# **Supporting Statement for OMB Clearance Request**

# Part B: Collection of Information Employing Statistical Methods

# Study of District and School Uses of Federal Education Funds

#### Submitted to:

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# Introduction

This information clearance request is for a study to examine targeting and resource allocation for five major federal education programs: Part A of Titles I, II, III, and IV of the *Elementary and Secondary Education Act (ESEA)* — including school improvement grants provided under Section 1003 of Title I, Part A — as well as Title I, Part B of the *Individuals with Disabilities Education Act (IDEA)*. The study will also collect information on the allocation of funds provided under the Education Stabilization Fund (ESF) authorized under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act).

More specifically, tThe study will collect detailed fiscal data from a nationally representative sample of 400 school districts, including budgets, plans, expenditure data, and personnel and payroll data. In addition, the study will collect data on allocations to districts and schools to examine how the distribution of funds varies in relation to program goals and student needs; survey district and school officials to explore such issues as the types of services and resources that are provided through the federal funds, coordination across programs, and use of flexibility; conduct interviews in nine site visits to districts to obtain more in-depth data; and analyze fiscal data.

This package is the first of two OMB clearance requests for this study. This package requests approval for selection and recruitment of nationally representative samples of school districts and schools and collection of certain preliminary information from states (i.e., lists of subgrantees and suballocation amounts for each program, contact information for district program coordinators for each of the covered *ESEA* programs, and the state chart of accounts). A future submission will request clearance for the data collection instruments for this study. We anticipate beginning collection of state subgrantee lists and other preliminary information in May 2020 and launching the district- and school-level data collection in September 2020.

This package contains two major sections:

- 1. Supporting Statement for Paperwork Reduction Act Submission
  - Justification (Part A)
  - Description of Statistical Methods (Part B)
- 2. Appendices
  - Appendix A: Notification letters
  - Appendix B: Request for data State suballocations and other data
  - •

# **B.** Collections of information employing statistical methods

# 1. Respondent universe and selection methods

The study will select a sample of districts and schools that is representative of the population of interest, which includes all districts, and schools that receive funds from Part A of Title programs I, II, III, IV, and/or Title I, Part B of the *Individuals with Disabilities Education Act*. Exhibit 1 provides information about the universe of potential respondents, sample size (where applicable), and expected response rates.

| Data collection activity  | Universe of<br>respondents                      | Sample selection                           | Expected response rate       |
|---|---|--|------------------------------|
| Extant data and documents   | All states and the<br>District of Columbia      | All states and the<br>District of Columbia | 100 percent                  |
| <ul><li>Resource allocation data</li><li>Fiscal data</li><li>Personnel data</li></ul> | 17,554 districts<br>99,785 schools <sup>1</sup> | 400 districts<br>1,500 schools             | ≥ 80 percent                 |
| District and school surveys   | 17,554 districts<br>99,785 schools              | 400 districts<br>1,500 schools             | ≥ 90 percent<br>≥ 85 percent |
| Site visits   | 400 sampled districts<br>1,500 sampled schools  | 9 districts<br>36 schools                  | 100 percent                  |

# Exhibit 1. Universe of respondents and sample selection

<sup>1</sup>The estimated number of districts and schools in the universe of respondents for the resource allocation data and district and school surveys came from the NCES Common Core of Data (2018-19 school year). The number of districts includes all regular public school and independent charter districts, which excludes regional education service agencies and supervisory union administrative centers, state-operated agencies, and federally operated agencies. The number of schools includes all public schools (including all types of charter schools as well).

# District-level sampling criteria

The sample will be determined by first selecting 400 districts, stratifying based on district size (number of students), predominant locale (urban, rural, or suburban), region of the country, and poverty rate. Districts will have equal probabilities of selection within these strata, with the exception that we will include extremely large districts (defined as those in the top 0.1 percent of student count) with certainty. Stratifying based on these variables will allow us to ensure adequate representation of districts with important characteristics that may be excluded from the random sample. Random selection within the identified strata allows us to increase the generalizability of the results within each subgroup.

Exhibit 2 summarizes the district sampling framework.

|           | Number of         |          |              | Number of        |
|-----------|-------------------|----------|--------------|------------------|
| Region    | Locale type       | students | Poverty rate | sample districts |
| Northeast | City              | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           | Urban fringe/town | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           |                   | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
|           | Rural             | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
| Midwest   | City              | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           | Urban fringe/town | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           |                   | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
|           | Rural             | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
| South     | City              | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           | Urban fringe/town | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           |                   | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
|           | Rural             | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
| West      | City              | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           | Urban fringe/town | Large    | High         | 13               |
|           |                   |          | Low          | 13               |
|           |                   | Small    | High         | 12               |
|           |                   |          | Low          | 12               |
|           | Rural             | Small    | High         | 12               |
|           |                   |          | Low          | 12               |

#### Exhibit 2. Preliminary survey sampling framework for districts that receive federal funds

Note: The study team will specify operational definitions of each stratum after examining relevant district- and school-level data, likely using a natural cut point in the distribution to define large/small and high/low. We may decide to implement separate strata definitions for each locale type if we find sufficient variation within locales. We may decide to include additional strata if, for example, we find there are many districts in rural communities that have a large number of students. District poverty rates will be based on the most recent data available from the Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program. Data for other sampling strata will be obtained from the NCES Common Core of Data (CCD).

# School-level sampling criteria

The sample will include 1,500 K-12 schools selected from the universe of schools located within the 400 districts, excluding full-time virtual schools. The universe of eligible schools will be identified using the extant data and documents provided by states. Schools will be selected using a stratified random sampling approach to facilitate the generalizability of the results. The school sample will be stratified on three characteristics: school poverty rate (based on the proportion of students eligible for free and reduced-price lunches), proportion of students who are English learners (ELs), and proportion of students who receive special education services or have an individualized educational plan. We will oversample schools with a high proportion of students who are ELs or who receive special education services. This approach ensures that our analyses will be generalizable to both the larger population of schools and to these particular subgroups.

Assuming that clustering within districts and sample weighting reduce the effective sample size for schools by 30 percent, the proposed sampling plan results in a margin of error of no greater than 3.0 percent for a dichotomous outcome for the total population of schools and 6.1 percent for analyses including only subpopulations comprising one-quarter of the population of schools. For an interval level outcome, which we may create from continuous variables (e.g., establish quintiles to define the percentage of students eligible for free- or reduced priced lunch), corresponding margins of error are 6.0 percent and 12.2 percent of the population standard deviation.

After selecting the district and school samples the study team will generate sample weights for the responding schools and districts. An initial weight will be assigned as the inverse of the probability of selection. The team will then adjust the initial weights to account for the ways in which nonrespondent schools and districts may differ from responding schools and districts to avoid bias. See Section 3 for more information about how this will mitigate bias due to nonresponse.

# Site Visits

Nine districts will be selected from the district survey sample of 400 districts for site visits. To determine the site visit sample, the study team will select a purposive stratified sample of three large, three medium, and three small districts, selecting districts in each size stratum that vary in the proportion of students who are from low-income families, are English learners, or are identified as having disabilities.

Given the small sample size, it will not be possible to generalize the findings from the site visits to the nation. Instead, we will use the information gathered in these visits as examples to illustrate the findings from the nationally representative survey.

The study will select an average of four schools within each of the nine districts for site visits, with at least one elementary and one secondary school in each district to capture variability in school level. Then, in consultation with district staff, schools will be selected to ensure variation in the proportion of populations served by federal funds (e.g., low-income, limited English proficiency, or special education including type of disability). The study team expects to visit at least one school per district with a center-based program or other program that serves a larger special education population where possible. Exhibit 4 provides a summary of the sampling framework for selecting district- and school-level sites for case studies.

# Exhibit 4. Sampling variables used in case study selection

- 1. Select nine case study districts to provide variation on:
  - a. District size
  - b. Proportion of low-income population served
  - c. Proportion of English learners
  - d. Proportion of special education students
  - e. Racial/ethnic composition

2. Within the 9 district sites, select a total of 36 case study schools (with an average of 4 schools per district to provide variation on:

- a. Proportion of low-income population served
- b. Proportion of English learner students served
- c. Proportion and variation by disability in the special education populations served
- d. School level (elementary, middle, high school)
- e. Racial/ethnic composition

# 2. Procedures for the collection of information

# State extant data and documents (current ICR)

State-level extant data will be collected in two phases. After OMB approval for the study design and the collection of preliminary state-level information, all 50 states and the District of Columbia will receive a letter by email requesting lists of subgrantees and suballocation amounts for each program, the state chart of accounts for 2019-20, and a cross-walk from F-33 survey revenue and expenditure data reporting codes to the state chart of accounts. Appendix B includes this letter as well as instructions on how to submit the data, which will be included as an attachment to the email request.

The second phase of extant data will occur after OMB approval for the surveys, interviews, and other data collection instruments. States that have districts that were randomly selected into the resource allocation data and survey samples will receive a second email asking for district grant applications for the sampled districts. In addition, in order to compile a comprehensive national dataset on school-level expenditures (which states are required to make publicly available through state and district report cards), we will seek to harvest machine-readable data from SEA websites and, in states where these data are not readily accessible in a machine readable format, we will ask the states to provide such data electronically.

# District- and school-level data collection (later ICR)

The district-and school-level data collection will include three components: 1) collection of fiscal data through resource allocation workbooks from the nationally representative sample of 400 districts; 2) surveys of the 400 districts and 1,500 schools within those districts; and 3) site visits to conduct interviews with district and school staff in the nine case study districts and a total of 36 schools within those districts.

- **Resource allocation data.** The study will collect detailed fiscal data on the uses of federal education funds, including program budgets and plans, expenditure data, and personnel and payroll data<sup>1</sup>, from the nationally representative sample of school districts. The team will ask district staff to provide these data for both the district at large and for the individual schools included in the sample. Data will be collected via an Excel workbook that has been customized to the accounting codes and conventions used in each state. Districts will also be given the option to submit the data in a format of the respondent's choosing that the study team can adapt to the workbook.
- **District and school surveys.** The study will administer surveys to district administrators and school principals to supplement the fiscal data on how they use federal funds and how they use available flexibility and coordinate the uses of funds from different funding sources.
- Site visits. In nine sites, the study team will conduct in-person interviews with appropriate district and school staff to obtain detailed information on resource allocation practices and patterns. Prior to site visits, the study team will collect the survey data relevant to each district and asked staff at selected sites to gather documentation describing their programs. Site visitors will bring the survey results for individual case study sites to the interviews so that the interviews can build upon the survey information and probe for additional detail about the practices and issues identified in the survey.

# 3. Methods to maximize response rates and to deal with issues of nonresponse

<sup>&</sup>lt;sup>1</sup> Personnel data are public information but typically are not readily accessible online.

To minimize respondent burden and to facilitate collection of valid and reliable data, respondents will receive a webinar that provides an overview of data collection instruments (i.e., details of requested budget documents and how to complete the survey), operational definitions for easy reference in the surveys, and a regularly updated frequently asked questions (FAQ) guide. In addition, project staff with will be available to respond to email or phone questions within 24 business hours of receiving a question. Team members will be assigned to regions so that participating districts can have a consistent individual point of contact to answer their questions and support their data submission. Respondents ongoing questions will receive one-on-one video or phone meetings to discuss their individual needs.

A week after the resource allocation data workbook respondents will receive a follow-up email that includes a reminder of the due date and invites them to contact the data collection administrator with any questions or concerns. Follow up with nonrespondents will continue via email approximately once a week for three weeks. Persistent nonrespondents will be receive additional follow up by telephone. Similar approaches in past surveys have yielded very high response rates, but bias due to nonresponse is still a possibility. To mitigate this potential for bias, SRI will fit a logistic regression to model the probability of responding as a function of district characteristics. Each respondent's initial weight (described above) will be modified using the estimated probability of response (i.e., multiplying the initial weight by the inverse of the probability of response) to generate a final weight. Statistical analyses will then be weighted by the final weight to obtain conclusions that are representative of the universe of eligible districts.

# 4. Tests of procedures or methods to be undertaken to minimize burden and improve utility

Both the resource allocation data workbooks and the district and school surveys will be piloted with up to nine individual respondents. These pilot tests help researchers understand how instruments can be improved by providing information about clarity of questions, specificity of measures, and the overall user-friendliness of the instruments. Follow-up phone calls with pilot respondents will help the study team learn more about the respondents' understanding of the text of each item, definitions of key terms, precision and completeness of the response options, and whether important questions are missing. This feedback will be incorporated into revisions of the instruments.

5. Names and telephone numbers of individuals consulted on statistical aspects of the design and the names of the contractors who will actually collect or analyze the information for the agency

| Name                    | Project role                                      | Organization | Phone number |
|-------------------------|---|--------------|--------------|
| Ashley Campbell         | Project director                                  | SRI          | 720-389-5906 |
| Jaunelle Pratt-Williams | Deputy project director                           | SRI          | 703-247-8624 |
| Julie Harris            | Study design and quantitative research expert     | SRI          | 703-247-8619 |
| Rebecca Schmidt         | Senior advisor                                    | SRI          | 703-247-8491 |
| Robert (Bob) Palaich    | Deputy project director                           | APA          | 720-227-0072 |
| Mark Fermanich          | Data collection oversight                         | APA          | 720-227-0101 |
| Justin Silverstein      | Design, instrumentation, and analysis contributor | APA          | 720-227-0075 |

# Exhibit 5. Staff responsible for collecting and analyzing study data