# NATIONAL CENTER FOR EDUCATION STATISTICS (NCES)

# SCHOOL ATTENDANCE BOUNDARY SURVEY (SABS)

JULY 2013 - JULY 2016

PART A

OMB SUBMISSION

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#### Table of Contents

#### A. JUSTIFICATION

1. CIRCUMSTANCES MAKING COLLECTION OF INFORMATION NECESSARY	2
2. PURPOSES AND USES OF THE SCHOOL ATTENDANCE BOUNDARY SURVEY	3
3. APPROPRIATE USE OF INFORMATION TECHNOLOGY	3
4. EFFORTS TO IDENTIFY DUPLICATION	4
5. METHODS USED TO MINIMIZE BURDEN ON SMALL ENTITIES	4
6. FREQUENCY OF DATA COLLECTION	4
7. SPECIAL CIRCUMSTANCES OF DATA COLLECTION	
8. CONSULTANTS OUTSIDE THE AGENCY	4
9. PROVISION OF PAYMENTS OR GIFTS TO RESPONDENTS	
10. ASSURANCE OF CONFIDENTIALITY	4
11. SENSITIVE QUESTIONS	4
12. ESTIMATES OF HOUR BURDEN FOR INFORMATION COLLECTION	4
13. ESTIMATES OF COSTS	
14. COSTS TO THE FEDERAL GOVERNMENT	
15. REASONS FOR CHANGES IN RESPONSE BURDEN AND COSTS	
16. TIME SCHEDULE FOR SCHOOL ATTENDANCE BOUNDARY SURVEY	
17. APPROVAL TO NOT DISPLAY EXPIRATION DATE FOR OMB APPROVAL	5
18. EXCEPTIONS TO CERTIFICATION FOR PAPERWORK REDUCTION ACT SUBMISSIONS.	5

#### B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

- 1. RESPONDENT UNIVERSE
- 2. STATISTICAL PROCEDURES FOR COLLECTING INFORMATION
- 3. PROCEDURES FOR COLLECTION OF INFORMATION
- 4. METHODS FOR MAXIMIZING RESPONSE RATES
- 5. TESTS OF PROCEDURES AND METHODS
- 6. REVIEWING STATISTICIANS

APPENDIX A – 2013 AND 2015 SCHOOL ATTENDANCE BOUNDARY QUESTIONNAIRE APPENDIX B – 2013 AND 2015 SUPERINDENT SCHOOL DISTRICT LETTER APPENDIX C – 2013 AND 2015 KEY HOLDER PACKET APPENDIX D – 2013 AND 2015 NON-RESPONSE CALL SCRIPT APPENDIX E – 2013 AND 2015 REMINDER LETTER APPENDIX F – 2013 AND 2015 DIGITIZER INSTRUCTIONS

#### A. JUSTIFICATION

#### 1. Circumstances Making Collection of Information Necessary

#### **Purpose of this Submission**

The National Center for Education Statistics (NCES), of the Institute of Education Sciences (IES), within the U.S. Department of Education, is requesting clearance to expand the initial school service area boundary collection of 350 largest districts obtained from other sources to include boundaries for all public school service areas in the 50 states and the District of Columbia (approximately 14,000 school districts and 100,000 schools) in 2013 and 2015. The School Attendance Boundary Survey (SABS), to be collected on a two year cycle, will assign geographic school attendance boundaries for the public elementary and secondary schools included in the Common Core of Data (CCD) universe.

#### **Legislative Authorization**

NCES is authorized to collect this information by law under the Education Sciences Reform Act of 2002 (20 U.S. Code Section 9543).

#### **Prior and Related Studies**

In 2008, Dr. Salvatore Saporito from the College of William and Mary proposed a project to provide spatial data delineating 2009-2010 K-12<sup>th</sup> grade school attendance boundaries for 20,000 schools from 600 U.S. school districts. The project was funded by the National Science Foundation (NSF) and resulted in the one-time creation of the School Attendance Boundary Information database (SABINS), which contains K-12<sup>th</sup> grade attendance boundaries for three states (Delaware, Minnesota, and Oregon), roughly 600 school districts embedded within a sample of regionally diverse Metropolitan Statistical Areas, including over 400 of the largest school districts.

Although geography is a fundamental organizing feature of K-12<sup>th</sup> education, until now school attendance boundary data have not been centralized and made publicly available in an easy-to-use format. SABINS removes these barriers by linking spatial data delineating school attendance boundaries with tabular data describing the demographic characteristics of populations living within those boundaries.

In addition to linking schools with their boundaries, the SABINS project associated school attendance boundaries with Census geography, thereby enabling users to efficiently estimate the socio-demographic characteristics of people and households within school attendance boundaries. Every school attendance boundary in the SABINS database is associated with Census blocks. This relationship facilitates the summary of block-level population characteristics to: (1) grade-specific school attendance boundaries; (2) school attendance boundaries that are coincident across grade spans; and (3) schools that provide services to specific areas. Finally, the SABINS project integrated school attendance boundaries with detailed socio-demographic data from the Census Bureau's American Community Survey. American Community Survey data are summarized to block groups—but block groups do not nest within school attendance boundaries. To overcome the misalignment between these geographies, the SABINS project uses a straightforward spatial allocation technique to estimate detailed population characteristics within school attendance boundaries.

The school boundaries are disseminated freely, via the National Historical Geographic Information System (NHGIS). National Academy of Sciences and the U.S. Department of Agriculture have requested SABINS to estimate the number of students eligible for free or reduced-price school lunches.

In 2010, NCES acquired the school service area boundaries for the largest 350 U.S. school districts from the SABINS project by type of schools (elementary, middle, and high school) and linked with the school level of the 2009-2010 Common Core of Data (CCD).

In 2011, the Census Bureau and NCES agreed to create special tabulations from the 2007-2011 American Community Survey (5 year average estimates) based on the public school boundaries from the 350 largest school districts.

This request for clearance seeks to expand the initial one-time "proof of concept" school service area boundary collection from SABINS to collect boundaries for all public school service areas.

#### 2. Purposes and Uses of the School Attendance Boundary Survey

NCES collects statistics on education in the United States, analyzes and reports their significance, and assists states, local education agencies, and postsecondary institutions in improving their statistical systems. NCES collects and provides policy-relevant data on issues as diverse as enrollment trends, access of minorities to postsecondary education, academic achievement of students, comparisons of the U.S. education system with education systems in other countries, and the association between education and economic productivity. In addition, through a project with the Census Bureau and Title I, NCES collects information on School District boundaries.

However, missing from these collection activities are the boundary information for each of the public elementary/secondary schools in the 50 States and the District of Columbia. For most schools, this information is available on paper maps or as electronic files. These are the maps or files that NCES proposes to collect as part of this project. Once collected, this information will be added to NCES's online mapping system, which currently includes boundary data for School Districts.

As through the current School District files, NCES will disseminate data from sources such as the American Community Survey (e.g. demographics and poverty information) mapped against the school boundaries. Users can display specific areas by pointing and clicking on a map or searching for a particular locality. The NCES mapping system is the only system in the United States to nationally visually link school exact geographic locations to their demographic and economic information.

By providing the public with a mapping system that contains detailed boundary information on all public schools across the Nation, it will become possible for school personnel, researchers, and policy makers to examine relationships between schools in the same district or across the nation. By visually presenting the school catchment areas with corresponding measures of geographic and poverty indices, decisions can be made regarding allocation of funds to smaller catchment areas. Awareness of the number of students in areas hit hard by natural disasters could aid relief efforts, and the Department of Homeland Security will use this information for planning disaster relief programs in case of a national disaster. The data will also aid school districts in distributing funds to schools within its system.

# 3. Appropriate Use of Information Technology

The Census Bureau will collect the SABS data under an interagency agreement with NCES. The Census Bureau already collects information on address, street, and street attribute updates, as well as legal and statistical boundary updates and other associated geographic information using the following methods: handwritten annotations on Census Bureau-supplied paper maps; electronic updates to Census Bureau-supplied digital shape files; partner-supplied digital file; web-based update system; Block Equivalency files; or Shapefile output. The same methodology will be used to collect the SABS data.

# 4. Efforts to Identify Duplication

The information collected through SABS does not duplicate information requested or collected by any other federal agency. Further, there is no similar current information available on a consistent national basis that could be used or modified for these purposes.

#### 5. Minimize Burden

NCES had devised several measures to minimize the response burden for school districts participating in the School Attendance Boundary Survey. Participants are offered software options which simplify the task of reviewing geographic data. NCES will also accept paper maps and respondent supplied digital files.

#### 6. Frequency of Data Collection

SABS will be a biennial survey that will begin in September 2013. Nationwide, schools and school boundaries change frequently and collecting data less often would make the information too obsolete to be useful for research and planning.

#### 7. Special Circumstances of Data Collection

There are no circumstances that will require special data collection efforts.

# 8. Consultants outside the Agency

In addition to internal NCES review, the following individuals from the U.S. Census Bureau reviewed data collection methods and content:

Jill O'Brien, Assistant Division Chief for Special Statistics, Governments Division Johnny Monaco, Chief, Education & Library Statistics Branch, Governments Division Laura Hardesty, Survey Statistician, Governments Division Jamie Hug, Survey Statistician, Governments Division

Public comments were received in response to the 60-day public comment period published on December 20, 2012, in Federal Register Vol. 77 No. 245, pp. 75419-75420. Responses to these comments are included in a separate document in this submission.

# 9. Provision of payments or Gifts to Respondents

No payments or gifts will be offered to survey respondents.

# **10.** Assurance of Confidentiality

Data collected through the School Attendance Boundary Survey are public domain data in their respective districts and states. As such, the data collection does not provide a unique disclosure risk and therefore does not provide or include a pledge of confidentiality.

#### **11.** Sensitive Questions

None of the questions asked during the School Attendance Boundary Survey are of a sensitive nature.

#### 12. Estimates of Hour Burden for Information Collection

The burden per district will vary by type of submission. De facto districts have only a single elementary and/or middle and/or high school, and we will contact to inform them that we will use their school boundaries as their district boundary and give them the opportunity to tell us if the characteristics of their district has changed (e.g. they no longer consist of only a single elementary and/or middle and/or high school). Thus these districts will not need to provide boundary information, and will incur minimal burden, averaging no more than 5 minutes. In turn, non de facto districts with access to shape files will be able to use the online collection and verification system to upload zip files or email the files directly to NCES. Either way, the burden in these situations is estimated at up to 0.5 hours. The burden on non de facto districts that draw their boundaries using the online collection application will vary greatly depending on the number of schools in the districts. It is estimated that mostly small districts, with up to 24 schools, will draw their boundaries, which for a district with 24 schools is estimated to take approximately three hours. With the expected response rate of approximately 88 percent, this translates into 6,340 estimated total burden hours for each of the collection years (2013 and 2015):

Respondent type	Universe (n)	Estimated response rate	Estimated number of respondents	Total number of responses	Estimated hours per instrument	Total burden hours
School District Administrator – De facto District	8,000	1.00	8,000	8,000	0.08	640
School District Administrator –e- mailed/ uploaded File	6,560	0.75	4,920	4,920	0.5	2,460
School District Administrator – drawn via the digitizer	1,440	0.75	1,080	1,080	3.0	3,240
Total	16,000	0.88	14,000	14,000		6,340

The standard NCES procedure for estimating cost for district administrators is to multiply the estimated total survey reporting hours by the average salary and associated computer costs of \$23.10 per hour. The respondent burden cost is estimated to be \$146,454 in each of the collection years (2013 and 2015).

#### **13.** Estimates of Costs

SABS respondents will not incur any costs other than their time to respond.

# 14. Annualized Cost to the Federal Government

The cost to the Federal Government for the SABS 2013 survey is \$1,500,000 for the work of the Census Bureau. Estimates were based on the number of institutions and the data processing requirements, including (a) costs of all aspects of data collection, data cleaning, and editing; and (b) administrative overhead and mailing costs. NCES also contracted Sanametrix to produce the online data collection instrument for SABS, at an estimated cost of \$500,000, including the web survey instrument and preparation of various project reports and technical documentation. Altogether, the total cost of SABS to the federal government is \$2,000,000 for each of the SABS data collection years (2013 and 2015).

# 15. Reasons for Changes in Response Burden and Costs

This is a new collection for the federal government. As such, it represents an overall burden increase for federal data collections.

# 16. Time Schedule for School Attendance Boundaries Survey

Example schedule for the 2013 data collection:

Introduction letter sent to superintendent of school district	July 2013
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Keyholder packet sent	August 2013
Registration and software release	September 1, 2013
Data collection	September 1, 2013 to August 30, 2014
Non-response follow-up	January 7, 2013 to August 29, 2014
Edit review	September 1, 2013 to August 30, 2014
Final file to NCES	December 2014
Final file sent to Census to link with American Community Survey data	October 2014
Final file released by NCES	December 2014

#### 17. Approval to not Display Expiration Date for OMB Approval

No approval is sought to not display the expiration date of OMB approval.

# **18.** Exceptions to Certification for Paperwork Reduction Act Submissions

There are no exceptions to the topics in Item 19 of Form OMB 83-1.