

This summary of the ERAC S&R 2021-1 (NRBSS evaluation) charge team meetings conducted on 5/13/2021** 6/3/2021*** 6/10/2021**** and 6/24/2021***** is presented as a markup of the Writeboard (<https://nasbla.basecampHQ.com/W6524150>) that was created 5/10/2021, added to in the run up to the sessions and then used to guide the team's discussions. **Items to be taken up in future calls, begin on page 13.**

Info, key discussion points and action items from the 5/13 charge team call – through page 6 -- are in red, from the 6/3 call – beginning page 7 through page 9 -- are in blue; from the 6/10 call – beginning page 10 – are in dark orange; and from the 6/24 call – beginning page 13 – are in green.

****IN ATTENDANCE on MAY 13 2021 CALL: Charge Team Members:** Tammy Terry (charge leader), Randy Henry, Jonathan Hsieh, Karen Steely. **ERAC Leadership:** John Girvalakis (ERAC Vice Chair). **ERAC staff:** Deb Gona

RECORDING LINK:

<https://transcripts.gotomeeting.com/#/s/2370f30286a0e40657fb54c09bccf775600a6b4d952a4c170e55aa676e1170f8>

*****IN ATTENDANCE on JUNE 3 2021 CALL: Charge Team Members:** Tammy Terry (charge leader), Jonathan Hsieh. **ERAC Leadership:** Seth Wagner (ERAC Chair), John Girvalakis (ERAC Vice Chair). **ERAC staff:** Deb Gona

RECORDING LINK:

<https://transcripts.gotomeeting.com/#/s/970b056420f9afa80ca323b45b61c63eb8a3334dbb80f4a2cb2cbb8df73d309c>

*****IN ATTENDANCE on JUNE 10 2021 CALL: Charge Team Members:** Tammy Terry (charge leader), Jonathan Hsieh. **ERAC Leadership:** John Girvalakis (ERAC Vice Chair). **ERAC staff:** Deb Gona

RECORDING LINK:

<https://transcripts.gotomeeting.com/#/s/04bf5f5312a63c2dbbe9b0f3231ff942c6a22ebf352b1c8a9342fac70cadbe2c>

*****IN ATTENDANCE on JUNE 24 2021 CALL: Charge Team Members:** Tammy Terry (charge leader), Jonathan Hsieh. **NASBLA/ERAC Leadership:** Dan Heskett (NASBLA Board Liaison), Seth Wagner (ERAC Chair), John Girvalakis (ERAC Vice Chair). **ERAC staff:** Deb Gona

RECORDING LINK:

<https://transcripts.gotomeeting.com/#/s/51edd0bf9e9f6f0cbb073b5029aeba9f37bab88433f15354a194ac22859b1c1a>

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WRITEBOARD

2018 NRBSS Methodology - Questions - Observations

As you continue to review the NRBSS Methodology Report* please use this Writeboard to jot down any questions you have, observations, or things that just struck you as interesting (or confusing).

*for copy, go to

https://nasbla.basecampHQ.com/projects/10558435/file/259787769/2018_NRBSS_Methodology_Report_MA_R_05_2020_FINAL.pdf

PLEASE JOIN IN BY POSTING YOUR QUESTIONS, COMMENTS AND OBSERVATIONS FROM YOUR HOMEWORK ASSIGNMENT Tammy and now Deb have kicked this off with some of their own. REMEMBER that NO question or comment is “silly” ... so don’t be intimidated ... and don’t be intimidated by the Writeboard and editing feature :-)

Some words of advice: It IS easier to read the Writeboard notes by going directly to <https://nasbla.basecampHQ.com/W6524150> rather than reading the text in the email notifications!

Methodology Report – p. 3

“The RBS Program plans to utilize exposure-based risk ratios as a primary performance criterion to evaluate the effectiveness of efforts to reduce accidents and fatalities.”

- What is the timeline for implementation of this measurement and what does that look like (in USCG estimation)? What are the thoughts regarding how many iterations of the survey might be needed to validate data and/or evaluate any trends in a state; note that we were advised that there is not a direct comparison between the 2012 and 2018 surveys (although preceding this statement, the text of the report uses 2011/2012 exposure data as an example)

USCG Response (via Jonathan on the Writeboard): I will take this question back to CG-BSX as this is more programmatic than survey-related. On a personal note, I need to take stock of all previous surveys this office has conducted and evaluate how consistent they have been throughout the years*

From 5/13 call:

- **Jonathan added that while there has been talk about trying to use the survey results as a performance indicator, nothing has gained traction just yet. [First] Need the history of all of the surveys (to date) and see how they have evolved; then get the program folks involved.**

Methodology Report – p. 2-3

In follow up to the questions posed immediately above: the report describes that exposure rates can be calculated and presented four ways depending on the purpose of the estimates. Yet, it is the fourth definition, the Boat Person Hours (the total number of hours persons are aboard a boat in use on the water) that is described as the “most commonly used to mean ‘exposure’ or ‘recreational boating exposure hours.’” Notably, it is the definition that the charge team at the time worked off of in evaluations of the 2012 survey data. So, the current question is what version of the risk ratios (using what definition) is the Coast Guard most likely to use in the performance measurement?

USCG Response (via Jonathan on the Writeboard): I will take this question back to CG-BSX as this is more programmatic than survey-related. On a personal note, I need to take stock of all previous surveys this office has conducted and evaluate how consistent they have been throughout the years*

From 5/13 call:

- **Deb said she didn’t recall the exposure hour data from 2012 being presented in those four ways; focus was on the fourth definition, “boat person hours.” May need to be careful in presenting the information to the states as the purpose(s) and how best to apply each might be confusing. Will hold for more information/guidance from Coast Guard re its plans (see above discussion).**

Methodology Report – p. 4

With regard to questions collecting data on water bodies used by boaters, and other states in which vessels are registered or stored, because you are asking for ‘most used’, are we losing any critical data? Was anything done to mitigate for this? (this one is minor; just curious)

USCG Response (via Jonathan on the Writeboard): Definitely something we can discuss

From 5/13 call:

- **Tammy noted that the way question is worded [see series of questions 7a-7g on Exposure Survey], the point of reference is the state. She used the example from her state and similar questioning and the respondents’ penchant for opting for the non-descript “all waters of the state.” Jonathan will explore the current selections, the inability to choose more than one response [especially on the BOWs], and see if there is any possibility for some ranking of responses.**

Methodology Report – p. 4

With regard to item #5, was there anything of interest gleaned from looking at the characteristics of households with different boat types? (spoilers from additional reports I haven’t gotten to yet are ok)

USCG Response (via Jonathan on the Writeboard): Probably not, the USCG has not conducted any research using survey results

From 5/13 call:

- **Tammy said that she was just curious as to possible socioeconomic differences between boaters/boat types (e.g., between paddlers and power boaters). Jonathan indicated that he will have to take another look; said this goes to the question of how the data is used and what can we glean from it. Deb said this was a problem she had—would read the narrative of the methodology report, then the questions, then the report itself to see the findings; in some cases, for some questions, there was no tabular information at all.**

Methodology Report – p. 4

Please explain telescoping effect/telescoping bias; how do you know your mitigation efforts were successful in minimizing it?

From 5/13 call:

- **Tammy asked the question as she didn’t immediately recognize the term. She assumed it was associated with “misremembering,” but wasn’t sure how it was used in this context. Jonathan noted it as a recall bias but will further review the survey methodology and how (potentially) this was mitigated. [Post-call note: telescoping involves respondents remembering recent events as being more remote than they actually are/were and more distant (past) events as being more recent.]**

Methodology Report – p. 5 (and associated DAQS)

Per item #8, is any of this raw and cleaned data noted as a deliverable in the report available for review? Or even the syntax (which I assume includes the fields employed) accessible? Per #9 the DAQS appears to lack

some of the key deliverables: download of data files, custom query generation; are these coming later/soon? (see also additional comments on the DAQS below)

USCG Response (via Jonathan on the Writeboard): Mr. Mahoney is drafting instructions for requesting data. Per law, the USCG does not have custody of any survey data.

From 5/13 call:

- Tammy asked because she was curious as to disconnect between the data file deliverables and what the Coast Guard might actually have at hand (similarly for the DAQS).
- Jonathan said that (given the way the grant was awarded for 2018) legally the Coast Guard can't hold the data (RTI and Ed Mahoney have copies); Ed is willing to discuss if anyone needs access (Jonathan used example of Arkansas Dept of Transportation seeking data and he referred them to Ed as principal investigator/statistician). Jonathan's understanding is that the data files involve/require more than just Excel (e.g., SPSS) to analyze). Since the Coast Guard does not have custody of the data, they have to file the request with the vendor.
- Deb suggests that for the next round, [if the survey is handled the same way, with the same stipulations] there should not be a statement in the reports that the data files can be made available. Saying that leaves the Coast Guard open to criticism if the requests have to be directed to the vendor and there are any issues with them providing it to the requestor. Also, there were questions on the survey for which there is no tabular information in the report (e.g., the series on accidents); if the files aren't available, it raises questions about why you don't want somebody to be able to access/use it/try to replicate it. Jonathan agreed there is a need for more transparency and he will be digging a bit deeper into this issue as he, as a data analyst, would also like to get access.
- Directing attention to the DAQS, Tammy said it mentions ability to download data files and create customized queries; but her experience thus far is that they are CSV files replicating tables from the report and do not contain the underlying data, and that the queries generate canned results. Jonathan said that he shared the sentiments expressed and that he will be reaching out to RTI to get more information as to how the dashboard is being held. His assumptions are that the DAQS is in a completed state with no additional work likely to be done.
- Given that she (as state personnel) initially found the DAQS site blocked and needed special permissions to access it from IT, Tammy said that when the group does the webinars for the states, they should be alerted to the possibility that they may be blocked and have to request permissions from their ITs to access the site.

Methodology Report – p. 5

Were you able to discern any potential decrease in response rate on the Participation Survey based on the nature of the types of questions asked (#1-#5 listed on this page); possible that some might be a bit too direct based on current culture and/or perception of government by respondents?

USCG Response (via Jonathan on the Writeboard): Definitely worth a discussion

From 5/13 call:

- Tammy raised this as she has seen in her own state's surveys that some folks are increasingly reluctant to answer certain socio-economic questions (e.g., revealing their income, etc.). She wondered whether there was any decrease in the response / completion rates for this survey. She added that perhaps this was less an issue in 2018 than it would have been if the survey had been conducted in the past year or two; so, it might be more important to watch in the next survey.
- Jonathan concurred with there being increasing sensitivity to these sorts of questions and that there will need to be more consideration of them and the implications in the next iteration. Tammy suggested it might be good to give the respondents the option of choosing not to answer certain of

this category of questions [e.g., “prefer not to answer” as a response selection]. The respondents might just choose it as an “out,” but it still might encourage survey completion.

Methodology Report (general observations/questions):

The Exposure Survey targeted boat owners; the Participation Survey on the other hand, also described as looking at the “exposed” population of recreational boaters, sought information on participation on owned, co-owned, AND rented watercraft. In fact, p. 23 of the Participation Report says:

“Respondents were asked about the ownership status of the boat(s) in which they (the respondents), or members of their households, went out on the water. The results reported in Table 3-9 indicate the increased use of rented and shared boat ownership including boat clubs. Of the persons that went boating in 2018, 42.9 % went out aboard boats owned by someone residing in their households. An additional 11.5 % went boating on boats over which they had joint/shared ownership with persons not residing in their households, including both formal and informal shared ownership arrangements. Approximately 41% of boaters went out at least once aboard some form of rented boats, including rented canoes, kayaks, paddleboards, PWCs and pontoon boats. **About 11% reported going out aboard boats they chartered without a captain.** It should be noted that even though specific definitions of different types of ownership were provided, there is likely some degree of misidentification among rental, charters, and shared ownership.”

All this said, the Exposure Survey relied on the collection of data from boat owners/co-owners, meaning that the exposure hour calculations do not factor in the exposure of boaters in/on rented watercraft. Of note is that the 2012 trip survey (what is now just the exposure survey) tried, but did not succeed in capturing reliable exposure data on the rentals and the Coast Guard did not deem it worthwhile to attempt to do anything with rentals in the end. Perhaps the increase in use of rented (or other forms of ownership/use) necessitates that these be factored into future iterations of the Exposure Surveys?

In the future, should consideration be given to doing the Participation Survey first rather than simultaneous with the Exposure Survey? It would seem that the results from the broader look should provide a basis for the assumptions in the exposure survey (?)

Where were the exposure hours from the 2018 survey assigned? Was it to the location of the operation or was it to the jurisdiction of registration or storage location? The criteria for selection of the vendor indicated that it was to be the former, but the reports suggest that might not always have been the case. Can we get clarification?

From 5/13 call:

- John raised a question about a response selection in the Participation Survey (see boldfaced result above) as to the ownership of the boat on which the respondent went on the water during the survey period (see Q12, p. 86 Methodology Report). [The option reads “Chartered (bare boat with no hired captain.” “Rented” is the next option in the survey.) He said he’d never heard of a chartered boat that didn’t have a captain. This resulted in more discussion about geographic variations re liveries, charters, rentals, and ultimately, acknowledgement that if there was confusion as to meaning among members on the call, there was higher likelihood of confusion among members of the general public as to the “ownership” of the boats on which they participated. Needs to be clearer delineation on the next round.
- Deb continued with the question as to whether (and how) the participation (time/days) on rentals should/can be factored into the collection of exposure hours on the next Exposure Survey (the 2018 only generated exposure data for persons who owned or co-owned boats). The current collection could be an issue given the relatively large (41 percent or so) set of boaters who indicated (through the Participation Survey) that they went out on rentals [note: the percentage could be larger depending on how the respondents read the “chartered” option, too.] Randy indicated interest in

capturing that data and accounting for other activity as Oregon is looking at injuries related to livery craft and likely upcoming legislation to better manage the safety aspects of livery operators.

- In response to the discussion and series of questions posed, Jonathan will be looking again at the assignment of the exposure hours (clarifying as to whether all were assigned by operating location as opposed to registration/storage location); give consideration to factoring in rental activity to the generation of exposure hours (is it possible?); the potential for doing the Participation Survey first and then the Exposure Hour Survey (highly dependent on the capabilities of the vendor selected for the next iteration); and will check on the specific question(s) used to generate/assign the exposure hours.

Methodology Report – p. 16 and beyond

Regarding the waves or cohorts of the 2018 surveys (especially as to the monthly Exposure Survey). The 2012 surveys were comprised of a boat survey, trip survey and participation survey. The trip survey, which captured the exposure data, was conducted using a panel of boaters selected from the boat survey, meaning the same people were surveyed over time. That created its own issues (e.g., panelists leaving the panel, etc., resulting in the need for additional weighting, and so on). The 2018 survey on the other hand is described as employing cohorts. Question: typically, “cohort” means that a category of interest or characteristics has been identified and the surveys are administered to persons from the sample who fall into that category. That is, it is not the same group of people receiving surveys over the course of the survey period, but generally folks meeting the similar criteria are surveyed. Is THAT an accurate description of what happened in the Exposure Survey?

From 5/13 call:

- The above description of “cohort” does appear to be the correct version. The Exposure Survey did not involve a “panel” (with the same persons throughout the year), but rather a random sample (drawn from a larger sample) of boat owners each month.
- Later in the discussion on these questions, Tammy posed the question of how they (RTI/MSU) used the data—is the assumption that what happened during the cohort month was representative of what those boaters did throughout the year?

In follow up, if it is, is it also possible that someone from the sample could have been surveyed more than once during the year?

From 5/13 call:

- It does not appear to be the case, but Jonathan will recheck the methodology.

Finally, section 4.1.1. (P. 22-23 of Methodology Report) indicates that the cohorts received their invitations at the end of the month in which they would need to recall their activity. So, they did not receive advance warning that they would be asked to log/recall their boating during the month? Is that in part why they were asked primarily about the last outing of the month in question (to facilitate recall)?

From 5/13 call:

- Deb said that her understanding was that at the end of the month in which they would be recalling the data, the cohorts received the invitation to participate in the survey—that is, they did not appear to get advance warning (beginning of the month) to pay attention to their boating activity for that month. She assumed this is why the boaters were asked about their last outing of the month (to facilitate recall). Jonathan will get clarification from RTI on the invitations and process.

Introductory discussion, June 3 call:

- Jonathan reported on recent discussions within CG-BSX and how best to lay the groundwork for a successful next round of surveys—more specifically, gathering research as to whether to go through the OMB approval process (standard for federal agencies conducting surveys of particular size) and of what benefit that would be to the Coast Guard. [As Jonathan noted later in the discussion, no one currently in BSX has actually taken the surveys through the process; hence the front-end research to determine next steps.] He noted that OMB process had been used in 2012, and was initiated for the 2018, but in the latter case, with some urgency to get the surveys out in the field, the solicitation and award to the survey vendor ultimately was via a non-profit grant and the OMB process was bypassed. They have since realized, however, that this arrangement does not give the Coast Guard much flexibility. One consideration is whether, in pursuing OMB approval, the Coast Guard is willing to push the survey into 2024 instead of 2023 (and whether that is acceptable to stakeholders in the survey). Further in the discussion, he noted that there has not been a consistent pattern to the surveys (i.e., every five years, three years, etc.) That being the case, a benefit of pushing off into 2024 would be more time to strategize about how to handle issues already identified from the 2018.
- In response to Tammy's request for clarification as to the circumstances under which OMB approval is necessary (awarding to external contractor? conducting in-house?), Jonathan explained that if the Coast Guard pursues OMB approval of the surveys, then it can go the contractual route or even go to [another federal statistical agency like] Census to see if they would be willing to assist. In 2018, with the survey conducted via non-profit grant, the Coast Guard was more restricted in its role in the survey; they are looking for more flexibility this time.
- In response to a comment/question Deb had about the approval process and publication in the Federal Register, Jonathan confirmed that it would entail two review [comment] periods with extensive review of the instrument(s) at the White House-level; that means the survey instruments would need to be as close to final as possible going into the process. Jonathan also noted that a benefit to going this route is that the Coast Guard would have more control over the actual administration of the surveys (and data access).
- John asked whether, in moving forward with the next round of surveys, there would be any safeguards in place regarding the effects of [anomalies associated with] COVID-19 (e.g., short term boaters versus those who started boating during the pandemic and have maintained activity). Jonathan noted that the earliest the surveys would be conducted would be 2023 or 2024, allowing for about two years of letting things settle down to measure participation in a boating year not impacted by a pandemic. He thought there could be a question or two in the next survey that could measure how many got into boating as a result of the pandemic and then maintained that interest (e.g., a question about when they bought their boats).
- As to questions from Deb and Tammy as to whether there is anything the team/committee can do more immediately (beyond the current discussions and plans to compile a summary document of feedback) to help facilitate the decision-making. Jonathan noted that he would keep the team apprised of developments, and, if the Coast Guard goes the OMB route, front-end feedback from stakeholders will be important to making their case. Further, once the determination is made, the team/committee will adjust its work/product delivery timelines for the cycle as needed.

Methodology Report (p. 10, Section 2.1.2) – added June 3, pre-call

How many of the twelve (12) cognitive interview participants were outside of academia; also, were there any participants from rural rather than urban locations?

From 6/3 call:

- The answer to this question was in the “cognitive interview” report that Jonathan had just received from the vendor the day of the team call. He reviewed key points, including that interview

participants came from Chicago, North Carolina, and DC (RTI's locations); involved testers who both had and had not gone out on the water in the Sept.-Oct. 2017 timeframe, and also involved participants identified through a variety of other RTI recruitment efforts.

- Deb requested copy of the report and Jonathan will take another look through it to ensure there's nothing that would be a problem in his providing the resource to the team – for posting only to Basecamp, NOT to the public NRBSS webpage.

Methodology Report (p. 13, Section 2.2.2) – added June 3, pre-call (also mentioned in section below re PARTICIPATION SURVEY INSTRUMENT)

It was noted that “4. a few respondents were concerned about the level of detail asked about individual household members.” - Was this addressed in any way (perhaps there were more of these questions that were removed prior to implementation?)

From 6/3 call:

- Tammy wondered whether this meant there were other questions, even more detailed, that were taken out prior to conducting the survey. Jonathan will review the cognitive interview report to determine.

Methodology Report (p. 15-20, Section 3 Sample Design) – added June 3, pre-call

Exposure Survey: Goal = 30,000 completed surveys (25,000 from registered boat owner lists; additional 5,000 from 'random' sampling, with weight given to households with demographics that indicated possible boat ownership (final total responses = 31,733; 23,681 from boat owners list, 8,052 from ABS)

- Note that in some 'Northern States' (how was that determined?) the boating season can extend well into the fall or start very early in the year dependent on seasonal conditions; could have an impact based on the way the surveys were collected by month –

- Overall, this seems like a very small sample when looking to determine exposure levels down to the state level for use

- 213,659 total surveys sent out to get targeted returned survey total (30,000) = ~14-15% response rate?

From 6/3 call:

- Tammy and John noted that (from their experiences as “northern states” per the survey) depending on the year and weather their states' boating seasons could extend into fall/winter months and start earlier in any given calendar year – something that would need to be factored in to analysis of any individual state's exposure hours and risk ratios if they look “wacky” (technical term 😊) that year.
- There was some discussion as to whether there is a better way to group/aggregate the states than the northern/southern split (e.g., by similar characteristics?)
- Regarding the small sample size, Tammy thought that would be something the states might have a question about.
- Regarding the response rate, Jonathan cautioned against making comparisons between the response rates from 2012 and 2018 given the different methods used to gather the data (mail-telephone v mail-web)

Participation Survey: Goal = 5,000 completed surveys (random sampling) (final total responses = 5,851)

- Same issue with 'Northern States' and seasonal changes to sampling
- Overall total samples still seem very low
- 43,590 total surveys sent out to get targeted returned survey total (5,000) = ~11.5-13.5% response rate?

From 6/3 call:

- Response rates to the surveys and how the surveys were being fielded in the states have been a concern.
- Deb said she remembered a similar conversation about the northern/southern states' split and related issues from the 2012 survey and would explore. [Post call, here's what she found:
 - In evaluating the 2012 survey, the question was asked as to what criteria were used to establish the "boating season" or length of the season for placement of the states in the northern and southern strata? accident report patterns? something else? The response from Dr. Philippe Gwet, the statistician spearheading the Coast Guard's survey effort at the time was "...We did consult with a number of boating experts and identified those states where little boating was believed to take place in winter. They were categorized in the Northern stratum. This was a little subjective. Perhaps a more objective criterion needs to be developed for the next survey..."
 - The "northern/southern" split and determination was also described in the ["Tell me more" sidepiece in the July August 2014 Small Craft Advisory](#)

Methodology Report (p. 21-32, Section 4 Data Collection) – added June 3, pre-call

Introduction: Because of the 'push to web' aspect, could the survey have favored younger (more tech-oriented) boaters versus older boaters?

From 6/3 call:

- Deb asked if there was still a live URL of the survey(s) to evaluate differences between the print and online versions; Jonathan didn't think so, but said he'd check his background papers for a mock-up.

Section 4.1: Seven mailings seems a bit excessive; however, do we know the response rate at each of the three mailing stages? (might be in Section 6; see that it also addressed in Section 4.7.1) –

From 6/3 call:

- Jonathan said he received a "lessons learned document" from the vendor and that issue also was identified.

Section 4.2.1: Is there a copy of the crosstab table referenced here available (exposure surveys by 51 states/jurisdictions and 10 boat types?); the report indicates that the results did not yield the average of 60 households per cell targeted, but I am curious where things fell short at the state/jurisdiction and boat type levels; I would think that significant variances (high or low) could be significant based on the low sample sizes.

From 6/3 call:

- Tammy posed the questions for the purpose of determining where was the possible skewing and what could be done better next time. Jonathan said he would explore this.

Section 4.2.1, Table 4-4: I was surprised by the total number of boat-owning households in the ABS Frame. Was this a result of filtering the sample by demographics indicating possible boat ownership? Do the researchers feel that this filtering may have impacted the results?

From 6/10 call:

- This question is in reference to the total of boat owners (last row table 4-4) in the ABS frame compared to the others. Not much detail as to how the vendor filtered it. Jonathan will research and get back to the group. Tammy said she asked because she wondered if assumptions about boat owners might lead to being a little more biased as to who are traditionally seen as boaters and would the survey have captured some of the “non-traditional” boaters who might be in the dataset now (in short, are we getting what we think we’re getting if we’re filtering in a “weird” way?). Jonathan said that in the next iteration, the future vendor(s) should be asked about their sampling strategy and how they would get to more non-traditional boating participants (e.g., paddlecraft).

Section 4.2.2: The Quarter 1 sample is very low, with a corresponding response total compared to the other three quarters.

From 6/10 call:

- See tables 4-5 and 4-6 for reference. There apparently was some issue with the January-March cohort and how the vendor was sampling. Jonathan indicated he believed there was documentation on this and he will research it also.

Section 4.3: “Overall, 80% of respondents received a gift card, indicating these incentives were a positive motivator to participate in the survey” - Would these folks have completed the survey anyway and the gift card was just a bonus? And is there any comparison with response rates on prior surveys (without incentives) for comparison?

From 6/10 call:

- Tammy posed the question out of interest in whether the incentive really was the positive motivator...or something else—that is, was the completion of the survey after having received the gift card causative or coincidental? Jonathan said that he will be reviewing the scholarly work on incentives. Tammy discussed her experience with a series of surveys conducted in Ohio with registered boat owners. There was no incentive and yet, on average, the response rate was about 30 percent, a figure she thought was pretty good. Jonathan will be checking to see if other federal agencies that conduct surveys offer an incentive.

~~**Section 4.4.1:** Was any additional prompting given to respondents who started, but did not complete their survey? How was it determined that a survey was ‘complete enough’ to include in the data set? (see Section 5)~~
Tammy asked that this question be pulled as she noted the answer was documented in section 5.

Section 4.5: “Weekly reports were programmed to provide a snapshot of how the sample was performing by cohort within each state (Exposure Survey) or division (Participation Survey), and overall. Weekly reports provided summary information to the USCG on the status of the data collection and sample performance.” - Are these weekly reports accessible or available? Was any action taken for under-performing areas through the process?

From 6/10 call:

- Tammy said she was curious if any adjustments were actually made as a result of those weekly reports and were they successful. Jonathan said that the reports are among the documentation printed out by Don Kerlin, so he will review them with this question in mind (although it might be

difficult as there is no context to the spreadsheets). Tammy said that if it is possible to discern any trends or ways that the adjustments were made, then it might be useful to others to know what worked and when (in the administration of the survey).

- At this point in the discussion, John G. described his experience with annual surveys re hunting (from U.S. Fish & Wildlife Service re migratory species); he said that some years, he's done them, others, not. While he didn't think about it at the time, he now thinks that if there had been some incentive, he might have been more likely to respond. He was curious as to where the (NRBSS) incentives were sent: to everyone? to underperforming areas? was it based on demographics? geography? Jonathan will check, but he believed that the vendor just blanketed the underperforming areas with more surveys.

Section 4.6: "Other sample members contacted the help line, refusing to participate and asking to be removed from the list of future mailings" - Do we know the reasons why they chose not to participate?

From 6/10 call:

- Reference table 4.7 (Count of Help Line Contacts by Topic – about 22 percent of the total contacts were refusals). Tammy thought that if there were some details on the refusals, there might be something to learn from them. Jonathan will check, but he suspected that the refusals were likely the typical "why spending tax dollars on this?" "why is government (big brother) asking me these questions (conspiracy)? "of what use will this be?" etc.

Section 4.7: So, the four experimental modifications noted were implemented/tested during the survey period? Any concern that these changes on certain cohorts had any effect on overall results? Which (if any) will be brought forward for use in the next NRBSS cycle? (for reference: reduced contacts, post-incentive increases, push-to-web experiment – registry sample, color)

From 6/10 call:

- See 4.7.1 thru 4.7.4 for reference. Tammy said her assumption was that these didn't have a significant impact on the responses as the survey was being done? She was asking because she thought the insights from the national survey might be beneficial to states that do their own surveys. Jonathan will review the lessons learned document – and see if he can create a fact sheet/best practices to share with states.
- Deb asked whether – if the Coast Guard goes the OMB approval route – any of the experimental practices (such as the \$\$ incentives) might be taboo for a governmental agency. Jonathan will check.

Methodology Report (p. 33 and beyond re Data Review and Cleaning):

It appears that there were a fair number of issues that respondents had in responding to the questions, leading to some modifications of the instrument(s) as the surveys were underway. The surveys were pretested however, and it will be helpful for this team to have a look at the National Recreational Boating Safety Survey Exposure Survey Cognitive Interview and Question Appraisal Report if it can be located.

USCG Response (via Jonathan on the Writeboard): We're trying to locate the report Reports delivered to team/posted to Basecamp, 6/22/2021

MORE Methodology Report (p. 33 and beyond re Data Review and Cleaning) – added June 3

Section 5.1: "In some instances, respondents provided more than one state. If the respondent originated from the registry sample, the state that matched the state provided on the sample frame was kept (see Section 3, Sample Design); otherwise, if the respondent originated from the ABS, the state recorded by the respondent

for the first boat listed on the survey form was used.”

AND

“When state of storage was missing, the state was assigned based on the following rules:

- If both state and zip code were provided but were inconsistent, the state overrode zip code.
- If state of storage was still missing after applying these rules, then the registration state was used (registry sample) or the mailing address state was used (ABS sample).”

- This might result in a continued under-estimation of out of state boating if it occurred frequently.

- With recoding needed on boat types and lengths; would there be value in the next iteration of using the registry sample information to start with (pre-inserting it into the survey), and just asking for verification by the respondent?

From 6/10 call:

- **In posing the question of whether it would be valuable to pre-populate the boat information on the survey provided to the respondent, Tammy also wondered whether that might make them feel they are not anonymous enough. There was some uncertainty as to what was in the InfoLink information provided (i.e., probably only addresses, not boat type).**

With regard to ‘out of range’ values provided by respondents: “If the outlier appeared to be an error, it was recoded to the mean value, but if it appeared to be real, it was top-coded it to the 90th percentile.” - Can you explain?

From the 6/10 call:

- **Jonathan thought it was basic data cleaning.**

- Is there any way to access the **boat-level file of data** from the Exposure Survey?

From the 6/10 call:

- **Tammy said this would be of interest for analysis (if they started with a household identifier, then created a record for each boat). Jonathan will advise on file availability**

Section 5.2 “Additionally, for two variables in the survey, Q2 (number of days out on a recreational boat since January 1, 2018 to the end date of the reference quarter) and Q9 (number of days out on a recreational boat only in the 3 months of the reference quarter), top-code values were set based on whether the respondent’s state was in a Northern state (as defined in Table 3.2) and whether the respondent was sampled in a winter quarter (Quarters 1 and 4). This top-coding was intended to prevent a small number of extreme values from having a disproportionate impact on key statistics.”

- We have some boaters that are avid in the colder months due to the lower density of other boaters on the water at that time; if common in other states, this action may reduce reliable estimates.

From the 6/10 call: see note from Tammy on previous page. She said that she has seen this (off-season colder month) participation primarily with sail boats and paddlers and in top coding she thought they might be underestimating the numbers. John G. noted that the later season boaters may not necessarily be engaging in recreational boating; they could be seeking some part-time commercial activity. However, he said that paddlers, especially kayakers, do show up in colder

weather (early and late-season). Jonathan said this is something to consider for the next round: How do we clean the data for the cold weather months?

Introductory discussion, June 24 call:

- Tammy initiated the discussion with a brief recap of charge activity to date for Board Liaison Dan Heskett's benefit (i.e., almost finished with review of the Methodology; will move into the survey reports and findings; still plan to develop/conduct a webinar for the states. Original timeline for submission of feedback from states (and other stakeholders in the survey) has been pushed back; Jonathan indicated that CG can be flexible in receipt of input for a few more months.
- Before launching into the remaining Writeboard comments and questions, Jonathan walked the charge team through – and sought feedback on -- a presentation that he's readying for the next NBSAC meeting (his deadline for completion of the presentation is June 30; however, as members have yet to be named under the new charter, the actual date(s) of the NBSAC meeting have yet to be determined). Note: at end of the 6/24 call, there was discussion about the best timing for the proposed charge team webinar for the states. Jonathan suggested holding until after the NBSAC meeting so that he could incorporate feedback from that group. [Post-call note: copy of the PPT was emailed to the team on 6/24 with request to review and send comments back to Jonathan NLT 6/28.]
- Since the Section 6 comments and questions below --- thru page 16 of this markup --- were added to the Writeboard the day prior to the call, Tammy suggested that the team hold off on discussing them until Jonathan has a fair chance to review them and then offer any responses either on the next call or as updates to the Writeboard itself.
- JUMP TO PAGE 17 of this markup to pick up the rest of the 6/24 summary...

TO BE TAKEN UP AS NEEDED on NEXT CALL: Methodology Report (Section 6; pages 36-53) (all section 6 questions and comments added to writeboard by Tammy on 6/23)

Generally, it would be nice in future iterations of reports that they 'dumb down' the wording where possible to make it more understandable to the general populace; I suspect most folks skip right over this section as it is very convoluted and jumps between items and sections.

LOOKS LIKE SECTIONS IN 6.1 ALL PERTAIN TO EXPOSURE SURVEY

Section 6.1.1 Weighting: Step 1: Address-Level Base Weights

- If I am understanding the methodology summarization for this, the 'base weight' adjustment is designed to add weight to those responses that correspond to larger population areas, right? (are we sure that our sample represents all of that population? the larger the population, the more variance would be expected, right)?
- In the de-duplication process between InfoLink and ABS frames, how was it determined which of the duplicates to remove in terms of the boat types for each record? (concern that removing all powerboats, paddlecraft, etc. consistently in this process could cause bias in responses)
- Note regarding CO, ID, LA, MN, MT, NH, VT, WV having a different system for use in Exposure Survey: did the change at month 5 in the methodology have any impact on those states' final exposure rates? Any anomalies?

Section 6.1.1 Weighting: Step 2: Adjust Address-Level Base Weights for Nonresponse

- With regard to accounting for non-response, the report indicates “It did so by transferring the base weights of nonresponding addresses to responding addresses within a set of mutually exclusive cells, or classes, formed by grouping together sampled addresses that shared approximately equivalent response probabilities.” (would like to know more about how this is done; again, I would think in higher population areas where there was lower response, this method could potentially extrapolate out something that may or may not be representative of the whole dependent on the details of those who did respond and/or by assuming that those who did not respond were similar to those who did respond, this may yield a less accurate result)

- Also noted in the report: “Upon closer examination, the first set of $w_{2,h,c,i}$ ’s developed was found to exhibit pockets of significant variation. Although the observed variation would not be expected to bias estimates produced at the national level, it is likely to decrease the precision of those estimates, and possibly add undue “noise” to estimates produced for particular population domains. To remedy this situation, extremely large and small weights were trimmed using PROC WTADJUST in SUDAAN® (RTI International, 2012) prior to initiating subsequent weighting steps.” (looks like this was addressed in next section/Step 3; will changes be made to methodology next time to avoid this issue and the need for additional weighting and manipulation in data in next survey?)

Section 6.1.1 Weighting: Step 3: Calibrate Address-Level Weights

- Per the report, additional calibration was conducted to: “(1) harmonize the weighted sum of responding households to known target population distributions; and (2) account for a modest amount of undercoverage inherent in the sample design.” (concern again for whether respondents were truly representative of the whole in larger populations, and whether nonrespondents were the same as respondents; at each point that additional manipulation of data is made, the more bias and inaccuracy might be expected in results)

- In regard to undercoverage, it was noted that these are folks ineligible to be surveyed. In specific, “In the Exposure Survey, some degree of undercoverage existed because multi-dwelling addresses from the ABS frame were excluded, as were sample addresses in the bottom quintile of boat-ownership propensities. These exclusions were made in response to evidence from a pilot sample of 350,000 addresses from the ABS frame that were matched to InfoLink’s registry frame. A logistic regression model with the boat-ownership status indicator variable as the dependent variable revealed an extremely low expected rate of boat ownership for these types of addresses (generally less than 1%). The anticipated yield was not deemed worthy of the requisite data collection resources.” (any details available on the addresses in the ‘bottom quintile of boat-ownership propensities? With many significant changes in home ownership going forward nationally, not sure that leaving out multi-dwelling addresses in the future is appropriate.)

- In states where all watercraft are required to be registered (both paddlecraft and powercraft), the weighting technique of post stratification to adjust for the possible overestimation of unregistered craft versus registered craft likely resulted in an underestimation of paddlecraft in those states.

Section 6.1.1 Weighting: Step 4: Create and Calibrate Boat-Level Weights

- Per the report, “Each boat associated with a particular address inherited the weight produced following the raking procedure at the end of Step 3.” (Seems like this would then add more weight to high population areas as they represent a larger population of responses than rural areas; if they are different in their usage patterns or other details, could this cause bias?)

- In the note on poststratification of boat-level weights to known registered boat numbers from USCG/InfoLink, is the calculation right? (says 0.9 represents overestimate of 10%, shouldn't that be underestimate; explain please)
- Again, in poststratification, similar rules were applied to unregistered boats as registered boats; in states where all watercraft are registered, this would result in issues with findings
- Per the report, "By using auxiliary data (i.e., counts of boat types from USCG and/or InfoLink) and the strong correlation between the counts of registered boats and total boats at individual addresses, the ratio estimator increases precision, providing more reliable survey estimates." (after so many adjustments to the data, is this true?)
- "To arrive at annual estimate, it is necessary to multiply the monthly estimates by 12." (so all months are being measured equally? not clear on this, and it would not be valid to say that what a boater does in one month in 'northern' state is the same as all of the other months)
- "There is also the issue of small cell sizes for certain state and boat type combinations. For many such cells, the survey sample size was not sufficiently large to generate observation for each month. The survey design called for an even distribution of the sample across the months so, in theory, the months for which there exist observation is a random sample of months and in the aggregate even with small cell sizes it is possible to generate annual estimate, albeit with small sample sizes and correspondingly large sampling variance." (not sure that a smaller sample size can be expounded in this fashion to achieve the same level of confidence with smaller sample sizes; can researchers explain further?)

Section 6.1.3 Exposure Survey Data Analysis

- "The collapsing that made most sense both substantively and for data estimation and presentation was to create two categories: motorized boat types and human-powered boat types. The first category includes open power boats, cabin power boats, pontoon boats, and PWCs. The second group includes kayaks, canoes, paddleboards, and row boats." (was there any accounting for the size of the power boats in the first group? different patterns for larger versus smaller craft (based on launching/docking patterns, costs, etc.); what about sailboats?)

LOOKS LIKE SECTIONS IN 6.2 ALL PERTAIN TO PARTICIPATION SURVEY

Section 6.2.1 Weighting

- Similar weighting to Exposure Survey throughout (although at household, not boat level); same issues would apply here
- "The sample was allocated so that the targeted number of completed surveys would be proportional to the number of unique addresses within a state." (does this give more weight to more heavily populated states? which may or may not be more heavily boating states? does it bias against states with multi-person dwellings as those were ineligible to participate?)
- Mismatch of data sets used in Step 2 (2013-2017) and Step 3 (2018); any impact on results?
- "Specifically, the weighted sum of individuals was calibrated by gender and race/ethnicity to match the corresponding totals published from the 2018 ACS at the national level" (because the boating public is not

particularly diverse in gender or race/ethnicity – and thus we would expect a large proportion of respondents to be from this group – does this disguise any nuances in more diverse groups (and do those respondents in those diverse groups represent that whole population?)

- In regard to Step 4 weighting (moving household data records to individual data records), “To get the figures for the fourth dimension, estimated totals from the 2011–2012 NRBSS were carried forward by multiplying the respective ratios of population growth.” (is there any issue with this; though the two surveys were not comparable)

- As with Exposure Data multiplying by 12 (months), the Participation data is multiplied by 4 (quarters); does this assume that actions and trends by respondents are the same across all four quarters of the year? (not true in northern states, or likely anywhere based on other cycles like school, holidays, etc.)

- In regard to Non Response Bias Checking: “One general strategy is to benchmark survey estimates against external sources. Obviously, the purpose of conducting a survey is to collect information not available elsewhere, yet there is still value in comparing survey estimates to, say, those from previous NRBSS administrations or other comparable data collection efforts. This general strategy was used to assess the face validity of boat-ownership rates overall and by type in the Exposure Survey, and for boating-participation rates and totals in the Participation Survey. Where deemed necessary and appropriate, subject matter experts were consulted to discuss particular differences observed relative to previously published figures. In a few instances, the weighting procedures were modified in response to feedback received.” (Again, response has been not not compare past surveys and it seems this could also lead to confirmation bias if the results differ significantly from past efforts; also who were the SMEs consulted, and do we know what they suggested/what was changed?)

- Also in regard to Non Response Bias Checking, “A third strategy is to compare unadjusted survey estimates with weighted survey estimates (Ekholm and Laaksonen, 1991), which is useful for examining the impact of weighting on key figures. Without a gold standard, one cannot know for certain whether the weighted estimates are closer to the truth, but the exercise can still be an enlightening way to learn what relationships were detected and corrected for by the nonresponse and calibration steps in the weighting procedure.” – also see Table 6.6 (sounds like the researchers are not 100% confident in their weighting details and significant changes in findings from Base weights to Final weights in all states; is there any correlation to the types of vessels registered in those states?)

Section 6.4 Mode Comparisons

- Indicates that research is ongoing to determine whether response rates and results are the same between those responding by mail versus web. Indicates that will be documented elsewhere. Is that available? Does it lend weight to pushing for web response in the future?

- “In general, web respondents appeared to be younger, tended to have a higher income level, and boat somewhat less frequently. They were not any less likely to own boats, but owned relatively more unregistered boats, especially kayaks and paddleboards. Conversely, web respondents owned relatively fewer open power boats than mail respondents.” (this is consistent with what we have seen in Ohio in previous surveys)

Pick up of discussion on June 24 call:

Methodology Report (p. 54-56 regarding the DAQS):

The report indicates that “To streamline the system so that the most relevant and useful information is available, state and industry stakeholders were asked to identify priorities.” When/how did that happen?

USCG Response (via Jonathan on the Writeboard): I will have to ask as the survey project manager that handled 2018 is not employed with the Coast Guard any longer

From 6/24 call:

- Jonathan turned the question back to us and asked if any of us had been made aware of this in the 2018/2019 timeframe. Deb indicated “no,” and suggested that it was probably in reference to gathering such input from NBSAC members given some of the presentations that had been done for that group by Ed Mahoney and/or Don Kerlin. Jonathan indicated that IBWSS might also have been a source; Deb noted that someone from RTI gave a presentation at the Summit (post-call note: see 2019 IBWSS presentation at <https://www.ibwss.org/wp-content/uploads/2019/04/willis-susan-boating-safety-surveys.pptx>).

The example screenshot of the DAQS really is not indicative of what the finished product looks like or does — at least not totally in the way the product and key questions are described on p. 55. The final does not seem to be nearly as robust as is implied (e.g., it is not possible to run cross-tabs, etc.). Did something happen in the implementation? Will that be rectified in the future?

USCG Response (via Jonathan on the Writeboard): Noted for the future. We will follow up

From 6/24 call:

- This was addressed in a prior call. What is presented in the DAQs is the final. Jonathan noted that the timing of development and finalizing the product was probably not the best as there was an intervening shift in CG personnel. Once the determination is made about the level of approval for the next survey, consideration should be given to the amount and type of data file access that can/will be given to the public. Per Jonathan, stakeholder outreach on the next round will be through this body.

Question that straddles methodology and the actual functioning/utility of the DAQS: The DAQs presents the risk ratios calculated from exposure data in various ways—for accidents, average boat days, and boat hours; and for “cases”, average boat person days and boat person hours. What does “Cases” mean in this context? It is not addressed in the footnotes or the Methodology Report (so far as I can tell). Would the intended users understand the differences?

From 6/24 call:

- Jonathan indicated that the “cases” likely designates the actual number of fatalities or injuries as opposed to the accident (e.g., two injuries in a single accident). Deb suggested then that is why the exposure hour calculation involves the boat person days or hours. This distinction should be made in footnote.

FROM THE COGNITIVE INTERVIEW REPORTS (general question added by Deb 6/23)

Who specifically was the “client” that is referenced throughout the report and who made the final call on each item identified as being of concern or in need of modification? Generally, the “client” would be the sponsoring organization, but this sounds like a specific individual. Was it Don Kerlin, as he is named on the cover page as

the recipient (or Don in conjunction with Ed Mahoney or someone else internal or external to the CG-BSX)? or someone else entirely? Asking because there seem to have been some good (solid) recommendations from RTI that ultimately were not incorporated.

From 6/24 call:

- Deb suggested that several of the questions or comments posed below (re the survey instruments) might be answered (or at least addressed) in the cognitive interview reports. She said her question about who the “client” is/was that was named in the reports is of interest because there were some recommendations (similar to what are posed in the comments below) that do not seem to have been incorporated; it is of interest to know who was making the final call on each of the items of concern. [Deb cited as an example the first question re whether consideration was given to allowing respondents to record a nickname for their boats for easier tracking] Given his reading of the background materials, Jonathan suggested that the “client” was likely a combination of Mahoney and Kerlin.
- Decision was made to ask everyone on the team to review the cognitive interview reports before the survey instrument questions are taken up on the next call.
- In further discussing a couple of the items below – and of particular note, 7u regarding the “major purpose” of the survey in producing reliable estimates of number/type of accidents -- Jonathan reported that an errata sheet is in process to stand alongside the reports – one purpose being to note that the surveys and reports were produced by the vendor ... and here is the Coast Guard’s stance on the report(s).
- Deb indicated she will go back through the questions/comments posed below and identify on the Writeboard (prior to next call) items that were addressed in the cognitive interview reports and how resolved.

FROM APPENDIX A – COPIES OF SURVEYS

EXPOSURE SURVEY INSTRUMENT

Were the respondents able to easily keep track of the boats numbered 1 thru 6 throughout? Was consideration given (in survey instrument development/design) to allow a place to record the boat type and “nickname” or something up front to identify the boat throughout other than by number?

Out of sheer curiosity, why was the first question re identifying the boat the length as opposed to the boat type? (see above for related question about design)

7s re ECOS – typo – watch this for next iteration – “engine safety cut-OUT switch”; also, a question as to why the person who might be thrown from the boat is referred to as the “helmsperson” as opposed to the “operator”?

7u re boating accidents. The lead in says “One major purpose of this survey is to produce reliable estimates of the number of different types of boating accidents/mishaps...” When did that become a “major purpose” and what if any impact did that series of questions have on the respondent’s willingness to respond either to those questions or the rest of the survey?

8. This demographic section reads like the census only there is no (legally) compelling reason for the respondent to provide the requested information. Question: what was the intention of asking about persons in the household who may or may not have been on the boat?

8f. Again, what was the intention of asking the employment status and at this level of detail?

9. And others... why was there not a “prefer not to answer” response option as opposed to allowing someone to just skip the question?

10. Same issue as raised above. In this case, why a question as to the relationships between the persons in the household?

General question about the demographics/socioeconomic data collected as part of the Exposure Survey: the Exposure Survey report findings section beginning 3.3 (p. 32) presents a pared down set of data (at least from the number and detail of questions posed on the instrument itself). Is that just because those were deemed the most relevant pieces of data/findings to report out or because of issues with the data itself (e.g., missing data/detail, etc.)?

PARTICIPATION SURVEY INSTRUMENT (added May 21)

Curious as to why the questionnaire – after asking the minimal screening questions regarding the individual respondent’s boating during the survey period (i.e., did you go out on the water? How many days? # persons in household) – launched into **ALL** of the demographics/socio-economic questions about the individual and other members of the household immediately and **before** screening for the other members’ boating (or non-boating) activity/participation (which is finally asked in Q7). The survey comes off as intrusive from the get-go. Especially questionable as to relevance or inability to select a “prefer not to answer” option: 4f Employment status; 5 Total combined income; 6 Detail on relationships of the household members. [Note: The methodology section 2.2.2, which describes the cognitive interview findings, indicates that “...A few respondents were concerned about the level of detail asked about individual household members.” The same discussion suggests that some changes were made to the test instrument as a result of the interview findings. Have to wonder whether there were even more intrusive questions or response options that were pulled as a result, though it is hard to imagine what those might have been and their relevance to the survey’s purpose.]

Were the respondents able to easily keep track of the household members throughout? (similar to the issue identified with the Exposure Survey – see previous section)

The respondents in the Participation Survey were asked a question (#15) as to whether they or any other members of their household had taken a boating safety course. The Exposure Survey cohorts were not asked a similar question. Why not?

Regarding Q12 as to ownership status of the boat that the respondent or others in the household went out on the water in/on: One issue already identified during the 5/13 team session was regarding the option “Chartered (bare boat with no hired captain)”; see notes from 5/13. On that same question, isn’t there a missing option? That is, a member of the household could have boated on a vessel owned by someone other than a person in the household and none of the options would accommodate that scenario. [Note: there is a “Joint/shared ownership with people who don’t live in this household” but that’s not the same thing.]

Seems like some of the questions are out of (logical) order and I wonder how that also might have impacted the quality of responses and response/completion rate. That is, Q12 asks about the ownership status of the boat that the respondent or others in the household went out on the water in/on; it is then followed by a series of unrelated questions as to whether the respondent/other household member operated the vessel, whether they wore life jackets, and whether they’d taken a boating safety course ... THEN comes another series of questions as to boat ownership, number of boats, boat type, length, registration, AND ownership

status again. The respondent also has to jump from tracking the up-to-five household members to owned boats (covering six possible watercraft). Just interested in the thinking behind the construction of this instrument and the feedback from the cognitive interview (testing) process.