NASS Review of OMB 0596-0189

Understanding Value Trade-Offs Regarding Fire Hazard Reduction Programs in the Wildland – Urban Interface July 2015

The description in the questionnaire is very clear, and it abides by Dillman's principle for question comprehension, instruction placement, asking one question at a time, and format consistency.

The sampling frame for this survey is appropriate: it included high, medium and low fire risk areas. It also includes areas that experienced catastrophic loss from the 2011 and 2012 Arizona, Colorado, New Mexico, and Texas wildfires.

The sampling design used for this survey design is also appropriate. The stratified random method ensures data will be collected from each typical area. The formula used to determine the sample size is accurate (Dillman, D. 2014, Internet, Phone, mail and Mixed Mode Surveys, Fourth Edition, John Wiley, Ins. 78-79).

Additionally, it was a thoughtful approach to deal with non-response issue, etc.

Alternative Sampling Design

If the population sizes are different in each state and the estimated sample sizes are based on population sizes, then consider looking at allocating samples according to population size. If the population size in each strata (low, medium, and high risk area) within state are different, then consider using proportional probability sampling (PPS) design. With proportionate stratification, the sample size of each stratum is proportionate to the population size of the stratum. This means that each stratum has the same sampling fraction.

- Proportionate stratification provides equal or better precision than a simple random sample of the same size.
- Gains in precision are greatest when values within strata are homogeneous, and
- Gains in precision accrue to all survey measures.

Questionnaire Design

Consider:

- 1. Clarifying and simplifying the questionnaire survey recording code. For example use code: **88** to express 'Don't Know' for Questions 3 and 11; and **99** for missing values or item non-response.
- 2. Asking why the respondent chose a particular alternative immediately after Questions 18, 19 and 20; instead of one catch-all question (Question 21).

Response to comments:

Thank you for the review. _We agree that the recording code be 88 for "Don't Know" responses and 99 for missing values or non-response. _In addition, we agree having a question on why they selected the choice immediately after each question (Question 18, 19 and 20)._ However, to reduce respondent burden (as promoted by OMB), it was decided to have only one question to explain all three responses. _Lastly, proportional probability sampling uses population size of the stratum to determine sample size. _Using proportional probability sampling, the sampling fraction will be the same for each stratum, thus the number of households sampled in low risk communities will be higher than high risk communities due to higher population sizes. _ However, this sampling scheme will not provide the necessary information to value wildfire protection programs. _The currently proposed stratified random sample with weighting scheme is more appropriate for this study because it is believe that people living in areas that have a higher risk of damage from wildfires would be more concerned about wildfire protection programs. _ Therefore, for each household sampled from low risk communities, two households will be sampled from medium communities, and three households will be sampled from high risk communities.