boat, and hours on the boat were presented in the docked days series. This information is critical to accurately estimating exposure.

Cognitive testing also revealed that certain questions did not apply to all boat types, and the survey could be further streamlined by skipping these questions.

The introduction to the trip expenditures section was a challenge to perfect. The survey before this section focuses on one day. In this section, the questions are about all the time the respondent spent away from home on the trip that included that day. For Round 1 of testing, no introductory text was used. This worked for day trips, but not for longer trips. After some initial probing in Round 1, the following text was tested in Round 2:

> Next, I'd like to talk about all the time you spent away from home that included the day 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 could be just the day or, or it could be several days.

With this specification, it was possible to streamline the text of several questions, removing statements like 'on the trip that included the day we have been talking about'.

Following Round 2, testing the introductory text was further modified for the final instrument to the text below:

> 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 will refer to as the trip.

A crucial part of measuring exposure is obtaining accurate trip data. Overall, respondents were able to remember their trip and provide information for time spent on the water. Most respondents were able to give specific numbers in terms of days and hours spend on the water. Three respondents explicitly used the times their boats had set out and returned. Most respondents thought the times they gave were quite accurate; some said it could have been an hour more or less.

SAMPLE DESIGN

INTRODUCTION

Panel participants for the 2012 Trip Survey were recruited from members of boat-owning households that participated in the Boat Survey.

At the end of the Boat Survey, respondents were asked if they would be willing to participate in a panel and be contacted on multiple occasions during 2012. Participants were informed they would be contacted two to four times in the coming year to provide information about boating trips, and would be compensated $5 each time they participated. The Boat Survey collected contact information including name, mailing address, telephone number, and e-mail address. Those boat owners who agreed to join the panel became the sample for the Trip Survey.

Trip Survey panelists consisted of members of households that own of a variety of boat types and represented registered and unregistered boats in all 50 States, the District of Columbia, and Puerto Rico. Exhibit 4 shows the distribution of Trip Survey panel sample by boat type. Exhibit 5 shows the distribution of the Trip Survey panel sample by jurisdiction.

Exhibit 4: Panel Composition by Boat Type

Boat Type	Frequency
Powerboat less than 15 feet	2,178
Powerboat 16–20 feet	5,477
Powerboat 21–28 feet	2,529
Powerboat greater than 28 feet	1,002
Sailboat less than 25 feet	1,137
Sailboat greater than 25 feet	1,198
Pontoon boat	1,559
Personal watercraft	1,684
Self-propelled	6,021
Other unidentified	1,096
Total	23,881

Exhibit 5: Panel Composition by Jurisdiction of Registration

Jurisdiction	Frequency		Jurisdiction	Frequency
Alabama	531		Montana	372
Alaska	381		Nebraska	217
Arizona	253		Nevada	216
Arkansas	427		New Hampshire	298
California	551		New Jersey	377
Colorado	273		New Mexico	186
Connecticut	431		New York	683
Delaware	237		North Carolina	581
District of Columbia	125		North Dakota	284
Florida	1,011		Ohio	656
Georgia	494		Oklahoma	393
Hawaii	212		Oregon	562
Idaho	304		Pennsylvania	589
Illinois	540		Rhode Island	286
Indiana	385		South Carolina	729
Iowa	474		South Dakota	296
Kansas	287		Tennessee	531
Kentucky	372		Texas	569
Louisiana	559		Utah	282
Maine	534		Vermont	334
Maryland	507		Virginia	524
Massachusetts	540		Washington	625
Michigan	1,088		West Virginia	219
Minnesota	1,113		Wisconsin	978
Mississippi	463		Wyoming	223
Missouri	557		Puerto Rico	222
			TOTAL	23,881

STRATIFICATION

The panel sample was stratified into Northern and Southern groups by jurisdiction of boat registration, for registered boats, and jurisdiction of residence for unregistered boats. To maximize the likelihood of collecting trip data and to more fully represent the boating season in those jurisdictions, the Trip Survey design called for panelists in the Southern strata to be eligible to be sampled up to four times over 12 months, and for panelists in the Northern strata to be eligible to be sampled up to two times over six months (for trips taken from April through September). Exhibit 6 shows the distribution of these two strata across jurisdictions.

Exhibit 6: Distribution of Jurisdiction by Northern or Southern Strata

Jurisdiction	Strata		Jurisdiction	Strata
Alabama	Southern		Montana	Northern
Alaska	Northern		Nebraska	Northern
Arizona	Southern		Nevada	Southern
Arkansas	Southern		New Hampshire	Northern
California	Southern		New Jersey	Northern
Colorado	Northern		New Mexico	Southern
Connecticut	Northern		New York	Northern
Delaware	Northern		North Carolina	Southern
District of Columbia	Northern		North Dakota	Northern
Florida	Southern		Ohio	Northern
Georgia	Southern		Oklahoma	Southern
Hawaii	Southern		Oregon	Northern
Idaho	Northern		Pennsylvania	Northern
Illinois	Northern		Rhode Island	Northern
Indiana	Northern		South Carolina	Southern
Iowa	Northern		South Dakota	Northern
Kansas	Northern		Tennessee	Southern
Kentucky	Northern		Texas	Southern
Louisiana	Southern		Utah	Northern
Maine	Northern		Vermont	Northern
Maryland	Northern		Virginia	Southern
Massachusetts	Northern		Washington	Northern
Michigan	Northern		West Virginia	Northern
Minnesota	Northern		Wisconsin	Northern
Mississippi	Southern		Wyoming	Northern
Missouri	Northern		Puerto Rico	Southern

To implement this design, the year was divided into four quarters consisting of three months per quarter. Exhibit 7 shows the distribution of the months and strata across these four quarters.

Exhibit 7: Sample Quarters and Strata

Quarter	Months	Strata
1	January–March	Southern
2	April–June	Northern and Southern
3	July–September	Northern and Southern
4	October–December	Southern

Panelists were selected to report their boating trips once per quarter. Once selected in a given quarter, panelists were not eligible to be drawn again in that quarter. Following this selection protocol, panelists selected in the first month of the first quarter were always selected in the first month of subsequent quarters. Likewise, panelists selected in the second month of the first quarter were always selected in the second month of subsequent quarters.

SAMPLE SIZES

Exhibit 8 presents monthly sample sizes for the Trips Survey by jurisdiction.

Exhibit 8: Sample Size by Jurisdiction and Month

Jurisdiction	Jan	Feb	Mar	April	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Total
AK				133	127	121	111	323	296				1,111
AL	166	162	160	184	162	156	147	423	395	124	124	124	2,327
AR	130	132	129	141	126	123	113	326	295	87	102	96	1,800
AZ	85	79	76	94	73	70	77	198	187	68	55	59	1,121
CA	182	185	184	182	166	172	140	422	394	114	125	134	2,400
CO				93	92	88	80	220	206				779
CT				151	143	136	137	383	348				1,298
DC				40	42	43	32	100	90				347
DE				85	79	72	74	208	188				706
FL	318	316	317	336	302	313	294	820	760	248	240	244	4,508
GA	155	153	153	168	155	150	145	418	394	121	130	130	2,272
HI	70	68	70	71	63	63	53	164	157	44	53	56	932
IA				160	158	156	146	394	358				1,372
ID				100	101	103	83	246	223				856
IL				188	179	173	165	458	420				1,583
IN				126	129	130	106	312	279				1,082
KS				94	95	95	87	250	221				842
KY				126	122	124	110	319	294				1,095
LA	184	188	187	184	172	157	133	418	379	117	132	122	2,373
MA				179	181	178	168	475	446				1,627
MD				168	169	168	148	445	409				1,507
ME				178	176	177	153	444	416				1,544
MI				362	359	362	322	938	866				3,209
MN				371	372	368	324	939	852				3,226
MO				189	183	184	163	468	425				1,612
MS	147	145	145	155	137	140	125	372	347	103	111	118	2,045
MT				124	122	126	111	309	275				1,067
NC	177	179	178	193	186	175	171	494	466	146	155	147	2,667
ND				95	93	96	83	251	231				849
NE				71	75	71	65	187	173				642
NH				100	100	97	91	249	229				866
NJ				127	121	127	114	331	316				1,136
NM	60	59	60	61	58	54	48	151	143	39	46	47	826
NV	68	72	69	71	65	62	56	164	158	44	56	51	936
NY				225	227	229	204	594	545				2,024
OH				219	218	217	199	572	529				1,954
OK	125	122	124	131	120	122	104	319	284	90	87	92	1,720

Jurisdiction	Jan	Feb	Mar	April	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Total
OR				186	191	183	163	492	463				1,678
PA				198	196	194	182	524	499				1,793
PR	51	48	46	53	40	43	45	120	103	36	28	36	649
RI				96	95	95	85	252	230				853
SC	238	238	240	242	216	220	205	584	555	176	166	180	3,260
SD				99	97	98	90	252	235				871
TN	165	166	163	177	167	155	158	437	405	128	138	122	2,381
TX	172	174	176	189	170	168	154	445	409	133	133	128	2,451
UT				95	90	97	86	237	214				819
VA	164	165	164	173	166	167	147	453	428	125	142	138	2,432
VT				110	111	112	106	290	252				981
WA				209	210	206	192	554	512				1,883
WI				323	327	325	296	845	766				2,882
WV				73	72	74	60	183	161				623
WY				74	75	74	60	174	157				614
Total	2,657	2,651	2,641	7,972	7,671	7,609	6,911	19,946	18,383	1,943	2,023	2,024	82,431

CONTACT MODE GROUPS

The Trip Survey sample was broken into two different groups to facilitate data collection contact: the Web group and the CATI group. The Web group was comprised of panelists who opted into the panel by providing a valid e-mail address when completing the Boat Survey. Valid e-mail addresses were not malformed and did not result in a bounce back. The CATI group was composed of panelists who opted into the panel by providing their telephone number (but not a valid e-mail address) when completing the Boat Survey. Panelists who provided both an e-mail address and telephone number were contacted first by e-mail, and, if that did not generate a response, by telephone.

TEMPORARY CENSUS OF PANELISTS

During the course of tracking data collection activities and results, we observed that our boat-owning panelists did not report as many trips as we had anticipated during the design stage of the study. Consequently, we considered options and consulted with USCG. In August 2012, the second month of quarter 3, we modified the sampling protocol in an effort to obtain more completed interviews with panelists who had spent time on the water recreational boating in the reference month. The active panelists in August and September were contacted to report their boating activity in the previous month, July and August, respectively. Prior to this deviation in protocol, panelists were contacted, at most, once every three months; however, in quarter three every active panelist was contacted during months two and three, and a portion were contacted in all three months.

PANEL COMMUNICATION

INTRODUCTION

Communication with panelists consisted of several contacts throughout the Trip Survey fielding period. Each correspondence contained information about the survey; the timeline to complete the survey; and a telephone number and e-mail address for panelists with questions, panelists who wanted to opt out of the panel, and those who needed to update their contact information. Panelists who provided an e-mail address when completing the Boat Survey received all communications via e-mail. Panelists for whom we did not have an e-mail address received the Welcome to the Panel, Prereference Month Notification, and Prenotification correspondence on USCG letterhead via first-class U.S. mail.

COMMUNICATION PIECES

The following sections describe each of the presurvey and postsurvey contacts employed throughout the Trip Survey. Copies of all distributed materials appear in Appendix A.

WELCOME TO THE PANEL

Before administering the Trip Survey, ICF sent correspondence to every panelist welcoming them to the panel. The correspondence thanked panelists for their participation in the Boat Survey and for volunteering to assist with the Trip portion of the study. Panelists were informed of the purpose and importance of the Trip Survey, when to expect communication from ICF, and how they would be contacted.

After sending the welcome communication, ICF sampled from the panel each month, as described previously. Cohorts received a prereference month communication and a presurvey communication to invite them to report about their boating trips. Both communications are described below.

PREREFERENCE MONTH NOTIFICATION

Prior to the month in which panelists were selected to report their trip activity, a prereference month notification was sent to all selected panelists. The prereference month notification informed panelists they were selected to participate in the Trip Survey, they would be asked to report details about boating activity in a given month (the reference month), and that they would be contacted following their reference month about their boating activities during the reference month. The notification specified the month in which the panelists were selected to report their boating activities.

PRESURVEY NOTIFICATION

Approximately one week before survey fielding selected panelists were sent a presurvey notification. The presurvey notification alerted panelists they would be contacted within the next few weeks about their boating activities in the reference month.

INCENTIVE DISBURSEMENT

Each time a panelist was selected and successfully completed the Trip Survey, the panelist received a $5 gift code redeemable at Amazon.com. The incentive disbursement communication thanked panelists for their participation, contained the panelist's unique gift code, and encouraged future participation in the Trip Survey.

THANK-YOU LETTER

At the conclusion of the Trip Survey, a thank-you correspondence was sent to every panelist who opted into the panel. The thank-you letter expressed appreciation for participation in the NRBS, and informed respondents that the 2011 Boat Survey and 2012 Trip Survey portions of the study had been completed. The correspondence also included a URL where respondents could access a copy of the *2011 National Recreational Boating Survey*.

DATA COLLECTION

INTRODUCTION

The 2012 Trip Survey was conducted as a dual mode Web and telephone study. Data collection began in February of 2012 and ended in early February of 2013. The following sections describe each component of Web and CATI data collection, after survey prenotification communications had been sent to selected panelists. Exhibit 9 shows the data collection cycle for reference month June.

Exhibit 9: Data Collection Cycle for Reference Month June
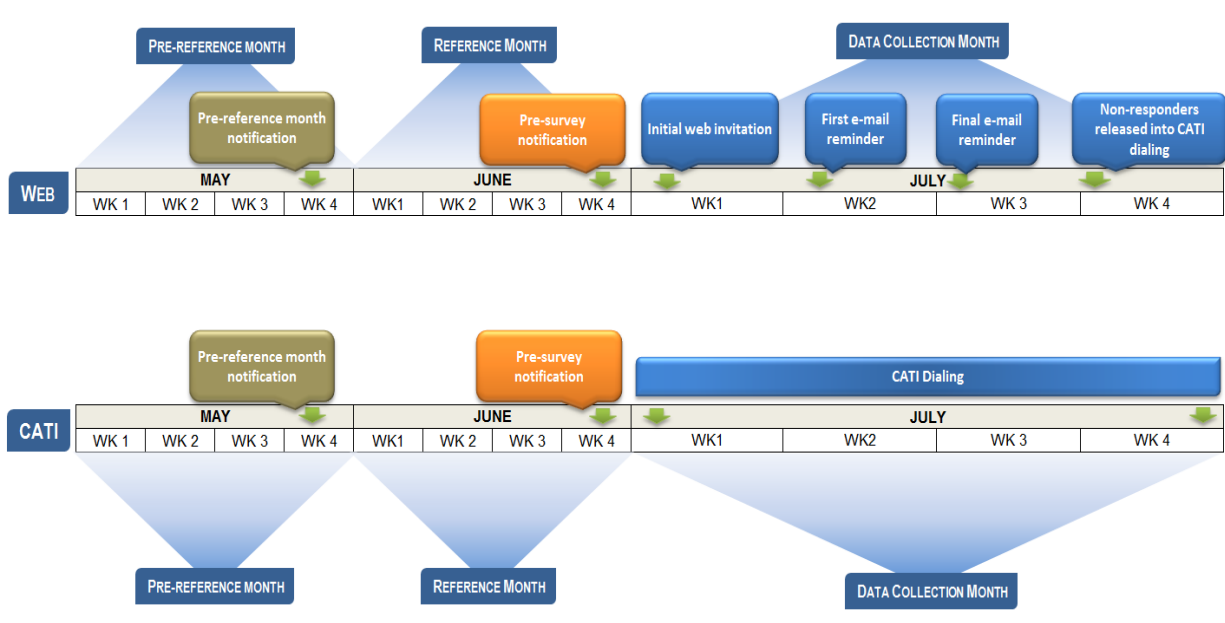
WEB DATA COLLECTION

The Web questionnaire was programmed using SPSS Dimensions™ software. SPSS Dimensions™ captures both quantitative and qualitative (open-ended) survey responses. The software automatically controls skip and fill logic, as well as range checking for numeric data. The programming logic directs the questionnaire's flow and prevents respondents from entering data in the wrong field.

Once programmed, the Web script was subjected to an extensive array of quality checks to ensure the integrity of the data collected:

- Randomly generated data was checked against a program of the skip logic in the survey to make sure there were no errors. A codebook of the randomly generated data was created and reviewed by data processing and project management staff.
- The survey project team visually reviewed the Web instrument to check spelling, accuracy of wording, and screen layout, and then proceeded with scenario testing.
- The USCG was provided with a Web link to view the instrument exactly as respondents would see it.

INITIAL WEB INVITATION

One week after panelists were sent the survey prenotification, the initial Web invitation was sent to those panelists for whom we had an e-mail address. The e-mail provided panelists with information about the survey and invited them to participate. The body of the e-mail contained a link which panelists used to access the Web survey. The link was embedded with an identifier unique to each panelist so progress could be tracked and survey questions could be prepopulated with the panelist's boat type.

FIRST E-MAIL REMINDER

The first e-mail reminder was sent approximately one week after the initial Web invitation to those panelists who did not respond to the initial invite. Panelists who indicated they no longer wished to participate in the Trip Survey, no longer owned a boat, or already completed the survey were removed from the first Web reminder sample. The reminder contained the same link and subject matter as the initial invitation and reiterated the importance of completing the survey.

FINAL E-MAIL REMINDER

We sent the final e-mail reminder approximately three days after the first e-mail reminder to panelists who did not respond to the initial invite or first e-mail reminder. Panelists who indicated they no longer wished to participate in the trip survey, no longer owned a boat, or already completed the survey were also removed from the final reminder sample. Similar to the initial invitation and first e-mail reminder, the final reminder contained the same link and subject matter as the initial invitation and first e-mail reminder, but further reiterated the importance of completing the survey.

TELEPHONE DATA COLLECTION

ICF programmed the CATI questionnaire using CfMC's 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 the following:

- Call management
- Quota controls
- In-bound calling capabilities
- Data back-up
- Monitoring
- Incidence tracking[5]

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 programming completion, ICF project managers rigorously tested the Trip Survey. Testing included the following activities:

- Developing scenarios to test all possible paths through the questionnaire
- Creating computer-simulated skip-checking programs

---

[5] Incidence is the proportion of the survey sample that is eligible to participate in the survey.

- Checking frequencies of randomly generated data
- Verifying frequencies of the data after the first day of interviewing, as well as periodically throughout the fielding process

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 telephone sample file to generate summary statistics on the following:

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

INTERVIEWER TRAINING

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

- The survey's background and objectives
- The NRBS data collection system
- The types of questions included in the Trip 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 were also provided with a Frequently Asked Questions (FAQ) sheet for reference during interviewing. The training manual and FAQ are located in Appendix C: Telephone Interviewer Training Manual.

LOADING THE SAMPLE

Each month the entire sample of panelists selected to participate in the reference month were loaded into the CATI study. Web panelists were loaded as a special sample type, allowing telephone agents to access the record, should a respondent call the project hotline to complete the survey via telephone. However, these records were excluded from outbound calling until after the Web data collection sequence was completed. Once the Web data collection sequence was completed, Web nonresponders were no longer treated as a special sample type, and were released into outbound calling.

INFORMED CONSENT

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 is 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 the respondent agreed to participate.

HANDLING REFUSALS

It is not uncommon for respondents to decline interest in a study, even if they had previously agreed to participate. We treat these records according to a specified protocol. The study protocol for refusal by a selected panelist or nonselected respondent was to attempt one refusal conversion. After the initial refusal, the record was assigned a special sample type and allowed a cool-off period of four days. After four days, the record was assigned a different sample type and transferred into a refusal conversion study. These records were then attempted one final 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 CALL-BACKS

Sometimes, a willing respondent is unavailable to complete the interview when we initially contact him or her. Other times, a selected respondent is unavailable to begin the interview. In such cases, we scheduled call-back appointments to reach the respondent. Our CATI system optimizes queuing for definite call-backs by continuously comparing station sample activity against the index of definite call-back 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 describes the circumstances of the original contact. This information gives the interviewer important cues about the record's history that can lead to increased success in generating a completed interview.

MANAGING INTERRUPTED INTERVIEWS

When respondents were willing, interrupted interviews (e.g., due to respondent schedule/availability) were restarted using a call-back strategy that gives definite appointments priority. In suspended or interrupted interviews, the interview set an exact time for a call-back 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 call-back to the same agent who began the interview maintains rapport and supports 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 telephone numbers. For the landline sample, our 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 of the week. 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 call, and could not complete an interview, we made another attempt.

For the cell phone sample, we used a five-attempt protocol. This lower-attempt protocol was implemented for the cell phone sample for a few reasons. First, we are more likely to make contact with someone on a cell phone than on a landline phone. Second, cell phone sample protocol did not include transfers to other household members, as was done on landline sample. Consequently, more interviews were completed on the first cell contact. Third, refusal conversion attempts (another call to address respondents' concerns such 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. However, as the study progressed, the cell protocol was raised to 10 attempts to maximize the utility from each record and to obtain the required number of completes.

CONDUCTING SPANISH INTERVIEWS

The telephone survey was available in both English and Spanish 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 system 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 final 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 10:

Exhibit 10: Trip Survey—Telephone Dispositions

Disposition	N	Percent
002 - Definite refusal - Selected	940	1.1%
003 - Definite refusal - Nonselected	5,628	6.8%
004 - Language barrier	10	0.0%
006 - Physical/mental impairment	13	0.0%
008 - Nonworking number	1,576	1.9%
010 - Not a residence	886	1.1%
015 - Number changed (no new number collected)	1,095	1.3%
016 - Household unavailable	2,482	3.0%
017 - No adults associated with this line	81	0.1%
025 - BTELIG - NO/DK/REF	1,745	2.1%
026 - STILLBT - NO/DK/REF	852	1.0%
027 - INTIC_1 – NO	1	0.0%
029 - XFRNAM_1=99	5	0.0%
031 - XFRNAM_2=99	2	0.0%
033 - REM1_1=02,97,99 OR REM2_1=0,97,99 OR REM_2=02,97,99	1	0.0%
061 - Complete - Boat owner, no activity	16,625	20.2%
062 - Complete - Dock day only	709	0.9%
063 - Complete - Water day only	7,060	8.6%
064 - Complete - Water day and dock day	1,152	1.4%

Disposition	N	Percent
075 - DIALER - Nonworking number	3,107	3.8%
078 - DIALER - Fax/modem	48	0.1%
094 - Dialed maximum attempts	22,496	27.29%
099 - Resolved in Web mode	1,244	1.5%
Total	82,431	100.0%

INTERVIEWER MONITORING

Supervisors and Quality Assurance assistants in our research centers monitor interviewer performance, providing feedback to each interview through both formal and informal performance evaluations. Ten percent of all interviews were monitored throughout the fielding period. In addition, each interviewer on the Trip Survey was monitored at least once a week.

The QA team for this survey included the project manager, data collection manager, and research center supervisors and QA assistants. Interviewer monitoring was primarily conducted by ICF's QA assistants 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 interviewer protocol:

- Reading the introduction and persuading respondents to complete interviews
- Response entry
- 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
- Dispositioning calls, leaving messages, and scheduling call-backs

QA staff also ensured that interviewers did the following:

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

HELP DESK AND TOLL-FREE PROJECT HOTLINE

Throughout fielding of the Trip Survey, a dedicated e-mail help desk and toll-free project telephone hotline were available to address respondents' questions and concerns. The help desk and project hotline were staffed during regular business hours, Monday through Friday, from 9 a.m. to 5 p.m., EST. Panelists who had questions about the survey, needed help completing the survey, wanted to opt out of the panel, or needed to update their contact information were assisted via the help desk and project

hotline. Information gleaned from the help desk and telephone hotline was used to update future sample draws. 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 complete the survey over the telephone.

INCENTIVES

Each time Trip Survey panelists completed the survey, they received a gift code in the amount of $5 redeemable at Amazon.com. The motive for using incentives was to minimize panel and survey attrition and promote prompt survey response. Prompt survey response is important because accurate recall of hours on the water is critical to achieving accurate exposure estimates. Panelists with a valid e-mail address received their gift code via e-mail. Panelists for whom we did not have a valid e-mail address but did have a mailing address received their gift code via U.S. mail. If there was no valid e-mail address and no mailing address on file, then panelists were released into the recontact study.

RECONTACT STUDY

Approximately midway through the fielding period, it became evident there was a pool of panelists who had completed the survey then changed their e-mail or mailing address without providing the updates to ICF project staff. To ensure that these panelists received their gift code and continued to receive panel correspondence, we designed and implemented a CATI recontact study to update bad contact information. The recontact study was expanded to include not only panelists who had completed the survey and needed to be provided a gift code, but also those whose e-mail bounced or mail was returned as undeliverable during the Web and CATI contact protocol. Panelists with invalid contact information were dialed and asked to update the outdated information. If the panelist completed the survey, then a gift code was supplied during the recontact call. Those who provided updated information were placed back in the sample, and were made eligible for future sample draws.

POSTCARD EXPERIMENT

While fielding the Trip Survey, a postcard experiment was conducted to determine if response rates would improve if Web frame respondents received a prenotification postcard in the mail in addition to the standard e-mail survey prenotification. The postcard mailed to panelists selected for the experiment contained the same text as the e-mail survey prenotification.

Each month, half of the panelists in the Web frame were randomly selected to participate in the postcard experiment. Of this group, half were randomly assigned to the experimental condition (postcard + e-mail survey prenotification), and the other half were assigned to the control condition (e-mail survey prenotification only). Results revealed no significant effect of the additional survey prenotification. Response rates (computed using Association for Public Opinion Research's (AAPOR's) Response Rate 3 (RR3) were not significantly different in any month (p > .10). Collapsing across months, the average response rate in the experimental condition (46.4%) was not significantly different from the average response rate in the control condition (46.1%), $\chi^2(1) = 0.20$, p = .655. The results suggest that an additional postcard survey prenotification has little impact on improving Web-survey response rates beyond an e-mail survey prenotification alone.

WEIGHTING

The goal of the weighting plan for the Trip Survey was to make the trip data collected from sampled panelists each month representative of the full U.S. boating population for that month. Because the Trip Survey collected information at (1) the level of the household (equivalent in this design to the selection of a panel boat), (2) individual water outings, and (3) individual dock days, three sets of weights were computed for estimates on the basis of these different units of analysis (see Exhibit 11).

Exhibit 11: Crosswalk Between Data Sets, Weights, and Units of Analysis

Data Set	Weight	Unit of Analysis
nrbs_trip_paradata_weighted	FINAL_WT_BOAT	Boat/HH
nrbs_trip_waterdays_weighted	FINAL_WT_WATER	Water outing
nrbs_trip_dockeddays_weighted	FINAL_WT_DOCKED	Docked day

The final weight for household/boat-level estimates is based on a single component boat weight. The final weights for water outing and docked day estimates are the product of two components: a component boat weight and a component days per record weight. Because the two exposure datasets are stacked by reports (i.e., individual water outings or docked days), the days per record component weight first adjusts the data in each report to represent all (or a weighted proportion of) exposure days by that boat that month. The boat component weight then adjusts that boat to represent other boats in its sampling stratum. The final water or docked weights—being the product of these two component weights—thus adjust reported data to represent total boating exposure (i.e., water or docked) days in the population. All final weights include adjustments for probability of selection, nonresponse, and coverage, as described in detail below.

BOAT COMPONENT WEIGHT

The boat component weight is computed within adjustment classes defined by *jurisdiction* (50 + DC and Puerto Rico), *boat type* (with up to 10 levels), and *month* (with 12 or 6 levels, depending on the State's boating season length). Due to sparse data within the jurisdiction/boat type/month adjustment classes, collapsing of boat types was implemented on the condition that there was less than one responding boat within a jurisdiction/boat type/month class. Collapsing proceeded iteratively from the full 10-level boat type variable to 7 types, then to 3 types (see Exhibit 12). Only two classes failed to meet the collapsing criterion after being collapsed to three types: Oklahoma/October and Puerto Rico/January. Boat type was therefore collapsed completely for these two classes.

Boat Type 10	Boat Type 7	Boat Type 3
01—Powerboat that is less than 16 feet	01—Powerboat	01—Powerboat/pontoon boat/PWC
02—16- to 20-foot powerboat		
03—21- to 28-foot powerboat		
04—Powerboat that is greater than 28 feet		
05—Sailboat that is less than 26 feet	02—Sailboat	03—Sailboat/row/INF/other
06—Sailboat that is greater than 25 feet		
07—Pontoon boat	03—Pontoon boat	01—Powerboat/pontoon boat/PWC
08—Personal water craft (e.g., jet ski)	04—PWC	
09—Self-propelled boat (e.g., kayak, canoe)	05—Canoe 06—Kayak	02—Canoe/kayak
10—Recreational boat	07—Row/INF/other	03—Sailboat/row/INF/other

The frame for the Trip Survey panel was the group of selected boats (one per HH) that were invited to join the Trip Survey panel at the end of the 2011 Boat Survey. The base weight for the Trip Survey boat component weight is therefore $w_{B1} = N/n$, the ratio of U.S. boats within each jurisdiction/type adjustment class to the number of selected boats in the 2011 Boat Survey within each adjustment class. This base weight is equal to FINAL_WT_BOATSEL, the weight delivered with the 2011 Boat Survey data set that adjusts selected boats to represent the full U.S. population of boats, poststratified to registered boat totals within jurisdiction/type classes (see the *2011 Boat Survey Methodology Report* for details of the computation of this weight).

The first adjustment to the base weight accounts for the fact that not all selected boat owners agreed to join the Trip Survey panel, $w_{B2} = w_{B1} \times \sum_{\in Selected} w_{B1} / \sum_{\in Joined} w_{B1}$.

During each in-season month of the Trip Survey, a random sample of boats was selected from the panel within jurisdiction/type strata. The adjustment for this additional probability of selection is $w_{B3} = w_{B2} \times \sum_{\in Joined} w_{B2} / \sum_{\in Sampled} w_{B2}$. The next adjustment accounts for unit nonresponse in the Trip Survey, $w_{B4} = w_{B3} \times \sum_{\in Sampled} w_{B3} / \sum_{\in Responded} w_{B3}$. The resulting boat component weight was then poststratified by raking against control totals for jurisdiction × type × registration status, producing w'_{B4}. Control totals were derived from population estimates computed from 2011 Boat Survey data (see the *2011 Boat Survey Methodology Report* for details on the original ratio adjustment for registration status). The raking algorithm iteratively matched the sample to the population along each of the listed dimensions. After several iterations, each dimension matched population totals within tolerance.[6]

Due to sparse data within the jurisdiction/type/registration/month raking classes, collapsing of boat types was implemented prior to raking, on the condition of there being less than one responding boat within a class. Collapsing proceeded iteratively from the full 10-level boat type variable to 7 types, then to 3 types, then across all types (see Exhibit 12). Only two classes failed to meet the collapsing criterion following collapsing of all boat types: Oklahoma/October and Oklahoma/November. These two jurisdiction/month classes were therefore collapsed with the neighboring jurisdiction/month with (1) the smallest population (according to 2010 Census estimates) and (2) Trip Survey data sufficient to meet the

---

[6] The raking algorithm used 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).

collapsing criterion. In both cases, the neighboring jurisdiction was Arkansas, resulting in all boats in Oklahoma and Arkansas being pooled together for October and November to make raking possible.[7] Note that the need to collapse boat types below seven levels for some raking classes leads to inaccurate weighted estimates of boat totals by the seven types for those classes. At minimum, however, the total population of boats within jurisdiction/registration classes will always match control totals across all types. The mean percent error in estimated boat type 7 totals compared to control totals across all classes is 24% (see Exhibit 13).

Exhibit 13: Distribution of Absolute Percent Difference Between Estimated Boat Totals and Control Totals by Boat Type 7 Across All Adjustment Classes
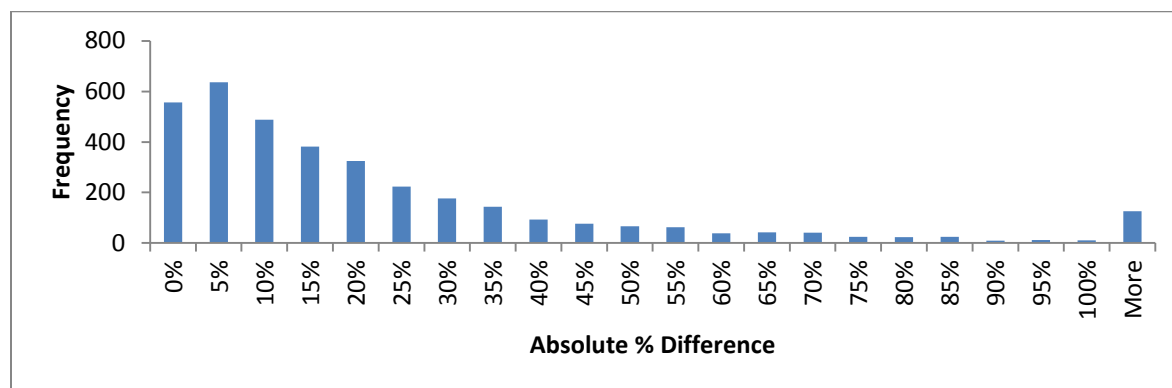
For the Trip Survey data set nrbs_trip_paradata_weighted, which is stacked by boat within month, w'_{B4} is the final delivered boat/HH weight, FINAL_WT_BOAT, used for all items involving data at the level of the boat or HH.

To facilitate the computation of weighted estimates by the end-user, the other two data sets (nrbs_trip_waterdays_weighted and nrbs_trip_dockeddays_weighted) were stacked by Water Day or Docked Day reports (respectively) within months. Because each Trip Survey interview could result in up to two Water Day reports and two Docked Day reports, stacking these data sets by report entails that responding panel boats may be represented up to twice within a jurisdiction/type/month class. To account for this duplication, a structural adjustment is required to properly distribute the boat weight computed above across records in these two data sets, $w_{B5} = w'_{B4} \times 1/n_i$, where n_i is the number of Water Day or Docked Day reports completed by responding boat i that month (n_i thus has a value of 1 or 2). For the Trip Survey data sets nrbs_trip_waterdays_weighted and nrbs_trip_dockeddays_weighted, w_{B5} is the final delivered boat component weight, WT_BT_COMPONENT, used to compute population estimates of boats.

DAYS PER RECORD COMPONENT WEIGHT

The days per record component weight adjusts the data in each Water Day or Docked Day report to represent all (or a weighted proportion) of the water outings or docked days, respectively, reported for each boat in its reference month.

---

[7] The result of collapsing jurisdictions is that the weighted total for boats in both jurisdictions for these 2 months matches the combined control totals for both jurisdictions, but the weighted totals within the individual jurisdictions for these 2 months do not match the individual jurisdiction control totals.

WATER DAYS

For Water Day reports, the base weight for this component is $w_{WD1} = WTRN$, where WTRN is the total number of days the boat went out on the water during the reference month. Due to the Water Day data set being stacked by report, and the possibility that a boat could complete two Water Day reports in a reference month, the total number of days needs to be distributed over all records for that boat that month. The required adjustment is $w_{WD2} = w_{WD1} \times \frac{d_i}{d_1 + d_2}$, where d_i is the number of water days reported for the first or second reported outing. For boats reporting two Water Days in a month, the effect of this adjustment is to scale the days per record weight proportionally to the relative duration of the two outings (i.e., the longer outing will have greater weight). For boats that completed only one Water Day report, this adjustment has no effect (i.e., it is equivalent to multiplying by 1).

DOCKED DAYS

For Docked Day reports, the base weight for the days per record component weight is $w_{DD1} = DTRN$, where DTRN is the total number of days the boat was used for more than an hour while docked during the reference month. Due to the Docked Day data set being stacked by report, and the possibility that a boat could complete two Docked Day reports in a reference month, the total number of days needs to be distributed over all records for that boat that month. The required adjustment is $w_{DD2} = w_{DD1} \times \frac{1}{d_1 + d_2}$. Since Docked Day reports were limited to one-day events, this adjustment scales the total reported docked days by 1 (for boats completing one Docked Day report) or ½ (for boats completing two Docked Day reports).

For the Trip Survey data sets nrbs_trip_waterdays_weighted and nrbs_trip_dockeddays_weighted, w_{D2} is the final delivered days per record component weight, WT_DPWC_COMPONENT or WT_DPDC_COMPONENT (respectively), used to compute estimates of the total number of water or docked days in a reference month for a sample boat.

FINAL EXPOSURE (BOAT DAY) WEIGHTS

The final exposure weights for the Trip Survey data sets nrbs_trip_waterdays_weighted and nrbs_trip_dockeddays_weighted are the product of the boat component weight (raked by jurisdiction × type × registration status) and the days per record component weight:

$$FINAL\_WT\_WATER = WT\_BT\_COMPONENT \times WT\_DPWC\_COMPONENT = w_{B5} \times w_{WD2}$$

$$FINAL\_WT\_DOCKED = WT\_BT\_COMPONENT \times WT\_DPDC\_COMPONENT = w_{B5} \times w_{DD2}$$

Multiplying by these two component weights adjusts each record to represent the total number of water or docked days for the population of boats within each jurisdiction/type/month class. Thus, for example, the sum of FINAL_WT_WATER within a jurisdiction/type/month class is a population estimate of the total number of water days for that class.

QUALITY CONTROL FOR DATA COLLECTION

Exhibit 14 describes several key areas of quality control that were implemented for the Boat Survey.

Exhibit 14: Quality Control Procedures

Survey Step	Quality Control Procedures
Testing the CATI and Web program	• Tested each response to each question, and each path through the survey • Reviewed frequencies from randomly generated data to ensure that the program was organizing data properly and recording values according to the survey specification • Developed skip check program to check data against defined conditions specified in the Microsoft Word version of the questionnaire
CATI quality assurance	• Monitored at least 10% of all interviews • Monitored each interviewer at least once per week • Assigned supervisors to manage a team of no more than 10 interviewers • Participated in daily briefing call with call center management • Reviewed call center shift reports and internal project tracking reports daily
Preparation of data files	• Identified incomplete interviews and merged back into the main data file • Cleaned and, when applicable, back-coded open-ended responses • Assigned a final disposition to each record • Produced frequency tabulations of every question and variable to detect missing data or errors in skip patterns

RESPONSE RATE

The response rate for the Trip Survey is based on standards established by the AAPOR, specifically AAPOR RR3:[8]

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

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 annual response rate, computed as the weighted average of monthly response rates, is 48%. Monthly response rates and components are presented in Exhibit 15.

Exhibit 15: Monthly Response Rates and Components

	RR	I	E	U	e(U)	X	N
Annual	**48%**	**25,966**	**12,630**	**19,797**	**15,530**	**10,438**	**68,831**
January	58%	1,281	468	551	458	357	2,657
February	60%	1,340	422	564	476	325	2,651
March	55%	1,177	430	666	542	368	2,641
April	48%	2,483	1,177	1,830	1,474	885	6,375
May	49%	2,573	1,192	1,871	1,534	827	6,463
June	51%	2,445	1,034	1,654	1,308	919	6,052
July	49%	2,180	932	1,679	1,310	877	5,668
August	45%	5,838	3,093	4,993	3,904	2,491	16,415
September	44%	5,060	2,950	4,413	3,385	2,433	14,856
October	43%	527	285	588	418	330	1,730
November	44%	523	275	535	381	324	1,657
December	43%	539	372	453	340	302	1,666

---

[8] Documentation for these response rates is available at
http://www.aapor.org/AM/Template.cfm?Section=Standard_Definitions2&Template=/CM/ContentDisplay.cfm&ContentID=3156

TRIP SURVEY CHALLENGES AND RECOMMENDATIONS FOR FUTURE ITERATIONS

In the following section, we discuss two areas which offered particular challenges during the fielding of the Trip Survey. Our experience with these challenges also informs recommendations for future iterations of the Trip Survey.

PANEL MANAGEMENT

Panel studies often present researchers with a unique set of challenges best summarized as panel management. How does one keep panelists actively engaged without overburdening the panel, while still maximizing the composition of the original panel? Our tactics include regular, intermittent engagement via e-mail, mail, and telephone. The e-mail and mail correspondence, described earlier, provided cues and established structure to panelists about what to expect from us and when. We also used a help desk system that included an e-mail account and interactive voice response system with a toll-free number that panelists could e-mail or call at their convenience to provide new contact information, report a change, schedule an appointment, or opt out of the panel.

Our multipronged approach to panel communication and panel management enabled us to retain 73% of our original panelists throughout the year. This retention rate is quite positive, considering that our exclusion protocol consisted of removing panelists who declined a single survey without specifically declining future panel cycles. A future consideration might be to create multiple opt-out levels—one for declining participation for a particular month, and one for declining participation for all months.

Recognizing the changes in how the general public engages with technology, ICF also recommends experimenting with smartphone applications to support panel management. ICF has panel metadata that can be used to implement such experimentation to offer new, perhaps more impactful, channels to reach panelists and keep them more engaged. If successful, such tactics can potentially save USCG money by reducing the higher cost of recruiting new panelists (boat owners) at random from the general population.

OBTAINING BOAT TRIP DATA

The goal of the Trip Survey was to measure exposure, safety behaviors, expenditures, and negative events by sampling individual boating trips over the course of a year. A crucial component of this measure is obtaining an appropriate number of interviews with respondents who spent at least one day on the water with their boat.

ICF's original sample design estimated collecting approximately 36,000 boat trip reports for the year. Once survey administration was underway, we observed that the incidence of reported trips was less than originally projected. Consequently, we sought to mitigate this projected shortfall of trip reports by oversampling panel members on a more frequent basis during the heaviest boating months for both Northern and Southern States. Therefore, rather than sampling a panelist once per quarter, panelists were sampled in consecutive months. This action was first suggested by ICF and endorsed by USCG to increase the levels of precision that additional boat trips would yield for critical outcome measures.

Having baseline measures from this survey cycle will help frame future cycles in terms of estimating the appropriate panel size to sample from, how many panelists to sample, and at what interval to sample.

APPENDIX A: PANEL COMMUNICATION PIECES

Dear [SALUTATION],

On behalf of ICF Macro and the U.S. Coast Guard (USCG), thank you for participating in the USCG's National Recreational Boating Survey and volunteering to assist us in 2012 with the trip portion of this study. The survey is being conducted on behalf of the USCG by ICF Macro, an independent survey research company. The USCG must collect reliable boating data from the public to improve boating safety programs and make informed resource allocation decisions to support states' safety programs. Your participation with the trip survey will help USCG meet these important goals and make recreational boating safer for all boaters.

Over twelve months, we will contact a limited number of boat owners each month to learn more about their most recent boating trips. If you are selected for a given month, we will notify you prior to that month so that you can be prepared to answer questions about your boating trips during that month. You will be selected either twice (if you live in a northern state) or four times (if you live in a southern state) during the survey period. You will not be contacted more than once every three months. Each survey is expected to take approximately 10 to 15 minutes to complete, and may be completed online via a secure Website or by telephone. You will receive a $5 Amazon.com gift code each time you complete a survey. Participation is voluntary, and answers will be kept confidential. Your answers will only be reported in group form, and your contact information may be used only to contact you with updates about the project and reminders, if necessary. These updates will be provided by email for participants who provided email addresses and by letter or postcard for those who did not.

If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: [masterid]

Thank you for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

Dear [SALUTATION],

We are please to inform you that you have been selected to participate in the <Month> Trip Survey.

In <next month>, you will receive an email from us inviting you to complete a survey about your boating activities in <Month>.

The survey will take approximately 10 to 15 minutes to complete, and may be completed online via a secure Website or by telephone. You will receive a $5 Amazon.com gift code for your completion of the survey. Participation is voluntary, and answers will be kept confidential.

If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: <MID>

Thank you for your participation in this important survey.

Sincerely,


Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

Dear [SALUTATION],

Thank you again for participating in the USCG's National Recreational Boating Survey and volunteering to assist us in 2012 with the Trip Survey portion of this study.

Within the next few weeks we will contact you regarding your boating trips in <Month>. The survey will take approximately 10 to 15 minutes to complete, and may be completed online via a secure Website or by telephone. You will receive a $5 Amazon.com gift code for your completion of the survey. Participation is voluntary, and answers will be kept confidential.

If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: [masterid]

Thank you for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

From: boatingpanel@icfi.com

To: [email address]

Subject: United States Coast Guard Boating Trip Survey

Dear [INSERT NAME],

Thank you for volunteering to assist us in 2012 with the Trip Survey portion of the U.S. Coast Guard's (USCG's) National Recreational Boating Survey. To participate, we invite you to complete this web-based survey online at your convenience. Your participation in the trip survey will help the USCG improve boating safety programs and make recreational boating safer for all boaters.

ICF Macro, an independent survey research company, is administering this online survey. ICF Macro will not provide any identifying information to the USCG along with your responses and will keep your identity private to the extent permitted by law. Your responses will be reported to the USCG only in group form with the responses from other boat owners. Participation is voluntary.

You are one of a limited number of boat owners selected to participate in the <month> trip survey, so we hope you will take a few minutes to tell us about your recent boating activities.

The survey is expected to take approximately 10 to 15 minutes and is located on the internet at: [hyperlink]

You can access the survey from any computer that has Internet access by clicking on the Internet address above or by copying the Internet address into your browser. You will receive a $5 Amazon.com gift code each time you complete a survey.

Please complete this survey no later than [day], [month] [date], [year]. If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: <MID>.

Thank you for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

From: boatingpanel@icfi.com

To: [email address]

Subject: United States Coast Guard Boating Trip Survey

Dear [INSERT NAME],

Thank you for volunteering to assist us in 2012 with the Trip Survey portion of the U.S. Coast Guard's (USCG's) National Recreational Boating Survey. Recently you should have received an e-mail message inviting you to participate in the <month> trip survey. We would like to again invite you to participate in this important study by completing the web-based survey online. You are one of a limited number of boat owners selected to participate in the <month> trip survey, so we hope you will take a few minutes to tell us about your recent boating activities.

Your participation in the trip survey will help the USCG improve boating safety programs and make recreational boating safer for all boaters.

ICF Macro, an independent survey research company, is administering this online survey. Your responses will be reported to the USCG only in group form, and ICF Macro will keep your identity private to the extent permitted by law. Participation is voluntary.

The survey is expected to take approximately 10 to 15 minutes and is located on the internet at: [hyperlink]

You can access the survey from any computer that has Internet access by clicking on the above Internet address or by copying the Internet address into your browser. You will receive a $5 Amazon.com gift code each time you complete a survey.

Please complete this survey no later than [day], [month] [date], [year]. If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: <MID>.

Thank you for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

Dear [INSERT NAME],

Thank you for volunteering to assist us in 2012 with the Trip Survey portion of the U.S. Coast Guard's (USCG's) National Recreational Boating Survey. We know recreational boating safety is important to all boaters like you. We would like to invite you one last time to participate in the USCG's web based survey online. Your participation in the trip survey will help the USCG improve boating safety programs and make recreational boating safer for all boaters.

 You are one of a limited number of boat owners selected to participate in the <month> trip survey, so we hope you will take a few minutes to tell us about your recent boating activities.

The cut-off date to complete this survey is [day], [month] [date], [year]. If you have already started the survey, the survey will resume exactly where you left off with all of your previous responses saved.

ICF Macro, an independent survey research company, is administering this online survey. Your responses will be reported to the USCG only in group form, and ICF Macro will keep your identity private to the extent permitted by law. Participation is voluntary.

The survey is expected to take approximately 10 to 15 minutes and is located on the internet at: [hyperlink]

You can access the survey from any computer that has Internet access by clicking on the above Internet address or by copying the Internet address into your browser. You will receive a $5 Amazon.com gift code each time you complete a survey.

If you have any questions, need to correct your contact information, or if you are no longer interested in participating in the survey, please contact ICF Macro at 888-316-8038 or boatingpanel@icfi.com and reference your unique identification number: <MID>.

Thank you for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

Dear [SALUTE],

On behalf of the United States Coast Guard, thank you for volunteering to assist in the Trip Survey portion of the National Recreational Boating Survey.   As a token of our appreciation for completing this survey about your boating activity in [month] we have enclosed a $5 Amazon gift code redeemable at www.amazon.com. Your unique gift code is [giftcode].

We highly value your input and panel membership, and hope you will continue to participate in this recreational boating panel if you are selected again in future months.

Thank you again for your participation in this very important survey and we look forward to learning more about your boating experiences in the coming months.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

Dear [SALUTATION],

On behalf of the U.S. Coast Guard (USCG) and ICF Macro, thank you for your participation in the USCG's National Recreational Boating Survey (NRBS). The NRBS is used to collect reliable boating data from the public to improve boating safety programs and make informed resource allocation decisions to support states' safety programs. Your participation in the survey has helped the USCG meet these important goals and make recreational boating safer for all boaters.

We have completed both the 2011 Boat Survey and the 2012 Trip Survey portions of the NRBS. The methodology and results of this Boat Survey portion of the study can be found in a report entitled "2011 National Recreational Boating Survey" by going to the following url:

http://www.uscgboating.org/assets/1/Page/1520b_USCG_RBS_NationalSurvey_Online_SinglePages.pdf

Thanks again for your participation in this important survey.

Sincerely,

Philippe Gwet, PhD
United States Coast Guard
Boating Safety Division
2100 Second St. SW Stop 7581
Washington, DC 20593-7581

APPENDIX B: TELEPHONE SURVEY INSTRUMENT

NRBS 2012 Trip Panel Survey

VARIABLES AND FLAGS:

SAMPLE NAME

CALLTYPE (=1 is landline, =2 is cell phone) --- some sample may be missing CALLTYPE

That the instrument sets a variable "callorig" to the value of "calltype" (i.e. the sample punch) upon start of the interview.

FROM THE BOAT SURVEY: BOAT TYPE, CATX, HASMOT, RESPONDENT'S NAME, TPOX

BOAT TYPE
Frequency of SAMPLE_CLASS*SIZE_CAT

sample_class	size_cat	_	FREQ_	
1 - Powerboat	<= 15 ft		2029	powerboat that is less than 16 feet
2 - Powerboat	16-20 ft		5139	16-20 foot powerboat
3 - Powerboat	21-28 ft		2329	21-28 foot powerboat
4 - Powerboat	> 28 ft		894	powerboat that is greater than 28 feet
5 - Sailboat	<= 25 ft		1039	sailboat that is less than 26 feet
6 - Sailboat	> 25 ft		1076	sailboat that is greater than 25 feet
7 - Pontoon boat	Length provided		1418	pontoon boat
8 - Personal watercraft	Length provided		1567	personal water craft (for example, jet ski)
9 - Self-propelled	Length provided		5913	self propelled boat (for example, kayak, canoe, etc.)
10 -Other undefined	Length provided		967	recreational boat

Throughout, 'REFERENCE PERIOD' or 'REFERENCE MONTH' should be the name of the most recent month

The docked days module should be inserted as a module in four locations:

1. If WTRIP IN (02,97,99) OR WTRN IN (97,99) GO TO STOREM THEN CLOSE

    a. If the boat did not go out on the water in the previous month or the respondent says don't know or refused then no water days, go straight to dock days then closing.

2. IF HHBT1 IN (01,02,97,99) INSERT DOCKED DAYS MODULE BETWEEN HHBT1 AND NDXFR_1

    a. If boat owner is not eligible for water day 1, insert docked days before transferring to another member of the household

3. IF SHHBT1 IN (01,02,97,99) INSERT DOCKED DAYS MODULE BETWEEN SHHBT1 AND BTDAY

    a. If boat owner is not eligible for water day 2, insert docked days before transferring to another member of the household

4. IF ONBT1=01 OR KNBT1=01INSERT DOCKED DAYS MODULE BETWEEN EXFLDG_1 AND CLOSE

    a. If boat owner is eligible and there is only one eligible water day, insert docked days after completing water day 1 and before the closing

5. IF SONBT1=01 OR SKNBT1=01 INSERT DOCKED DAYS MODULE BETWEEN EXFLDG_2 AND CLOSE

    a. If boat owner is eligible to complete both water days, insert docked days module after the end of the second water day and before the closing

   /

After the docked days module:

Definitions of a complete:

1. ASSIGN DISP 61 IF WDAY1 IS MISSING AND DPROFILE=0 AND CLOSE=01
    a. Boat owner, no eligible activity - Boat owner who reported no water days and no dock days in the reference month
2. ASSIGN DISP 62 IF WDAY1 IS MISSING AND DPROFILE IN (1,2) AND CLOSE=01
    a. Dock day only - Boat owner who reported no eligible water day in reference month but did report at least 1 dock day

3. ASSIGN DISP 63 IF WDAY1 IN (1,2) AND DPROFILE=0 AND CLOSE=01
   a. Water day only - Boat owner who reported at least 1 water day in the reference month but no dock days in the reference month
4. ASSIGN DISP 64 IF WDAY1 IN (1,2) AND DPROFILE IN (1,2) AND CLOSE=01
   a. Water day and doc day - Boat owner who reported at least 1 water day and at least 1 doc day in the reference month

TERM BLOCK

From SECDAY3 through EXFLDG_2 insert a second TERM block with these options:

EXIT

1. Respondent refused second water day

2. Error – respondent reports there was only one day on the water

3. Respondent reports the behaviors on the second water day were the same as the first

CHANGE LOG

Throughout, updated/revised logic is referenced as follows:

Version 101 = start of field through xx, studies

NRBS TRIP PHONE SURVEY

/   **/ALL/**

INTRO1.   Hello, may I please speak to [INSERT SAMPLE NAME]?

[IF NECESSARY: "This is [name]. I'm calling on behalf of the US Coast Guard. [INSERT SAMPLE NAME] agreed to help us with a survey about a recreational boat. "]

01 ON THE PHONE

02 SUCCESSFUL TRANSFER

04 TERM BLOCK

/   **/IF INTRO1 IN (01,02)/**
/   **/IF IT IS THE RIGHT PERSON OR A SUCCESSFUL TRANSFER/**

INTRO2.   [IF INTRO1=02 INSERT "Hello, my name is [full name]. I'm calling on behalf of the United States Coast Guard."] A while ago, you completed a survey about your boat for us, and said we could contact you again. I just have a few questions about boating activities associated with your boat in [REFERENCE PERIOD].

01 CONTINUE

03 CALL BACK /TERM ASSIGN DISP 104 OR 105/

99 REFUSAL /TERM ASSIGN DISP 116 OR 003/

/   **IF CALLTYPE IS MISSING**

CELL Is this a cell phone?

01 YES

02 NO

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

99 REFUSED /TERM ASSIGN DISP 116 OR 003/

/ **IF CELL=01 SET CALLTYPE=2**
/ **IF CELL=02 SET CALLTYPE=1**

/ **IF CALLORIG=2 OR IF CELL=01**

SAFETY Your safety is important to us. Are you driving a car or other vehicle right now or doing anything else that would make it unsafe to talk right now?

INTERVIEWER NOTE: If respondent indicates it is not safe to talk now, ask "When is a better time to try to call back?" and schedule an appointment.

01   SAFE TIME/NOT DRIVING

02   DRIVING/NOT A SAFE TIME

99   REFUSED /TERM ASSIGN DISP 116 OR 003/

/ **IF SAFETY = 2**

SAFECB We will call back at a later time. Thank you. /TERM ASSIGN DISP 105/

01 CONTINUE

/ **/IF INTRO2=01/**
/ **/IF THE RESPONDENT IS CONTINUING/**

INFO. 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 5-10 minutes. The United States Coast Guard is conducting a short survey about boats to get information to make boating safer.

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.

You will receive a $5 Amazon gift code for completing the survey.

This interview may be monitored or recorded.

[IF NECESSARY: You can call 888-316-8038 to reach the survey verification line.]

 [FOR INTERVIEWER: IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

[INTERVIEWER TYPE 'SUSPEND' TO TERMINATE THE CALL]

01 YES

/ **/IF INFO=01/**
/ **/IF RESPONDENT IS CONTINUING WITH INTERVIEW/**

BTELIG.   Did you own the [INSERT BOAT TYPE] on January first of this year?

01 YES

02 NO   ///TERM AS DISP 25(INELIGIBLE-REMOVE FROM SAMPLE)///

97 DON'T KNOW ///TERM AS DISP 25(INELIGIBLE-REMOVE FROM SAMPLE)///

99 REFUSED   ///TERM AS DISP 25(INELIGIBLE-REMOVE FROM SAMPLE)///

> / **/IF BTELIG IN (02,97,99), THEN THANK AND TERMINATE. REMOVE RESPONDENT FROM BOAT PANEL./**
> / **/IF RESPONDENT DID NOT HAVE BOAT ON JANUARY FIRST OF THIS YEAR, THEN TERMINATE AND REMOVE RESPONDENT FROM BOAT PANEL/**
> **//INSERT CLOSING STATEMENT FOR NON-QUALIFIERS//**

X1 Unfortunately you are not eligible for the survey. Thank you very much for your time, those are all the questions I have for you today.

01 CONTINUE

> / **/IF BTELIG=01/**
> / **/IF RESPONDENT OWNED BOAT ON JANUARY OF THIS YEAR/**

STILLBT Do you still own the boat?

01 YES

02 NO   ///TERM AS DISP 26(INELIGIBLE-REMOVE FROM SAMPLE)///

97 DON'T KNOW ///TERM AS DISP 26(INELIGIBLE-REMOVE FROM SAMPLE)///

99 REFUSED   ///TERM AS DISP 26(INELIGIBLE-REMOVE FROM SAMPLE)///

> / **/ IF STILLBT IN (02,97,99) THEN THANK AND TERMINATE, REMOVE RESPONDENT FROM THE BOAT PANEL/**
> / **/IF RESPONDENT DOES NOT OWN THE BOAT, DOES NOT KNOW, OR REFUSES THEN TERMINATE AND REMOVE FROM THE BOAT PANEL///INSERT CLOSING STATEMENT FOR NON-QUALIFIERS//**

X2 Unfortunately you are not eligible for the survey. Thank you very much for your time, those are all the questions I have for you today.

01 CONTINUE

> /

Water Days

IDENTIFY WATER RECREATION DAYS

> / **/IF STILLBT=01/**
> / **/IF RESPONDENT OWNS THE BOAT/**

WTRIP. During [REFERENCE PERIOD], was there any calendar day when the boat went out on the water? Please include days when your boat was used but you were not on it.

[IF NECESSARY: "We're interested in calendar days the boat was out on the water whether you were present or not."]

01 YES

02 NO   /SKIP TO STOREM

97 DON'T KNOW   /SKIP TO STOREM

99 REFUSED   /SKIP TO STOREM

/   **/IF WTRIP=01/**
/   **/IF THE BOAT WENT OUT ON THE WATER/**

WTRN.   On how many calendar days in [REFERENCE PERIOD] did the boat go out on the water, whether you were present or not?

__ RECORD NUMBER [RANGE= 1-31]

97 DON'T KNOW   /SKIP TO STOREM

99 REFUSED   /SKIP TO STOREM

/   **IF WTRN=1**
/   **IF THE BOAT WENT ON THE WATER ONCE**

ONBT1 Were you personally on the boat the day the boat went out on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/
/   **IF WTRN=2-31**
/   **RANGE=0-31**
/   **IF THE BOAT WENT ON THE WATER MORE THAN ONCE**

ONBT2 On how many of the /INSERT WTRN VALUE/ days the boat went out on the water were you personally on the boat?

0-WTRN VALUE

97 DON'T KNOW

99 REFUSED

/   **IF ONBT1=01 OR ONBT2=1 SET "DAY1" TO "DAY"**
/   **IF ONBT2=2-31 RANDOMLY SET "DAY1" TO "FIRST DAY" OR "LAST DAY"**
/
/   **IF ONBT1=01 OR ONBT2=1-31**
/   **IF PERSON ON PHONE WAS ON THE BOAT**

ONBT3 We'd like to ask you questions about the / INSERT "DAY1"/ in /REFERENCE PERIOD/ you were on the boat.

01 CONTINUE

/
/   **IF ONBT1 IN (97,99) OR ONBT2 IN (97,99) TERM AND THANK /TERM ASSIGN DISP 116 OR 003/**

X4 Thank you very much for your time, those are all the questions I have for you today.

01 CONTINUE

KNBT1 Would you say you know enough about the day the boat was on the water to be able to report where the boat went and how long it was on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

X5 Thank you very much for your time, those are all the questions I have for you today.

01 CONTINUE

KNBT2 On how many of the /INSERT WTRN VALUE/ days the boat went out on the water, would you say you know enough about where the boat went and how long it was on the water to answer questions about it?

0-WTRN VALUE

97 DON'T KNOW

99 REFUSED

X6 Thank you very much for your time, those are all the questions I have for you today.6

01 CONTINUE

KNBT3 We'd like to ask you questions about the /INSERT "DAY1"/ in /REFERENCE PERIOD/ the boat was on the water.

01 CONTINUE

HHBT1 Was anyone in your household aged 16 or older personally on the boat /IF WTRN>1 INSERT "any of the days" IF WTRN=1 INSERT "the day"/ the boat went out on the water in /REFERENCE PERIOD/?

   01 YES

   02 NO

   97 DON'T KNOW

   99 REFUSED

TRIP REPORT HAND-OFF MODULE

NDXFR_1. Can you transfer me to one of the people 16 years of age or older in your household who was present on the boat on /IF WTRN>1 INSERT "any of the days" IF WTRN=1 INSERT "the day"/ in /REFERENCE PERIOD/?

   01 SUCCESSFUL TRANSFER

   02 REFUSE TO TRANSFER /TERMINATE ASSIGN DISP 115 OR 003/

   03 CALLBACK TO COMPLETE

XFRNUM_1. I'll call back to talk to that person. Is there a better number I can call?

   01 YES—RECORD NUMBER

   02 NO

   99 REFUSED

XFRNWN_1. RECORD NEW NUMBER: _____

XFRNAM_1. Can you give me a name to ask for when I call back?

[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 and anonymous. We won't use any information such as a name for any purpose other than calling to complete the survey. "]

   01 RECORD NAME—SCHEDULE CALLBACK

   99 REFUSED /TERM ASSIGN DISP 29/

XFRNMR_1. RECORD NAME OR INITIALS: _____

/ **/IF NDXFR_1=03 AND XFRNMR_1 NE "" THEN SCHEDULE CALLBACK AND RESUME ON INT1C_1/**
/
/ **/IF NDXFR_1 IN (01) OR (NDXFR_1 =03 AND XFRNMR_1 NE "")/**
/ **/IF SUCCESSFUL TRANSFER OR CALLBACK COMPLETE/**

INT1C_1. Hello. /IF XFRNAM_1=01 INSERT "May I please speak with [INSERT XFRNMR_1]?"/ My name is [full name]. I spoke with [INSERT SAMPLE NAME] in your household about /INSERT BOAT TYPE/, and I understand that you recently went out on the boat. The United States Coast Guard is conducting a short survey about boats to get information to make boating safer. This call may be monitored or recorded for quality assurance purposes.

[IF NECESSARY: "We recently called and spoke with someone else in your home about this survey, who gave us your contact information as someone who was on the boat in /REFERENCE PERIOD/."]

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

[IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

01 YES

02 NO   ///TERM AS DISP 27///

/ **/IF INT1C_1=01**
/ **/IF RESPONDENT IS CONTINUING WITH THE INTERVIEW/**

CELL1C_1. Is this a cell phone?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ **IF CELLIC_1=01 SET CALLTYPE=2**
/ **IF CELLIC_1=02 SET CALLTYPE=1**

/ **/IF CELL1C_1=01 /**
/ **/IF RESPONDENT IS ON A CELL PHONE/**

CELL2C_1. Your safety is important to us. Are you driving a car or other vehicle right now or doing anything else that would make it unsafe to talk right now?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ **/IF CELL2C_1 IN (01,97,99) THEN SET UNSCHEDULED CALLBACK/**

CELLCB Thank you, will we call back at a later time. /TERM ASSIGN DISP 105/

01 CONTINUE

AGEC_1. Are you at least 16 years of age?

01 YES

02 NO /TERM ASSIGN DISP 28

97 DON'T KNOW /TERM ASSIGN DISP 28

99 REFUSED /TERM ASSIGN DISP 28

AGETerm Unfortunately you are not eligible for the survey. Thank you very much for your time.

01 CONTINUE

INFOC_1. You are eligible for this survey. 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 5-10 minutes.

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.

This interview may be monitored or recorded.

[IF NECESSARY: You can call 888-316-8038 to reach the survey verification line.]

 [IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

[INTERVIEWER TYPE SUSPEND TO END THE INTERVIEW]

01 YES

PNAME_1 In case we get disconnected or we need to call back at a later time, may I please have your name, initials, or some other way to identify you.

01 YES

99 REFUSED /TERMINATE ASSIGN DISP 30

NAME_1 RECORD NAME

REM1_1. We understand the "BOAT TYPE" went out on the water once in /REFERENCE MONTH/. Were you personally on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

REM2_1 We understand the /BOAT TYPE/ went out on the water /INSERT WTRN VALUE/ days in /REFERENCE MONTH/. On how many of the /INSERT WTRN VALUE/ days the boat went out on the water were you personally on the boat?

0-WTRN VALUE

97 DON'T KNOW

99 REFUSED

X7 Thank you very much for your time, those are all the questions I have for you today.

01 CONTINUE

REM3_1 We'd like to ask you questions about the / INSERT "DAY1"/ in /REFERENCE PERIOD/ you were on the boat.

01 CONTINUE

SECDAY1 Was the /DAY1/ the boat went out on the water in /REFERENCE PERIOD/ the **first** day the boat went out on the water with someone from your household 16 years of age or older?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

SECDAY2 Was the /DAY1/ the boat went out on the water in /REFERENCE PERIOD/ the **last** day the boat went out on the water with someone from your household 16 years of age or older?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

END TRIP HAND-OFF MODULE

TRIP EXPOSURE

BOAT HOURS

OVRNT_1. Was that day part of an overnight trip on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

STMON_1 Did the overnight trip start in /REFERENCE MONTH/?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ENDMON_1 Did the overnight trip end in /REFERENCE MONTH/?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

LNCHT_1H. On the first day of the trip, about what time of day did the [INSERT BOAT TYPE] set out?

__ RECORD HOUR [RANGE 1-12]

97 DON'T KNOW

99 REFUSED

LNCHT_1M RECORD MINUTE [RANGE 0-59]

97 DON'T KNOW

99 REFUSED

LNCHT_1X

[IF NECESSARY WAS THAT AM OR PM?]

01 AM

02 PM

 97 DON'T KNOW

99 REFUSED

DOCKD_1.

/IF STMON_1=01 AND ENDMON_1=01 INSERT "How many days later did the boat return to shore?"

/IF STMON_1=(02,97,99) OR ENDMON_1=(02,97,99) INSERT "How many days in /REFERENCE MONTH/ was the boat out on the water for this overnight trip? Please include only the days of the trip that occurred in /REFERENCE MONTH/."

__ RECORD NUMBER [RANGE: 1-31]

97 DON'T' KNOW

99 REFUSED

/ **/IF OVRNT_1=01/**
/ **IF ENDMON_1=(01,97,99) ASK**
/ **IF THE OVERNIGHT TRIP ENDED IN THE REFERENCE MONTH ASK**
/ **IF ENDMON_1=02 AUTOPUNCH DOCKT_1H=12**
/ **IF THE OVERNIGHT TRIP DID NOT END IN REFERENCE MONTH, AUTOPUNCH END TIME AS MIDNIGHT**

DOCKT_1H. About what time of day did the boat return to shore?

__ RECORD TIME [RANGE 1-12]

97 DON'T KNOW

99 REFUSED

/ **/IF OVRNT_1=01/**
/ **IF ENDMON_1=(01,97,99) ASK**
/ **IF THE OVERNIGHT TRIP ENDED IN THE REFERENCE MONTH ASK**
/ **IF ENDMON_1=02 AUTOPUNCH DOCKT_1M=0**
/ **IF THE OVERNIGHT TRIP DID NOT END IN REFERENCE MONTH, AUTOPUNCH END TIME AS MIDNIGHT**

DOCKT_1M RECORD MINUTE [RANGE 0-59]

97 DON'T KNOW

99 REFUSED

/ **/IF OVRNT_1=01/**
/ **IF ENDMON_1=(01,97,99) ASK**
/ **IF THE OVERNIGHT TRIP ENDED IN THE REFERENCE MONTH ASK**
/ **IF ENDMON_1=02 AUTOPUNCH DOCKT_1X=01**
/ **IF THE OVERNIGHT TRIP DID NOT END IN REFERENCE MONTH, AUTOPUNCH END TIME AS MIDNIGHT**

DOCKT_1X RECORD AM OR PM

[IF NECESSARY WAS THAT AM OR PM?]

01 AM

02 PM

97 DON'T KNOW

99 REFUSED

WHRS_1. 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

OUTDAY_1 For the next questions, I will refer to the /INSERT 'DAY1'/ in /REFERENCE MONTH/ the boat was out on the water as the 'outing.'

01 CONTINUE

OUTNT_1 The next questions are about the outing, which includes the /INSERT 'DAY1'/ in /REFERENCE MONTH/ when the boat was out on the water. By 'outing', I mean from when the boat left shore until it returned to shore.

/IF STMON_1=(02,97,99) OR ENDMON_1=(02,97,99) INSERT 'Please include only the /INSERT DOCKD_1 VALUE/ days of this overnight outing that occurred in /REFERENCE MONTH/.

01 CONTINUE

STATES WHERE BOATED

LOC_1. For that outing, which of the United States was the boat launched from?

LOC_1O.   RECORD OTHER LOCATION: _____

OST_1A. During this outing, did the boat go into states other than [INSERT LOC_1]?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

OST_1B. Which ones?

OST_1BO. RECORD OTHER LOCATION: _____

PEOPLE ON THE BOAT

WPPL_1. Including you, how many people were on the boat during this outing?

[IF NECESSARY: "Including yourself, how many people were on the boat most of the time?"]

__ RECORD NUMBER /RANGE=1-96/

97 DON'T KNOW

99 REFUSED

WKIDS_1. How many children under the age of 16 were on the boat during this outing?

__ ENTER RESPONSE /RANGE=0-WPPL_1 VALUE-1/

97 DON'T KNOW

99 REFUSED

TYPES OF WATER

/ **/IF WDAY1 IN (1,2)**
/ **/IF THERE IS AN ELIGIBLE WATER DAY FOR THIS REPORT**
/ **/MULTIPUNCH – MUL=3**

WRTYP_1. During this outing, did the boat go on any…

[READ LIST, SELECT ALL THAT APPLY]

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 WDAY1 IN (1,2)**
/ **/IF THERE IS AN ELIGIBLE WATER DAY FOR THIS REPORT**
/ **MULTIPUNCH – MUL=7**

WRBDY_1. What kinds of bodies of water did the boat 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 WRBDY_1=07**

WRBDY_1O. ENTER OTHER SPECIFY:_____

END TRIP EXPOSURE

BOATING SAFETY AWARENESS AND BEHAVIORS

BOAT OPERATION

> / **/IF WDAY1=1**
> / **IF WPPL_1=1 AUTOPUNCH WHOOP_1=01**
> / **/IF ELIGIBLE WATER DAY AND RESPONDENT WAS PRESENT ON THE BOAT**

WHOOP_1. Did you personally operate the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

> / **/IF WHOOP_1=1/**
> / **/IF RESPONDENT PERSONALLY OPERATED THE BOAT/**

OPSAFE_1. Have you ever taken a boat safety course?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

> / **/IF WHOOP_1=1/**
> / **/IF RESPONDENT PERSONALLY OPERATED THE BOAT/**

OPEXP_1. How experienced in the operation of the boat are you? Would you say…

01   Very experienced

02   Somewhat experienced

03   Somewhat inexperienced, or

04   Very inexperienced

97 DON'T KNOW

99 REFUSED

> / **/IF WDAY1=1 AND WPPL_1=2-96/**
> / **/ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT AND**
> / **MORE PEOPLE THAN THE RESPONDENT WERE PRESENT ON THE BOAT /**

OPN_1. How many people other than yourself operated the boat during this outing?

__ RECORD NUMBER (RANGE = 0-WPPL_1-1)

97 DON'T KNOW

99 REFUSED

POPAG_1

/IF OPN_1=1 INSERT: "Next, I'm going to ask you questions about the person, other than yourself, who operated the boat during this outing."/

/IF OPN_1=2-5 INSERT: "Next, I'm going to ask you questions about the /INSERT OPN_1 VALUE/ people, other than yourself, who operated the boat during this outing. Please start with the person who operated the boat most of the time during this outing."/

/IF OPN_1=6-96 INSERT: "Next, I'm going to ask you questions about 5 people, other than yourself, who operated the boat the most during this outing. Please start with the person who operated the boat most of the time during this outing."/

01 CONTINUE

/ /ASK IF OPN_1=1-96/
/ ///ASK OPAG01_1 THRU OPAG05_1 FOR EACH PERSON IN OPN_1, MAXIMUM IS 5///

OPAG##_1. How old was the //INSERT INTEGER// person other than you who operated the boat most of the time during this outing?

[READ IF NECESSARY]

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, or

10   Over 65

97 DON'T KNOW

99 REFUSED

/ /ASK OPEP01_1 THRU OPEP05_1 FOR EACH PERSON IN OPN_1, MAXIMUM IS 5/

OPEP##_1. How experienced in the operation of the boat was the /INSERT INTEGER/ operator? Would you say…

01   Very experienced

02   Somewhat experienced

03   Somewhat inexperienced, or

04   Very inexperienced

97 DON'T KNOW

99 REFUSED

ALCOHOL

PALC_1. The next questions ask about activities you engaged in during this outing. All your responses are anonymous and confidential.

01 CONTINUE

ALC_1. 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

ALCOP_1. 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

LFJBT_1. Were there life jackets on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

LFJN_1. How many?

__ RECORD RESPONSE [RANGE = 1-96]

97 DON'T KNOW

99 REFUSED

LFPBT_1. Were there life preservers or throwable devices on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

LFPN_1. How many?

__ RECORD RESPONSE [RANGE = 1-96]

97 DON'T KNOW

99 REFUSED

LFJSLF_1. Did you wear a lifejacket all the time on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

WKID5_1. How many children were on the boat who were less than 6 years old?

WKID10_1. How many children were on the boat who were 6 to 10 years old?

WKID15_1. How many children were on the boat who were 11 to 15 years old?

__ RECORD RESPONSE [RANGE=0-WKIDS_1 VALUE]

97 DON'T KNOW

99 REFUSED

CORRECT Earlier you said there were /WKIDS_1 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_1 VALUE /GO BACK TO WKID5_1/

2 SUM VALUE /FORCE WKIDS_1 = SUM/

LJK5_1. How many of the children who were less than 6 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0-WKID5_1 VALUE]

97 DON'T KNOW

99 REFUSED

LJK10_1. How many of the children who were 6 to 10 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0-WKID10_1 VALUE]

97 DON'T KNOW

99 REFUSED

LJK15_1. How many of the children who were 11 to 15 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0-WKID15_1 VALUE]

97 DON'T KNOW

99 REFUSED

LJA_1. 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 - 1 - [WKIDS_1 IN (97,99) ? YES: 0 NO: WKIDS_1]]

97 DON'T KNOW

99 REFUSED

MODULE: REASONS FOR LIFEJACKET USE

> / **/IF LFJSLF_1=2 AND RANDUNIFORM<.1 /**
> / **ASK OF 10% OF RESPONDENTS WHO DIDN'T WEAR A LIFEJACKET ALL THE TIME**

LFJW_1. You indicated that you didn't 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 LFJW_1=01///*

LFJW_1O. ENTER RESPONSE:_____

> / **/IF THE SUM OF WKID5_1+WKID10_1+WKID15_1=WKIDS_1 AND (LJK5_1+ LJK10_1+ LJK15_1) < WKIDS_1 AND WKIDS_1 <>0,97,99 AND LJK5_1<> 97,99 AND LJK10_1<> 97,99 AND LJK15_1 <> 97,99 AND RANDUNIFORM<.1 AND LFJBT_1=01 /**
> / **/ASK OF 10% OF RESPONDENTS WHO REPORT THAT ANY CHILD DIDN'T WEAR A LIFE JACKET ALL THE TIME. /**

LFJWC_1. 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?

01 RECORD RESPONSE

97 DON'T KNOW

99 REFUSED

/ *IF LFJWC_1=01///*

LFJWC_1O. ENTER RESPONSE:_____

END MODULE: REASONS FOR LIFEJACKET USE

OTHER SAFETY EQUIPMENT

> / **/IF WDAY1 IN (1) AND CATX NOT IN (4,5)**
> / **/ASK THERE IS AN ELIGIBLE WATER DAY AND**
> / **IF BOAT TYPE IS NOT CANOE OR KAYAK/**

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

SFFA_1.   A First aid kit?

SFHK_1.   Equipment for reaching someone in the water?

SFEXT_1.   A Fire extinguisher?

SFVDS_1.   Visual distress signals such as flares?

SFSS_1.   A Sound signal such as a horn?

SFRB_1.   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_1 – SFRB_1 =1**
/   **/IF THERE WAS ANY SAFETY EQUIPMENT ON THE BOAT**

SFUSE_1.   You indicated that you had a [INSERT all SFFA_1 – SFRB_1=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_1=01/**
/   **/IF YES, THEN ASK/**
/   **IF THERE WAS MORE THAN ONE OF SFFA_1-SFRB_1=01/**
/   **MULTIPUNCH – MUL=6/**

SFUSED_1. 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 WDAY1 IN (1,2) AND (HASMOT=1 OR CATX=2)**
/ **/ASK IF THERE IS AN ELIGIBLE WATER DAY AND**
/ **BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/**

ACCLVA_1. During this outing, did the boat collide with another vessel?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ **/IF ACCLVA_1=01/**
/ **/IF THE BOAT COLLIDED WITH ANOTHER VESSEL/**

ACCLVB_1. 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_1=01/**
/ **/IF THE BOAT COLLIDED WITH ANOTHER VESSEL/**

ACCLVC_1. 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=1-MIN(10,ACCLVB_1 VALUE]

97 DON'T KNOW

99 REFUSED

/ **ASK IF WDAY1 IN (1,2) AND (HASMOT=1 OR CATX=2)**
/ **/ASK IF THERE IS AN ELIGIBLE WATER DAY AND**
/ **BOAT HAS A MOTOR OR BOAT TYPE=SAILBOAT/**

ACAGDA_1. During this outing, did the boat run aground?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACAGDB_1. During this outing, how many times, did the boat run aground?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACAGDC_1. During this outing, how many times did you or someone else report to the authorities that the boat ran aground?

__ RECORD RESPONSE [RANGE=1- MIN(10,ACAGDA_1 VALUE]

97 DON'T KNOW

99 REFUSED

ACCLFA_1. Did the boat collide with a fixed or submerged object?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACCLFB_1. 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

ACCLFC_1. 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=1- MIN(10,ACCLFB_1 VALUE]

97 DON'T KNOW

99 REFUSED

ACFLDA_1. Did the boat capsize, flood, or swamp?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACFLDB_1. During this outing, how many times, did the boat capsize, flood, or swamp?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACFLDC_1. 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=1- MIN(10,ACFLDB_1 VALUE]

97 DON'T KNOW

99 REFUSED

ACOBA_1. Did anyone fall overboard?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACOBB_1. During this outing, how many times, did anyone fall overboard?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACOBC_1.   During this outing, how many times did you or someone else report to the authorities that someone fell overboard?

__ RECORD RESPONSE [RANGE=1- MIN(10,ACOBB_1]

97 DON'T KNOW

99 REFUSED

ACSKIA_1.   Was there a water-skiing accident?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACSKIB_1.   During this outing, how many times, was there a water-skiing accident?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACSKIC_1.   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=1- MIN(10,ACSKIC_1 VALUE]

97 DON'T KNOW

99 REFUSED

DAMAGE TO PEOPLE AND VESSELS

PRE3 Did any of these incidents involve:

01 CONTINUE

ACCDMG_1. 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

ACINJR_1. An injury requiring medical treatment or first aid?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ECONOMIC IMPACT OF RECREATIONAL BOATING

EIRB1 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 will refer to as the 'trip.'

01 CONTINUE

STORET_1 Where was this boat kept or stored immediately prior to this trip?

01 - MY PERMANENT WATERFRONT HOME
02 - MY PERMANENT NON-WATERFRONT HOME
03 - MY WATERFRONT SECOND HOME OR COTTAGE
04 - MY NON-WATERFRONT SECOND HOME OR COTTAGE
05 - FRIEND OR RELATIVE'S WATERFRONT HOME
06 - FRIEND OR RELATIVE'S NON-WATERFRONT HOME
07 - MARINA, YACHT CLUB, OR DRYSTACK
08 - NON-WATERFRONT STORAGE FACILITY
09 - OTHER LOCATION
97   DON'T KNOW

99 REFUSED

TRPDST_1. 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 WDAY1 IN (1)**
/ **/IF THERE IS AN ELIGIBLE WATER DAY FOR THIS REPORT**

STYAWY_1. 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_1=01/**
/ **/IF RESPONDENT STAYED WITH BOAT FOR ONE OR MORE DAYS/**

STYN_1. 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: 1-996]

997 DON'T KNOW

999 REFUSED

/ **/IF STYAWY_1=01/**
/ **/IF RESPONDENT STAYED WITH BOAT FOR MORE THAN ONE DAY/**
/ **/MULTIPLE – MUL=5**

STYL_1. 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, or

05   On board the boat

97   DON'T KNOW

99   REFUSED

/ **/IF STYL_1=05/**
/ **RANGE=1-996**
/ **/IF RESPONDENT STAYED ON THE BOAT/**

STYLN_1. Other than your time spent on the water, how many nights did you stay onboard the boat?

__ RECORD NUMBER [RANGE=1-MIN(996,STYN_1 VALUE)]

997 DON'T KNOW

999 REFUSED

TRPDYS_1. How many total days did you take the boat out on the water on this trip?

__ RECORD NUMBER [RANGE=1- MIN(996,STYN_1 VALUE + 1]

997 DON'T KNOW

999 REFUSED

LCH_1.   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   A launch site at a marina or dry stack

05   A privately owned/operated launch site

97 DON'T KNOW

99 REFUSED

TRPMT_1.   Were the boat's motors or engines operated during this trip?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

TRPMTH_1. Approximately how many hours did you operate the motors or engines on this trip?

__ RECORD NUMBER [RANGE= 1-996]

997 DON'T KNOW

999 REFUSED

END MODULE: BOAT EXPENDITURE COROLLARY QUESTIONS

TRIP EXPENDITURES

/ **/IF WDAY1 IN (1)**

PRE4 The next questions concern money you spent on this trip on things other than the boat itself.

01 CONTINUE

/ **/IF TRPDST_1=21-996/**

PRE5 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 WDAY1 IN (1)**

PRE6 How much did you spend for this trip [if TRPDST_1>20 then "**before you left home for the trip**"] on …

01 CONTINUE

/ **/IF WDAY1 IN (1) AND HASMOT=01/**
/ **/IF BOAT HAS A MOTOR/**

EXNFL_1. Boat fuel and oil:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF WDAY1=1 AND CATX NOT IN (4,5) AND TPOX NE 2**
/ **/IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/**

EXNDCK_1. Temporary dockage or marina fee:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF WDAY1=1 AND CATX NOT IN (4,5) AND TPOX NE 2**
/ **/IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/**

EXNLCH_1. Pump-out and launch fees:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=0-20 /**
/

EXNML_1. Restaurant meals and drinks:

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

997 DON'T KNOW

999 REFUSED

EXNGRC_1. Groceries, take-out food and drinks:

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

997 DON'T KNOW

999 REFUSED

EXNGS_1. Auto gas and oil:

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

997 DON'T KNOW

999 REFUSED

EXNSHP_1. Shopping and souvenirs:

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

997 DON'T KNOW

999 REFUSED

EXNRC_1. Recreation and entertainment:

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

997 DON'T KNOW

999 REFUSED

EXNLDG_1. Lodging expenses (e.g., hotel, camping, and B&B):

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

9997 DON'T KNOW

9999 REFUSED

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 TRPDST_1=21-996 AND HASMOT=01/**
/ **/IF BOAT HAS A MOTOR/**

EXFFL_1. Boat fuel and oil:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996 AND CATX NOT IN (4,5) AND TPOX NE 2**
/ **/IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/**

EXFDCK_1. Temporary dockage or marina fee:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996 AND CATX NOT IN (4,5) AND TPOX NE 2**
/ **/IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/**

EXFLCH_1. Pump-out and launch fees:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996 /**

EXFML_1. Restaurant meals and drinks:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996 /**

EXFGRC_1. Groceries, take-out food and drinks:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996**

EXFGS_1. Auto gas and oil:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_1=21-996**

EXFSHP_1. Shopping and souvenirs:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

EXFRC_1. Recreation and entertainment:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

EXFLDG_1. Lodging expenses (e.g., hotel, camping, and B&B):

$___ RECORD NUMBER [RANGE=0-9996]

9997 DON'T KNOW

9999 REFUSED

END ECONOMIC IMPACT OF RECREATIONAL BOATING

Second Water Day

SECDAY3 We'd like to ask you questions about the /INSERT "DAY2"/ in /REFERENCE PERIOD/ the boat went out on the water with someone from your household 16 years of age or older.

01 CONTINUE

SAMETRIP Was the /INSERT "DAY2"/ in /REFERENCE MONTH/ part of the same outing we just discussed?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

SONBT1 Were you personally on the boat the /INSERT "DAY2"/ the boat went out on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

SONBT2 Next, we'd like to ask you questions about the /INSERT "DAY2"/ in /REFERENCE PERIOD/ the boat went out on the water.

01 CONTINUE

SKNBT1 Would you say you know enough about the /INSERT 'DAY2'/ the boat was on the water to be able to report where the boat went and how long it was on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

SKNBT2 We'd like to ask you questions about the /INSERT "DAY2"/ in /REFERENCE PERIOD/ the boat went out on the water.

01 CONTINUE

SHHBT1 Was anyone in your household aged 16 or older personally on the boat the /INSERT "DAY2"/?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

PBTDAY We'd like to talk to the other person in your household that was on the boat the /INSERT "DAY2"/. Could you please tell me what day of the month or what type of activity happened that day, so I can reference that with the other person in your household?

01 RECORD RESPONSE

97 DON'T KNOW

99 REFUSED

BTDAY

OPENEND

TRIP REPORT HAND-OFF MODULE

NDXFR_2. Can you transfer me to one of the people 16 years of age or older in your household who was present on the boat on the [DAY2]?

  01 SUCCESSFUL TRANSFER

  02 REFUSE TO TRANSFER /TERMINATE ASSIGN DISP 115 OR 002/

  03 CALLBACK TO COMPLETE

XFRNUM_2. I'll call back to talk to that person. Is there a better number I can call at?

  01 YES—RECORD NUMBER

  02 NO

  97 DON'T KNOW

  99 REFUSED

FRNUM_2 RECORD PHONE NUMBER

XFRNAM_2. Can you give me a name to ask for when I call back?

[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 and anonymous. 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 /TERMINATE ASSIGN DISP 31/

  XFRNMR_2. RECORD NAME OR INITIALS: _____

INT1C_2. Hello. /IF XFRNAM_2=01 INSERT "May I please speak with [INSERT XFRNMR_2]?"/ My name is [full name]. I spoke with [sample name] in your household about a boat you own, and I understand that you recently went out on the boat. The United States Coast Guard is conducting a short survey about boats to get information to make boating safer. This call may be monitored or recorded for quality assurance purposes.

[IF NECESSARY: "We recently called and spoke with someone else in your home about this survey. You were 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."]

[IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

[INTERVIEWER TYPE SUSPEND TO END THE INTERVIEW]

01. YES

CELL1C_2. Is this a cell phone?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

CELL2C_2. Your safety is important to us. Are you driving a car or other vehicle right now or doing anything else that would make it unsafe to talk right now?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

CELLCB2 Thank you, will we call back at a later time. /TERM ASSIGN DISP 105/

01 CONTINUE

/ **/IF INT1C_2=01 AND CELL2C_2 NOT IN (01,97,99)**
/ **/IF RESPONDENT IS CONTINUING WITH INTERVIEW/**

AGEC_2. Are you at least 16 years of age?

01 YES

02 NO /TERM ASSIGN DISP 28

97 DON'T KNOW /TERM ASSIGN DISP 28

99 REFUSED /TERM ASSIGN DISP 28

/ **/IF AGEC_2 IN (02, 97, 99) THEN TERMINATE/**

XAGETerm Unfortunately you are not eligible for the survey. Thank you very much for your time.

01 CONTINUE

/
/
/ **/IF AGEC_2=01 ///**
/ **/IF RESPONDENT IS 16 YEARS OF AGE OR OLDER**

INFOC_2. You are eligible to be interviewed. 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. 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.

This interview may be monitored or recorded.

[IF NECESSARY: You can call 888-316-8038 to reach the survey verification line.]

 [IS RESPONDENT CONTINUING WITH THE INTERVIEW?]

[INTERVIEWER TYPE SUSPEND TO END INTERVIEW]

01. YES

/ **INFOC_2=01**

PNAME_2 In case we get disconnected or we need to call back at a later time, may I please have your name, initials, or some other way to identify you.

01 YES

99 REFUSED /TERMINATE ASSIGN DISP 32

/ **IF PNAME=01**

NAME_2 RECORD NAME

/
/ **/IF INFOC_2=01/**

REM_2. We understand that you spent time on a boat owned by someone in your household in [INSERT REFERENCE PERIOD]. The other person we spoke to said that day was:

INSERT OPENEND FROM BTDAY

Do you remember that?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

> /   **IF REM_2=01 SET 'DAY2' TO 'DAY'**

> /   **IF REM_2 IN (02,97,99) THANK AND TERM TERM ASSIGN DISP 33/**

X8 Thank you very much for your time, those are all the questions I have for you today.6

01 CONTINUE

END TRIP HAND-OFF MODULE

TRIP EXPOSURE

BOAT HOURS

> /   **/IF SONBT1=1 OR REM_2=1 OR SKNBT1=1**
> /   **/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT**

OVRNT_2. Was that day part of an overnight trip on the water?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

> /   **/IF OVRNT_2=01/**
> /   **IF 'DAY2'='NEXT DAY' AUTOPUNCH STMON_2=01**
> /   **IF THE SAMPLE DAY IS THE NEXT DAY OF THE MONTH, AUTOPUNCH THE OVERNIGHT TRIP STARTED IN REFERENCE MONTH**

STMON_2 Did the overnight trip start in /REFERENCE MONTH/?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

> /   **IF OVRNT_2=01**
> /   **IF 'DAY2'='PREVIOUS DAY' AUTOPUNCH ENDMON_2=01**
> /   **IF THE SAMPLE DAY IS THE PREVIOUS DAY OF THE MONTH, AUTOPUNCH THE OVERNIGHT TRIP ENDED IN REFERENCE MONTH**

ENDMON_2 Did the overnight trip end in /REFERENCE MONTH/?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

- / **/IF OVRNT_2=01/**
- / **/IF STMON_2=(01,97,99) ASK**
- / **IF THE OVERNIGHT TRIP STARTED IN THE REFERENCE MONTH ASK**
- / **IF STMON_2=02 AUTOPUNCH LNCHT_2H=12**
- / **IF THE OVERNIGHT TRIP DID NOT START IN THE REFERENCE MONTH, AUTOPUNCH START TIME AS MIDNIGHT**

LNCHT_2h. On the first day of the trip, about what time of day did the [INSERT BOAT TYPE] set out?

__ RECORD HOUR [RANGE 1-12]

97 DON'T KNOW

99 REFUSED

- / **/IF OVRNT_2=01/**
- / **/IF STMON_2=(01,97,99) ASK**
- / **IF THE OVERNIGHT TRIP STARTED IN THE REFERENCE MONTH ASK**
- / **IF STMON_2=02 AUTOPUNCH LNCHT_2M=0**
- / **IF THE OVERNIGHT TRIP DID NOT START IN THE REFERENCE MONTH, AUTOPUNCH START TIME AS MIDNIGHT**

LNCHT_2M RECORD MINUTE [RANGE 0-59]

97 DON'T KNOW

99 REFUSED

- / **/IF OVRNT_2=01/**
- / **/IF STMON_2=(01,97,99) ASK**
- / **IF THE OVERNIGHT TRIP STARTED IN THE REFERENCE MONTH ASK**
- / **IF STMON_2=02 AUTOPUNCH LNCHT_2X=1**
- / **IF THE OVERNIGHT TRIP DID NOT START IN THE REFERENCE MONTH, AUTOPUNCH START TIME AS MIDNIGHT**

LNCHT_2X

[IF NECESSARY WAS THAT AM OR PM?]

01 AM

02 PM

 97 DON'T KNOW

99 REFUSED

DOCKD_2.

/IF STMON_2=01 AND ENDMO_2=01 INSERT "How many days later did the boat return to shore?"

/IF STMON_2=(02,97,99) OR ENDMO_2=(02,97,99) INSERT "How many days in /REFERENCE MONTH/ was the boat out on the water for this overnight trip? Please only include the days of the trip that occurred in /REFERENCE MONTH/."

__ RECORD NUMBER [RANGE = 1-31]

97 DON'T' KNOW

99 REFUSED

DOCKT_2h. About what time of day did the boat return to shore?

__ RECORD TIME [RANGE 1-12]

97 DON'T KNOW

99 REFUSED

DOCKT_2M RECORD MINUTE [RANGE 0-59]

97 DON'T KNOW

99 REFUSED

DOCKT_2X RECORD AM OR PM

[IF NECESSARY WAS THAT AM OR PM?]

01 AM

02 PM

97 DON'T KNOW

99 REFUSED

WHRS_2. 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

OUTDAY_2 For the next questions, I will refer to the /INSERT 'DAY2'/ in /REFERENCE MONTH/ the boat was out on the water as the 'outing.'

01 CONTINUE

OUTNT_2 The next questions are about the outing, which includes the /INSERT 'DAY2'/ in /REFERENCE MONTH/ when the boat was out on the water. By 'outing', I mean from when the boat left shore until it returned to shore.

/IF STMON_2=(02,97,99) OR ENDMON_2=(02,97,99) INSERT 'Please include only the /INSERT DOCKD_2 VALUE/ days of this overnight outing that occurred in /REFERENCE MONTH/./

01 CONTINUE

STATES WHERE BOATED

LOC_2. For that outing, which of the United States was the boat launched from?

/ LOC_2O. RECORD OTHER LOCATION: _____

OST_2A. During this outing, did the boat go into states other than [INSERT LOC_2]?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/   **/IF OST_2A=01/**
/   **/IF THE BOAT WENT TO MORE THAN ONE LOCATION/**
/   **/MULTIPUNCH – MUL=51/**

OST_2B. Which ones?

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

    /   **IF OST_2B =96**

OST_2BO. RECORD OTHER LOCATION: _____

PEOPLE ON THE BOAT

    /   **/IF WDAY2 IN (1)**
    /   **/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT**

WPPL_2. Including you, how many people were on the boat during this outing?

[IF NECESSARY: "Including yourself, how many people were on the boat most of the time?"]

    RECORD NUMBER /RANGE=1-96/

97   DON'T' KNOW

99   REFUSED

    /   **/IF WPPL_2>1 AND WPPL_2<97**
    /   **IF THERE WAS MORE THAN ONE PERSON ON THE BOAT; THE RESPONDENT IS NECESSARILY OVER 16**

WKIDS_2. How many children under the age of 16 were on the boat during this outing?

    ENTER RESPONSE /RANGE=0-WPPL_2 VALUE-1/

97 DON'T KNOW

99 REFUSED

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

TYPES OF WATER

    /   **/IF WDAY2 IN (1,2)**
    /   **/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT**
    /   **/MULTIPUNCH – MUL=3**

    WRTYP_2. During this outing, did the boat go on any…

    [READ LIST, SELECT ALL THAT APPLY]

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 WDAY2 IN (1,2)**
/   **/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT**
/   **MULTIPUNCH – MUL=7**
/   **INTERVIEWER CODED**

WRBDY_2. What kinds of bodies of water did the boat 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 WRBDY_2=07**

WRBDY_2O. ENTER OTHER SPECIFY:_____

END TRIP EXPOSURE

BOATING SAFETY AWARENESS AND BEHAVIORS

BOAT OPERATION

/   **/IF WDAY2 IN (1)**
/   **IF WPPL_2=1 AUTOPUNCH WHOOP_2=01**
/   **/IF THERE IS AN ELIGIBLE TRIP FOR THIS REPORT AND RESPONDENT WAS ON BOAT**

WHOOP_2. Did you personally operate the boat during this outing?

01   YES

02   NO

97   DON'T KNOW

99   REFUSED

OPSAFE_2. Have you ever taken a boat safety course?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

OPEXP_2. 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

OPN_2. How many people other than yourself operated the boat during this outing?

__ RECORD NUMBER [RANGE= 0-WPPL_2 VALUE-1]

97 DON'T KNOW

99 REFUSED

POPAG_2

/IF OPN_2=1 INSERT: "Next, I'm going to ask you questions about the person, other than yourself, who operated the boat during this outing."/

/IF OPN_2=2-5 INSERT: "Next, I'm going to ask you questions about the /INSERT OPN_2 VALUE/ people, other than yourself, who operated the boat during this outing. Please start with the person who operated the boat most of the time during this outing."/

/IF OPN_2=6-96 INSERT: "Next, I'm going to ask you questions about 5 people, other than yourself, who operated the boat the most during this outing. Please start with the person who operated the boat most of the time during this outing."/

01 CONTINUE

OPAG##_2. How old was the /INSERT INTEGER/ person other than you who operated the boat most of the time during this outing?

 [READ IF NECESSARY]

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, or

10   Over 65

97 DON'T KNOW

99 REFUSED

OPEP##_2. How experienced in the operation of the boat was the [INSERT INTEGER] operator? Would you say…

01   Very experienced

02   Somewhat experienced

03   Somewhat inexperienced, or

04   Very inexperienced

97 DON'T KNOW

99 REFUSED

ALCOHOL

PALC_2. The next questions ask about activities you engaged in during this outing. All your responses are anonymous and confidential

01 CONTINUE

ALC_2. 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

ALCOP_2. 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

IN THE SECOND TRIP REPORT, RESPONDENTS HAVE THE OPPORTUNITY TO CONFIRM THAT THE SAME LIFEJACKETS (AND NO ADDITIONAL ONES) WERE ON THE BOAT DURING THIS OUTING

LFJSAME. I have down that on another day the boat was carrying /IF LFJBT_1=02,97,99 INSERT "0" IF LFJN_1=1-96 INSERT VALUE "[LFJN_1]"/ life jackets and /IF LFPBT_1=02,97,99 INSERT "0" IF LFPN_1=1-96 INSERT VALUE "[LFPN_1]"/ life preservers. Did you have the same number of life jackets and life preservers on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

LFJMORE. Were there any additional life jackets or preservers on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ **IF LFJSAME IN (02,97,99) AND WDAY2=1**
/ **IF THE SAME EQUIPMENT WASN'T ON THE BOAT**

LFJBT_2. Were there life jackets on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/ **/IF LFJBT_2=01 OR LFJMORE=1/**
/ **/IF THE SAME EQUIPMENT WASN'T ON THE BOAT OR IF THERE WERE ADDITIONAL LIFE JACKETS**

LFJN_2. How many life jackets were there?

__ RECORD RESPONSE/RANGE 1-96/

97 DON'T KNOW

99 REFUSED

/ **IF LFJSAME IN (02,97,99) AND WDAY2=1**
/ **IF THE SAME EQUIPMENT WASN'T ON THE BOAT**

LFPBT_2. 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_2=01 OR LFJMORE=1**
/ **IF THE SAME EQUIPMENT WASN'T ON THE BOAT**

LFPN_2. How many life preservers were there?

__ RECORD RESPONSE [RANGE = 1-96]

97 DON'T KNOW

99 REFUSED

/ **/IF WDAY2=1 AND ((LFJSAME=01 AND LFJBT_1=01) OR LFJBT_2=01)**
/ **/ASK IF THE RESPONDENT WAS PRESENT ON THE BOAT AND THERE WERE LIFE JACKETS ON THE BOAT**

LFJSLF_2. Did you wear a lifejacket all the time on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

WKID5_2. How many children were on the boat who were less than 6 years old?

WKID10_2. How many children were on the boat who were 6 to 10 years old?

WKID15_2. How many children were on the boat who were 11 to 15 years old?

__ RECORD RESPONSE [RANGE=0-WKIDS_2 VALUE]

97 DON'T KNOW

99 REFUSED

CORRECT2 Earlier you said there were /WKIDS_2/ children on the boat, and now you've recorded a total of /SUM/ on the boat. How many children were on the boat?

1 WKIDS_2 VALUE /GO BACK TO WKID5_2/

2 SUM VALUE /FORCE WKIDS_2 = SUM/

LJK5_2. How many of the children who were less than 6 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0-WKID5_2 VALUE]

97 DON'T KNOW

99 REFUSED

LJK10_2. How many of the children who were 6 to 10 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0- WKID10_2 VALUE]

97 DON'T KNOW

99 REFUSED

LJK15_2. How many of the children who were 11 to 15 years old wore a lifejacket all the time while on the boat?

__ RECORD RESPONSE [RANGE=0- WKID15_2 VALUE]

97 DON'T KNOW

99 REFUSED

LFJ_2. 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 - 1 - [WKIDS_1 IN (97,99) ? YES: 0 NO: WKIDS_1]

97 DON'T KNOW

99 REFUSED

END MODULE: REASONS FOR LIFEJACKET USE

OTHER SAFETY EQUIPMENT

AGAIN, IN THE SECOND TRIP REPORT, RESPONDENTS HAVE THE OPPORTUNITY TO CONFIRM THE INFORMATION THEY ALREADY PROVIDED ABOUT EQUIPMENT ON THE BOAT.

SFSAME. I have down in a previous report that the boat was carrying [INSERT ALL OF SFFA_1=1, SFHK_1=1, SFEXT_1=1, SFVDS_1=1, SFSS_1=1, SFRB_1=1]. Were all of those on the boat during this outing?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

SFMOREA. Was there a

[SELECT ALL THAT APPLY]

01	A FIRST AID KIT
02	EQUIPMENT FOR REACHING SOMEONE IN THE WATER
03	A FIRE EXTINGUISHER?
04	VISUAL DISTRESS SIGNALS SUCH AS FLARES
05	A SOUND SIGNAL SUCH AS A HORN
06	AN EMERGENCY POSITION INDICATING RADIO BEACON-EPIRB
88	NONE
97	DON'T KNOW
99	REFUSED

/   **IF SFSAME IN (.,01,02, 97,99) AND WDAY2=1**
/   **IF THEY DO NOT CONFIRM, THE ORIGINAL SERIES IS ASKED AGAIN**
/   **IF SFSAME=01 AUTOPUNCH SFFA_2-SFRB_2=01 WHERE SFFA_1-SFRB_1 =01 OR IF THE CORRESPONDING PIECE OF EQUIPMENT WAS SELECTED IN SFMOREA**

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

SFFA_2.   A First aid kit?

SFHK_2.   Equipment for reaching someone in the water such?

SFEXT_2.   A Fire extinguisher?

SFVDS_2.   Visual distress signals such as flares?

SFSS_2.   A Sound signal such as a horn?

SFRB_2.   An Emergency Position Indicating Radio Beacon-EPIRB?

01 YES
02 NO
97 DON'T KNOW
99 REFUSED

USAGE OF SAFETY EQUIPMENT

/   **//IF SFFA_2=01 OR SFHK_2=01 OR SFEXT_2=01 OR SFVDS_2=01 OR SFSS_2=01 OR SFRB_2=01**
/   **/IF THERE WAS ANY SAFETY EQUIPMENT ON THE BOAT**
/   **/SINGLE PUNCH**

SFUSE_2.   You indicated that you had a [INSERT all SFFA_2 – SFRB_2=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

SFUSED_2.   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

ACCLVA_2.   During this outing, did the boat collide with another vessel?

01   YES

02   NO

97   DON'T KNOW

99   REFUSED

ACCLVB_2.   During this outing, how many times, did the boat collide with another vessel?

__   RECORD RESPONSE [RANGE=1-10]

97   DON'T KNOW

99   REFUSED

ACCLVC_2.   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=1- MIN(10,ACCLVB_2 VALUE]

97 DON'T KNOW

99 REFUSED

ACAGDA_2. During this outing, did the boat run aground?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACAGDB_2. During this outing, how many times, did the boat run aground?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACAGDC_2. During this outing, how many times did you or someone else report to the authorities that the boat ran aground?

__ RECORD RESPONSE [RANGE=1- MIN(10,ACAGDA_2 VALUE]

97 DON'T KNOW

99 REFUSED

ACCLFA_2. Did the boat collide with a fixed or submerged object?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACCLFB_2. 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

ACCLFC_2. 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=1- MIN(10,ACCLFB_2 VALUE]

97 DON'T KNOW

99 REFUSED

ACFLDA_2. Did the boat capsize, flood, or swamp?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ACFLDB_2. During this outing, how many times, did the boat capsize, flood, or swamp?

__ RECORD RESPONSE [RANGE=1-10]

97 DON'T KNOW

99 REFUSED

ACFLDC_2. 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=1- MIN(10,ACFLDB_2 VALUE]

97 DON'T KNOW

99 REFUSED

ACOBA_2.   Did anyone fall overboard?

01   YES

02   NO

97   DON'T KNOW

99   REFUSED

ACOBB_2.   During this outing, how many times, did anyone fall overboard?

__   RECORD RESPONSE [RANGE=1-10]

97   DON'T KNOW

99   REFUSED

ACOBC_2.   During this outing, how many times did you or someone else report to the authorities that someone fell overboard?

__   RECORD RESPONSE [RANGE=1- MIN(10,ACOBB_2]

97   DON'T KNOW

99   REFUSED

ACSKIA_2.   Was there a water-skiing accident?

01   YES

02   NO

97   DON'T KNOW

99   REFUSED

ACSKIB_2.   During this outing, how many times, was there a water-skiing accident?

__   RECORD RESPONSE [RANGE=1-10]

97   DON'T KNOW

99   REFUSED

ACSKIC_2.   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=1- MIN(10,ACSKIC_2 VALUE]

97 DON'T KNOW

99 REFUSED

DAMAGE TO PEOPLE AND VESSELS

PRE10 Did any of these incidents involve:

01 CONTINUE

ACCDMG_2. 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

ACINJR_2.   An injury requiring medical treatment or first aid?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

ECONOMIC IMPACT OF RECREATIONAL BOATING

EIRB2 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 will refer to as the 'trip'.

01 CONTINUE

TRPUNQ. Were the two days we have talked about on the same trip?

01   YES

02   NO

97   DON'T KNOW

99   REFUSED

STORET_2 Where was this boat kept or stored immediately prior to this trip?

01 - MY PERMANENT WATERFRONT HOME
02 - MY PERMANENT NON-WATERFRONT HOME
03 - MY WATERFRONT SECOND HOME OR COTTAGE
04 - MY NON-WATERFRONT SECOND HOME OR COTTAGE
05 - FRIEND OR RELATIVE'S WATERFRONT HOME
06 - FRIEND OR RELATIVE'S NON-WATERFRONT HOME
07 - MARINA, YACHT CLUB, OR DRYSTACK
08 - NON-WATERFRONT STORAGE FACILITY
09 - OTHER LOCATION
97   DON'T KNOW

99   REFUSED

TRPDST_2. 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

STYAWY_2. 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

STYN_2. 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= 1-996]

997 DON'T KNOW

999 REFUSED

STYL_2. 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, or

05   On board the boat

97 DON'T KNOW

99 REFUSED

STYLN_2. Other than your time spent on the water, how many nights did you stay onboard the boat?

__ RECORD NUMBER /RANGE=1-MIN(996,STYN_2 VALUE)/

997 DON'T KNOW

999 REFUSED

TRPDYS_2. How many total days did you take the boat out on the water on this trip?

__ RECORD NUMBER [RANGE=1- MIN(996,STYN_2 VALUE + 1]997   DON'T KNOW

999 REFUSED

LCH_2.   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   A launch site at a marina or dry stack

05   A privately owned/operated launch site

97 DON'T KNOW

99 REFUSED

/   **/ IF TRPUNQ=2 AND HASMOT=1/**
/   **IF THERE IS A VALID WATER DAY AND THERE IS A MOTOR**

TRPMT_2.   Were the boat's motors or engines operated during this trip?

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

/   **/IF TRPMT_2=01/**
/   **/IF MOTORS OR ENGINES WERE OPERATED DURING THIS TRIP/**
/   **/RANGE=1-996/**

TRPMTH_2. Approximately how many hours did you operate the motors or engines on this trip?

__ RECORD NUMBER [RANGE= 0-996]

997 DON'T KNOW

999 REFUSED

END MODULE: BOAT EXPENDITURE COROLLARY QUESTIONS

TRIP EXPENDITURES

/ **/IF TRPUNQ=2**

PRE11 The next questions concern money you spent on this trip on things other than the boat itself.

01 CONTINUE

/ **/IF TRPDST_2=21-996 /**

PRE12 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

PRE13 How much did you spend for this trip [if TRPDIST>20 then "**before you left home for the trip**"] on …

01 CONTINUE

EXNFL_2. Boat fuel and oil:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNDCK_2. Temporary dockage or marina fee:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNLCH_2. Pump-out and launch fees:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNML_2. Restaurant meals and drinks:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNGRC_2. Groceries, take-out food and drinks:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNGS_2. Auto gas and oil:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNSHP_2. Shopping and souvenirs:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNRC_2. Recreation and entertainment:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXNLDG_2. Lodging expenses (e.g., hotel, camping, and B&B):

$___   RECORD NUMBER [RANGE=0-9996]

9997   DON'T KNOW

9999 REFUSED

PRE14 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

EXFFL_2. Boat fuel and oil:

$___   RECORD NUMBER [RANGE=0-996]

997   DON'T KNOW

999   REFUSED

EXFDCK_2. Temporary dockage or marina fee:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 AND CATX NOT IN (4,5) AND TPOX NE 2**
/ **/IF BOAT TYPE NOT IN CANOE, KAYAK, INFLATABLE/**

EXFLCH_2. Pump-out and launch fees:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 /**

EXFML_2. Restaurant meals and drinks:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 /**

EXFGRC_2. Groceries, take-out food and drinks:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 /**

EXFGS_2. Auto gas and oil:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 /**

EXFSHP_2. Shopping and souvenirs:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

/ **/IF TRPDST_2=21-996 /**

EXFRC_2. Recreation and entertainment:

$___ RECORD NUMBER [RANGE=0-996]

997 DON'T KNOW

999 REFUSED

EXFLDG_2. Lodging expenses (e.g., hotel, camping, and B&B):

$___   RECORD NUMBER [RANGE=0-9996]

9997 DON'T KNOW

9999   REFUSEDEND ECONOMIC IMPACT OF RECREATIONAL BOATING

Docked days module

1. If WTRIP IN (02,97,99) OR WTRN IN (97,99) GO TO STOREM THEN CLOSE

    a. If the boat did not go out on the water in the previous month or the respondent says don't know or refused then no water days, go straight to dock days then closing.

2. IF HHBT1 IN (01,02,97,99) INSERT DOCKED DAYS MODULE BETWEEN HHBT1 AND NDXFR_1

    a. If boat owner is not eligible for water day 1, insert docked days before transferring to another member of the household

3. IF SHHBT1 IN (01,02,97,99) INSERT DOCKED DAYS MODULE BETWEEN SHHBT1 AND BTDAY

    a. If boat owner is not eligible for water day 2, insert docked days before transferring to another member of the household

4. IF WDAY1 IN (1,2) AND MISSING(WDAY2) AND MISSING(STOREM)

    a. If there is only one eligible water day and boat owner is eligible, insert docked days after completing water day 1 and before the closing

5. IF SONBT1=01 OR SKNBT1=01 INSERT DOCKED DAYS MODULE BETWEEN EXFLDG_2 AND CLOSE

    a. If boat owner is eligible to complete both water days, insert docked days module after the end of the second water day and before the closing

---

IDENTIFY DOCKED RECREATION DAYS

/   **/ALL/**

STOREM

During [REFERENCE PERIOD], was the boat kept or stored on land or on the water?

[IF NECESSARY: Where was the boat when people were not on it?]

01 LAND

02 WATER

03 BOTH

04 NEITHER – BOAT WAS AWAY FROM SHORE THE WHOLE MONTH

97   DON'T KNOW

99   REFUSED

DTRIP

During [REFERENCE PERIOD], was there any day when you or members of your household spent time on the boat while it was docked or moored but didn't take it out on the water?

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

01 YES

02 NO

97 DON'T KNOW

99 REFUSED

DTRN

On how many days in [REFERENCE PERIOD] did you or someone from your household spend more than an hour on the boat while it was docked or moored?

[IF NECESSARY: "When the boat was NOT being prepared for a launch the same day"]

RECORD NUMBER [RANGE=00-31]

97   DON'T KNOW

99   REFUSED

/   **THE SURVEY WILL HAVE UP TO TWO DOCKED REPORTS. HERE, WE SET A FLAG TO TELL US HOW MANY TRIPS WE'LL PROFILE.**
/   **THEN FOR EACH DOCKED DAY, WE'LL PICK ONE OF THE TRIPS FROM THE SET OF DTRN**
/   **IF DTRN=1 THEN DPROFILE=1**
/   **ELSE IF DTRN=2-31 THEN DPROFILE=2**
/   **ELSE DPROFILE=0**

FIRST DOCKED DAY

/   **/PICK THE FIRST DOCKED DAY**
/   **/IF DPROFILE IN (1, 2) THEN**
/   **IF DPROFILE=1 SET DDAY1="DAY"**
/   **IF DPROFILE=2 RANDOMLY SET DDAY1 TO "FIRST" OR "LAST"**
/

PRE15 Next, I'm going to ask about the /INSERT DDAY1/ in /REFERENCE MONTH/ you or someone in your household spent time on the boat while it was docked or moored.

01 CONTINUE

TRIP EXPOSURE

STATES WHERE BOATED

/ **IF DPROFILE IN (1,2)**

DLOC_1. On that day, which of the United States was the boat in?

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

/ **IF DLOC_1=96**

DLOC_1O RECORD OTHER LOCATION

PEOPLE ON THE BOAT

/ **IF DPROFILE IN (1,2)**

DPPL_1. How many people were on the boat while it was docked or moored?

[IF NECESSARY: "We're looking for the total number of people who were there most of the time while on the boat"]

[IF NECESSARY: "When the boat was NOT being prepared for a launch the same day"]

___ RECORD NUMBER [RANGE= 1-96]

97 DON'T KNOW

99 REFUSED

BOAT HOURS

/ **IF DPROFILE IN (1,2)**

DHRS_1. On that day, how many hours did you or someone in your household spend on the boat while it was docked or moored?

[IF NECESSARY: "WHEN THE BOAT WAS NOT BEING PREPARED FOR A LAUNCH THE SAME DAY"]

__ RECORD NUMBER [RANGE=1-24]

97 DON'T KNOW

99 REFUSED

SECOND DOCKED DAY

/ **/PICK THE SECOND DOCKED DAY**
/ **/IF DPROFILE IN (2) THEN**
/ **IF DDAY1="FIRST" THEN SET DDAY2="NEXT DAY"**
/ **IF DDAY1="LAST" THEN SET DDAY2= "PREVIOUS DAY"**

PRE16 Next, I'm going to ask about the /INSERT DDAY2/ in /REFERENCE MONTH/ you or someone in your household spent time on the boat while it was docked or moored.

01 CONTINUE

TRIP EXPOSURE

STATES WHERE BOATED

/   **IF DPROFILE=2**

DLOC_2. On that day, which of the United States was the boat in?

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

/   **IF DLOC_2=96**

DLOC_2O RECORD OTHER LOCATION

PEOPLE ON THE BOAT

/   **IF DPROFILE=2**

DPPL_2. How many people were on the boat while it was docked or moored?

[IF NECESSARY: "WE'RE LOOKING FOR THE TOTAL NUMBER OF PEOPLE WHO WERE THERE MOST OF THE TIME WHILE ON THE BOAT"]

[IF NECESSARY: "WHEN THE BOAT WAS NOT BEING PREPARED FOR A LAUNCH THE SAME DAY"]

___   RECORD NUMBER [RANGE= 1-96]

97   DON'T KNOW

99   REFUSED

BOAT HOURS

/   **IF DPROFILE=2**

DHRS_2. On that day, how many hours did you or someone from your household spend on the boat while it was docked?

[IF NECESSARY: "WHEN THE BOAT WAS NOT BEING PREPARED FOR A LAUNCH THE SAME DAY"]

__   RECORD NUMBER [RANGE= 1-24]

97 DON'T KNOW

99 REFUSED

END DOCKED DAYS MODULE

PARTICIPATION QUESTIONS

/ **IF REM1_1 AND REM2_1 AND REM_2 ARE ALL MISSING**
/ **IF THE BOAT OWNER IS STILL ON THE PHONE**

PPQ1 Lastly, I would like to ask you three questions about boating activities this boat was used for in 2011….

01 CONTINUE

/ **IF PPQ1=01**
/ **IF THE BOAT OWNER IS STILL ON THE PHONE**

PQ1 In 2011, how many days was the boat used?

[IF NECESSARY: Your best guess is fine]

ENTER VALUE [RANGE=0-365]

997 DON'T KNOW

999 REFUSED

/ **IF PPQ1=01**
/ **IF PQ1=1-365**
/ **IF PQ1=997**
/ **IF PQ1=999**
/ **IF THE BOAT OWNER IS STILL ON THE PHONE**

PQ2 On an average day the boat was used in 2011, about how many hours was the boat on the water?

ENTER VALUE [RANGE=1-24]

97 DON'T KNOW

99 REFUSED

/ **IF PPQ1=01**
/ **IF PQ1=1-365**
/ **IF PQ1=997**
/ **IF PQ1=999**
/ **IF THE BOAT OWNER IS STILL ON THE PHONE**

PQ3 On an average day the boat was used in 2011, about how many people were aboard the boat?

ENTER VALUE [RANGE=1-96]

97 DON'T KNOW

99 REFUSED

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

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

Definitions of a complete:

1. ASSIGN DISP 61 IF WDAY1 IS MISSING AND DPROFILE=0 AND CLOSE=01
   a. Boat owner, no eligible activity - Boat owner who reported no water days and no dock days in the reference month
2. ASSIGN DISP 62 IF WDAY1 IS MISSING AND DPROFILE IN (1,2) AND CLOSE=01
   a. Dock day only - Boat owner who reported no eligible water day in reference month but did report at least 1 dock day
3. ASSIGN DISP 63 IF WDAY1 IN (1,2) AND DPROFILE=0 AND CLOSE=01
   a. Water day only - Boat owner who reported at least 1 water day in the reference month but no dock days in the reference month
4. ASSIGN DISP 64 IF WDAY1 IN (1,2) AND DPROFILE IN (1,2) AND CLOSE=01
   a. Water day and doc day - Boat owner who reported at least 1 water day and at least 1 doc day in the reference month

Appendix 1: State FIPS Codes

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

01 ALABAMA	21 KENTUCKY	38 NORTH DAKOTA
02 ALASKA	22 LOUISIANA	39 OHIO
04 ARIZONA	23 MAINE	40 OKLAHOMA
05 ARKANSAS	24 MARYLAND	41 OREGON
06 CALIFORNIA	25 MASSACHUSETTS	42 PENNSYLVANIA
08 COLORADO	26 MICHIGAN	72 PUERTO RICO
09 CONNECTICUT	27 MINNESOTA	44 RHODE ISLAND
10 DELAWARE	28 MISSISSIPPI	45 SOUTH CAROLINA
11 DISTRICT OF COLUMBIA	29 MISSOURI	46 SOUTH DAKOTA
12 FLORIDA	30 MONTANA	47 TENNESSEE
13 GEORGIA	31 NEBRASKA	48 TEXAS
15 HAWAII	32 NEVADA	49 UTAH
16 IDAHO	33 NEW HAMPSHIRE	50 VERMONT
17 ILLINOIS	34 NEW JERSEY	51 VIRGINIA
18 INDIANA	35 NEW MEXICO	53 WASHINGTON
19 IOWA	36 NEW YORK	54 WEST VIRGINIA
20 KANSAS	37 NORTH CAROLINA	55 WISCONSIN

56 WYOMING

88 THE BOAT WAS NOT IN
    THE UNITED STATES

96 OTHER (SPECIFY)

97 DON'T KNOW

99 REFUSED

APPENDIX C: TELEPHONE INTERVIEWER TRAINING MANUAL

National Recreational Boating Survey (NRBS)
(Trip Survey) Interviewer Training Manual

Conducted by ICF Macro

BACKGROUND TO THE SURVEY

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 and 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 boating.

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. 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. 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

> **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.

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.

WHY RECREATIONAL BOATING DATA IS NECESSARY

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 "Trip Survey"** which may also be referred to as the "Panel Survey".

Figure 1 illustrates the NRBS "Trip Survey" structure including survey modes, sample source and universe, targeted respondent, and analytic goals.

Figure 1 - Overview of the NRBS Trip Survey Data Collection Structure

Survey	Mode(s)	Sample source(s)	Universe	Respondent	Analytic Goals
Trip Survey	Web, Phone	Panel	Privately owned recreational boats	Boat owner (panelist)	Exposure Safety awareness and behaviors Economic impact of boating Negative events

What you must know about this survey prior to calling

Who is the client?

➢ USCG: the United States Coast Guard.

　　o 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
　　☎　(919) 293-1653　☎
If needed, Matt will pass along client contact information to the respondent.

How long is the survey?

➢ The survey is approximately 10-15 minutes in length.

What is the purpose of the survey?

The primary purpose of the survey is to speak with an adult member of the boat owning household about recent recreational boating trips they have taken with the boat and to collect information about what happened on the trip(s): how long they lasted, what safety events occurred, and what money was spent.

The purposes of the NRBS Trip Survey are to measure:

1. Exposure:
   - Boat and boater hours on the water
   - Boat hours in docked recreation

2. Boating safety awareness and behaviors
   - Lifejacket use
   - Reasons for life jacket use
   - Alcohol use and boat operation
3. Economic impact of recreational boating
   - Money spent on boating trips
   - Money spent in communities on boat trips
4. Negative event Incidence and risk
   - Actual and reported accidents that cause injury and boat damage

In more detail, the Trip Survey will gather information from recreational boat owners that will measure:

- Boating exposure (or how much time people are out recreational boating), including the number and duration of actual trips taken on recreational boats

- Details of what happened on those trips

- Safety behaviors, such as whether people on the boat were wearing life vests or not, etc.

- Safety events, which may include if a boater or passenger on a boat was injured during the trip, etc.

- Boating expenditures (i.e., how much money the boater spent on items related to that specific trip such as gas for the boat, etc.), and

- Negative events, such as if the boat hit and damaged something during the trip, etc.

How does the trip survey work?

The **Trip Survey** will be conducted monthly during 2012. This survey samples individual trips that boats have taken and collects information about what happened on those trips: how long they lasted, what safety events occurred, and what money was spent. The sample for the Trip Survey will be boat-owning households recruited from the Boat Survey fielded in late 2011.

Target population: Boat owning households who completed the NRBS Boat Survey and volunteered to join the Trip panel.

Enrollment in the panel: Respondents provided their contact information and how they prefer to be contacted during the Trip Survey, either by telephone or e-mail. All panelists will be sent an advance letter or email confirming their consent to join the panel, some additional background information about the study and general information about how they will be contacted for the survey. Respondents who prefer e-mail contact will be contacted by e-mail first and then by telephone if they are non-responsive after two weeks. Our panel includes approximately 22,000 individuals from boat-owning households.

Frequency of contact: Panelists are recruited to represent every state and they are divided into "southern" and "northern" states. Southern state panelists are eligible to be surveyed once every quarter throughout 2012. In northern states, boating is rare from October through March. Therefore, in these states, one Trip

Survey will be conducted in April with a reference period 'from January through March'; and another one in January with a reference period 'from October through December'.

Respondents will remain in the panel for subsequent months even if they don't respond in any given month for a 12-month period, **unless they explicitly request removal**. Any respondent who has participated within the past three months, will NOT be selected to participate in the trip survey. Respondents will be stratified to achieve targets by state and by boat type. We will administer the trip survey to selected participants each month. However, <u>any participant can only be interviewed up to four times maximum for the survey,</u> and they can refuse to participate at any time.

Screening for eligibility: We will screen households to confirm that respondents still own the boat we discussed with them during the Boat Survey. Respondents who no longer own the boat will be removed from the panel.

Incentives: Each time respondents are eligible and they complete a trip survey with us, we provide them with a $5 Amazon.com gift code to compensate them for their time. Respondents who have sold their boats and are ineligible will not receive the incentive because they cannot complete a survey. Respondents whose boat did not involve an eligible trip in the reference period are still eligible to receive an incentive.

Follow-up with non-respondents: We will make 10 attempts to reach respondents. Calling on the survey will begin on February 29, 2012.

Communicating with Respondents: ICF will send letters, emails, and postcards to keep respondents informed and engaged in the trip survey panel. <u>It will be **especially important** that CATI interviewers have positive interactions on the telephone with these respondents since we may be contacting them multiple times to help us with this project.</u>

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

- ➢ Confirming boat ownership;
- ➢ Identifying number of days the boat was on the water
- ➢ Recording details for up to two recreational boating trips
- ➢ Detailing number of people on the boat
- ➢ Number of hours the boat trip lasted
- ➢ What type of water the boat was on (fresh, saltwater, or brackish water)
- ➢ Boat safety awareness questions and behaviors
- ➢ Boat operation questions
- ➢ Alcohol use
- ➢ Lifejacket use
- ➢ Damage to people and vessels
- ➢ Economic impact of recreational boating

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?

- We are calling boat owners who agreed to assist us with another boat related (trip) survey when we interviewed them for the National Recreational Boat Survey.
- **The only respondents eligible are individuals age 16 or older contacted at a household.**

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.

- 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, <u>so a respondent's answers cannot be connected to a specific person or telephone number.</u>

How can anyone verify this survey effort is legitimate?

- Respondents may call the ICF Macro IVR line. If a respondent asks to speak to the client, interviewers should provide them with ICF Macro Associate, Matt Brenner's name and phone number.

OTHER SURVEY DETAILS

Expected Survey Length: 10-15 minutes

Number of Completes: As many as possible from each monthly wave. The total panel size is approximately 22,000. Each monthly wave will be approximately 2000-5000 records. Respondents can complete the survey by telephone or by Web.

Type of Dialing: Predictive

The Trip Survey will also include:

- A survey version programmed in Spanish;
- A caller ID pulsed out to each respondent's caller ID box; and
- An 800 # for respondents to call us at a more convenient time or to receive help desk support (web surveys), if they request it.

SURVEY ISSUES

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 converter
- "3" – Web panelists
- "4"– Refusal converter
- "5" – Spanish
- "6" – Spanish Refusal converter
- "7" – Met protocol
- "8" – Initial refusals with a "cool off period"
- "9" – Do not call list

REFUSAL POLICY

If a named respondent refuses the record should be coded as a selected refusal and considered resolved. If there is a refusal but it is clear that it comes from the named respondent the record should be assigned as an unselected refusal, whereupon the record will be assigned for refusal conversion attempt in 4 days.

Any respondent providing a clear and definitive refusal—whether the respondent is named or not—should be assigned a hard refusal. The respondent does not have to be irate or swear, for them to be considered adamant in not wanting to do the survey. If they ask to be put on our Do Not Call List, or firmly state to the effect of 'I am not interested in doing this survey', interviewers must take the record out as a hard refusal. Please notify Josh Brown concerning any records that need to be added to the Do Not Call List.

If the respondent asks to be taken off our list, threatens to contact the client or a lawyer, etc., **interviewers must code that record as a hard refusal**, apologizing to the respondent if they are upset, and assuring them that their record will be taken out of dialing, and they will not be re-contacted for the survey. During this process, interviewers should focus on being polite, professional, and listening to the respondent, and never try to force the respondent to participate if they are adamant they do not want to take part in the survey. **This includes both non-selected respondents, as well as selected respondents.**

- Note that once a record moves to refusal conversion, it will first move to special interviewer type 8 for a "cool-off" time. After 4 days the record will move to special interviewer type 4 where it is ready to be called by a refusal converter.

For phone cell sample, a clear and definitive refusal should also be taken out as a hard 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.

Call Attempts

Each landline number will be called a maximum 10 times over days, nights, and weekends. Each cell phone number will be called a maximum 5 times. If a respondent is contacted on the last call, and an interview cannot be completed, another attempt will be made.

ICF Macro, Inc.
126 College Street
Burlington, VT 05401