Documentation Overview

Contents

README.txt	This document as a text file
fh2.txt	FH2 data file.
fh3.txt	FH3 data file.
fh4.txt	FH4 data file.
Convert2.sas	FH2 SAS program.
Convert3.sas	FH3 SAS program.
Convert4.sas	FH4 SAS program.
State_outliers.txt	List of State outliers

Documentation directory (Word files)

README.docx	This file
fh2.docx	FH2 documentation.
fh3.docx	FH3 documentation.
fh4.docx	FH4 documentation.

A. Introduction and Background

This is the Public Use File documentation for the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (FHWAR). This survey was conducted in three waves with in-person and telephone screening of households.

In the first wave, which occurred between April and June 2011, we conducted the screening interview. If any of the household members had participated in fishing or hunting between January 1, 2011 and the interview date, we sampled them into the Sportsperson sample (fishing and hunting) and conducted the first detailed interview. If any of the household members had participated in wildlife watching between January 1, 2011 and the interview date, we randomly selected a sample of those participants into the wildlife watching sample (formerly called nonconsumptive) and conducted the first detailed interview.

The second wave of interviewing was conducted between September and October 2011. For this wave, we selected household members who had not participated by the Wave 1 interview date but were likely to participate during 2011. Their likelihood of participation was determined by their past participation levels and their stated likeliness to participate in 2011. This was the first detailed interview for these respondents. It was possible for a respondent who was in the Sportsperson sample in Wave 1 to be selected for the Wildlife Watching sample in Wave 2, or for a Wildlife-Watching respondent in Wave 1 to be selected for the Sportsperson sample for Wave 2.

Wave 3 was conducted between January and May 2012. Refer to the National Report at http://www.census.gov/prod/www/abs/fishing.html for a detailed explanation regarding the Wave 3 interview period. The wave 3 sample consisted of respondents from both Wave 1 and Wave 2. This was to be the second detailed interview for both samples (Sportsperson and Wildlife Watching). If we were not able to reach the respondent during the wave in which they were selected into sample, we still interviewed them in the 3rd wave and collected data for the entire year of 2011.

In Wave 1 a significant portion of the sample could not be contacted by telephone. To improve response rates, a portion of the uncontacted sample was selected to receive a personal visit interview between February and May 2012. We conducted a screening interview (designated as "Wave 3 Screener") for these cases since no such interview was done in Wave 1. If any of the household members had participated in fishing or hunting between January 1, 2011 and December 31, 2011, we sampled them into the

Sportsperson sample (fishing and hunting) and conducted a detailed interview to collect data for the entire year of 2011. If any of the household members had participated in wildlife watching between January 1, 2011 and December 31, 2011, we randomly selected a sample of those participants into the wildlife watching sample and conducted a detailed interview to collect data for the entire year of 2011.

B. Data Layout

1. The data are provided as ASCII text files. The data are presented in three files: 1) the screening file; 2) the sportsperson (fishing and hunting) file, and 3) the wildlife watching file. Record layout descriptions are found in the Documentation directory under the appropriate file (Screener file FH2.docx, Fish/Hunt file FH3.docx, and Wildlife Watching file FH4.docx).

   We have provided three SAS programs that can be used to create SAS data sets from the three ASCII files. The modifications that you will need to make are specified in each program. Convert2.sas is for converting the screening ascii file (fh2.txt), convert3.sas is for converting the sportsperson ascii file (fh3.txt), convert4.sas is for converting the wildlife watching ascii file (fh4.txt). The information in these programs specifies variable names and locations in the ASCII file, thus the programs could be modified for use in other statistical packages.

   There are 66,659 records on the screening file, 11,016 records on the sportsperson file, and 9,132 records on the wildlife watching file. Each file's sample was drawn specifically to arrive at estimates for that type of wildlife-related recreation; In general, it is not correct to mix data from different files in a computer program. The sampling schemes and thus the weights are different for the 3 different files. (See Section G, "Weights" below).

2. Multiple item variable names for a question are based on the maximum number of answers that were given for that question. For example, there are seven variables for hunting states (HUNTSTD1 through HUNTSTD7) because the maximum number of hunting states reported was seven. Thus, there will be seven variables for each hunting question on participation and expenditures, one for each state. Those variables have identifiers that identify which state they pertain to. Please remember, for any given type of hunting (big game, small game, etc.) there may be answers in all, any, or none of these variables.

   It is possible that variables for a particular type of hunting (small game, for example) will not have any information in them or information in just one or two states. Also, the information may not be in the 1st, 2nd, 3rd, etc. state. Information on small game may only be in state 7 (for example, SMDAYSD7, or any combination of SMDAYSD1 through SMDAYSD7). So, when examining small game hunting in Pennsylvania for example, the first place you must look is in HUNTSTD1 through HUNTSTD7 to see if the respondent hunted in Pennsylvania and in which hunt state variable that data will be reported (HUNTSTD1 through HUNTSTD7). If "PA" is found in one of those state variables then go to the small game variable of interest, small game days for example, and look for the corresponding small game day variable. Assuming "PA" was found in HUNTSTD3, you would look in SMDAYSD3 for small game hunting days in Pennsylvania. This concept applies to all types of hunting, i.e., big game, small game, migratory bird, and other animal.

   The fishing questions were asked differently. First we asked respondents to identify all the states in which they fished. Then we asked if they participated in Great Lakes fishing, Other Freshwater fishing, and Saltwater fishing based on the available types of fishing in the state(s) where they fished. For example, respondents who fished in a Great Lakes state were asked if they did any Great Lakes Fishing. Likewise, respondents who fished

in a saltwater state were asked if they fished in saltwater. Thus the number of states that were reported are different for each type of fishing. The maximum number of states anyone reported Great Lakes fishing was two. So there will be two variables for each Great Lakes fishing question on participation and expenditures. The maximum number of states for Other Freshwater fishing was seven. The maximum number of states for Saltwater fishing was four. Unlike the hunting data, for each type of fishing (Great Lakes, Other Freshwater, Saltwater) if there is no entry in the first state variable, there will not be any data in the 2nd, 3rd, (and up to 7th for Other Freshwater) states. States were entered in the order they were received for each type of fishing and the entry started at 1. This is only true for the state variables. Other variables such as GLSTDAYSD1 through GLSTDAYSD2 are filled based on the GLKSTED1 through GLKSTED2. Therefore it is possible for data to be in GLSTDAYSD2 but not GLSTDAYSD1 if a respondent did not answer the question for GLSTDAYSD1.

Information on participation in wildlife watching was collected in a way similar to hunting. However, since there is only one type of activity for wildlife watching (unlike the four types for hunting), state information for away-from-home wildlife watching is filled in numeric order. Data were filled in state one then state two etc. (NCU_STD1, NCU_STD2,...). Therefore, if a respondent does not have any information in NCU_STD1, there will not be any in NCU_STD2. This is only true for the state variables (NCU_STD1 through NCU_STD9). Other variables such as NCUDAYSD1 through NCUDAYSD9 are filled based on the NCU_STD1 through NCU_STD9. Therefore, it is possible for data to be in NCUDAYSD2 but not NCUDAYSD1 if a respondent did not answer the question for NCUDAYSD1.

C. Valid Lower Ranges

Some questions requesting an open-ended numeric entry allowed zeros as valid entries and some did not. For example, we allowed zero trips to be reported but the respondent could not report zero days. We allowed zero trips since some people may not actually take a trip to participate primarily for the activity. The person may be on a trip to visit their relatives and, while there, go bird watching in a nearby park. Days required a minimum of 1 since participation on any part of a day counts as a day. All trip expenditure categories allowed zero as a valid entry. Only a few equipment expenditures allowed zero as an entry, and those entries have been footnoted.

D. Blanks

There are four reasons a data field may be blank: 1) The respondent was not required to answer that question due to the skip pattern of the interview; 2) The respondent gave an answer of "don't know" or "refused", which was subsequently blanked; 3) The variable was created using information from other variables which did not allow us to definitively state that the respondent said "no" to the question - thus only affirmative responses are reported (see Section H, "Created Variables"); 4) For the screening data only, a household respondent answered questions for the entire household and some questions required them to identify who in the household participated in the activity (e.g., observing wildlife) or had a specific characteristic (e.g., was of Hispanic origin) thus only positive responses were recorded and all others were left blank.

E. Variable Names

Variable names include both interview wave and state of activity where appropriate. Coding for each variable is explained within the documentation.

F. Created Variables

In order to make the data more user-friendly, we created some variables using the data we received from the respondent. These variables allow the user to find information in one

variable instead of having to search a list of variables. Other variables were created post-data collection in order to identify and monitor the case and its data.

The range of responses for most created variables are either 1 or blank. "No" responses for these variables were left blank since the respondent did not actually answer "no" to the question.

G. Weights

Each file has its own weight. The screening weight, stored in PERWGT, is appropriate for use with the screening information for individuals. The Sportsperson weight, stored in SPWGT, is appropriate for the fishing and hunting data. The Wildlife Watching weight, stored in NCWGT, is appropriate for the wildlife watching data. The weight is the number of people each observation represents.

The person weight (PERWGT) is calculated based on the inverse of the probability of selection into the screening sample. The method used for collecting the data herein was a STRATIFIED sample, NOT a RANDOM sample. This weight MUST be used with all analysis of the screening data if the results are to be representative of the U.S. Population.

The sportsperson weight (SPWGT) is calculated based on the inverse of the probability of selection into the sportsperson sample. The method used for collecting the data herein was a STRATIFIED sample, NOT a RANDOM sample. This weight MUST be used with all analysis of the sportsperson data if the results are to be representative of the sportsperson.

The wildlife-watching weight (NCWGT) is calculated based on the inverse of the probability of selection into the wildlife watching sample. The method used for collecting the data herein was a STRATIFIED sample, NOT a RANDOM sample. This weight MUST be used with all analysis of the wildlife-watching data if the results are to be representative of the wildlife-watching participants.

When using the socio-demographic data that is associated with sportspersons or wildlife-watching participants, you should use the weight that applies to the specific activity. For example, when analyzing age and education characteristics of wildlife-watching participants from the wildlife-watching data set, you should use NCWGT as the weight.

For a thorough explanation of the procedures that were used to develop these weights and more information on the weights themselves, see Appendix D in the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation National Report.

H. Hunting Designation

To qualify as a big game hunter, the respondent had to report hunting a big game species. The same holds true for small game, migratory birds, and other animals. Once the respondent indicated hunting a certain type of game (big game, small game, etc.), we asked the correlating sections of questions. For example, respondents who indicated they hunted deer were asked participation and trip-related expenses for big game.

I. Angler Designation

To qualify as a Great Lakes, other freshwater, or saltwater angler, respondents first had to report fishing in a Great Lakes, other freshwater, or saltwater state, respectively, and that they participated in that specific type of fishing. For example, respondents who reported fishing in Michigan, were asked Great Lakes and other freshwater fishing introductory questions. If the respondent reported participation in Great Lakes fishing

but not other freshwater fishing, only Great Lakes fishing questions were asked.

J. Great Lakes Fishing

Great Lakes fishing is defined as fishing in the Great Lakes and their tributaries and connecting waters. These include the St. Mary's River system, Detroit River, St. Clair River, and Niagara River. Also included was fishing for smelt, steelhead, and salmon in rivers that run into the Great Lakes and fishing in the St. Lawrence River, south of the bridge at Cornwall.

K. Expenditures

1. Trip Expenditures

Trip expenditures account for just the respondent's share of the expenses and did not include amounts paid for license fees, stamps, tags, or equipment purchases.

2. Equipment Expenditures

For equipment expenditures, we included any equipment that the respondent may have purchased or that may have been bought for the respondent. The equipment expenditures had to be purchased PRIMARILY for the activity (hunting, fishing, hunting or fishing, or wildlife-watching activity). We only included equipment purchased in the United States. Respondents were asked to include both new items and items previously owned by others.

3. Expenditures by state where spending took place

In the 2011 FHWAR (as with the 1996, 2001, and 2006 FHWAR), we asked respondents to specify the state where they purchased the equipment items. This allows researchers to report total expenditures in any given state. In previous FHWAR surveys, data users were forced to assume that expenditures for equipment and land leasing or owning were made in the respondent's state of residence.

Analyzing expenditures by state where spending took place is more complicated than by respondent's state of residence.

In order to calculate expenditures by state where the spending took place, researchers must first look in the variable for where the money was spent then sum the expenditures in the expenditure variable. This is complicated by the fact that, 1) respondents may have purchased the item(s) in any state, 2) they could have reported purchasing the item(s) in up to 5 states, and 3) they could have reported those states in any order. Also respondents did not need to participate in a state to report spending money there. It follows then that the states in the variables for where the respondent spent the money do not have to match the states where the respondent participated nor does it have to match the order in which those states may have been reported.

It is important to note that respondents could have spent money on different equipment items in different states and, even if they spent money in the same states on different equipment items, they could have reported the states in a different order. In the simplest of terms, this means that the variables that contain state codes for where spending took place are INDEPENDENT of any other variable, including other expenditure variables. The states may be the same for some, but there is no guarantee that they will be for others.

The following is an example of how to calculate total expenditures for camping equipment in Pennsylvania from the Sportsperson data set.

a. Check FHEQP1 to see if the respondent reported any expenditures in this category.

b. Check CAMPSTA1 through CAMPSTA5, CAMPSTB1 through CAMPSTB5 (10 places) for the state code "PA" for Pennsylvania. If there is no data in the CAMPSTA1 variable, there won't be any in the CAMPSTA2 through CAMPSTA5 variables. These variables were filled in order for either Wave 1 or Wave 2 (A respondent only was asked a specific section once for either Wave 1 or Wave 2, so if they answered the sportsperson questions in Wave 1, they would not be asked them in Wave 2). However, there may be data in CAMPSTB1 through CAMPSTB5 (variables from Wave 3), even if there is none in CAMPSTA1 through CAMPSTA5.

Now assume PA is found in CAMPSTA1.

c. Check to make sure no other state code is listed in any of the other variables CAMPSTA2 through CAMPSTA5 (these are other states where the respondent may have spent money on camping equipment for the first wave/interview as determined by the "A" in the variable name). If there is a state listed in one of these other four variables, the respondent reported spending the money specified in more than one state and the money will need to be divided between the states listed.

d. Assuming no other states are listed, the value in CAMPCOST1 can be added to the total value of expenditures for camping equipment in Pennsylvania.

It is possible for a respondent to spend money on camping equipment in two of the interview waves, the first and the last wave for example. In this case, under "d" above, PA would have been found in a wave/interview "A" and a wave "B" state variable, CAMPSTA1 and CAMPSTB1 for example. In addition to what was done above, data users should also check CAMPSTB2 through CAMPSTB5 for other states and divide the expenditures among them as appropriate.

It is important to remember that just because PA is listed as the first state in wave/interview one ("A") it doesn't mean it will be the first state listed in Wave 3 ("B"). This applies across variables too. A state may be listed first in one expenditure item but last for another. You must check all locations!

L. Crossover Sample

The Sportsperson and Wildlife Watching samples were selected separately. However, it is possible for a respondent to be in both samples since the same screening questionnaire was used. Respondents who are in both the sportsperson and wildlife watching samples are identified as such on these files. This is identified in the I_WAVE1, I_WAVE2, and I_WAVE3 variables. If a respondent is in both samples, this only indicates that the respondent received both questionnaires. This does NOT represent a population of persons who engaged in both types of activities. These people should NOT be combined to form a data set of respondents who participated in both types of activities. They were not selected for that purpose and their weights were not created for them to be representative of that population.

Respondents were asked if they participated in the other type of activity as a part of each questionnaire instrument. Researchers that are interested in "crossover" activity should use these questions to measure "crossover" activity. However, it should be noted that a different estimate will arise depending on whether the Sportsperson or Wildlife Watching

sample is used. This is because the samples are different and the weights are different. We recommend that the Sportsperson sample be used for this type of analysis because it has a larger sample and is more reliable. This is the method that was used in reporting the data in the U.S. Fish and Wildlife Service reports.

M. Some published estimates from the State Reports cannot be replicated using these ascii files. Outlier adjustments were made to the data sets for the State reports for some expenditure estimates. The outlier data was not removed from the data sets (ascii files on this cd). In order to replicate values in the published State reports, variables that had outliers will need to have their values changed to the values listed in the document "State_outliers.txt" which is included on this cd. For each outlier, the ID, LINENUM, variable name, and the value the variable was changed to is listed.

N. For all National and State Reports the variable I_RESIDENT is the state of residence for the respondent (from Wave 1). RESSTATE is the state the respondent lived in during Wave 3.