SUPPORTING STATEMENT – PART B U.S. Department of Commerce U.S. Census Bureau Report of Building or Zoning Permits Issued for New Privately-Owned Housing Units (C-404) OMB Control Number 0607-0094

B. Collection of Information Employing Statistical Methods

1. Description of Universe and Respondent Selection

The target population for the survey is all permit-issuing jurisdictions in the United States. The universe and monthly sample are updated every 10 years; a new universe and sample was defined in 2013 for use beginning in 2014. A sample of about 7,675 permit-issuing places was selected in 2013 from a universe of about 19,875 places to provide monthly estimates of construction authorized by building permits.

All places in the consolidated metropolitan statistical areas and selected metropolitan statistical areas were selected with certainty. The remaining places were stratified by state, into two strata based on the number of housing units authorized in 2010, 2011, and 2012. In each state, all places that authorized housing units during the period greater than or equal to a predetermined number of units were selected with certainty. In addition, about 625 places were selected with certainty because of cooperative arrangements we have with state agencies to receive data electronically. The other places were selected at the rate of 1 in 10. We multiply data for the certainty places by 1 and data for the non-certainty places by 10 to generate monthly estimates for states and the United States. The monthly unit response rate is about 73 percent.

The remaining places are canvassed annually. At the end of the year, nonrespondents to the monthly survey are also asked to provide any missing data. The data from the annual respondents are combined with the data from the monthly respondents to produce an annual total. The response rate goal at the conclusion of the annual survey is above 80 percent, which aligns with the response rate goal for the Census Bureau. After conducting the annual survey, the overall unit response rate for 2014 was about 85 percent.

2. <u>Statistical Methodology - Estimation Procedures</u>

Monthly estimates are produced by tabulating data weighted by the inverse of the probability of selection of the permit-issuing place for the monthly sample. Places with extreme numbers of weighted housing units are designated as outliers and receive a weight reduction designed to minimize mean squared error. The

weight for all places for annual estimates is one.

When a report is not received, missing housing unit data are either obtained by using permits listed for Census Bureau's Survey of Construction (SOC) or are imputed. Data from the SOC are available for only about 900 permit offices for which Census Bureau field representatives list and sample the permits to be followed up to determine when the units are started, completed, and sold. For places not in the SOC, imputations are used. Imputations are based on the assumption that the ratio of current month authorizations to those of a year ago should be the same for reporting and non-reporting places.

3. Efforts to Maximize Responses

We send form letters (Attachments C through G) and additional survey forms as part of the annual survey to delinquent monthly and annual respondents. We also periodically contact non-respondents by telephone or email to solicit their participation, and we contact higher-level government agencies to request responses from their jurisdictions. We also ask State Data Centers and members of the Federal-State Cooperative for Population Estimates for their assistance with name and address updates as well as help obtaining data for prior time periods for places that are currently delinquent to the survey.

4. <u>Tests of Methods</u>

We completed an evaluation of the BPS as required by the Statistical Policy Directive on Compilation, Release, and Evaluation of Principal Federal Economic Indicators; this evaluation was submitted to the OMB in August 2014. Additionally, testing and evaluation of the variance methods was conducted, which led to the implementation of updated variance programs in February 2015.

All changes to methodology or processing systems are tested. For example, we conducted usability testing of the online questionnaire with a sample of respondents before offering the online questionnaire to all respondents, and documented the results of the testing.

5. <u>Contacts</u>

The Economic Indicators Division plans and coordinates the survey. This includes the design of the reporting forms, sample selection, instructions for collecting and editing the information, preparation of table formats, and tabulation and release of the data.

The contact person for questions relating to the statistical aspects of the survey is Ms. Amy Newman-Smith, Methodology Director for Manufacturing, Investment, and Construction Programs in Economic Statistical Methods Division. She can

be reached on (301) 763-6595.

The contact person for questions relating to the collection and analysis of the data is Ms. Erica Filipek, Assistant Division Chief for Construction Indicator Programs in the Economic Indicators Division. She can be reached on (301) 763-5161.

Attachments:

- A. Form C-404, "Report of Building or Zoning Permits Issued for New Privately-Owned Housing Units"
- B. Letter of support from the Bureau of Economic Analysis
- C. C-404-L1 Initial letter for annual respondents
- D. C-404-L2 Letter for monthly respondents not reporting 5 or more months of the year
- E. C-404-L3 Follow-up letter for monthly respondents not reporting 1 to 4 months of the year
- F. C-404-L4 Follow-up letter for annual non-respondents
- G. C-404-L5 Annual reminder letter to monthly respondents
- H. Selected screenshots from Centurion Instrument