Public Libraries Survey (PLS) Data Collection

Supporting Statement for PRA Submission

B Collection of Information Employing Statistical Methods

B.1. Respondent Universe

The Public Libraries Survey (PLS) is a universe survey of public libraries that are identified by state library administrative agencies (SLAAs) in the 50 states, the District of Columbia, and outlying areas. The survey frame consists of 9,249 public library systems –-9,245 public libraries in the 50 states and the District of Columbia and 4 public libraries in the outlying areas of American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands – as identified by SLAAs. A total of 9,046 of the 9,249 public libraries in the survey frame responded to the FY 2018 PLS, for a unit response rate of 98 percent. Respondents to the survey are defined as public libraries for which data were reported on population of the legal service area and at least three of the following five items: total paid employees, total operating revenue, total operating expenditures, print materials, and total circulation. Some individual survey items, such as population of legal service area, service outlets, and type of legal basis, have a 100.0 percent response rate for their state because the SLAA provided these data for all public libraries in their state.

State library agencies collect the data from their local public libraries, and State Data Coordinators (SDCs) employed by the agencies report the data to IMLS via a web-based system developed by the American Institutes for Research (AIR). All 50 states, the District of Columbia, American Samoa, Guam, and Northern Mariana Islands participated in the FY 2018 PLS.

B.2. Procedures for the Collection of Information

Preparation for and administration of the collection will include annual reviews of the survey instrument; annual reviews of data elements, edit-checks, and post-collection processing; updates to the web application tool for data collection; contacting the chief officers of the SLAAs and the designated SDCs; opening the web application for respondents during the data collection field period; post-collection editing and imputation of the data file; and release of the data file, data documentation, and report of the findings.

B.2.1. Data Collection

Programming the Web Application

The PLS data are collected over the Internet via a computer self-administered questionnaire, called the PLS Web Portal to allow for the collection and analyses of high quality and timely policy-relevant data on the current status of public libraries that enables an ongoing evaluation of trend comparisons. The PLS Web Portal tool is a database-driven web application specifically designed to integrate extant data into the data collection tool while incorporating information, user assistance, data validation, and reporting seamlessly into one site. The online administration was designed to minimize user technology requirements for both hardware and software, and as such, the PLS Web Portal can be accessed via personal computers or laptops. All that is needed to access the survey tool is Internet access to any commonly used web browser, including Microsoft Internet Explorer or Edge, Firefox, Safari, and Google Chrome.

The web application is designed to minimize response burden, to enable timely submissions of high quality data, and to require minimal or no edit follow-up for data problems. A user guide is included in the web application. An edit check tool alerts the respondent to questionable data during the data entry process via on-screen edit check warnings and an edit check report that can be viewed on-screen or printed. These tools ease the completion of the survey and enable the review and submission of the data in a timely fashion. In addition, the survey is transmitted with prior-year data pre-entered into the system. The respondent is instructed to review the pre-entered data and update any information that has changed from the previous year.

The reporting web application is updated and maintained by AIR, the primary administrator of the data collection. IMLS and AIR share responsibility for testing the product prior to its official release. The web application's operation is reviewed on an on-going basis, and updates and improvements to the application are made as needed.

Contacting Respondents

The official request for data collection will be e-mailed to the chief officers of SLAAs (COSLA) and stresses the importance of their participation in the survey, as partners in the process. The SDCs receive a separate e-mail that recognizes their primary responsibility for completion of the survey and encourages their response. The e-mails to the SDCs and chief officers of SLAAs will also contain information for logging into the web application.

Techniques to Enhance Response

As the end of the data collection period approaches, AIR contacts non-respondents to encourage them to complete the survey. Members of IMLS staff also contact the chief officers of the relevant SLAAs if necessary, to encourage response. SDCs have peer mentors, selected by the SDCs. Library Statistics Working Group (LSWG) members are also available to serve as mentors and may provide technical assistance to states in reporting their data. AIR conducts edit follow-up of the data submissions and tries to obtain any data not reported in the original submission in order to maximize accuracy and response rate.

B.2.2. Statistical Methods

This is a universe survey and does not require special considerations for statistical methods.

Imputation
In order to make complete PLS datasets for constructing estimates of totals, it is sometimes necessary to impute for missing data items. After the data have been collected, edited, and cleaned, remaining missing items will be imputed. The data are identified as either imputed or reported on the survey data file through the use of imputation flags and data users are given definitions of what each flag means. Imputation methodologies that are commonly implemented for the PLS data: Zero Rule, Growth Rule, Sum Rule, Raking Procedure, Sum of Internal-detail Reported, and Regression Modeling.

B.3. Methods to Maximize Response Rate and Deal with Non-Response

B.3.1. Methods to Maximize Response Rates

The PLS has achieved a unit response rate by local public libraries of at least 96 percent since 1989. To maximize response rate and reduce respondent burden, the PLS was developed as an electronic data collection instrument. The web survey application includes a universe maintenance function, data editing/edit report tool, table generator, and user guide. These features were designed to provide maximum assistance to the respondent in completing the survey, to improve data quality, data timeliness, and to minimize edit follow-up for data problems.

To further reduce response burden, the survey contains pre-entered prior-year data. The respondent is requested to review the pre-entered data and update it, if necessary.

In 2020, IMLS will host a conference to train SDCs on the functions and use of the survey application. IMLS and AIR will also offer technical assistance to states that have new SDCs and those having difficulty in submitting their data due to staff shortages or other reasons. AIR will offer training sessions on various parts of the survey via webinars several times during the submission period. Staggered survey due dates were established to enable state data to be submitted closer to the end of the state fiscal cycle. This results in timelier data submissions and enhances the flow of data processing at the state and federal levels. Some LSWG members serve as mentors to other SDCs. States with low item response rates are identified during the edit follow-up process and encouraged to improve their response rates.

B.3.2. Statistical Approaches to Non-response

Historically, issues of non-response have not been problematic with the PLS. The survey is the result of a cooperative effort between the States and IMLS. This cooperative effort has led to the high response rate this survey has historically achieved.

B.4. Tests to Minimize Burden and to Improve Utility

AIR developed the web application based on a previously developed tool by the Census Bureau. AIR is responsible for the web application's testing and maintenance, with technical assistance and review performed by IMLS. The survey application would be tested by AIR and IMLS staff members.

The PLS definitions are reviewed on an ongoing basis by individuals on the LSWG and revised when necessary to improve data quality. Survey items may be added, changed, or discontinued due to changing importance or poor data quality. Evaluations of the validity and reliability of selected data are made periodically, including recommendations for improving the data collection.

B.5. Individuals Responsible for Study Design and Performance

The following individuals are responsible for the study design and the collection and analysis of the data on PLS.

Personnel Involved with PLS

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