

Censuses and Surveys of Governments: A Workshop on the
Research and Methodology behind the Estimates

QulP Trips – What Are They And How Are They Helping Us Improve Sampling Frame Coverage?

Joshuah S. Latimore, Carma R. Hogue



March 15, 2012

QuIP Trips – What Are They And How Are They Helping Us Improve Sampling Frame Coverage?

Joshuah S. Latimore

Carma R. Hogue

DISCLAIMER: This report is released to inform interested parties of research and to encourage discussion of work in progress. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

Abstract

In preparation for the 2012 Census of Governments, Governments Division (GOVS) instituted a Quality Improvement Program (QuIP) aimed to improve the quality of data products produced by the censuses and surveys conducted by the Division. Some specific goals of the program include improving the coverage of our universe of state and local governments, determining questionnaire content for surveys that are part of the Census, and improving participation in all aspects of the 2012 Census of Governments. A fundamental aspect of our improvement program has been a series of trips targeted at areas of the country that have typically presented data collection challenges to the Division. Approximately every two months, a multidisciplinary team of subject matter experts and survey methodologists travels to one of these areas to examine the challenges inherent to that area, and to recommend changes in our methodology and processes based on the insight and experience gained from the trip.

We found that this team approach has been instrumental in improving our coverage, determining the content and wording of our questionnaires, and raising public awareness of the 2012 Census of Governments, among other tangible benefits.

Introduction

In the spring of 2010, we determined that the best way to prepare for the 2012 Census of Governments and to address the data quality issues relevant to Governments Division (GOVS) would be to use an interdisciplinary team approach to address problem areas as one part of our Quality Improvement Program (QuIP). At this time, the Division was faced with a large number of staffing challenges (mostly caused by a wave of retirements), as well as the need to re-engineer several programs in the Division, all within the ever-present boundaries of

significant resource constraints. The genesis of the GOVS Quality Improvement Program came from taking a creative look at how to address these challenges, with the idea of using an innovative and unprecedented collaborative approach that would involve survey statisticians, mathematical statisticians, and survey methodologists.

The Division’s surveys of state and local governments’ finances, employment, and pension plans had been examined in 2007 by the Committee on National Statistics. After this examination, they issued the report *State and Local Government Statistics at a Crossroads*, which had recommended that Governments Division evaluate the content of its surveys to determine if the data that are being collected are relevant and that all estimates are of sound statistical quality. At the same time, we determined that the coverage of special purpose governments, public employee pension systems, state dependent agencies, and perhaps even small townships might need to be improved. Records-keeping studies, cognitive interviewing, examination of non-responding units, and frame coverage became the focus of a massive quality improvement effort for the 2012 Census of Governments.

Approach

Teams of six to seven staff, led by a branch chief or higher-level manager were sent to targeted areas approximately every other month, starting with the first QuIP trip to the Chicago, Illinois area in August 2010. Subsequent trips have been made to seven additional states; see Table 1 for a full listing of locations visited.

The trips so far have served multiple purposes:

1. **Records-keeping Studies** – We needed to examine the records-keeping practices of various types of local governments (counties, municipalities, and special purpose governments) for questionnaire content determination for both our Finance and Retirement collection products. After holding a series of data user workshops in the fall of 2009 and spring of 2010, we determined new questionnaire content for these surveys was needed in order to stay relevant. The next step was to determine if the data providers possessed the means of providing these new data. We

Table 1: Completed QuIP Trips

#	City Area	Dates
1	Chicago, IL	8/23/10 – 8/26/10
2	Harrisburg, PA	9/28/10 – 9/29/10
3	Trenton, NJ	11/15/10 – 11/18/10
4	Santa Fe, NM	1/24/11 – 1/28/11
5	St. Louis / Jefferson City, MO	6/13/11 – 6/16/11
6	Hartford, CT	7/25/11 – 7/29/11
7	Indianapolis, IN	9/12/11 – 9/15/11
8	Austin / Houston, TX	1/23/12 – 1/26/12



determined to do this through a series of records-keeping practices studies of various types of governments across the country.

2. **Cognitive Testing** – We also needed to evaluate this new questionnaire content to make sure respondents would interpret and understand the questions in the way we intended. We accomplished this through a series of in-person cognitive interviews with respondents for the Finance and Retirement surveys.
3. **Non-Response Visits** – We also made visits to chronically non-responding government units, to verify their operating status and to get possible contact and address updates. We have also started to perform non-response follow-up directly with government units that have not responded to the first phase of the 2012 Census of Governments – the Government Units Survey.
4. **Frame Coverage and Development** – One of the biggest challenges of government data collection is finding effective ways to develop and update our frame of governments, especially for special purpose, and smaller municipal governments. As such, one of the ‘core’ items of these trips was the group that would work on developing, and assessing the quality of the frame of governments in that particular state. As a Division, we have realized that states are increasingly headed towards consolidated offices that have purview over (or at least knowledge of) local governments (or a subset of local governments) in their state. While these types of offices do not necessarily exist in every state, we have determined that if they do, identifying these entities and developing a relationship with them can be extremely beneficial to the Division, both from a short-term coverage evaluation perspective, as well as a long-term frame maintenance perspective. Moreover, when these offices are identified, they can often be useful for other data collection purposes.

The ideal goal of the coverage portion of the trips is to identify the office or offices (if they exist) that maintain a listing of local governments / political subdivisions in their state. We take this information and compare it with our frame of governments (the Governments Master Address File) to determine where we are possibly under-covering or over-covering government units in our surveys and censuses. Additionally we use these listings, where appropriate, to update our frame with supplemental data such as a government’s address information, contact information, functional classification, etc.

As the trips have evolved, these state coverage visits have become a bigger part of the trips, allowing us to develop a network of contacts in each state that could help us with coverage and collection challenges. Additionally, these contacts are often useful as

authoritative reference points for survey specific challenges or concerns that may come up in each state. For instance, many of the entities we have visited have influence over a certain subset of local governments, and could assist with issues ranging from chronic non-response to data validation.

5. **Outreach and Education** – An over-arching goal of the trip on all of the meetings, visits, interviews, etc., mentioned above has been to increase awareness of the Census of Governments as a whole. To this end, we created a package of outreach materials that could be given out on any of the specific task areas of the trip. These packages contain basic information about the Census of Governments, some data visualizations related to the state we were visiting (via our Snapshot Series of materials), some examples of publications released by the Division, and other outreach materials.

Areas to visit were generally selected because they presented challenges to data collection, had heavy pockets of chronic non-response, suspected coverage problems, or a variety of government types or financial accounting systems. Trips generally lasted four days. At the end of each day, the entire team would meet to discuss the experiences of the day, allowing for a sharing of ideas across each of the sub-teams, and presenting the opportunity to ask questions that may have arisen through the day. Often, these discussions would inform further work performed.

After returning to headquarters, the team members hold a debriefing meeting to discuss the trip as a whole – where we succeeded and where we might be able to improve our procedures in the future. Each group writes up a brief report summarizing the results of the trip, the knowledge gained, and any lessons learned, that will be used to inform the activities of future trips. At the end of each fiscal year, a summary report is created that outlines the results of all trips completed in the preceding fiscal year.

Results and Findings

From each trip we learned about coverage, records keeping, questionnaire design, etc., but we also learned procedural improvements that could be considered for future QuIP trips.

- We learned about the importance of the outreach packages in educating local governments about the Census of Governments and in increasing their interest in responding to the 2012 Census. Additionally we found that these materials served as a good 'ice-breaker' for our meetings. As the trips have developed, we have expanded these outreach materials from a single handout of our Snapshot Series sheet for each state, to a whole package of materials related to the Census.
- We learned the importance of visiting with the state government offices early in the trip. In several trips, they have had valuable information on local governments, particularly for coverage improvement. This information can sometimes be useful to the other teams on the trip.
- We learned the importance of coordinating visits to ensure that the teams are not burdening the same local governments
- We learned that the daily wrap-up meetings can be important. Members of different branches can often tie the findings of their own surveys to those from the trip, which can reinforces these findings or expose conflicting results that merit future study. Additionally, these meetings served as a method of team building among staff, and allowed team members to get exposure to other areas of the Division that they normally might not interact with -- this has been especially helpful for those members that are new to the Division. All team members are invited to participate in these wrap-up sessions.
- We learned that many of the state level contacts we made (especially associations of local government) were willing to help with the promotion of the Census, often offering to place materials in their newsletters, etc.
- As a result of the records-keeping and cognitive testing done on these trips, we have developed many findings and recommendations that we plan to use on Division surveys. This includes both survey specific findings and recommendations for the update and re-design of the Finance, Retirement, Employment and GUS surveys, as well as general broad-based findings that can be shared across surveys and the Division as a whole.
- The state coverage visits we made resulted in many tangible benefits to the Division. This includes both coverage-specific benefits, but also more broadly beneficial results.

See Table 2 for a brief description of coverage visits that have been made on the completed trips.

Table 2: Coverage Visit Highlights

Location	Entity	Details
Harrisburg, PA	PA Department of Community & Economic Development	<ul style="list-style-type: none"> • Provided listings of nearly all governments in PA, allowed us to compare and update our frame
Trenton, NJ	NJ State Division of Local Government Services	<ul style="list-style-type: none"> • Provided several listings of NJ governmental units, allowed us to compare and update our frame • Found that they also collect financial data, and were open to the idea of developing a central collection agreement which did not previously exist • Offered to provide outreach services, i.e.: sending an e-mail to governments in NJ as we send out our surveys
Santa Fe, NM	NM Local Government Division	<ul style="list-style-type: none"> • This office was just beginning to compile a listing of special districts in the state, we received their preliminary work to compare with and update our frame, the quality of this listing should improve over time • The office also collects finance data for some special districts, which may be useful for non-responding units to the finance survey
	NM Association of Counties	<ul style="list-style-type: none"> • Received listing of county governments in NM
	NM Municipal League	<ul style="list-style-type: none"> • Received listing of municipal governments in NM
	NM Interstate Stream Commission	<ul style="list-style-type: none"> • Discussed our challenges with acequia / ditch districts in NM
Jefferson City, MO	MO Office of the State Auditor	<ul style="list-style-type: none"> • Received exhaustive listings of governmental units in MO • Established that we would work with this office to let them know of governments that are in our frame but not in their listings • New central collection agreement negotiated on trip
	MO Department of Economic Development	<ul style="list-style-type: none"> • Received listings of Community Improvement Districts, many of which the State Auditors office was not aware of, initiated communication between these offices
	MO Department of Natural Resources	<ul style="list-style-type: none"> • Received reports from these offices on public water districts, and soil & water conservation districts • Offered to put outreach materials in their publications
	MO Association of Counties	<ul style="list-style-type: none"> • Offered to place outreach materials in their newsletter
	MO Municipal League	<ul style="list-style-type: none"> • Provided us with a member directory • Offered to promote Census in their publications
Hartford, CT	CT Office of Policy & Management	<ul style="list-style-type: none"> • Provided us with an extract of their database, containing contact & financial information for large local governments • As they collect financial data from some government units, this office can be useful for non-responding units to the finance survey • Also provided us with a listing of all retirement systems in the state
	CT Office of the Secretary of State	<ul style="list-style-type: none"> • Discussed councils of government in the state, this office also referred us to several other resources that we visited
	CT Commission on Fire Prevention & Control	<ul style="list-style-type: none"> • Are developing a list of fire districts in the state, will provide to us when it is complete • Also willing to do mass e-mails to fire districts when we send out survey materials to promote response
	CT Conference of Municipalities	<ul style="list-style-type: none"> • Offered to place outreach materials in newsletter
Indianapolis, IN	IN Department of Local Government Finance	<ul style="list-style-type: none"> • Learned that this office was collaborating with the State Board of Accounts to create a joint Master Unit File that will contain a list of all local government and special district information, when complete this will be a valuable resource to the Division
	IN State Board of Accounts	<ul style="list-style-type: none"> • Will provide us with listing of local governments that they maintain
	IN Housing & Community Development Authority	<ul style="list-style-type: none"> • Provided us with a list of fund applicants and grantees over a five-year period, which should provide a basis of housing authorities in the state, especially new ones that we may not know of
	IN Department of Environmental Management	<ul style="list-style-type: none"> • Provided us with a list of regional sewer districts, regional water districts, and regional solid waste districts

Table 2: Coverage Visit Highlights

Location	Entity	Details
Austin, TX	TX Commission on Environmental Quality	<ul style="list-style-type: none">• Will provide us with database extract of all natural resource related special districts, utility districts, etc.• Learned that they collect finance data for these units, useful for non-responding units to the finance survey• Established that we would work with this office to let them know of governments that are in our frame but not in their database
	TX Office of the Comptroller	<ul style="list-style-type: none">• Provided us with listings of all taxing entities in the state, no contact information
	TX Association of Counties	<ul style="list-style-type: none">• Will be sending them a list of GUS non-responding counties in the hopes that they can urge to complete• Offered to place outreach materials in their publications / website
	TX Association of Regional Councils	<ul style="list-style-type: none">• Offered to place outreach materials in their publications / website