#### SUPPORTING STATEMENT – PART B

# U.S. Department of Commerce U.S. Census Bureau

# 2018 Survey of Compact of Free Association (COFA) Migrants OMB Control No. 0607-XXXX

#### **Collections of Information Employing Statistical Methods**

## 1. <u>Description of Universe and Sample Selection</u>

The Department of the Interior (DOI) has requested the Census Bureau to produce estimates of the number of qualified nonimmigrants (also referred to as Compact of Free Association (COFA) migrants) from the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau residing in Guam and the Commonwealth of the Northern Mariana Islands (CNMI) in 2018 as required by the COFA Amendments Act of 2003.

These estimates for Guam and CNMI will be based on data collected from a representative sample of the addresses in each area in 2018. The Guam and CNMI estimates are expected to have the same level of reliability as an estimate of COFA migrants residing in Hawaii that will be derived from data collected in the American Community Survey (ACS), which is expected to have a 15% coefficient of variation (i.e., one standard error/estimate).

The sample universes for Guam and CNMI are all of the addresses (both housing unit and group quarters) on these islands in 2018 and the target population will be the COFA migrants residing at these addresses. A sample of these addresses will be selected in several stages. First, the Census 2010 tabulation blocks in Guam and CNMI that had no addresses in Census 2010 will be combined with larger neighboring blocks, thus giving each tabulation block with no Census 2010 addresses a chance of being selected for the 2018 Survey of Compact of Free Association (COFA) Migrants. Next, the blocks and combined blocks in each area will be assigned to one of four strata that we have labeled as "None", "Low", "Moderate", and "High" based on the Census 2010 count of the number of people who were born in the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau. Blocks with a high level of growth for these populations between Census 2000 and Census 2010 will have their Census 2010 totals adjusted appropriately to reflect projected continued growth between 2010 and 2018. The preliminary definitions of these strata are as follows:

Stratum	Census 2010 Count of People Born in the Republic of the	
	Marshall Islands, the Federated States of Micronesia, and	
	the Republic of Palau	
None	0	
Low	1-14	
Moderate	15-29	
High	30 or more	

The counts of blocks and combined blocks for each stratum from Census 2000 were as follows and will be updated with Census 2010 data:

Stratum	Total Blocks and	Total Blocks and
	Combined Blocks in	Combined Blocks in
	Guam	CNMI
None	343	87
Low	378	136
Moderate	142	60
High	209	116

The blocks and combined blocks within each stratum will then be ordered based on geographic variables. A representative sample of these ordered blocks and combined blocks will then be selected within each stratum using a higher sampling rate in the "High" stratum and a decreasing sampling rate for each subsequent stratum. The within-stratum sampling rates will be determined to result in an expected relative error of 15%. These rates are expected to result in an oversample of blocks and combined blocks from the "High" and "Moderate" strata, and an undersample from the "Low" and "None" strata. While the exact sampling rates are unknown at this time, we expect to select about 45 blocks and combined blocks in Guam and about 30 blocks and combined blocks in CNMI. We expect to identify about 4,400 sample addresses from the Guam sample blocks and about 2,700 sample addresses from the CNMI sample blocks.

The sample blocks and combined blocks will be canvassed by enumerators to identify every address currently in the blocks and combined blocks (see Attachment F for the address register), and the occupants at each address will be interviewed using a questionnaire containing questions comparable to those used in the ACS and Census 2010. The addresses in sample blocks and combined blocks that contain a large number of addresses will be subsampled and only the addresses in the subsample will be interviewed.

In addition, a reinterview sample will be selected from households completing the questionnaire in Guam and CNMI. Each enumerator in Guam and CNMI will have three cases from their workload randomly selected for reinterview. Households selected will be administered a paper questionnaire by supervisory enumerators to detect discrepancies or data falsification.

#### 2. Procedures for Collection of Information and Estimation Procedures

Based on the sample sizes and sample designs for Guam and CNMI, we expect a 68 percent confidence interval relative error of  $\pm 15$  percent for the estimates of the number of COFA migrants residing in each of these areas in 2018. This relative error is being targeted for these estimates so the reliability level will be comparable to what is expected for the estimate of COFA migrants residing in Hawaii that will be derived from data collected previously on the ACS.

In the majority of the sample blocks and combined blocks, residents in all housing units and group quarters addresses will be administered the paper questionnaire via personal visit. In very large blocks, the list of addresses will be subsampled to help defray the costs of enumeration. Only the housing units and group quarters addresses selected for the subsample will be administered the questionnaire via personal visit. The very large blocks that will need to be subsampled will be identified once the sample of blocks and combined blocks has been selected.

A maximum of three personal visits will be made to each sample address to complete the interview. Enumerators will attempt to collect telephone numbers during the first visit and when possible, conduct the follow-up interview attempts by telephone. In addition, a quality control reinterview will be conducted for approximately 700 sample cases.

The survey estimates for Guam and CNMI will be based on weighted data. The weights for producing these estimates will be calculated using a three-step procedure. First, the base weight (BW), which is the inverse of the probability of selecting a sample block or combined block, will be calculated and assigned to each sample address in the block or combined block. Next, the subsampling factor (SF), which is the inverse of the subsampling rate used in a subsampled block or combined block, will be calculated and assigned to each of the addresses selected for the subsample. Addresses in sample blocks and combined blocks that are not subsampled will be assigned a subsampling factor of 1.0. Finally, a nonresponse adjustment factor (NRF), which is the ratio of the occupied sample addresses divided by the interviewed occupied sample addresses, will be calculated and assigned to the interviewed occupied sample addresses. Separate nonresponse adjustment factors will be computed for the major geographic entities within Guam and CNMI. The weight for each interviewed address will be the product of these factors as expressed by the following formula:

Weight = BW \* SF \* NRF

#### 3. Methods to Maximize Response

We will maintain high levels of data accuracy and response rates through interviewer instruction, professional training, and close monitoring of the data. We expect a response rate of approximately 95%, which is based on the response rate received for the American Community Survey in Hawaii in 2016 (95.4% for housing units and 94.2% for group quarters).

Survey procedures in Guam and CNMI include the initial personal visit supplemented by up to two follow-up visits to addresses where no respondents were present at the initial visit. Staff will conduct telephone follow-up interviews when possible to help encourage responses to the survey and to obtain additional information or clarification about reported data.

#### 4. Testing Procedures

No tests were conducted; however, the language of the 2018 Survey of Compact of Free Association (COFA) Migrants questionnaire is similar to the Census 2010 questionnaire administered in Guam and CNMI. Additionally Census Bureau maintains a continuing dialogue with data users to ensure, to the extent possible, that the required data serve their intended purposes, that the survey instructions are clear, and that unreasonable burdens are not imposed.

## 5. Contacts for Statistical Aspects and Data Collection

The survey is designed and conducted within Census Bureau by the Directorate for Demographic Programs. Census Bureau, National Processing Center will process these data. Within the Census Bureau, the following individuals should be consulted for further information on their area of expertise.

#### **Statistical Aspects:**

Stephen Ash Demographic Statistical Methods Division U.S. Census Bureau (301) 763-4294 Stephen.Eliot.Ash@census.gov

#### Overall Data Collection:

Loraine West
Population Division
U.S. Census Bureau
(301) 763-6242
Loraine.A.West@census.gov

#### Attachments

Attachment A – Frequently Asked Questions (FAQs)

Attachment B – Invitation letter

Attachment C – Notice of Visit letter

Attachment D – 2018 Survey of Compact of Free Association (COFA) Migrants questionnaire

Attachment E – Reinterview questionnaire

Attachment F – Address Register