# SUPPORTING STATEMENT PART B FOR PAPERWORK REDUCTION ACT SUBMISSION

## **B.** Collection of Information Employing Statistical Methods

The agency should be prepared to justify its decision not to use statistical methods in any case where such methods might reduce burden or improve accuracy of results. When Item 7 of the IC Data Part 1 is checked "Yes," the following documentation should be included in the Supporting Statement to the extent that it applies to the methods proposed:

1. Describe the potential respondent universe (including a numerical estimate) and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, state and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

The target respondent universe for the Use of Funds District Survey is Title II-A subgrant recipients. For the 2022 survey administration, we will draw the sample from a list sampling frame constructed from a pre-release version of the 2020–21 National Center for Education Statistics (NCES) Common Core of Data (CCD) Public Elementary and Secondary Agency Universe File, which is expected to be available in late 2021. Our approach for 2022 will follow the sampling method used for previous years. The sample frame for the 2021 survey administration (based on the 2019–20 CCD) included approximately 17,300 traditional school districts and charter school districts, of which about 13,300 (or 77%) were classified as traditional school districts and about 4,000 (23%) as charter school LEAs. To be eligible for inclusion in the frame, school districts must be operational during the school year, have students enrolled, and be located in one of the 50 states, the District of Columbia (DC), or Puerto Rico (collectively referred to as states). Because the poverty measure aligns well with the measure used to assign Title II-A funds, the sample design uses child poverty data from the 2019 U.S. Census Bureau Small Area Income and Poverty Program (SAIPE). Specifically, we will use the estimated percentage of children ages 5 to 17 years old living in

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School districts excluded from the respondent universe are those outside of the 50 states; DC; or Puerto Rico (e.g., American Samoa, BIE, DoDEA, Guam, Northern Mariana Island, Virgin Islands); those that are neither regular school districts nor charter school districts; those that were closed or otherwise not operational during the school year; and those with missing enrollment or an enrollment of 0 students.

poverty. To ensure the sample is representative of Title II-A recipients, we will stratify by poverty status (high/not high)<sup>2</sup> to sample both higher and lower poverty districts.

The sample approach includes a target response rate of at least 80 percent, a response rate in line with the achieved response rates in past administrations of this survey. Based on those estimates and the target response rate, we expect to sample approximately 5,000 traditional school districts, representing each of the 50 states, DC, and Puerto Rico and a nationally representative sample of approximately 500 charter school districts. By including roughly 33 percent of all traditional and charter school districts, this sample total of 5,500 local education agencies (LEAs) limits respondent burden while still allowing the Department to produce reliable descriptive statistics such as means, proportions, and totals at both the state level (traditional school districts) and national level (traditional and charter school districts).

### **Traditional School District Sample**

For the traditional school districts,<sup>3</sup> we will stratify the frame by state to produce state-level estimates with the desired precision. We will use a minimum detectable difference power analysis to determine an appropriate sample size allocation for the traditional districts. Each state with at least 60 target sampled traditional school districts will have a minimum of eight strata (two size strata crossed by two urbanicity strata crossed by two poverty strata).<sup>4</sup> To prevent fragmentation of strata, each stratum must include at least seven to eight sampled districts. States with at least 120 target sampled traditional school districts will have 16 strata (2 size strata crossed by 4 urbanicity strata crossed by 2 poverty strata) instead of 8.<sup>5</sup> To ensure adequate representation and minimize sampling error for each state (even with some nonresponse), in states with fewer than 60 traditional school districts, the sample will include a census of all districts.

For stratification by size within each state, the sampling method involves the proportional allocation using the square root of the district size of student enrollment. This approach allows the survey results to provide estimates not only of amounts of funds used but also the proportions of districts with certain attributes that use funds in different ways. After allocating the state sample to size-strata proportionally to the sums of the size measures, an equal probability systematic sample using the zip code as the sort variable will be selected from each stratum, in order to obtain a geographical spread of districts in the sample. The strata allocation for traditional school districts is presented in Table B-1.

<sup>&</sup>lt;sup>2</sup> Poverty strata were defined by the estimated percentage of children ages 5 to 17 years old in the district who are in poverty. Each state's median district poverty percentage was used to create two poverty strata (above and below the median).

<sup>&</sup>lt;sup>3</sup> Traditional school districts are the local government administrative authority that governs the education system at a specified local level on behalf of the public and the state. Within the CCD data, these are districts types 1 and 2. However, in the case of New York City and Vermont, they are type 3. Based on past experience, New York City and Vermont will sample the supervisory union because the component districts under supervisory unions are unable to respond to the Use of Funds District Survey.

<sup>&</sup>lt;sup>4</sup> The two size strata will be formed by using the median of the square root of the district size of student enrollment across the state. The two urbanicity strata will be formed by grouping the four high-level locale categories (city, suburban, town, and rural) into two categories (city/suburban vs. town/rural). The two poverty strata will be formed by using the median district percentage of poor students across all districts in the state.

<sup>&</sup>lt;sup>5</sup> States with a target sample size of at least 120 districts will have 16 strata, and states with a target sample size of between 60 and 120 districts will have 8 strata.

Table B-1. Strata allocation for traditional school districts (2020–21 sample)

Target sample size	Total number of strata	Number of size strata	Number of urbanicity strata	Number of poverty strata
< 60	1	1	1	1
60 - 120	8	2	2	2
> 120	16	2	4	2

The sample allocation per state for school year 2020–21 is presented in Table B-2 along with the frame size based on the 2019–20 CCD prerelease data; the target sample size (i.e., actual sample size given the overall objective of a sample of 5,000 traditional school districts); target completed surveys (i.e., the desired number of completed surveys given the overall objective of a sample of 5,000 traditional school districts with an estimated 80 percent response rate); and the number of strata given the target sample size in a particular state. For the 2021–22 sample, we will update the sample allocation per state using the 2020–21 CCD data.

Table B-2. Frame size and sample allocation for traditional LEAs, by state (2020–21 sample)

	Frame size	Target sample size	Target completed	Number of strata
State			surveys	
Alabama	138	96	77	8
Alaska	53	53	42	1
Arizona	214	113	90	8
Arkansas	234	116	93	8
California	991	152	122	16
Colorado	178	106	85	8 8 1
Connecticut	169	104	83	8
Delaware	19	19	15	
District of Columbia	1	1	1	1
Florida	67	66	53	8
Georgia	180	106	85	8 8 1
Hawaii	1	1	1	1
Idaho	115	88	70	8
Illinois	853	149	119	16
Indiana	294	124	99	16
lowa	327	127	102	16
Kansas	286	123	98	16
Kentucky	172	105	84	8
Louisiana	72	69	55	8
Maine	191	109	87	8
Maryland	24	24	19	1
Massachusetts	321	127	102	16
Michigan	537	140	112	16
Minnesota	329	127	102	16
Mississippi	140	96	77	8
Missouri	515	140	112	16
Montana	399	133	106	16
Nebraska	244	118	94	8
Nevada	19	19	15	1
New Hampshire	165	103	82	8

New Jersey	562	141	113	16
New Mexico	89	78	62	8
New York	719	146	117	16
North Carolina	120	90	72	8
North Dakota	173	105	84	8
Ohio	617	143	114	16
Oklahoma	511	139	111	16
Oregon	175	105	84	8
Pennsylvania	499	139	111	16
Puerto Rico	1	1	1	1
Rhode Island	36	36	29	1
South Carolina	81	74	59	8
South Dakota	149	99	79	8
Tennessee	147	98	78	8
Texas	1,022	152	122	16
Utah	41	41	33	1
Vermont	156	101	81	8
Virginia	132	94	75	8
Washington	298	124	99	16
West Virginia	55	55	44	1
Wisconsin	420	134	107	16
Wyoming	48	48	38	1
Total	13,299	5,000	3,997	

NOTE: Total sample sizes may not match target sample sizes due to rounding.

SOURCE: National Center for Education Statistics, Common Core of Data, Local Education Agency (School District) Universe Survey Data, 2019-20 prerelease file.

# **Charter School District Sample**

For the sample of charter school districts, we will stratify the frame by enrollment size, urbanicity, and poverty estimates. For the size strata, the square root of the district size of student enrollment will be used to balance the importance of including large districts while also including a reasonable number of small districts. For the poverty estimates, because charter school districts are generally not included in the SAIPE district poverty estimates, we will use Census tract child poverty estimates from the American Community Survey. In this sample, we will target a minimum of 12 charter school districts per stratum. For a target sample of 500, charter school districts will be allocated to 40 strata formed by crossing five size strata with four urbanicity strata with two poverty strata (Table B-3). As with the traditional school district sample, an equal probability sample will be selected from each stratum.

Table B-3. Strata allocation for charter school LEAs (2020-21 sample)

Target sample	Total number of	Number of size strata	Number of urbanicity	Number of poverty strata
3126	strata		strata	
500	40	5	4	2

<sup>&</sup>lt;sup>6</sup> Charter school districts are education units created under the state charter legislation; these districts operate only charter schools and are not under the administrative control of another LEA, and operate only charter schools. Within the CCD, these are LEA type 7.

<sup>&</sup>lt;sup>7</sup> The five size strata will be formed by using quintiles of the square root of the district size of student enrollment. The four urbanicity strata will be formed by four high-level locale categories (city, suburban, town, and rural). The two poverty strata will be formed by using the median district percentage of poor students across all charter LEAs in the nation.

- 2. Describe the procedures for the collection of information, including:
  - Statistical methodology for stratification and sample selection.
  - Estimation procedure.
  - Degree of accuracy needed for the purpose described in the justification.
  - Unusual problems requiring specialized sampling procedures, and
  - Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

### **Notification of the Sample**

We will send a notification letter via email to the district contact for Title II, Part A identified by the state education agency (SEA) Title II-A coordinator (see Appendix C) explaining the study and emphasizing the importance of the district's response to this data collection. The notification letter also will include login information. School districts receiving educational funds are obligated to participate in Department evaluations (Educational Department General Administrative Regulations (EDGAR) (34 CFR § 76.591)). The district letter will note the mandatory nature of their response.

The notification email will be sent to district contacts beginning in April 2021 and will include a URL to the web-based data collection form and reference an invitation email they will receive shortly after the letter is mailed. The district survey URL will include embedded login information to reduce the number of communications from the study team to securely provide login information separate from the survey URL. This method of providing login information also reduces the burden of sharing access to the survey within the district if a different respondent is identified as the best person to complete the survey.

We will monitor completion rates, review the survey responses for completeness through the field period, and follow-up by email and telephone as needed to answer questions and encourage completion.

# Statistical Methodology for Stratification and Sample Selection

The study will include all nationally- and state-representative sample of traditional school districts and a nationally-representative same of charter school districts. Based on experience, the study design assumes that 80 percent of school districts will respond. Therefore, the study team plans to construct weights to account for district-level nonresponse.

#### **Estimation Procedures**

We will develop survey weights for the LEA survey, starting with the base weight (i.e., the inverse of the sampling probability), and adjusting for unit nonresponse. The nonresponse weighting adjustment will use the response propensity score method to accommodate the rich auxiliary information available in the CCD-based sampling. We will use the jackknife variance estimator to estimate the variance of LEA survey estimates by creating variance strata and primary sampling units within the strata. This is important for unbiased variance estimation for complex survey designs such as this study. The sample design and weighting procedures described here were established starting in the 2018–19 data collection and have been applied successfully in three rounds of data collection. We have refined the procedures to reflect updates in how the data in the CCD are reported.

# **Degree of Accuracy Needed.**

For the sample of traditional school districts, we will calculate an effective sample size using a design effect of 1.3 to account for variable sampling weights and a standard error of 5 percent. We expect to achieve a precision level of 10 percent coefficient of variation (two times the standard error) for state-level estimates for traditional school districts, so that the total of all states is 5,000 sampled districts.

For the sample of charter school districts, we will stratify the frame by enrollment size, urbanicity, and poverty estimates with the desired precision of about 8 percent coefficient of variation (two times the standard error) at the national level.

# **Universal Problems Requiring Specialized Sample Procedures.**

There are no unusual problems requiring specialized sampling procedures.

# Use of Periodic (less than annual) Data Collection to Reduce Burden.

Section 2104(b) of ESEA requires school districts to describe how Title II, Part A funds are used. To understand how school districts are using Title II, Part A funds and if school districts are improving equitable access to teachers for low-income and minority students as outlined under Section 2104(b), the Department requires information on an annual basis.

3. Describe methods to maximize response and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The study team will work with school districts to explain the importance of this data collection effort and to make it as easy as possible to comply. We will provide the Office of

Management and Budget clearance information along with a clear description of the study and its importance. We will be courteous, yet persistent in following up with participants who do not respond in a timely manner to our attempts. We also will be very flexible gathering the data, allowing different people to respond if necessary. Project staff will monitor completion rates and follow up by email and telephone as needed to answer questions and encourage completion. Throughout the data collection period, project staff will review data provided for completeness and follow up with respondents with any questions about data and provide respondents with an opportunity to update data if needed.

4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

The Westat study team conducted a pilot test of the district survey with seven respondents and held debriefing sessions during October and November 2021 to ensure that questions are clear and that the average completion time is within expectations. Based on the feedback from these districts, the study team added or revised text in the survey instructions and response options for several survey questions to improve clarity. Based on the respondents' reported time to complete the survey, the study team also increased the estimated average time to complete the survey from 120 minutes to 180 minutes.

 Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other persons who will actually collect and/or analyze the information for the agency.

Joel Wakesberg, Westat Statistician, and Lou Rizzo, Westat Senior Statistician, were consulted on the statistical aspects of the survey sample design.