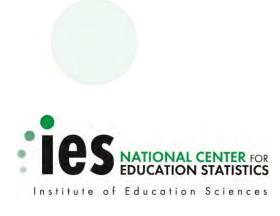
# Private School Universe Survey (PSS): Survey Documentation for School Year 2015–16



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# I. Overview

The Private School Universe Survey (PSS) is conducted by the National Center for Education Statistics (NCES) on behalf of the U.S. Department of Education in order to collect basic information on American private elementary and secondary schools. PSS grew out of a proposal in 1988 to develop a private school data collection that would improve on the sporadic collection of private school data dating back to 1890 and improve on commercially available private school sampling frames. PSS was first collected by the U.S. Census Bureau in the 1989–90 school year, with data collections every 2 years since.

The target population for PSS is all schools in the United States that are not supported primarily by public funds, provide classroom instruction for one or more of grades kindergarten through 12 (or comparable ungraded levels), and have one or more teachers. Organizations or institutions that provide support for homeschooling but do not provide classroom instruction are not included.

# **Purpose and Content of the Survey**

PSS is currently designed to generate biennial data on the total number of private schools, teachers, and students, and to build a universe of private schools to serve as a sampling frame for NCES sample surveys.

The 2015–16 PSS consisted of a single school questionnaire designed to be filled out by school administrators. Data collected included enrollment by grade, enrollment by race/ethnicity and sex, number of high school graduates, number of teachers, program emphasis, school religious orientation or affiliation, association membership, existence and type of kindergarten program, number of days in the school year and length of the school day, and whether the school had a library media center. A copy of the 2015–16 PSS questionnaire is contained in appendix B. The 2015–16 PSS questionnaire content is unchanged from that of 2013–14.

# Content of the Documentation

This documentation contains chapters covering frame creation, data collection procedures, response rates, data preparation and imputation, weighting and variance estimation, the quality of PSS data, information on data files, and user notes and cautions.

Information in the chapters is supported by material in the appendices. Appendix A contains the key terms for the 2015–16 PSS, appendix B contains a copy of the 2015–16 PSS questionnaire, appendix C lists the private school lists that were received and processed, appendix D lists the 2015–16 area frame counties, appendix E contains selected unit and item response rates, appendix F contains the counts of pre-edit rejections of PSS data and counts of changes made during the pre-edit, appendix G contains the donor imputation variables and counts of changes made during editing and imputation, and appendix H contains the variable categories used in developing adjustment factor cells for weighting.

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# II. Frame Creation

Because PSS attempts to include every private school in the United States, a universe list of private schools meeting the PSS definition (i.e., not supported primarily by public funds, providing classroom instruction for one or more of grades kindergarten through 12—or comparable ungraded levels, and having one or more teachers) must be created. Since 1983, NCES has used a dual frame approach for building the private school universe (Beller 1984). The dual frame consists of a list frame and an area frame. The combination of the list frame schools and additional schools identified in the area search comprised the schools included in the 2015-16 PSS.

# **List Frame**

The list-building component was the primary means for improving coverage of private schools. The basis for the 2015-16 PSS list frame was the 29,245 private schools from the 2013–14 PSS list frame (table 1). Additionally, 4,670 programs identified in the 2013–14 PSS as prekindergarten only were included in case any of these programs included at least a kindergarten in the 2015-16 school year; 28 programs temporarily without students in 2013-14 were also included in case they had students in 2015-16. In order to provide coverage of private schools founded since 2013 and to improve coverage of private schools existing in 2013, the Census Bureau requested membership lists from 31 private school associations and religious denominations; 30 of these lists were received and processed. (See table C-1 in appendix C.) The departments of education from each of the 50 states and the District of Columbia were asked to provide lists of private schools, and 46 lists were received and processed. Additional private schools that submitted requests to NCES to be included in PSS were added to the list frame.

Table 1. Number and percentage of PSS cases, by source: 2015–16

Source	Number	Percent	
Total	42,389	100.0	
List frame	39,397	92.9	
2013–14 PSS	35,022	82.6	
Base list	29,245	69.0	
Prekindergarten only cases	4,670	11.0	
Temporarily without students only cases	28	0.1	
2015 lists	4,375	10.3	
Traditional lists <sup>1</sup>	4,375	10.3	
Area frame	2,992	7.1	

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Schools on private school association membership lists and the state lists were compared to the base list, and any school that did not match a school on the base list was added to the NCES private school universe list. The total number of private schools added by the 2015-16 list frame operation was 4,375 (table 1).

<sup>&</sup>lt;sup>1</sup>Traditional lists are those received from state departments of education or private school associations.

# **Area Frame**

To identify private schools that might have been overlooked in the list-building component, a group of geographic areas was selected to be searched for private schools. The United States is divided by the Census Bureau into 2,062 primary sampling units (PSUs), each PSU consisting of a single county, independent city, or group of contiguous counties. The area frame consists of a sample of these 2,062 PSUs.

### **Certainty PSUs**

The 8 PSUs (Los Angeles and Orange Counties, California; Harris County, Texas; Cook County, Illinois; Queens and Kings Counties, New York; Miami-Dade County, Florida; and Philadelphia County, Pennsylvania) with the highest private school enrollment in the 2009 American Community Survey were included in the 2015-16 PSS area frame with certainty.

## **Noncertainty PSUs**

From the 2,054 noncertainty PSUs 116 PSUs were selected independently of the 2013-14 PSU sample. The strata for selecting the PSUs were defined the same way as in the 2013–14 PSS area frame design. Initially, 16 strata were created: region (Northeast, Midwest, South, and West), metro/nonmetro status within region, and high/low percentage of private enrollment within metro/nonmetro status (i.e., above or below the median private school enrollment within each metro/nonmetro status). The high/low cutoffs were then adjusted so as to more nearly equalize the expected variance between the two strata. The purpose of this was to try to lower the overall standard errors resulting from the sample of PSUs.

Sample sizes were determined for each metropolitan statistical area status within each region, proportional to the measure of size. Some adjustments were made so that each sample size was an even number and sample size was evenly distributed between the high and low groups. This was done in order to have an even number of cases in each stratum (with a minimum of two) for pairing purposes for calculating the PSS variances.

### **Total Area Frame Sample**

A total of 124 PSUs (155 counties) were in the area sample. The 2015-16 PSS area frame counties are listed in table D-1 of appendix D. Within each of these PSUs, the Census Bureau attempted to find all eligible private schools. A block-by-block listing of all private schools in a sample of PSUs was not attempted. Rather, National Processing Center (NPC) staff created the frame by using such sources as yellow pages (yp.com), local Catholic dioceses, local education agencies, and local government offices. The Census Bureau also obtained a list of eligible private schools for area frame sample PSUs from the InfoUSA database created by Infogroup.

Once the area search lists were constructed, they were matched with the list frame. Schools already on the list frame were deleted from the area frame. Schools that did not match the list frame were considered part of the area frame. A total of 2,992 schools were added to the universe from the area frame resulting in a total frame of 42,389 schools (table 1).

<sup>&</sup>lt;sup>1</sup> The PSS sample PSUs were selected systematically with probabilities proportional to the square root of the 2009 American Community Survey PSU private school enrollment.

# Changes in Frame Creation Methodology from 2013-14 to 2015-16

There was one change in PSS frame creation methodology between 2013–14 and 2015-16.

During previous cycles, the Area Search Frame (ASF) creation was performed by the field staff. Field offices would research the PSU's that fell in their regions. This cycle, this effort was centralized at NPC as a clerical operation. All activities were the same except for the fact that physical yellow page phone books were replaced with online yellow page resources, primarily yp.com.

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# III. Data Collection

# **Time Frame of the Survey**

The 2015–16 PSS data were collected during the 2015–16 school year. Table 2 shows the specific data collection activities and the time frame when each occurred.

Table 2. PSS data collection time schedule: 2015–16

Activity	Date(s)
First mailing: Internet letter (nonexperimental cases) and PSS-1 (experimental and Amish cases)	October 1, 2015
Production deployment of Internet data collection	October 1, 2015-June 10, 2016
Mail first reminder postcard	October 14, 2015
Second mailing of the questionnaires to experimental and Amish cases, and first mailing to nonexperimental cases	October 28, 2015
Mail second reminder postcard	December 2, 2015
Mail reminder Internet letter	February 10, 2016
CATI data collection for list frame cases	January 13-February 26, 2016
CATI data collection for area search frame cases	February 9-March 18, 2016
Conduct no phone field follow-up	January 13-February 24, 2016
Conduct field follow-up—CATI nonrespondents	April 4–May 13, 2016
Data collection closeout	June 3, 2016

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# **Data Collection Procedures**

The 2015–16 PSS used a mailout/mailback and Internet data collection methodology. Follow-up of nonresponding cases was conducted first by computer-assisted telephone interviewing (CATI), by Census Bureau field representatives, and then an Internet reminder letter to all schools not followed-up by field representatives.

### **Initial Mailing and Reminder Post Card**

The 2015–16 Private School Universe Survey (PSS) data collection began on October 1, 2015 with the mailout of a letter to most private schools describing how to respond to the 2015-16 PSS online, and including a userid and password for the online option. Additionally, Amish, Mennonite, and experimental schools were mailed their first paper questionnaire (table 2).

A reminder postcard was sent to all schools 2 weeks after this initial mailout (table 2).

### **Second Mailings and Reminder Postcard**

The second mailing of survey material was sent out on October 28, 2016. As a result, the Amish, Mennonite, and experimental schools received their second paper questionnaire. Additionally, schools that were nonresponsive to the invitation to complete the interview via the internet, received their first paper questionnaire.

A reminder postcard was sent to all schools 5 weeks after this second mailout (table 2).

On February 10, 2016, 10,598 cases that were sent a reminder letter offering the internet option. This mailout included the experimental schools that had not yet responded and nonexperimental schools. The PSS (mail and Internet) return rate before the start of CATI (January 13, 2016) was 47 percent.<sup>2</sup>

# Nonresponse Follow-up

### Telephone Follow-up

Telephone Follow-up took place in two waves. The first wave was telephone interviewing for PSS schools that had not responded by mail but for which phone numbers were available. This wave initiated on January 13, 2016. The second wave was for area frame cases that were identified in the area frame creation, starting on February 9, 2016. Between the two waves, there were a total of 21,133 schools in the CATI workload. Telephone interviewing took place at the Census Bureau's CATI facilities located in Tucson, Arizona, and Jeffersonville, Indiana. CATI follow-up for the list frame PSS cases continued through February 24, 2016, and through March 18, 2016, for the area search frame schools.

Initially, there were 21,133 cases selected for telephone follow-up, but 928 were late mail returns<sup>3</sup> prior to the start of CATI and were not assigned to a telephone center. Twenty-four percent of the total 21,133 CATI workload cases were completed by CATI interviews, 11 percent were out-of-scope (i.e., were not eligible schools), 57 percent were noninterviews (i.e., cases that refused to participate or did not respond), and 8 percent were late mail returns after the start of CATI (table 3).

Table 3. Number and percentage of PSS cases in telephone follow-up, by response status and telephone center: 2015–16

		Comp	leted						_
	Total	interv	iew	Out-of-	scope	Noninte	rview	Late mai	l return
Telephone center	workload	Number	Percent	Number	Percent	Number 1	Percent	Number	Percent
Total	21,133	5,047	23.9	2,331	11.0	12,067	57.1	1,688	8.0
Telephone center assigned	20,205	5,047	25.0	2,331	11.5	12,067	59.7	760	3.8
Jeffersonville, Indiana	7,670	2,014	26.3	860	11.2	4,467	58.2	329	4.3
Tucson, Arizona	12,535	3,033	24.2	1,471	11.7	7,600	60.6	431	3.4
Telephone center not									
assigned (LMR)	928	†	+	†	†	†	†	928	100.0

<sup>†</sup> Not applicable.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

### Assigning Field Follow-up Priority

Prior to field and telephone follow-up, all nonresponding cases were assigned a field follow-up priority. This priority was intended to determine which cases should be sent for field follow-up and to assist field representatives to prioritize cases during field follow-up. Nonresponding cases were assigned to one of the following priority categories:

<sup>&</sup>lt;sup>2</sup>The return rates cited in the data collection portion of the documentation are unweighted return rates calculated by dividing the total number of returns (interviews, refusals, and out-of-scopes) less undeliverable as addressed/blank questionnaires by the total number of schools.

<sup>&</sup>lt;sup>3</sup>Late mail returns were questionnaires returned after the closeout of the second mailout period.

Priority = 1 (Always followed-up) if

- the school was Amish or Mennonite; or
- the school was from the previous PSS and had no phone number;

Priority = 2 (Most likely to be followed-up) if

- the school was from the area frame operation and had a phone number; or
- the school was an interview from the previous PSS; or
- the school was a new list frame case added after the mailout

Priority = 3 (Less likely to be followed-up) if

- the school was from the area frame operation and had a phone number; or
- the school was a noninterview from the previous PSS, excluding unable to contact cases; or
- the school was included in the mailout, had a phone number and was a list frame add or an area frame case

Priority = 4 (Least likely to be followed-up) if

- the school was a list frame add or area frame case and had no phone number; or
- the school was a noninterview from the previous PSS, that was an unable to contact case; or
- the school was an out-of-scope from the previous PSS

Priority = 5 (Will not be followed-up) if

greater than 5 call attempts were made during telephone follow-up

### Field Follow-up

On February 17, 2016, the Census Bureau's 6 Regional Field Offices began in-person no-phone followup on 1,505<sup>4</sup> PSS cases that did not have a telephone number listed. Follow-up of these schools continued through February 24, 2016. Of the 1,505 schools, approximately 74 percent were completed interviews, 9 percent were out-of-scope, 9 percent were noninterviews, and the remaining 7.6 percent were late mail returns (table 4).

Table 4. Number and percentage of PSS cases in field follow-up, by response status: 2015–16

		Comp	leted						
	Field_	interv	iew	Out-of-	scope	Noninte	erview	Late mai	l return
Activity	workload	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total field	4,031	1,941	48.2	620	15.4	228	5.7	1242	30.8
Schools with no phone									
number	1,505	1,118	74.3	139	9.2	134	8.9	114	7.6
Mail and computer- assisted telephone interviewing (CATI)									
nonresponse	2,526	823	32.6	481	19.0	94	3.7	1128	44.7

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015-16.

Following CATI closeout of list and area search frame schools in mid-March, additional follow-up of 2,526 telephone nonresponse cases was conducted by Census Bureau field representatives. Field follow-

 $<sup>^4</sup>$  The 1,505 cases were schools with no telephone numbers and had been assigned priority = 1.

up continued through May 13, 2016. Of the 2,526 mail and telephone nonresponse cases sent to field follow-up, approximately 33 percent were completed interviews, 19 percent were out-of-scope, 4 percent were noninterviews, and the remaining 45 percent were late mail returns (table 4).

### Internet Letter Follow-up

On February 10, 2016, 10,598 nonresponding cases that were not refusals and not included in the field mail and telephone nonresponse follow-up were sent a final letter offering the Internet option. Internet data collection continued until June 10, 2016.

# **Interviewer Training**

CATI interviewers and Census Bureau regional office representatives conducting the PSS field follow-up received training on the content and data collection procedures for the 2015-16 PSS. CATI operator training consisted of 1 hour of self-study and 3 hours of classroom instruction conducted at the Census Bureau's CATI facilities in Tucson, Arizona, and Jeffersonville, Indiana. The Tucson training had 45 staff attend and the Jeffersonville training had 45 attendees. Training for field representatives consisted of 2 hours of self-study. Eight hundred and twenty-seven field representatives completed training.

### Status at the End of Data Collection

By the end of data collection, Census Bureau staff was able to reconcile the status (interview, noninterview, or out-of-scope case) for 100 percent of PSS cases. At the end of data collection, 60 percent (22,832) of the 38,120 cases were interviews, 22 percent (8,426) were out-of-scope, and 18 percent (6,862) were noninterviews (table 5). The 6,862 noninterviews consisted of 3,488 refusals and 3,374 nonrespondents (schools that never responded).

Of the 22,832 completed interviews, 70 percent were completed during the mailout period (40 percent by mail and 21 percent by Internet), 20 percent were completed during telephone follow-up, 8.5 percent were completed during field follow-up, and 10 percent were late mail returns (table 6).

Table 5. Number and percentage of PSS cases, by interview status at end of data collection: 2015-16

Interview status	Number	Percent
Total	38,120	100.0
Completed interview	22,832	59.9
Out-of-scope	8,426	22.1
Noninterview	6,862	18.0
Refusal	3,488	9.2
Other noninterviews	3,374	8.9

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Table 6.	Number and percentage of completed PSS interviews at end of data collection, by mode of data
	collection: 2015–16

Mode of data collection	Number	Percent
Total	22,832	100.0
First mailout	3,613	15.8
Second mailout	5,497	24.1
Late mail returns	2,342	10.3
Internet	4,795	21.0
Computer-assisted telephone interviewing (CATI)	4,644	20.3
Field staff	1,941	8.5

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015-16.

# 2015–16 PSS Branding Experiment

A branding experiment was conducted during for the 2015–16 PSS. The goal of the experiment was to test whether paper questionnaires branded with the Census logo and signature from the Bureau's director may improve response rates in comparison to paper questionnaires that carry the NCES logo and signatures from the Acting Commissioner of NCES.

This experiment consisted of two groups: a treatment group and a control group. Five thousand schools received mailing material that were branded with the Census Bureau logo and signature from the Bureau's director, and 5,000 schools received mailing materials that were branded with the NCES logo and signatures from the Acting Commissioner of NCES. The 10,000 experimental cases were not granted access to the internet instrument until the end of the mail out operations (February 10, 2016). This was to assure that schools did not receive branding assignments that were not intended for them, as the internet instrument was strictly NCES branded. In order to increase response rate among these cases, post experiment, these schools were sent an internet invite letter to provide this mode as an additional option for responding. All non-Amish/Mennonite schools received internet access in the 2015–16 PSS.

Response rates during the experimental time frame (October 1, 2015 - January 13, 2016) were compared for each of the branding groups. An independent samples two-tailed t-test was used to determine if the difference between the response rates was significant at the 5 percent level. In addition to testing the overall response rates, the response rates between the branding groups by the three-level private school type—Catholic, other religious, and nonsectarian were also tested.

There were no significant differences in response rates found between the two branding groups at the 5 percent significance level (table 7). Therefore, there is no evidence to suggest that the Census logo improves the response rate compared to the NCES logo.

Table 7. PSS branding experiment response rates by branding group: 2015–16

		Response		Difference	<i>t</i> -statistic of
	Branding	rate	Standard	of response	significance for
Selected school characteristic	group	in percent	error	rates	the difference
Total	Census	50.78	0.79		_
	NCES	50.80	0.78	-0.02	-0.02
Private school type					
Catholic	Census	56.27	1.64		
	NCES	59.78	1.61	-3.51	-1.53
Other religious	Census	48.20	1.17		
	NCES	48.60	1.18	-0.40	-0.24
Nonsectarian	Census	50.54	1.39		
	NCES	47.51	1.36	3.03	1.56

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# Changes in Data Collection Procedures from 2013-14 to 2015-16

Below is a summary of the changes to the 2015–16 PSS data collection procedures as compared to the 2013–14 PSS:

- There were no experiments in the 2013–14 PSS. During the 2015–16 PSS, however, a branding experiment was conducted.
- During the 2015–16 PSS, all letters mailed to schools had printed endorsements from the schools' respective religious and/or educational affiliation. There were no endorsements on the 2013–14 mailing material.
- Mail out operations for the 2013–14 PSS were interrupted by the 2013 Federal Government shutdown, forcing up to a two-week delay in mailing operations. There were no substantial delays during the 2015–16 mail out operations.
- The area search frame creation was changed from the 2013–14 PSS. This cycle, instead of FRs researching schools within their respective PSUs using telephone yellow pages, NPC staff performed this task out of the Jeffersonville (IN) office using yp.com. This produced lists that were much larger and with poorer quality data than in previous cycles. Processing these lists resulted in a one-month delay in the delivery of the Area Frame. To account for this delay, these cases were sent directly to CATI, as opposed to mail out in previous cycles. Additionally, to account for a second workload coming into CATI, a second CATI instrument was developed to work the ASF cases.

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# IV. Response Rates

# **Survey Response Rates**

The weighted survey response rates by frame for the 2015–16 PSS are presented in table 8. The weighted survey response rates by frame for traditional and kindergarten-terminal schools are presented in tables 9 and 10, respectively. The weighted response rates were calculated by dividing the number of interview cases weighted by the base weight by the total number of eligible cases weighted by the base weight. The base weight for each sample case is the inverse of the probability of selection.

Overall there were 23,938 interviews and 10,638 noninterviews, resulting in a response rate of 69.2 percent (table 8). The response rate for list-frame schools was 78.2 percent, while that for area-frame schools was 28.6 percent. The response rate for traditional schools was 68.2 percent—78.6 percent for list-frame schools and 24.8 percent for area-frame schools (table 9). The response rate for kindergarten-terminal schools was 77.2 percent—75.3 percent for list-frame schools and 100 percent for area-frame schools (table 10). Because the unit response rate for schools was less than 85 percent, a bias analysis was performed. See appendix tables E-1 and E-2 for the number of interviews and noninterviews, and weighted response rates, by private school typology and by the religious and nonsectarian orientation of the school.

Table 8. Weighted and unweighted number of PSS interviews and noninterviews, and weighted response rates, by frame: 2015–16

Interviews		Noninterv	riews	Weighted response rate	
Frame type	Unweighted	Weighted	Unweighted	Weighted	(percent)
Total	22,428	23,938	7,207	10,638	69.2
List frame	22,155	22,155	6,194	6,194	78.2
Area frame	273	1,783	1,013	4,444	28.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), "Documentation Data File," 2015–16.

Table 9. Weighted and unweighted number of PSS interviews and noninterviews, and weighted response rates for traditional private schools, by frame: 2015–16

	Interviev	Interviews		iews	Weighted response rate	
Frame type	Unweighted	Weighted	Unweighted	Weighted	(percent)	
Total	19,538	20,783	6,276	9,707	68.2	
List frame	19,315	19,315	5,263	5,263	78.6	
Area frame	223	1,468	1013	4444	24.8	

NOTE: Weighted using the inverse of the probability of selection. Traditional schools are those for which the highest grade is 1 through 12 or ungraded. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), "Documentation Data File," 2015–16.

Weighted and unweighted number of PSS interviews and noninterviews, and weighted response rates for kindergarten-terminal private schools, by frame: 2015–16

	Interviews		Noninterv	riews	Weighted response rate
Frame type	Unweighted	Weighted	Unweighted	Weighted	(percent)
Total	2,890	3,155	931	931	77.2
List frame	2,840	2,840	931	931	75.3
Area frame <sup>1</sup>	50	315	0	0	100.0

<sup>&</sup>lt;sup>1</sup>Caution should be used when looking at area frame kindergarten-terminal nonresponse because all cases that lacked sufficient information to determine K-terminal or traditional status were classified as traditional school cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), "Documentation Data File," 2015-16.

# Unit nonresponse bias analysis

### Overview of Methodology

Table 10.

Because NCES Statistical Standard 4-4 requires analysis of unit nonresponse bias for any survey stage with a base-weighted response rate of less than 85 percent, the 2015-16 PSS data file was evaluated for potential bias. Comparisons between the frame and respondent populations were made before and after the noninterview weighting adjustments were applied in order to evaluate the extent to which the adjustments reduced or eliminated nonresponse bias. The following section explains the methodology and summarizes the conclusions.

As outlined in Appendix B of the NCES Statistical Standards, the degree of nonresponse bias is a function of two factors: the nonresponse rate and how much the respondents and nonrespondents differ on survey variables of interest. The mathematical formulation to estimate bias for a sample mean of variable y is as follows:

$$B(\bar{y}_R) = \bar{y}_R - \bar{y}_T = \left(\frac{n_M}{n_T}\right)(\bar{y}_R - \bar{y}_M)$$

where

 $\bar{y}_T$  = the estimated mean based on all eligible sample cases

 $\bar{y}_R$  = the estimated mean based only on respondent cases

 $\overline{y}_M$  = the estimated mean based only on nonrespondent cases

 $n_T$  = the estimated number of cases (i.e.,  $n_T = n_R + n_M$ )

 $n_M$  = the estimated number of nonrespondents

 $n_R$  = the estimated number of respondents

NOTE: Weighted using the inverse of the probability of selection. Kindergarten-terminal schools are those in which the highest grade is kindergarten. Detail may not sum to totals because of rounding.

A variable-free estimate of the bias, referred to as a relative bias, was used to compare biases across all variables included in the analysis. The relative bias for an estimated mean using only the respondent data,  $\bar{y}_R$ , is calculated using the following formula:

$$RelB(\overline{y}_R) = \frac{B(\overline{y}_R)}{\overline{y}_R}$$

Relative bias was estimated for variables known for respondents and nonrespondents. There is a very limited amount of information available about nonresponding private schools. The variables used in the PSS unit bias analysis were affiliation (20 categories), community type (4 categories), enrollment (6 categories), and grade level of the school (4 categories).

The following steps were followed to compute the relative bias. First, the nonresponse bias was estimated and tested to determine if the bias is significant at the 5 percent level. Second, noninterview adjustments were applied, with the variables listed above included in the nonresponse models. The noninterview adjustments, which are included in the weights, were designed to significantly reduce or eliminate unit nonresponse bias for variables included in the models. Third, after the weights were computed, any remaining bias was estimated for the variables listed above and statistical tests were performed to check the remaining significant nonresponse bias. For this comparison, nonresponse bias was calculated as the difference between the base-weighted sample proportion and the nonresponse-adjusted respondent proportion, which evaluates the effectiveness of each noninterview adjustment in mitigating nonresponse bias. Schools found to be ineligible for the PSS were excluded from the analysis.

As shown in table 11, the weighting adjustments eliminated most, but not all, significant bias. For all respondents, approximately 80 percent of the variable categories were significantly biased before nonresponse weighting adjustments, and approximately 14 percent were significantly biased after adjustments. The average bias was reduced by 79 percent, from 23 percent to 5 percent. Detailed data by affiliation and reporting characteristics are presented in tables 12 and 13.

Table 11. Summary of 2015-16 PSS nonresponse bias statistics

Nonresponse bias statistic	Total percentage
Before nonresponse adjustment <sup>1</sup>	
Mean estimated absolute percent relative bias	23.35
Median estimated absolute percent relative bias	11.62
Percent of variable categories significantly biased	78.57
After nonresponse adjustment <sup>2</sup>	
Mean estimated absolute percent relative bias	5.02
Median estimated absolute percent relative bias	1.45
Percent of variable categories significantly biased	14.29

<sup>&</sup>lt;sup>1</sup>The difference between the base-weighted respondents and the base-weighted sample.

<sup>&</sup>lt;sup>2</sup>The difference between the nonresponse adjusted respondents and the base-weighted sample.

SOURCE: U.S. Department of Education, National Center for Education Statistics, "Private School Survey (PSS) Data File," 2015–16.

Table 12. Base-weighted PSS school frame distribution, interviewed distribution, estimated bias, percent relative bias, standard errors, and t statistic, by affiliation membership and reporting characteristics: 2015-16

						T test of
		Weighted			Standard	significance
	Weighted	eligible		_	error of	for the
	respondent		Estimated		difference of	difference in
Selected characteristics	proportions <sup>1</sup>	proportions1	bias	relative bias	proportions	proportions
Affiliation membership						
List Frame						• • • • • • • • • • • • • • • • • • • •
Catholic, Parochial	8.95	7.30	1.65	18.42	0.08	21.19*
Catholic, Diocesan	9.82		1.64	16.66		18.82*
Catholic, Private	3.21	3.05	0.16	5.11	0.03	5.09*
Amish	4.62		1.11	24.01	0.04	29.12*
Assembly of God	0.79	0.67	0.11	14.20	0.01	15.63*
Baptist	5.48	4.81	0.66	12.13	0.05	13.06*
Episcopal	1.22		0.23	18.63	0.01	21.48*
Jewish	2.59	2.63	-0.04	-1.56		-1.44
Lutheran Church, Missouri Synod	3.44		0.83	24.05	0.03	29.18*
Wisconsin Evangelical Lutheran Synod	1.22	0.91	0.32	26.04	0.01	32.16*
Mennonite	1.63	1.28	0.35	21.51	0.01	25.50*
Pentecostal	0.90		0.10	11.12	0.01	11.85*
Seventh-Day Adventist	2.65	2.13	0.52	19.76	0.02	23.03*
Other Religious	17.55	16.29	1.26	7.17	0.17	7.32*
Nonsectarian, regular	13.03		-0.56	-4.27	0.15	-3.84*
Nonsectarian, special emphasis	10.52		1.46	13.86	0.10	15.21*
Nonsectarian, special education	4.93		0.76	15.41	0.04	17.18*
Area frame only	1.55	,	0.70	10.11	0.01	17.10
Catholic	0.75	1.64	-0.89	-118.61	0.21	-4.18*
Other religious	4.26		-2.94	-69.00	0.59	-5.00*
Nonsectarian	2.44	9.18	-6.73	-275.85	0.73	-9.18*
School level		<b>7.1</b> 0	0.76	270.00	0.7.0	,,10
K–Terminal	13.84	18.42	-4.58	-33.10	0.45	-10.21*
	51.18	44.95	6.23	12.17	0.45	13.69*
Elementary					0.43	
Secondary Combined	8.51 26.48	8.61 28.02	-0.10 -1.55	-1.19 -5.84	0.20	-0.50 -3.90*
Combined	20.46	20.02	-1.55	-3.04	0.40	-3.90
Enrollment—list frame only <sup>1</sup>						
Less than 50	40.37	40.86	-0.48	-1.20	†	†
50–149	26.22	25.79	0.43	1.64	+	+
150–299	18.81	18.55	0.26	1.37	+	+
300–499	8.40	8.58	-0.17	-2.07	+	+
500–749	3.84	3.73	0.10	2.73	+	†
750 or more	2.36	2.49	-0.13	-5.70	+	†
Community type						
City	33.34	34.06	-0.72	-2.17	0.55	-1.33
Suburban	37.12	37.44	-0.32	-0.85	0.51	-0.62
Town	8.87	8.65	0.23	2.55	0.40	0.57
Rural	20.67	19.85	0.81	3.94	0.51	1.60
*p<.05.						

<sup>\*</sup>*p*<.05.

Table 6. Final weighted PSS school frame distribution, interviewed distribution, estimated bias, percent relative bias, standard errors, and t statistic, by affiliation membership and reporting characteristics: 2015-16

<sup>&</sup>lt;sup>1</sup>The enrollment size bias is calculated for list frame only, because the enrollment size is not assigned for area frame nonrespondents. NOTE: Detail may not sum to totals because of rounding or missing values in cells with too few sample cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Table 13. Final weighted PSS school frame distribution, interviewed distribution, estimated bias, percent relative bias, standard errors, and t statistic, by affiliation membership and reporting characteristics: 2015-16

Selected characteristics	Weighted respondent proportions	Weighted eligible sample proportions	Estimated bias	Percent relative bias	Standard error of difference of proportions	T test of significance for the difference in proportions
Affiliation membership	proportions	proportions	Ulas	oras	proportions	proportions
List Frame						
Catholic, parochial	7.30	7.30	0.00	0.04	0.14	0.02
Catholic, Diocesan	8.18	8.18	0.00	-0.02	0.15	-0.01
Catholic, private	3.01	3.05	-0.04	-1.20	0.13	-0.65
Amish	3.51	3.51	0.00	0.00	0.07	0.00
Assembly of God	0.69	0.67	0.00	2.50	0.07	1.34
Baptist	4.85	4.81	0.02	0.77	0.01	0.42
	1.04	0.99	0.04	4.86	0.03	2.59*
Episcopal Jewish	2.64	2.63	0.03	0.38	0.02	0.21
Lutheran Church, Missouri	2.68	2.61	0.06	2.27	0.05	1.22
Synod	0.01	0.01	0.01	0.62	0.02	0.24
Wisconsin Evangelical	0.91	0.91	0.01	0.63	0.02	0.34
Lutheran Synod	1.20	1.00	0.01	0.56	0.02	0.20
Mennonite	1.28	1.28	0.01	0.56	0.02	0.30
Pentecostal	0.81	0.80	0.01	1.25	0.02	0.67
Seventh-Day Adventist	2.13	2.13	0.00	0.00	0.04	0.00
Other religious	16.46	16.29	0.16	0.99	0.31	0.53
Nonsectarian, regular	13.20	13.59	-0.39	-2.97	0.24	-1.61
Nonsectarian, special emphasis	9.13	9.06	0.06	0.71	0.17	0.38
Nonsectarian, special education	4.17	4.17	0.00	0.00	0.08	0.00
Area frame only						
Catholic	1.81	1.64	0.17	9.58	0.32	0.55
Other religious	10.30	7.20	3.10	30.10	1.59	1.95
Nonsectarian	5.90	9.18	-3.27	-55.46	0.89	-3.66*
School level						
K-Terminal	15.69	18.42	-2.73	-17.37	0.62	-4.40*
Elementary	48.10	44.95	3.16	6.56	1.06	2.98*
Secondary	8.35	8.61	-0.26	-3.06	0.28	-0.91
Combined	27.85	28.02	-0.18	-0.63	0.90	-0.20
Enrollment-list frame only <sup>1</sup>						
Less than 50	41.22	40.86	0.36	0.87	†	†
50–149	25.65	25.79	-0.14	-0.54	+	+
150–299	18.40	18.55	-0.14	-0.34	†	, †
300–499	8.29	8.58	-0.13	-3.47	+	+
					+	†
500–749 750 or more	3.91	3.73	0.18	4.55	+	† †
750 or more	2.53	2.49	0.04	1.66	'	'
Community type						
City	33.19	34.06	-0.87	-2.63	0.76	-1.15
Suburban	36.62	37.44	-0.82	-2.23	0.69	-1.18
Town	8.39	8.65	-0.26	-3.11	0.61	-0.43
Rural *p<.05.	21.80	19.85	1.95	8.94	1.23	1.59

<sup>\*</sup>*p*<.05.

<sup>†</sup> Not applicable.

¹The enrollment size bias is calculated for list frame only, because the enrollment size is not assigned for area frame nonrespondents. NOTE: Detail may not sum to totals because of rounding or missing values in cells with too few sample cases.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# **Item Response Rates**

The unweighted and weighted item response rates are presented in table 14. The unweighted item response rates are the number of sample cases responding to an item divided by the number of sample cases eligible to answer the item, excluding the survey nonrespondents. The weighted item response rates are the number of sample cases weighted by the final weight divided by the number of sample cases eligible to answer the item, excluding the survey nonrespondents, weighted by the final weight. Because all items had weighted response rates greater than 85 percent, no item bias analysis was performed.

The unweighted and weighted item response rates for traditional and kindergarten-terminal schools are presented in appendix tables E-3 and E-4. See chapter V for a description of the imputation procedures used to compensate for item nonresponse.

Table 14. PSS item response rates for private schools: 2015–16

Itaan maalaan	Unweighted	Final weighted		Unweighted	Final weighted
Item number	response rate		Item number	response rate	response rate
Q4A_GRD	100.0		Q6A	97.1	96.3
Q4A_ENRL	99.8		Q6B	97.1	96.2
Q4B_GRD	100.0	100.0		97.1	96.2
Q4B_ENRL	99.8		Q6D	97.1	96.2
Q4C_GRD	100.0	100.0	Q6E	97.1	96.2
Q4C_ENRL	99.9	99.8	Q6F	97.1	96.2
Q4D_GRD	100.0		Q6G	97.1	96.2
Q4D_ENRL	99.8	99.6	Q7A	99.8	99.8
Q4E_GRD	100.0	100.0	Q7B	98.0	97.6
Q4E_ENRL	100.0	100.0	Q8A	99.9	100.0
Q4F_GRD	100.0	100.0	Q8B	98.8	98.7
Q4F_ENRL	99.9		Q8C	98.7	98.6
Q4G_GRD	100.0		Q8D	95.1	95.2
Q4G_ENRL	99.9		Q9A	99.8	99.7
Q4H_GRD	100.0	100.0		99.5	99.4
Q4H_ENRL	99.9	99.8	Q10_FT	99.7	99.6
Q4I_GRD	100.0		Q10_>3/4	99.6	99.5
Q4I_ENRL	99.9		Q10_>1/2	99.6	99.5
Q4J_GRD	100.0		Q10_>1/4	99.6	99.5
Q4J_ENRL	99.9		Q10_<1/4	99.6	99.5
Q4K_GRD	100.0	100.0	Q10_TOTAL	99.8	99.7
Q4K_ENRL	99.9		Q10_101AL Q11	99.4	99.5
Q4K_ENKL Q4L_GRD	100.0		Q12A	99.8	99.8
Q4L_GRD Q4L_ENRL	99.8		Q12B	100.0	100.0
Q4M_GRD	100.0		Q13A	99.9	99.9
OAM ENDI	99.8	00.0	Q13B	99.6	99.6
Q4M_ENRL	100.0		Q13C	99.0 99.9	99.9
Q4N_GRD					
Q4N_ENRL	99.5		Q13C_CATHOLIC	99.4	99.4
Q4O_GRD	100.0	100.0		100.0	100.0
Q4O_ENRL	99.5	99.4	Q15	98.0	97.3
Q4P_GRD	100.0	100.0	_	99.0	98.7
Q4P_ENRL	99.5		Q17	99.7	99.7
Q4Q_GRD	100.0		Q18A	98.0	98.1
Q4Q_ENRL	99.5		Q18B	89.3	89.1
Q5_TOTAL	99.9	99.8	Q19A	97.9	98.0
			Q19B	94.7	94.6

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), "Documentation Data File," 2015–16.

# V. Data Preparation and Imputation

# **Questionnaire Check-in**

Paper questionnaires returned by individual respondents and those completed by field representatives during field follow-up were sent to the Census Bureau's National Processing Center (NPC) in Jeffersonville, Indiana. Upon receipt, codes were assigned to each questionnaire to indicate its status (e.g., complete interview, refusal, out-of-scope). Then the questionnaires were grouped into batches for data capture.

# **Data Capture**

The 2015–16 PSS data were captured using a combination of manual data keying and imaging technology, using the Integrated Computer Assisted Data Entry (iCADE) system. The questionnaires were disassembled and each duplex page was scanned. Clerical staff reviewed and resolved data issues due to system errors such as the inability to read a barcode, inability to recognize a page corner point, or checkbox ambiguities (e.g., marks outside checkbox, scratch outs, random marks on a page). Each imaged response was presented to a keying operator and all fields except the checkboxes were keyed from image (KFI). The checkboxes were captured using Optical Mark Recognition (OMR). All nonblank data fields were 100 percent KFI verified.

# Reformatting

# **Merging Data Files**

After the PSS questionnaire data were captured, the output files from the different sources (keyed, Internet, and CATI) were reformatted into SAS datasets and then merged into one file. Some variables on the CATI output files (e.g., ungraded enrollment, nursery and prekindergarten enrollment, association membership) had to be recoded to be consistent with those from the PSS paper questionnaire output file.

### Name and Address Updates

Corrections to the name, address, and telephone numbers supplied by the respondents were applied to the PSS file during the reformatting phase. These corrections were keyed, either by NPC or during the CATI interviews. All addresses were then checked with National Change of Address (NCOA) software, a commercial software package that corrects and standardizes addresses.

# **Preliminary Interview Status**

The next step in processing was to make a preliminary determination of each case's interview status recode (ISR); that is, whether it was an interview, a noninterview, or out of scope. In general, those cases with "out-of-scope" check-in codes (assigned by clerks to the paper questionnaires when they were received by the Census Bureau) or "out-of-scope" final outcome codes (assigned by CATI interviewers) were classified as out-of-scope (ISR = 3) for the preliminary ISR. Otherwise, cases with data entries were classified as interviews (ISR = 1) and those with no data were classified as noninterviews (ISR = 2).

# **Computer Pre-Edit**

After the preliminary ISR classification, interview records (ISR = 1) on the data file were processed through a computer pre-edit designed to identify respondent errors in variables needed for imputation. This pre-edit program generated lists of cases where there were potential data problems. Census Bureau

staff reviewed the computer record of cases that met each pre-edit rejection condition. Whenever possible, unacceptable entries were corrected by using information reported in other questionnaire items or information from other sources. Unacceptable entries that could not be corrected were blanked in the data record. The procedures described above are referred to as "pre-edits" because staff, rather than computer algorithms, handled computer-identified problems. (See appendix table F-1 for the number of records rejected by pre-edit rejection reason.) The changes made during the pre-edit are summarized in table 14. (See appendix table F-2 for the number of changes made to PSS variables during the pre-edit.)

# **Computer Edit**

After pre-edit corrections were made, the file was submitted to a completely automated computer edit. This edit consisted of a consistency edit, a blanking edit, and a logic edit. The consistency edit identified inconsistent entries within each record. The fields compared could be within items (e.g., if the response in item 8a, whether any students were enrolled in 12<sup>th</sup> grade last year, was "No," but the second part of the question reported 12<sup>th</sup> graders enrolled the previous year) or between items (e.g., if kindergarten was reported in item 4c and the response to item 9a indicated that the school did not offer kindergarten). Entries were corrected for those inconsistencies that could be resolved; for those that could not be resolved, the entries were deleted. The blanking edit deleted inappropriate entries and assigned the "not answered" (.N) code to items that should have been answered but were not. Only records classified as interviews in the preliminary ISR were edited. The changes made during the edit are summarized in table 15.

Table 15. Summary of changes made to PSS questionnaire variables during the pre-edit and edit: 2015-16

		Range of	Range of percent of
	Number of variables where	numbers of	number of
Source of change	changes were made <sup>1</sup>	records affected	records affected
Pre-edit	40	0-1,063	0-4.33
Edit	80	0-12,802	0-52.11

<sup>&</sup>lt;sup>1</sup>There are 113 total variables in the 2015–16 PSS.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), .2015-16.

In the logic edit, the following sources were used to create entries for items with missing data:

- Other items on the 2015-16 PSS questionnaire. Based on entries from related items on the school record, assumptions were made about how the respondent should have answered items 4c-e (number of kindergarten, transitional kindergarten, and transitional first grade students) and 9a (length of school day for kindergarten, transitional kindergarten, and transitional first grade) with missing values. The source item used for imputing items 4c-e was item 9a. The source items used for imputing item 10a were items 4c-e and 16. For example, if the respondent did not answer item 9a (length of school day for kindergarten, transitional kindergarten, and transitional first grade) and item 4 indicated that the school did not have students enrolled in any of those grades, then zero (school does not offer kindergarten) was imputed to item 9a.
- Data from the 2013–14 PSS. Data from the 2013–14 PSS were used to fill the items with missing values whenever possible. For example, if the type of school was not reported in item 11 and it had been reported on the 2013–14 PSS, the 2013–14 response was copied to the 2015–16 record.

In addition to filling items where values were missing, some inconsistencies between students by race and total enrollment items were corrected by ratio adjustment during the logic edit. For records where the number of students in item 6 (students by race) did not equal the enrollment in item 5, excluding

prekindergarten, the item 6 entries were adjusted to be consistent with item 5; that is, each entry in item 6 was multiplied by the ratio of the student count in item 6 to the enrollment in item 6, excluding prekindergarten.

# **Final Interview Status**

After the range check, consistency edit, and blanking edit were complete, a final determination (final ISR) of whether the case was in-scope and, if so, whether sufficient data had been collected for the case to be classified as an interview was made.

A case was classified as out-of-scope (ISR = 3) if

- the school was prekindergarten only (item 4); or
- any of the five screening questions was marked "No" (item 2); or
- the school was located in a private home that was used primarily as a family residence (item 12b) and had fewer than six students (item 5); or
- the school was located in a private home that was used primarily as a family residence (item 12b) and had all ungraded students (item 4).

A case was classified as an interview (ISR = 1) if

- none of the conditions for out-of-scope case was met; and
- there were valid entries for either total number of students enrolled (item 5) or total number of teachers (item 10); and
- there were valid entries in at least two of the following items—
  - whether the school had any students enrolled in 12th grade in the last school year (item 8a),
  - -type of school (item 11a),
  - whether the school had religious orientation or purpose (item 13a), or
  - -number of days in the school year (item 15).

A case was classified as a noninterview (ISR = 2) if the conditions for out-of-scope case or interview case were not met.

The preliminary ISR and final ISR counts and the percentage of change between the preliminary and final ISR counts are presented in table 16.

Table 16. Number of PSS cases, by preliminary and final interview status and the percentage change between preliminary and final interview status: 2015–16

Interview status	Preliminary ISR	Final ISR	Percent change
Total	38,120	38,120	†
Interview	22,848	22,428	-1.9
Noninterview	7,024	7,207	2.5
Out-of-scope	8,248	8,485	2.8

<sup>†</sup> Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# **Imputation**

After the edit and final ISR processing were complete, there were missing values within some records classified as interviews (ISR = 1). These were cases where the respondent had not answered some applicable questionnaire items (and data for these items were not added in the consistency edit) or the response had been deleted during editing. Values were imputed to the missing items during imputation, which are described below.

# **Donor Imputation**

In donor imputation, values were created by extracting data from the record for a sample case with similar characteristics, using a procedure known as the "sequential nearest neighbor hot deck" (Kalton and Kasprzyk 1982, 1986; Kalton 1983; Little and Rubin 1987; Madow, Olkin, and Rubin 1983). In order to match records with missing data values (donors), "imputation" variables were selected at the end of the logic edit. These variables identified certain characteristics that were deemed to be relevant to the data in each item (e.g., religious affiliation, enrollment, school level). Items were grouped according to the relevance of the imputation variables to the data collected by the item. For example, school level (LEVEL) was used for matching incomplete records and donors to fill item 15 (length of school year) but was not used for item 6 (students by race). See appendix tables G-1 and G-2 for a list of the imputation matching variables and the collapsing order.

Items 12b (located in a private home that is used primarily as a family residence), 13a and 13c (religious orientation or purpose, and religious orientation or affiliation), and 14 (association membership) did not go through the donor imputation program. If, after the logic edit, item 12b was still incomplete, the assumption was made that the school was not located in a private home and for item 14 that the school did not belong to any associations. If values were still missing for items 13a and 13c after the logic edit, the records were reviewed and imputed by an analyst.

### **Analyst imputation**

After the donor imputation was completed, there were records that still had missing values for some items. These were cases where (1) the imputation failed to create a value because there was no suitable record to use as a donor, or (2) the value imputed was deleted in the post imputation edits because it was outside the acceptable range for the item or was inconsistent with other data on the same record, or (3) the religious orientation or purpose, or the religious orientation or affiliation, was not reported (items 13a and 13c) and no previous PSS information was available.

For these cases, values were imputed by analysts to the items with missing data. That is, staff reviewed the data record, sample file record, and the questionnaire and identified a value consistent with the information from these sources for imputation.

# **Changes to PSS Variables During Imputation**

The changes made during imputation are summarized in table 17 below. The number of changes made to the PSS variables during imputation are listed in table G-3 in appendix G.

Table 17. Summary of changes made to PSS questionnaire variables during imputation, by type of change: 2015-16

	Number of		
	variables	Range of	Range of percent
	where changes	numbers of	of number of
Type of change	were made <sup>1</sup>	records affected	records affected
Imputed from a donor record	63	0-539	0–2.19
Analyst imputation	52	0-368	0-1.50

<sup>&</sup>lt;sup>1</sup>There are 113 total variables in the 2015–16 PSS.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# VI. Weighting and Variance Estimation

This chapter describes the weighting procedure used for the 2015-16 PSS. The final weights are needed to have the estimates reflect the population of private schools when analyzing the data. The method of estimating sampling errors for weighted estimates in PSS using the replicate weights is also discussed. Weighting is presented first, followed by variance estimation.

# Weighting

The data from the area frame component were weighted to reflect the sampling rates (probability of selection) of the PSUs. Survey data from both the list and area frame components were adjusted for school nonresponse. The final weight for PSS data items is the product of the **Base Weight** and the **Nonresponse Adjustment Factor**, where:

**Base Weight** is the inverse of the probability of selection of the school. The base weight is equal to one for all list frame schools. For area frame schools, the base weight is equal to the inverse of the probability of selecting the PSU in which the school resides.<sup>5</sup>

**Nonresponse Adjustment Factor** is an adjustment that accounts for school nonresponse. It is the weighted (base weight) ratio of the total eligible in-scope schools (interviewed schools plus noninterviewed schools) to the total responding in-scope schools (interviewed schools) within cells. Noninterviewed and out-of-scope cases are assigned a nonresponse adjustment factor of zero.

The cells used to compute the nonresponse adjustment were defined differently for list frame and area frame schools. For schools in the list frame, the cells were defined by affiliation (17 categories), locale type (4 categories), grade level (4 categories), Census region (4 categories), and enrollment (3 categories). (See appendix H.) The nonresponse adjustment cells for area frame schools were defined by three-level typology (3 categories), and grade level (4 categories). (See appendix H.)

If the number of schools in a cell was fewer than 15 or the nonresponse adjustment factor was greater than 1.5, then that cell was collapsed into a similar cell. The variables used to collapse the cells and the collapse order varied according to whether the school was from the list or area frame and whether a school was a traditional or K–Terminal school. The cells for traditional schools from the list frame were collapsed within enrollment category, locale type, grade level, and Census region. Cells for K–Terminal schools from the list frame were collapsed within enrollment category, locale type, region (if applicable), and affiliation. Cells for traditional schools from the area frame were collapsed within grade level and then within three-level typology. Cells for K–terminal schools from the area frame were collapsed within three-level typology.

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<sup>&</sup>lt;sup>5</sup> See the "Area Frame" section of chapter II.

# Variance Estimation

This section describes the variance estimation used for the 2015–16 PSS, how the replicates were assigned, and how to use the replicate weights to compute variances.

# **Producing Replicate Weights**

In surveys with complex sample designs, direct estimates of sampling errors that assume a simple random sample will typically underestimate the variability in the estimates. The PSS sample design and estimation included procedures that deviate from the assumption of simple random sampling, primarily resulting from the stratified cluster sampling occurring in the area frame.

The preferred method of calculating sampling errors to reflect these aspects of the complex sample design of PSS is using replication. Replication methods involve constructing a number of subsamples, or replicates, from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. The replicate weights are used to compute the variance of a statistic, Y, as given below:

Variance 
$$(Y) = \left(\frac{1}{n}\right) \sum_{r} (Y_r - Y)^2$$

where:  $Y_r$  = the estimate of Y using the  $r^{th}$  set of replicate weights

n = the number of replicates

PSS uses a procedure known as balanced repeated replication (BRR) for the calculation of sampling variance. BRR assumes sampling is done with replacement, and hence, BRR does not reflect the increase in precision due to sampling a large proportion of a finite population.

To execute the BRR procedure, half-samples are defined by pairing sample PSUs within each sampling stratum, forming variance strata. The final product is 88 replicate weights. After the variance strata were assigned, an orthogonal matrix (matrix H where:  $HH^T = nI_n$  where  $I_n$  is the identity matrix of order n) was used to form the 88 balanced half-sample replicates.

### **Applying Replicate Weights**

Each PSS data file includes a set of 88 replicate weights designed to produce variance estimates. Replicate weights were created for each of the 88 samples using the same estimation procedures used for the full sample and are included in the data file. The replicate weights for PSS are REPW1 to REPW88.

The computation of sampling errors using these replicate weights can be done easily using one of the following software: AM Statistical Software, R. SAS, SPSS, Stata, SUDAAN, or WesVar.

**AM Statistical Software.** The user needs to set the replicate weights along with the replication method using the right-click context menu in the variable list window. Once the "Set Replicate Weights" window is displayed, the replicate weights as identified above can be highlighted and dragged into the window. At the bottom of the window are four options for replication method; BRR should be selected. For more information, visit http://am.air.org/help/JSTree/MainFrame.asp.

**R.** Standard errors based on BRR can be generated in R using the 'survey' package. The sample design information – variance type, full weight, and replicate weights – must first be specified with the 'svrepdesign' function (e.g., mydesign <- svrepdesign(type="BRR", weights=~PFNLWT, repweights=REPW[1-88]+). The survey package has a number of functions for statistical analysis including: svyglm, svyhist, svyquantile, svyratio, and svytable. For more information, visit <a href="https://cran.r-project.org/web/packages/survey/survey.pdf">https://cran.r-project.org/web/packages/survey/survey.pdf</a>.

SAS. Standard errors based on BRR can be generated in SAS version 9.2 or higher using the survey procedures (SURVEYFREQ, SURVEYLOGISTIC, SURVEYMEANS, and SURVEYREG) available in the SAS/STAT module. This module is an optional addition to the Base SAS software. The BRR method is specified in the PROC statement using the VARMETHOD option parameter (e.g., PROC SURVEYMEANS VARMETHOD=BRR;). The replicate weight variables are specified using the REPWEIGHT statement (i.e., REPWEIGHTS varlist;) within a survey procedure call. For more information, visit

https://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#titlepage.htm.

SPSS. Standard errors based on BRR can be generated in SPSS version 20 or higher using the optional add-on Complex Samples module. The Complex Samples module adds a "Complex Samples" option to the "Analyze" drop-down menu. The sample design information must be specified in a sample plan that can be created using a design wizard. The sample plan wizard creates a sample file that is specified at the beginning of each analysis. The Complex Samples module has a full complement of statistical functions for the analysis of complex sample data. For more information, visit <a href="http://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/20.0/en/client/Manuals/BM\_SPSS\_Complex\_Samples.pdf">http://public.dhe.ibm.com/software/analytics/spss/documentation/statistics/20.0/en/client/Manuals/BM\_SPSS\_Complex\_Samples.pdf</a>.

**Stata.** Standard errors based on BRR can be generated in Stata using the 'svy' commands. The data must first be declared as complex survey data using the 'svyset' command. This command also designates variables that contain information about the survey design, and specifies the default method for variance estimation. The 'vce' option to this command should be set for "brr" (i.e., "vce(brr)") for balanced repeated replication; the weight variables are specified with the option 'brrweight(varlist)'. For more information, visit https://www.stata.com/manuals/svysurvey.pdf.

**SUDAAN.** The user needs to specify the sample design as a "Balanced Repeated replication" design as well as specifying the replicate weight variables. Specifying the sample design (i.e., DESIGN = BRR) is done in the procedure call statement (e.g., PROC DESCRIPT DESIGN = BRR;). The specification of the replicate weights is done with the REPWGT statement (i.e., REPWGT REPW1–REPW88;) within any procedure call. For more information, visit <a href="http://sudaansupport.rti.org/Sudaan/onlinehelp/SUDAAN10/Default.htm">http://sudaansupport.rti.org/Sudaan/onlinehelp/SUDAAN10/Default.htm</a>.

**WesVar.** The user needs to create a new WesVar data file by specifying the full sample weight variable and the replicate weight variables as defined above, and the replication method, BRR. The replicate weights and the full sample weight can be highlighted and dragged to their appropriate place on the "New WesVar Data File" window. For more information, visit <a href="https://www.westat.com/our-work/">https://www.westat.com/our-work/</a> information-systems/wesvar-support.

# VII. Quality of PSS Data

This chapter describes the steps taken to review the quality of the PSS data and some indicators of the quality of the PSS data, such as the area-frame contribution, coverage estimates, and comparisons with other data sources.

# Reviewing the Quality of PSS Data

NCES program staff members have the responsibility of ensuring that the PSS data file is acceptable for public release. Before files are released to the public, staff members review the data for errors associated with frame construction, data collection, or processing. Below are aspects of the datasets that were reviewed:

- 1. Unit nonresponse. Response rates were calculated for traditional and K-terminal schools. (See chapter IV for unit response rate information.) Because the total unit response rate was less than 85 percent, bias analysis was performed.
- 2. **Item nonresponse.** Item response rates were calculated for each item. (See chapter IV for item response rate information.) Because the item response rates were all greater than 85 percent, no bias analysis was performed.
- 3. **Edits.** The validity of the skip patterns in the questionnaire was established during the processing of the data; that is, Census Bureau analysts verified that each item had the number of responses it should have if skip instructions were followed correctly.
- 4. Reasonableness of data. Multivariate tabulations of key survey variables were obtained and compared to estimates from the 2013-14 PSS survey. Tabulations were reviewed to determine whether the estimates were within reasonable bounds, allowing for elements of change (such as random fluctuations in variance, or secular growth).

# Area-Frame Contribution to Estimates

The standard error of an estimate is an indicator of the precision of that estimate for a given sample size. Because all list-frame cases are included in PSS, the list-frame component of the standard error is always zero. Since only the area frame contributes to the standard error for PSS, the contribution of the area frame to an estimate is a measure of the precision of that estimate. For the 2015–16 PSS, approximately 17 percent of traditional private schools (table 18), 11 percent of traditional private school enrollment and teachers (headcount) (tables 19 and 20) were from the area frame. Approximately 21 percent of Kterminal private schools, 19 percent of K-terminal private school enrollment, and 22 percent of the number of K-terminal private school teachers (headcount) were from the area frame (table 21).

Table 18. Weighted number of traditional private schools by frame and percentage of total schools from the area frame, by private school typology: 2015–16

Private school typology	Total	List frame	Area frame	Area frame as percent of total
Total	29,429	24,302	5,127	17.4
Catholic	6,931	6,305	626	9.0
Parochial	2,723	2,387	336	12.3
Diocesan	3,100 2,936			5.3
Private	1107.9	982.3	126	11.3
Other religious	14,964	11,606	3,358	22.4
Conservative Christian	4,052	3,644	408	10.1
Affiliated	2,974	2,612	362	12.2
Unaffiliated	7,937	5,349	2,588	32.6
Nonsectarian	7,535	6,392	1,143	15.2
Regular	3,170	2,745	425	13.4
Special emphasis	2,767	2,203	564	20.4
Special education	1,598	1,444	154	9.7

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Table 19. Weighted number of traditional private school students by frame and percentage of total students from the area frame, by private school typology: 2015–16

Private school typology	Total	List frame	Area frame	Area frame as percent of total
Total	4,839,807	4,327,164	512,644	10.6
Catholic	1,900,099	1,788,234	111,865	5.9
Parochial	635,173	579,957	55,216	8.7
Diocesan	877,770	847,042	30,728	3.5
Private	387,156	361,235	25,921	6.7
Other religious	1,913,453	1,593,983	319,471	16.7
Conservative Christian	661,960	570,297	91,663	13.8
Affiliated	509,226	470,498	38,728	7.6
Unaffiliated	742,268	553,188	189,080	25.5
Nonsectarian	1,026,255	944,947	81,308	7.9
Regular	685,926	645,284	40,642	5.9
Special emphasis	235,894	199,876	36,018	15.3
Special education	104,435	99,787	4,648	4.5

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Table 20. Weighted number of traditional private school teachers (headcount) by frame and percentage of total teachers from the area frame, by private school typology: 2015-16

Private school typology	Total	List frame	Area frame	Area frame as percent of total
Total	517,148	458,575	58,573	11.3
Catholic	153,185	144,141	9,044	5.9
Parochial	49,399	45,188	4,211	8.5
Diocesan	68,632	66,052	2,580	3.8
Private	35,153	32,901	2,253	6.4
Other religious	217,675	180,415	37,260	17.1
Conservative Christian	71,711	61,436	10,276	14.3
Affiliated	63,652	56,811	6,841	10.7
Unaffiliated	82,312	62,168	20,144	24.5
Nonsectarian	146,288	134,020	12,269	8.4
Regular	91,285	84,823	6,463	7.1
Special emphasis	34,688	29,958	4,730	13.6
Special education	20,315	19,239	1,076	5.3

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

Table 21. Weighted number of kindergarten-terminal private schools, students, and teachers (headcount) by frame and the percentage of schools, students, and teachers from the area frame, by private school three-level typology: 2015-16

				Area frame as	
Private school typology	Total	List frame	Area frame	percent of total	
Schools					
Total	5,147	4,047	1,100	21.4	
Catholic	77.2	77.2	0	0.0	
Other religious	1,301	1,098	202.7	15.6	
Nonsectarian	3,770	2,872	897.7	23.8	
Students					
Total	63,789	51,585	12,204	19.1	
Catholic	1,375	1,375	0	0.0	
Other religious	19,366	15,683	3,683	19.0	
Nonsectarian	43,048	34,527	8,521	19.8	
Teachers					
Total	15,774	12,385	3,389	21.5	
Catholic	275.5	275.5	0	0.0	
Other religious	3,915	3,360	554.5	14.2	
Nonsectarian	11,584	8,750	2,835	24.5	

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# **Capture-Recapture Estimate of PSS Coverage**

Because PSS uses a dual frame approach, it is possible to estimate the coverage or completeness of PSS. A capture-recapture methodology (Sekar and Deming 1949) was used to estimate the number of traditional private schools in the United States and to estimate the coverage of traditional private schools in the 2015–16 PSS. The list frame "captured" 23,037 schools. In the subsequent area frame, 20,818 schools (weighted) were "captured," of which 15,734 were "recaptured" (i.e., already on the list frame). Solving for x in the equation 20,818\*(23,037/x) = 15,734 reveals an estimated population (capture-recapture estimate) of 30,481 private schools. The coverage of the traditional PSS estimate is the ratio of the PSS estimate (28,121) to the traditional capture-recapture estimate (30,481) and is equal to 92.3 percent.

The capture-recapture estimate of 30,481 traditional private schools is based on the assumption that the probability of observing a school from a frame has the same expected value for all units. Violation of this assumption tends to underestimate the undercoverage. Using poststratification cells to compute the capture-recapture estimate can alleviate concerns about this. Separate traditional private school capture-recapture estimates were computed for four different sets of poststratification cells: nine-level typology (31,368), three-level grade (30,451), three-level collapsed typology—Catholic, other religious, nonsectarian (30,780), and nine-level collapsed typology within grade (31,578). Using the highest estimate makes it least likely that the above-mentioned assumption would be violated. The largest traditional private school capture-recapture estimate is produced using the nine-level collapsed typology within grade poststratification cells (31,578). The most conservative traditional private school coverage rate, then, is equal to 89.1 percent.

The same capture-recapture methodology was used to estimate the number of K-terminal private schools in the United States and to estimate the coverage of K-terminal private schools in the 2015–16 PSS. The list frame "captured" 2,810 schools. In the subsequent area frame, 2,462 schools (weighted) were "captured," of which 1,350 were "recaptured" (i.e., already on the list frame). Solving for x in the equation 2,462 \*(2,810/x) = 1,350 reveals an estimated population (capture-recapture estimate) of 5,124 private schools. The coverage of the K-terminal private school PSS estimate is the ratio of the PSS estimate (3,922) to the K-terminal private school capture-recapture estimate (5,124) and is equal to 76.5 percent.

The capture-recapture estimate of 5,124 K-terminal private schools is also based on the assumption that the probability of observing a school from a frame has the same expected value for all units. Separate K-terminal private school capture-recapture estimates were computed for two different sets of poststratification cells: nine-level typology (4,964) and three-level collapsed typology—Catholic, other religious, nonsectarian (5,106). These K-terminal private school capture-recapture estimates produced by postratification cells are both lower than the overall capture-recapture estimate of 5,124 K-terminal private schools, so the postratification cells do not give a more conservative K-terminal private school coverage rate than the overall estimate of 76.5 percent.

# **Comparability With Other Estimates**

One way to verify the external validity of the 2015–16 PSS data is to make comparisons to estimates computed from other sources. The 2015–16 PSS estimates were compared to those produced using 2015 Current Population Survey, 2015–16 National Catholic Educational Association (NCEA), and prior PSS data.

## **Current Population Survey Data**

A comparison of the PSS estimate of K-12 students enrolled in all private schools (traditional and K-terminal) with the household survey estimate from the 2015 October Supplement of the Current Population Survey (CPS) (U.S. Census Bureau 2016) shows that the PSS estimate of 4,903,596 does statistically differ from the CPS estimate of the number of private school students in grades K-12 in October 2015 of 4,700,000.

#### **National Catholic Educational Association Data**

Comparisons of the PSS estimates for Catholic schools, students, and full-time equivalent (FTE) teachers (traditional schools) with NCEA 2016 data for the 2015–16 school year show differences in the FTE teacher counts (151,101 versus 143,186) between the two data sources (table 22).

The survey methodologies used by NCES and NCEA are quite different; NCES surveys private schools directly while NCEA surveys archdiocesan and diocesan offices of education and some state Catholic conferences. The NCEA and PSS computations of FTEs differ in the weight assigned to part-time teachers, thus the FTE teacher counts are not strictly comparable between PSS and NCEA.

### **Prior PSS Data**

The numbers of schools, students, and FTE teachers for each PSS collection since 1999–2000 are presented in table 23. The estimated number of schools in 2015–16 was not statistically different from that of 2013–14. The estimated number of private school students and FTE teachers increased between 2013–14 and 2015–16.

Table 22. Weighted number of PSS Catholic schools, students, and teachers compared to those of the National Catholic Educational Association, by level: 2015–16

School level	NCEA	PSS
Schools		
Total	6,525	7,008
Elementary	5,325	5,566
Secondary	1,200	993
Combined	· <del>-</del>	449
Students		
Total	1,915,836	1,901,474
Elementary	1,337,630	1,213,197
Secondary	578,206	528,333
Combined	· <del>-</del>	159,943
Teachers		
Total	151,101	143,186
Elementary	103,460	88,571
Secondary	50,856	39,834
Combined	·	14,781

<sup>-</sup> Not available.

NOTE: Teachers are in full-time equivalents. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015-16; United States Catholic Elementary and Secondary Schools, 2015-16: Annual Statistical Report on Schools, Enrollment, and Staffing, National Catholic Educational Association (NCEA).

Table 23. Weighted number of private schools, students, and teachers, by level: 1999–2000, 2001–02, 2003–04, 2005–06, 2007–08, 2009–10, 2011–12, 2013–14 and 2015-16

Level	1999–2000	2001-02	2003-04	2005–06	2007–08	2009–10	2011–12	2013–14	2015–16
Schools									
Total	32,995	35,895	34,681	35,054	33,740	33,366	30,861	33,619	34,576
Elementary	22,302	24,049	23,494	22,870	21,870	21,425	19,697	22,509	21,907
Secondary	2,538	2,704	2,694	2,927	2,932	2,776	2,677	2,701	2,946
Combined	8,155	9,142	8,494	9,257	8,938	9,165	8,488	8,409	9,723
Students									
Total	5,254,485	5,439,925	5,212,991	5,146,814	5,072,451	4,700,119	4,494,845	4,576,410	4,903,596
Elementary	2,923,174	2,981,423	2,784,714	2,640,490	2,513,099	2,269,301	2,124,106	2,154,815	2,190,500
Secondary	806,639	835,328	845,083	859,453	826,905	785,500	757,448	737,863	774,499
Combined	1,524,673	1,623,175	1,583,195	1,646,871	1,732,447	1,645,318	1,613,291	1,683,732	1,938,598
Teachers									
Total	408,397	440,804	440,850	449,811	456,266	437,414	420,880	441,496	481,558
Elementary	200,914	217,469	214,677	209,508	207,229	194,482	184,134	193,578	202,628
Secondary	62,737	67,318	68,344	70,676	69,241	67,526	65,178	64,769	69,491
Combined	144,746	156,017	157,830	169,626	179,797	175,406	171,568	183,150	209,438

NOTE: Teachers are in full time equivalents. Detail may not sum to totals because of rounding. SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 1999–00, 2001–02, 2003–04, 2005–06, 2007–08, 2009–10, 2011–12, 2013–14, 2015-16.

# VIII. Information on Data Files

# **Availability of Data**

The 2015–16 PSS data are available in restricted-use and public-use formats. Access to the restricted-use data file is limited to individuals associated with organizations that have received a license to use PSS data. The public-use data file is available to the public. The PSS restricted-use and public-use data files are exactly the same except the restricted-use file contains one variable (P355—the number of students who graduated from the 12<sup>th</sup> grade in school year 2014–15) that is not on the public-use file. This variable is not available on the public-use file because of the possibility of using this variable to disclose individually identifiable information, which is confidential and protected by law.

### **Restricted-Use Data File**

The restricted-use data are available on CD-ROM in SAS, SPSS, and text format. The data are restricted because they contain information that can be used to indirectly disclose individually identifiable information, which is confidential and protected by law. Access to the restricted-use data files is limited to individuals associated with organizations that have received a license.

#### How to Get a Restricted-Use Data File

Researchers who can demonstrate a need for more detailed information may request a license to use the restricted-use dataset for statistical research purposes. The restricted-use data procedures and license documents are available at http://nces.ed.gov/statprog/instruct\_gettingstarted.asp.

### **Public-Use Data File**

Public-use data are, as the name implies, available to the public.

### How to Access Public-Use Data

The public-use data file is available online in SAS, SPSS, and text format and can be accessed at http://nces.ed.gov/surveys/pss/pssdata.asp.

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# IX. User Notes and Cautions

This section provides some caveats and considerations that analysts should take into account when using the 2015–16 PSS data.

# **Locale Code (Urbanicity)**

The 2015–16 PSS file does not contain the 8-category locale code (LOCALE) that was included on the 2005–06 and earlier PSS files. The 2015–16 file does contain the new (2003) 12-category locale code (ULOCALE), which is also included on the 2003–04, 2005–06, 2007–08, 2009–10, 2011–12, and 2013– 14 PSS data files.

# Race/Ethnicity

Beginning with the 2009-10 PSS, race/ethnicity data (Item 7) were collected following the Department of Education's October 2007 guidance on collecting and reporting race and ethnicity data. The seven race/ethnicity categories used in 2015–16 were Hispanic or Latino, regardless of race (P320); and for those not of Hispanic or Latino origin, American Indian or Alaska Native (P310), Asian (P316), Black or African American (P325), Native Hawaiian or other Pacific Islander (P318), White (P330), and Two or more races (P332). In 2007-08 and earlier PSS collections, race/ethnicity data were collected using five categories; Asians and Pacific Islanders were combined in one category—Asian or Pacific Islander, and there was no category for those of two or more races.

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# **Appendix A. Key Terms for PSS**

# Full-time equivalent (FTE)

Full-time equivalent (FTE) quantifies private school teacher positions in proportion to a full-time position. Private school teacher positions are assigned an FTE based on respondent provided information on full-time and part-time work status:

- **FTE** = **1.000.** A teacher works full time.
- FTE = .875. A teacher works at least 3/4 time but less than full time.
- **FTE** = .625. A teacher works at least 1/2 time but less than 3/4 time.
- FTE = .375. A teacher works at least 1/4 time but less than 1/2 time.
- **FTE** = .125. A teacher works less than 1/4 time.

# Kindergarten-terminal school

A school is kindergarten-terminal (K-terminal) if kindergarten is the highest grade offered at the school.

#### Private school

A private school is a school that is not supported primarily by public funds. It must provide classroom instruction for one or more of grades K–12 (or comparable ungraded levels), and have one or more teachers. Organizations or institutions that provide support for homeschooling but do not offer classroom instruction for students are not included.

## **Program emphasis**

Private schools are classified according to one of seven types of program emphasis that best describes the school:

- **Regular.** The PSS questionnaire does not provide a definition of this term. Regular schools do not specialize in special, vocational/technical, or alternative education; or in having a Montessori or special program emphasis, although they may offer these programs in addition to the regular curriculum.
- **Montessori.** The PSS questionnaire does not provide a definition of this term. Montessori schools provide instruction using Montessori teaching methods.
- **Special program emphasis.** A science/mathematics school, a performing arts high school, a foreign language immersion school, and a talented/gifted school are examples of schools that offer a special program emphasis.
- Special education. Special education schools primarily serve students with disabilities.
- Career/Technical/Vocational. These schools primarily serve students who are being trained for occupations.
- Alternative. Alternative schools provide nontraditional education and may serve as adjuncts to regular schools. They fall outside the categories of regular, special education, and vocational education, although they may provide similar services or curriculum. Schools that provide a nontraditional setting or nontraditional system of teaching are considered alternative.
- **Early childhood.** Early childhood program schools serve students in prekindergarten, kindergarten, transitional (or readiness) kindergarten, and/or transitional first (or pre-first) grade.

### Region

Private schools are assigned to one of four geographic regions.

• Northeast. Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

- Midwest, Kansas, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.
- South. Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.
- West. Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

## School level

Private schools are classified using respondent-provided highest and lowest grades in the school according to one of three instructional levels:

- Elementary. A school is elementary if it has one or more of grades K-6 and does not have any grade higher than grade 8; for example, schools with grades PK-KG, K-6, 1-3, or 6-8 are classified as elementary schools.
- **Secondary.** A school is secondary if it has one or more of grades 7–12 and does not have any grade lower than grade 7; for example, schools with grades 9–12, 7–8, 10–12, or 7–9 are classified as secondary schools.
- **Combined.** A school is classified as combined if it has one or more of grades K-6 and one or more of grades 9–12; for example, schools with grades K–12, 6–12, 6–9, or 1–12 are classified as having combined grades. Schools in which all students are ungraded (i.e., not classified by standard grade levels) are also classified as combined.

#### **Teacher**

Any full-time or part-time school staff member who teaches one or more regularly scheduled classes in any of grades K-12 (or comparable ungraded levels). The following types of teachers are included:

- regular classroom teachers;
- teachers who teach subjects such as music, art, physical education, and special education; and
- teaching principals or administrators who teach a regularly scheduled class.

Short-term substitute teachers, student teachers, and teacher aides are not included.

# Traditional private school

A traditional school provides instruction for one or more of grades 1 through 12 (or comparable ungraded levels).

## **Typology**

Private schools are assigned to one of three major categories (Catholic, other religious, or nonsectarian— "3-level typology") based on the school's religious affiliation provided by respondents and, within each major category, one of three subcategories ("9-level typology"):

- Catholic. Catholic schools are categorized according to governance, provided by Catholic school respondents, into parochial, diocesan, and private schools.
- Other religious. Other religious schools have a religious orientation or purpose, but are not Roman Catholic. Other religious schools are categorized according to religious association membership, provided by respondents, into conservative Christian, affiliated, and unaffiliated schools.

- Conservative Christian schools are those "Other Religious" schools with membership in at least one of four associations: Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, or Oral Roberts University Educational Fellowship.
- O Affiliated schools are those "Other Religious" schools not classified as Conservative Christian with membership in at least 1 of 11 associations: Association of Christian Teachers and Schools, Christian Schools International, Evangelical Lutheran Education Association, Friends Council on Education, General Conference of the Seventh-Day Adventist Church, Islamic School League of America, National Association of Episcopal Schools, National Christian School Association, National Society for Hebrew Day Schools, Solomon Schechter Day Schools, Southern Baptist Association of Christian Schools—or indicating membership in "other religious school associations."
- o *Unaffiliated* schools are those "Other Religious" schools that have a religious orientation or purpose, but are not classified as Conservative Christian or affiliated.
- Nonsectarian. Nonsectarian schools do not have a religious orientation or purpose and are categorized according to program emphasis, provided by respondents, into regular, special emphasis, and special education schools. Regular schools are those that have a regular elementary/secondary or early childhood program emphasis. Special emphasis schools are those that have a Montessori, career/technical/vocational, alternative, or special program emphasis. Special education schools are those that have a special education program emphasis.

# **Ungraded students**

Ungraded students are those who are not assigned to a particular grade level (kindergarten, first grade, second grade, etc.); for example, special education centers and alternative schools often classify their students as ungraded. Students in Montessori schools are also considered ungraded if the school assigns them to "primary" and "intermediate" levels instead of specific grades.

## **Urban-centric community type**

Urban-centric community type is derived from the 12-category, urban-centric locale code (ULOCALE12). The urban-centric locale code is based on the school's physical address (or mailing address if the physical address is not reported) and is a measure of a school's location relative to populous areas. For this documentation, the urban-centric locale codes were aggregated into four urban-centric community types:

- City. The territory inside an urbanized area and inside a principal city;
- Suburb. The territory outside a principal city and inside an urbanized area;
- Town. Territory inside an urban cluster; and
- Rural. Census defined rural territory.

# Appendix B. 2015–16 PSS Questionnaire

U.S. DEPARTMENT OF EDUCATION

15115017

cs and Statistics Administration U.S. CENSUS BUREAU

OMB No. 1850-0641: Approval Expires 06/30/2016

NATIONAL CENTER FOR EDUCATION STATISTICS U.S. DEPARTMENT OF COMMERCE

**PRIVATE SCHOOL SURVEY** 2015-16 SCHOOL YEAR



### **PLEASE NOTE:**

The 2015-16 Private School Survey is intended to include all private -

### SCHOOLS that teach ANY of the following -

- At least one grade from 1 to 12
- Ungraded students from 5 to 18 years old
- Kindergarten traditional year of school primarily for 5-year-olds prior to first grade
- Transitional (or readiness) kindergarten extra year of school for kindergarten-age children who are judged not ready for kindergarten
- Transitional first (or prefirst) grade extra year of school for children who have attended kindergarten but have been judged not ready for first grade

## ► EARLY CHILDHOOD PROGRAMS AND DAY CARE CENTERS that have ANY of the following -

- Kindergarten
- Transitional (or readiness) kindergarten
- Transitional first (or prefirst) grade

An early childhood center that has a nursery school, a prekindergarten program, and a kindergarten would be eligible for this survey, since it includes a kindergarten.

But an early childhood center that has a nursery school and a prekindergarten program ONLY would NOT be eligible for this survey, since it does not include kindergarten. You would mark box 2 in item 2b.

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PLEASE CONTINUE WITH ITEM 1 ON PAGE 3.



## **DEAR ADMINISTRATOR:**

The National Center for Education Statistics (NCES) of the U.S. Department of Education requests your participation in the 2015-16 Private School Survey, a national data collection valuable to private schools across the country. NCES is authorized to conduct this survey under the Education Sciences Reform Act of 2002 (ESRA: 20 U.S.C., § 9543).

#### WHY IS NCES SPONSORING THIS SURVEY?

This data collection seeks to obtain current information about private schools, such as type of school, length of school year, number of students and teachers, and number of high school graduates, if applicable. The data will be used to produce a web-based private school search tool and statistical summaries about the providers of private education in the United States.

#### WHO SHOULD PARTICIPATE IN THIS SURVEY?

The 2015-16 Private School Survey includes all private schools and early childhood programs that provide educational instruction to students in kindergarten and at least one grade from 1 to 12.

#### WHY SHOULD YOUR SCHOOL PARTICIPATE IN THIS SURVEY?

Private schools are a significant segment of the nation's educational system. Results from previous surveys show that approximately 25 percent of all elementary and secondary schools in the United States are private institutions; these schools enroll approximately 10 percent of the nation's children and employ 13 percent of the nation's teachers. NCES has instituted this survey in recognition of the important role of private education in the United States. While there is no penalty for not responding, a high response rate is very important to maintain high data quality. We encourage you to participate in this voluntary survey.

#### WHERE SHOULD YOU MAIL YOUR COMPLETED QUESTIONNAIRE?

Please return your completed questionnaire using the enclosed envelope. If you do not have the return envelope, please mail your questionnaire to:

> U.S. CENSUS BUREAU ATTN: DCB 60A **1201 E. 10TH STREET** JEFFERSONVILLE, IN 47132-0001

THANK YOU FOR YOUR COOPERATION IN THIS VERY IMPORTANT EFFORT.

SINCERELY,

PEGGY G. CARR, PH.D.

COMMISSIONER FOR EDUCATION STATISTICS NATIONAL CENTER FOR EDUCATION STATISTICS

### Paperwork Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0641. The time required to complete this information collection is estimated to average 23 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, DC 20202-4537. If you have comments or concerns about the contents of this questionnaire, write directly to: Private School Survey, National Center for Education Statistics, 1990 K Street, N.W., #9012, Washington, DC 20006-5651.

Please print your name, title, and school telephone number.
YOUR NAME 051 TITLE
SCHOOL TELEPHONE NUMBER  052
2a. Is this institution or organization still in operation?
100 1 ☐ Yes Month Day Year
2 □ No - Please record the date when closed. → 101 102 103 → GO TO item 3 below.)
b. Are any of grades K to 12 or comparable ungraded levels taught by this institution or organization?
Which grades?  Mark (X) all that apply, then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply, then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then GO TO item 2c below.  See Mark (X) all that apply then
<ul> <li>Mark (X) all that apply, then GO TO item 3 below.</li> <li>1 □ Adult education or postsecondary education</li> <li>1 □ Tutoring program or before and after school program</li> <li>1 □ Prekindergarten, nursery school, early childhood center, or day care center</li> <li>Other - Please describe. →</li> </ul>
C. Is this a private school or program? For this survey, all non-public elementary or secondary schools are considered private schools.  For example, Roman Catholic schools, Hebrew day schools, Lutheran schools, private boarding schools, nonsectarian private schools, private schools that provide special education services to public school districts, private schools that receive tuition for some students from public school districts.  130  Yes  Which of the following best describes your school or program?  Mark (X) only one box, then GO TO item 3 below.  132  Public school, including public charter, state-run, Bureau of Indian Education, or Department of Defense school  Other → Please describe the type of school or program.   131
3 // 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /
3. If you marked "No" for any of items 2a-c, do not complete this questionnaire. Please return it in the enclosed envelope. If you do not have the return envelope, mail your questionnaire to:  U.S. CENSUS BUREAU  ATTN: DCB 60A  1201 E. 10TH STREET  JEFFERSONVILLE, IN 47132-0001  If you marked "Yes" for all of items 2a-c above, continue with item 4 on page 4.

#### **INSTRUCTIONS**

The data you enter on this form will be captured through the use of imaging technology. Please print all information clearly in ordinary characters, using a black ballpoint pen.

CORRECT marking example – (Use care to keep characters in their designated spaces.)	INCORRECT marking example –
35	<b>35</b> 35
1 🔀 Yes	1 ¥Yes 1 ■ Yes
2 No	2 No 2 No

- **a.** If you are unsure about how to answer a question, please give the best answer you can rather than leaving it blank.
- **b.** If you have any questions, call the U.S. Census Bureau at 1-888-329-5890. Someone will be available to take your call Monday through Friday, between 8:00 a.m. and 8:00 p.m. (Eastern Time).

**Ungraded levels.** The term "ungraded levels" refers to schools that classify students by an alternative means other than particular grade levels (e.g., Kindergarten, 1st grade, 2nd grade, etc.)

- 4. How many students were enrolled in each of the following grade levels around the first of October?
  - Report only for the school or program named on the front of this questionnaire.
     Do NOT include postsecondary or adult education students.

  - ♠ Do NOT include children who are enrolled only in day care at this school or program.
     ♠ In column (1), mark (X) "Yes" or "No" for each grade level.

  - In column (2), record the number of students for each grade level with "Yes" marked in column (1).

	Grade levels		noc	this program nts in this		(2) nber of students in this grade
		135	1	Yes →	140	
a.	Ungraded (including ungraded special education students)		2	No		_,
		145	1	Yes →	150	
b.	Nursery and prekindergarten		2	No		
		155	1	Yes→	160	
C.	Kindergarten (traditional year of school primarily for 5-year-olds prior to first grade)		2	No		, , , , , ,
d.	Transitional (or readiness) kindergarten (extra	165	1	Yes →	170	
٠.	year of school for kindergarten-age children who are judged not ready for kindergarten)		2	No		
e.	Transitional first (or prefirst) grade (extra year of school for children who have attended	175	1	Yes →	180	
	kindergarten but have been judged not ready for first grade)		2	No		, , , , ,

	Grade levels	(1) Does this school or program have students in this grade?	(2) Number of studin this grad
		185 ₁ ☐ Yes → 2 ☐ No	190
f.	1st	2	200
g.	2nd	2 No	,
16	2-4	205 ₁ ☐ Yes →	210
11.	3rd	215 <sub>1</sub> □ Yes →	220
i.	4th	2 No	,
j.	5th	1 ☐ Yes → 2 ☐ No	230
		<sup>235</sup> 1 ☐ Yes →	240
k.	<u>6th</u>	2 No	,
ı.	7th	1 ☐ Yes → 2 ☐ No	250
		255 <sub>1</sub> □ Yes →	260
m.	8th	2 □ No  265 1 □ Yes →	270
n.	9th	2 No	,
		275 1 ☐ Yes →	280
0.	10th	2 □ No  285 1 □ Yes →	290
p.	11th	2 No	L,
		295 <sub>1</sub> ☐ Yes →	300
q.	12th	2 No	,

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		Do	NOT	inclu	de ci	hildre		are el	garten, postsecondary, or adult education students. enrolled only in day care at this school or program.
20	a.	Hi	spar	nic or	Lati	ino,	regard	ess o	of race?
		0		Non	e c	or		-1	Students
	b.	W	hite,	not d	of Hi	spar	ic or L	atino	origin?
30		0		Non	e c	or [	,		Students
	c.	В	ack	or Af	ricar	Am	erican	, not o	of Hispanic or Latino origin?
25		0		Non	e c	or [	,		Students
40	d.	A	sian,	not o	of Hi	spar	ic or L	atino	origin?
16		0		Non	e c	or	,		Students
	e.	N	ative	Haw	aiian	or	other P	acific	Islander, not of Hispanic or Latino origin?
18		0		Non	e c	or	,		Students
	f.	A	neri	can Ir	ndiar	or .	Alaska	Nativ	ve, not of Hispanic or Latino origin?
10		0		Non	e d	or [	,		Students
	g.	T	vo o	r mor	e ra	ces,	not of	Hispa	anic or Latino origin?
32		0		Non	e d	or [	,	1.	Students
<b>7a.</b>	Is	this	sch	ool c	or pr	ogra	m coe	ducati	ional?
Γ	- 1		Ye	s					
	2		No	, it is	an a	all-fer	nale so	hool	GO TO item 8a on page 7.)
	3		No	, it is	an a	all-ma	ale sch	ool	J
b.	Ar	our	nd th	e firs	t of	Octo	ber, h	ow ma	any MALE students in grades K-12 and comparable is school or program?
	•	Do	NOT	inclu	de n	urse	ry, prek	inderg	garten, postsecondary, or adult education students.
							en who  () the b		enrolled only in day care at this school or program.
40	0		No	ne	or	1	1 1	М	fale students

8a.	LAST school year (2014-15), were any students enrolled in 12th grade?
345	1  Yes
	2 ☐ No → GO TO item 9a below.
	How many students were enrolled in 12th grade around October 1, 2014?
350	12th graders
C.	How many students graduated from the 12th grade with a diploma LAST school year (2014-15)?  • Include 2015 summer graduates. Do not include students who received only vocational certificates, certificates of attendance, or certificates of completion.  • If none, please mark (X) the box.
355	o None → GO TO item 9a below.
Г	Graduates
d.	Of those who graduated with a diploma LAST school year (2014-15), approximately what percentage went to four-year colleges?
	<ul> <li>         • If none, please mark (X) the box.     </li> <li>         • Round to the nearest whole percent.     </li> </ul>
360	o □ None or Percent
9a.	How long is the school day for a kindergarten, transitional kindergarten, or transitional
	first grade student?  • Mark (X) only one box.
365	<ul> <li>School or program does not offer kindergarten, transitional kindergarten, or transitional first grade → (item 10 at top of page 8.)</li> </ul>
ſ	Full day (4 hours or more per day)
-	2 Half day (less than 4 hours per day)
↓ (	Both offered
b.	How many days per week does a kindergarten, transitional kindergarten, or transitional first grade student attend?  • If the number of days per week varies (e.g., some students attend 3 days per week and some
370	attend 5 days per week), record the most days that a student would attend in a week.
	Days per week

If this school or program has eight full-time teachers for grades 1-8, one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time and prekindergarten ½ time, a music teacher who teaches two days each week, a physical education teacher who teaches three days each week, and a teaching principal who teaches one 30-minute class each day, you would complete item 10 as follows:    None   or   8	The following is an example to illustrate how to report teachers in this item for a school or prograt that includes prekindergarten through grade 8.  If this school or program has eight full-time teachers for grades 1-8, one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time, a music teacher who teaches two days each week, a physical education teacher who teaches three days each week, and a teaching principal who teaches one 30-minute class each day, you would complete item 10 as follows:    None   or   8				or the numb	per of teachers for grades K-12 by the amount of time they n.
teaches kindergarten % time and prekindergarten % time, a music teacher who teaches two days each week, and a teaching principal who teaches one 30-minute class each day, you would complete item 10 as follows:    None or   8	teaches kindergarten % time and prekindergarten % time, a music teacher who teaches two days each week, and a teaching principal who teaches one 30-minute class each day, you would complete item 10 as follows:    None or   8	The f	ollowing i	s an rekin	example to i	Illustrate how to report teachers in this item for a school or progra rough grade 8.
Teach at least ½ time but less than full time  Teach at least ½ time but less than ¾ time  This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he of she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	Teach at least ½ time but less than full time  Teach at least ½ time but less than ¾ time  This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he or she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	teach each	es kinder week, a	garte physi	n ½ time an cal education	d prekindergarten ½ time, a music teacher who teaches two days n teacher who teaches three days each week, and a teaching
Teach at least ½ time but less than full time  This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he of she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1  Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1  Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	Teach at least ½ time but less than full time  This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he of she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1  Teach at least ½ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1  Teach less than ½ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	0 🗆	None	or	8	Full-time teachers
This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he of she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	This number includes the one full-time teacher who teaches kindergarten ½ time and prekindergarten ½ time. The time he of she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	0 🗶	None	or		Teach at least 3/4 time but less than full time
she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who teaches three days a week.  None or 1 Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1 Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	0 🗆	None	or	2	This number includes the one full-time teacher who teaches
None or Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	Teach at least ¼ time but less than ½ time  This includes the music teacher who teaches two days a week.  None or 1  Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.					she spends teaching prekindergarten is not counted in item 10.  This number also includes the physical education teacher who
Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	Teach less than ¼ time  This includes the principal who teaches one 30-minute class ead day. The time he or she spends working as a principal is not included in item 10.	0 🗆	None	or	1	Teach at least ¼ time but less than ½ time
day. The time he or she spends working as a principal is not included in item 10.	day. The time he or she spends working as a principal is not included in item 10.	0 🗆	None	or	1	Teach less than ¼ time
1 2 TOTAL TEACHERS	1 2 TOTAL TEACHERS					
					1 2	TOTAL TEACHERS

and special education
class at this school or
or adult education
ite teachers social workers, or t THIS school or progran
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	1		REGULAR school – elementary or secondary
	2	Ш	MONTESSORI school
	3		SPECIAL PROGRAM EMPHASIS school – such as a science or math school, performin arts school, talented or gifted school, foreign language immersion school, etc.
	4		SPECIAL EDUCATION school – primarily serves students with disabilities
	5		CAREER/TECHNICAL/VOCATIONAL school – primarily serves students being trained for occupations
	7		EARLY CHILDHOOD PROGRAM OR DAY CARE CENTER – such as kindergarten only prekindergarten and kindergarten only, kindergarten and transitional first grade only, day care and transitional kindergarten only, etc.
	6		ALTERNATIVE/OTHER school – offers a curriculum designed to provide alternative or nontraditional education; does not specifically fall into the categories of regular, special program emphasis, special education, or vocational school – <i>Please describe.</i>
		416	
12a.	Is	a ma	ajor role of this school or program to support homeschooling?
420	1	П	Yes
	2	ш	No
b.	Is	this	school or program located in a private home that is used primarily as a family resi
425	i		Yes
	2	П	No
13a.	Do	es t	his school or program have a religious orientation or purpose?
	1		Yes
		П	No → (GO TO item 14 on page 12.)
	2	_	
<b>b</b>	_	thic	
<b>b</b> .	_	this	school or program affiliated with a religious organization or institution?
	_	this	

1 🗆	Roman Catholic   Is this school -   Mark (X) only one box.
2 🗆	African Methodist Episcopal  African Methodist Episcopal  African Methodist Episcopal  African Methodist Episcopal
з 🗆	Amish 2 Diocesan
4 🗆	Assembly of God 3 Private
5 🔲	Baptist
6 🗆	Brethren
7 🗆	Calvinist
8 🗆	Christian (no specific denomination)
9 🔲	Church of Christ
10	Church of God
11 🔲	Church of God in Christ
12	Church of the Nazarene
13	Disciples of Christ
14	Episcopal
15	Friends
16	Greek Orthodox
17	Islamic
18	Jewish
19	Latter Day Saints
20	Lutheran Church - Missouri Synod
21	Evangelical Lutheran Church in America (formerly AELC, ALC, or LCA)
22 🔲	Wisconsin Evangelical Lutheran Synod
23	Other Lutheran
24	Mennonite
25	Methodist
26	Pentecostal
27	Presbyterian
28	Seventh-Day Adventist
29	Other – Specify

450	1		This school or program does NOT belong to ANY associations or organizations
	R	ELIG	ious
155	1		Accelerated Christian Education (ACE) (or School of Tomorrow)
160	1		American Association of Christian Schools (AACS)
165	1		Association of Christian Schools International (ACSI)
167	1		Association of Christian Teachers and Schools (ACTS)
168	1		Association of Classical and Christian Schools (ACCS)
170	1		Christian Schools International (CSI)
180	1		Evangelical Lutheran Education Association (ELEA)
185	1		Friends Council on Education (FCE)
190	1		General Conference of the Seventh-Day Adventist Church (GCSDAC)
192	1		Islamic School League of America (ISLA)
195	1		Jesuit Secondary Education Association (JSEA)
500	1		National Association of Episcopal Schools (NAES)
505	1		National Catholic Educational Association (NCEA)
510	1		National Christian School Association (NCSA)
515	1		National Society for Hebrew Day Schools (Torah Umesorah)
520	1		Oral Roberts University Educational Fellowship (ORUEF)
522	1		The Jewish Community Day School Network (RAVSAK)
525	1		Solomon Schechter Day School Association (SSDSA)
530	1		Southern Baptist Association of Christian Schools (SBACS)
535	1		Other religious school association(s) – Specify
		536	

	1 C 1 C 1 C 1 C	Other Montessori association(s)  Association of Military Colleges and Schools (AMCS)  Association of Waldorf Schools of North America (AWSNA)
5	1 [	Association of Military Colleges and Schools (AMCS)  Association of Waldorf Schools of North America (AWSNA)
5 5 0	1 [	Association of Waldorf Schools of North America (AWSNA)
5	1 [	
0		National Association of Private Special Education Centers (NAPSEC)
5	1 [	
5		Other association(s) for exceptional children
	1 [	European Council for International Schools (ECIS)
0	1 [	National Association for the Education of Young Children (NAEYC)
0	1 E	National Association of Laboratory Schools (NALS)
2	1 [	National Coalition of Girls' Schools (NCGS)
5	1 [	Other special emphasis association(s) – Specify
0	1 [	Alternative School Network (ASN)
	ОТН	ER SCHOOL ASSOCIATIONS OR ORGANIZATIONS
0	1 [	National Association of Independent Schools (NAIS)
2	1 [	State or regional independent school association
0	1 [	National Independent Private Schools Association (NIPSA)
5	1 [	The Association of Boarding Schools (TABS)
0	1 [	Other school association(s) – Specify 📈
	64	

	Days per school YEAR
16.	How long is the school DAY for students in this school or program?  • Report BOTH hours and minutes, e.g., 06 hours and 00 minutes, 05 hours and 45 minutes, etc.  • If the length of day varies by grade level, record the longest day.
650	Hours AND Minutes
17.	Does this school or program have a library media center?  (A library media center is an organized collection of printed and/or audiovisual and/or computer resources which is administered as a unit, is located in a designated place or places, and makes resources and services available to students, teachers, and administrators. A library media center may be called a school library, media center, resource center, information center, instructional materials center, learning resource center, or any other similar name.)
660	1  Yes
	2 No
18a.	Does this school participate in the National School Lunch Program (that is, the federal free or reduced-price lunch program)?
661	1  Yes
	2 ☐ No → (GO TO item 19a below.)
b.	Around the first of October, how many students at this school were APPROVED for free or reduced-price lunches?
	<ul> <li>♠ Do NOT include nursery or prekindergarten students.</li> <li>♠ If none, please mark (X) the box.</li> </ul>
662	□ None <b>or</b> K-12 students approved
19a.	Around the first of October, did any students enrolled in this school receive Title I services at this school or at any other location?  (Title I is a federally funded program that provides educational services, such as remedial reading or remedial math, to children who live in areas with high concentrations of low-income families.)
663	1 Ves
	2 □ No → (GO TO item 20 on page 15.)
b.	How many students participate in the Title I program?
	• If none or all, please mark (X) the box.
664	○ □ No K-12 students
	↑ □ All K-12 students
665	K-12 students

	Please enter the date you completed this questionnaire.  • Report month as a number, i.e., 01 for January, 02 for February, etc.
670	Month Day Year
010	
21.	Please verify this school's or program's name and mailing address that are printed below.
	If any part of the name and mailing address is incorrect, enter the correction(s), as necessary, in the appropriate space(s) below.
700	School or program name
701	Mailing address
	City
702	
	State ZIP Code + 4
703	704
22a.	Is the physical or street address of this school or program the same as the mailing address?
705	1  Yes
F	- 2 No
b.	Please print this school's or program's physical or street address.
706	Street
	City
707	
	State ZIP Code
708	709
	THANK YOU FOR PARTICIPATING IN THIS IMPORTANT SURVEY. YOUR TIME AND EFFORT ARE APPRECIATED.
IF Y	PLEASE RETURN THE QUESTIONNAIRE IN THE ENCLOSED ENVELOPE. OU DO NOT HAVE THE RETURN ENVELOPE, MAIL YOUR QUESTIONNAIRE TO:
	U.S. CENSUS BUREAU
	ATTIL DOD COA
	ATTN: DCB 60A 1201 E. 10TH STREET JEFFERSONVILLE, IN 47132-0001

To learn more about the Private School Survey (PSS) and to access reports from earlier collections, see the PSS website at: http://nces.ed.gov/surveys/pss

Additional data collected by the National Center for Education Statistics (NCES) on a variety of topics in elementary, secondary, postsecondary, and international education are available from NCES' website at: http://nces.ed.gov

For additional data collected by various Federal agencies, including the Department of Education, visit the Federal Statistics clearinghouse at: http://www.fedstats.gov

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# **Appendix C. Private School Lists Received and Processed**

Table C-1. Private school association lists whether received or processed: 2015-16

Association name	Received	Processed
American Association of Christian Schools	Yes	Yes
American Montessori Society	Yes	Yes
Association Montessori International	Yes	Yes
Association of Boarding Schools	Yes	Yes
Association of Christian Schools International	Yes	Yes
Association of Christian Teachers and Schools	Yes	Yes
Association of Military Colleges and Schools of the United States	Yes	Yes
Association of Waldorf Schools of North America	Yes	Yes
Christian Schools International	Yes	Yes
Conference of Seventh Day Adventists	Yes	Yes
Evangelical Lutheran Church in America	Yes	Yes
General Council Agudath Israel of America	No	No
Friends Council on Education	Yes	Yes
International Christian Accrediting Association	Yes	Yes
Islamic School League of America	Yes	Yes
Jesuit Secondary Education Association	Yes	Yes
Lutheran Church—Missouri Synod (LCMS) Lutheran Schools	Yes	Yes
National Association of Episcopal Schools	Yes	Yes
National Association of Independent Schools	Yes	Yes
National Association of Laboratory Schools	Yes	Yes
National Association of Private Special Education Centers	Yes	Yes
National Catholic Educational Association	Yes	Yes
National Christian School Association	Yes	Yes
National Coalition of Girls' Schools	Yes	Yes
National Independent Private School Association	Yes	Yes
Oklahoma Private Accreditation Commission	Yes	Yes
Solomon Schechter Day School Association	Yes	Yes
Southern Baptist Association of Christian Schools	Yes	Yes
Southern Association of Colleges and Schools	Yes	Yes
Torah U'Mesora - National Society for Hebrew Day Schools	Yes	Yes
Wisconsin Evangelical Lutheran Synod	Yes	Yes

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 2015–16.

# **Appendix D. 2013–14 PSS Area Frame Counties**

Table D-1. PSS area frame counties, by PSS county number, state, and certainty/sample status: 2015-16

PSS PSU number	State	County	Certainty/sample status
666	Alabama	Greene County	Sample
667	Alabama	Hale County	Sample
698	Alabama	Lauderdale County	Sample
725	Arizona	Pinal County	Sample
668	Arkansas	Cleburne County	Sample
699	Arkansas	Washington County	Sample
669	Arkansas	White County	Sample
739	California	Alameda County	Sample
090	California	Los Angeles County	Certainty
092	California	Orange County	Certainty
740	California	Riverside County	Sample
737	California	San Francisco County	Sample
741	California	San Joaquin County	Sample
726	California	San Luis Obispo County	Sample
742	California	Tulare County	Sample
,	211222		~ ·
743	Colorado	Jefferson County	Sample
727	Colorado	Mesa County	Sample
654	Connecticut	New Haven County	Sample
696	District of Columbia	District of Columbia	Sample
670	Florida	Calhoun County	Sample
671	Florida	Gulf County	Sample
700	Florida	Hernando County	Sample
015	Florida	Miami-Dade County	Certainty
701	Florida	Palm Beach County	Sample
672	Georgia	Colquitt County	Sample
702	Georgia	DeKalb County	Sample
703	Georgia	Jackson County	Sample
673	Georgia	Lamar County	Sample
704	Georgia	Madison County	Sample
674	Georgia	Pike County	Sample
074	Georgia	1 IKC County	Sample
738	Hawaii	Honolulu County	Sample
721	Idaho	Fremont County	Sample
722	Idaho	Madison County	Sample
728	Idaho	Nez Perce County	Sample
023	Illinois	Cook County	Certainty

Table D-1. PSS area frame counties, by PSS county number, state, and certainty/sample status: **2015–16—Continued** 

PSS PSU number	State	County	Certainty/sample status
603	Illinois	Fulton County	Sample
628	Illinois	McLean County	Sample
629	Illinois	Menard County	Sample
630	Illinois	Sangamon County	Sample
604	Indiana	Daviess County	Sample
631	Indiana	Elkhart County	Sample
600	Indiana	LaGrange County	Sample
605	Indiana	Pike County	Sample
632	Indiana	Porter County	Sample
601	Iowa	Allamakee County	Sample
606	Iowa	Clay County	Sample
624	Iowa	Dubuque County	Sample
607	Iowa	Fayette County	Sample
608	Iowa	O'Brien County	Sample
602	Iowa	Winneshiek County	Sample
633	Iowa	Woodbury County	Sample
675	Kentucky	Boyle County	Sample
705	Kentucky	Jessamine County	Sample
676	Kentucky	Washington County	Sample
706	Kentucky	Woodford County	Sample
707	Louisiana	Caddo Parish	Sample
677	Louisiana	Catahoula Parish	Sample
678	Louisiana	Concordia Parish	Sample
664	Louisiana	Pointe Coupee Parish	Sample
697	Louisiana	St. John the Baptist Parish	Sample
643	Maine	Somerset County	Sample
708	Maryland	Anne Arundel County	Sample
709	Maryland	Prince George's County	Sample
679	Maryland	St. Mary's County	Sample
655	Massachusetts	Hampshire County	Sample
609	Michigan	Dickinson County	Sample
610	Michigan	Iron County	Sample
634	Michigan	Jackson County	Sample
611	Michigan	Lenawee County	Sample
635	Michigan	St. Clair County	Sample

Table D-1. PSS area frame counties, by PSS county number, state, and certainty/sample status: status: 2015–16—Continued

PSS PSU number	State	County	Certainty/sample status
612	Minnesota	Fillmore County	Sample
613	Minnesota	Houston County	Sample
636	Minnesota	Olmsted County	Sample
680	Mississippi	Benton County	Sample
681	Mississippi	Tippah County	Sample
614	Missouri	Andrew County	Sample
615	Missouri	Cole County	Sample
616	Missouri	Holt County	Sample
637	Missouri	Jasper County	Sample
625	Missouri	St. Louis County	Sample
		·	•
617	Nebraska	Gage County	Sample
618	Nebraska	Pawnee County	Sample
729	Nevada	Nye County	Sample
644	New Hampshire	Sullivan County	Sample
656	New Jersey	Atlantic County	Sample
657	New Jersey	Mercer County	Sample
650	New Jersey	Ocean County	Sample
658	New York	Albany County	Sample
008	New York	Kings County	Certainty
645	New York	Lewis County	Sample
659	New York	Montgomery County	Sample
651	New York	New York County	Sample
009	New York	Queens County	Certainty
660	New York	Richmond County	Sample
641	New York	Tompkins County	Sample
710	North Carolina	Cabarrus County	Sample
682	North Carolina	Moore County	Sample
711	North Carolina	Randolph County	Sample
683	North Carolina	Vance County	Sample
684	North Carolina	Warren County	Sample
<b>620</b>	01.		G 1
638	Ohio	Clark County	Sample
619	Ohio	Defiance County	Sample
626	Ohio	Geauga County	Sample
639	Ohio	Medina County	Sample
620	Ohio	Van Wert County	Sample

Table D-1. PSS area frame counties, by PSS county number, state, and certainty/sample status: **2015–16—Continued** 

PSS PSU number	State	County	Certainty/sample status
685	Oklahoma	Craig County	Sample
686	Oklahoma	Mayes County	Sample
712	Oklahoma	Tulsa County	Sample
730	Oregon	Baker County	Sample
744	Oregon	Clackamas County	Sample
731	Oregon	Union County	Sample
732	Oregon	Wallowa County	Sample
661	Pennsylvania	Beaver County	Sample
652	Pennsylvania	Delaware County	Sample
646	Pennsylvania	Franklin County	Sample
647	Pennsylvania	Fulton County	Sample
662	Pennsylvania	Lackawanna County	Sample
054	Pennsylvania	Philadelphia County	Certainty
648	Pennsylvania	Pike County	Sample
642	Pennsylvania	Union County	Sample
663	Pennsylvania	Westmoreland County	Sample
653	Rhode Island	Bristol County	Sample
687	South Carolina	Lancaster County	Sample
713	Tennessee	Anderson County	Sample
688	Tennessee	Cumberland County	Sample
665	Tennessee	Fayette County	Sample
714	Tennessee	Williamson County	Sample
689	Texas	Blanco County	Sample
690	Texas	Cherokee County	Sample
715	Texas	Denton County	Sample
691	Texas	Gillespie County	Sample
069	Texas	Harris County	Certainty
716	Texas	Lubbock County	Sample
717	Texas	Travis County	Sample
745	Utah	Utah County	Sample
649	Vermont	Washington County	Sample
692	Virginia	Appomattox County	Sample
718	Virginia	Arlington County	Sample
693	Virginia	Prince Edward County	Sample
719	Virginia	Falls Church City	Sample

Table D-1. PSS area frame counties, by PSS county number, state, and certainty/sample status: 2015–16—Continued

PSS PSU number	State	County	Certainty/sample status
720	Virginia	Salem City	Sample
723	Washington	Columbia County	Sample
733	Washington	Ferry County	Sample
734	Washington	Pend Oreille County	Sample
746	Washington	Snohomish County	Sample
735	Washington	Stevens County	Sample
724	Washington	Walla Walla County	Sample
694	West Virginia	Monroe County	Sample
695	West Virginia	Summers County	Sample
640	Wisconsin	Calumet County	Sample
621	Wisconsin	Jackson County	Sample
627	Wisconsin	Milwaukee County	Sample
622	Wisconsin	Monroe County	Sample
623	Wisconsin	Walworth County	Sample
736	Wyoming	Albany County	Sample

### **Appendix E. Selected Weighted Response Rate Tables**

Table E-1. Weighted and unweighted number of PSS interviews and noninterviews, and weighted response rates, by private school typology: 2015–16

	Intervie	ws	Noninterv	Weighted response rate	
Private school typology	Unweighted	Weighted	Unweighted	Weighted	(percent)
Total	22,428	23,938	7,207	10,638	69.2
Catholic	4,760	4,760	669	669	87.7
Parochial	1,957	1,957	245	245	88.9
Diocesan	2,128	2,128	316	316	87.1
Private	675	675	108	108	86.2
Other religious	8,477	8,477	1268	1268	87.0
Conservative Christian	2,599	2,599	428	428	85.9
Affiliated	2,040	2,040	270	270	88.3
Unaffiliated	3,838	3,838	570	570	87.1
Nonsectarian	5,628	5,628	1068	1068	84.1
Regular	2,508	2,508	579	579	81.2
Special emphasis	2,117	2,117	336	336	86.3
Special education	1,003	1,003	153	153	86.8
Unknown	374	1,884	1068	4,499	29.5

NOTE: Weighted using the inverse of the probability of selection. Religious or nonsectarian orientation status of school is that known prior to data collection. Detail may not sum to totals because of rounding.

Table E-2. Weighted and unweighted number of PSS interviews and noninterviews, and weighted response rates, by religious or nonsectarian orientation of school: 2015-16

	Intervie	ews	Noninter	views	Weighted response rate
Religious or nonsectarian category	Unweighted		Unweighted		(percent)
Total	22,428	23,938	7,207	10,638	69.2
Religious orientation	13,237	13,237	1,937	1,937	87.2
Roman Catholic	4,760	4,760	669	669	87.7
African Methodist Episcopal	5	5	2	2	71.4
Amish	760	760	51	51	93.7
Assembly of God	165	165	33	33	83.3
Baptist	1,116	1,116	181	181	86.0
Brethren	43	43	7	7	86.0
Calvinist	81	81	5	5	94.2
Christian (unspecified)	2,145	2,145	432	432	83.2
Church of Christ	74	74	16	16	82.2
Church of God	49	49	11	11	81.7
Church of God in Christ	8	8	2	2	80.0
Church of the Nazarene	44	44	3	3	93.6
Disciples of Christ	8	8	0	0	100.0
Episcopal	268	268	37	37	87.9
Friends	58	58	7	7	89.2
Greek Orthodox	22	22	5	5	81.5
Islamic	152	152	37	37	80.4
Jewish	483	483	126	126	79.3
Latter Day Saints	4	4	0	0	100.0
Lutheran Church—Missouri Synod	759	759	53	53	93.5
Evangelical Lutheran Church In America	86	86	8	8	91.5
Wisconsin Evangelical Lutheran Synod	281	281	17	17	94.3
Other Lutheran	50	50	7	7	87.7
Mennonite	335	335	26	26	92.8
Methodist	170	170	11	11	93.9
Pentecostal	181	181	37	37	83.0
Presbyterian	153	153	19	19	89.0
Seventh-Day Adventist	576	576	73	73	88.8
Other	401	401	62	62	86.6
Nonsectarian	5,628	5,628	1,068	1,068	84.1
Unknown  † Not applicable	3,563	5,073	4,202	7,633	39.9

<sup>†</sup> Not applicable.

NOTE: Weighted using the inverse of the probability of selection. Religious or nonsectarian orientation status of school is that known prior to data collection. Detail may not sum to totals because of rounding.

Table E-3. PSS item response rates for traditional private schools: 2015–16

Item number	Unweighted response rate	Final weighted response rate	Item number	Unweighted response rate	Final weighted
Q4A_GRD	100.0	100.0	Q6A	99.6	response rate 99.6
Q4A_GRD Q4A_ENRL	99.8	100.0 99.9	Q6B		
Q4A_ENKL Q4B_GRD	100.0		Q6C	99.6 99.9	99.6
Q4B_ENRL		100.0 99.8	Q6D		99.8
Q4B_ENKL Q4C_GRD	99.8			97.5	96.7
Q4C_GKD	100.0	100.0	Q6E	97.4	96.6
Q4C_ENRL	99.9	99.8	Q6F	97.5	96.7
Q4D_GRD	100.0	100.0	Q6G	97.4	96.7
Q4D_ENRL	99.9	99.9	Q7A	97.4	96.7
Q4E_GRD	100.0	100.0	Q7B	97.4	96.6
Q4E_ENRL	100.0	100.0	Q8A	97.4	96.6
Q4F_GRD	100.0	100.0	Q8B	99.9	99.9
Q4F_ENRL	99.9	99.9	Q8C	98.1	97.7
Q4G_GRD	100.0	100.0	Q8D	99.9	99.9
Q4G_ENRL	99.9	99.8	Q9A	98.8	98.7
Q4H_GRD	100.0	100.0	Q9B	98.7	98.6
Q4H_ENRL	99.9	99.8	Q10_FT	95.1	95.2
Q4I_GRD	100.0	100.0	Q10_>3/4	99.8	99.8
Q4I_ENRL	99.9	99.8	Q10_>1/2	99.6	99.4
Q4J_GRD	100.0	100.0	Q10_>1/4	99.7	99.6
Q4J_ENRL	99.9	99.8	Q10_<1/4	99.6	99.5
Q4K_GRD	100.0	100.0	Q10_TOTAL	99.6	99.5
Q4K_ENRL	99.9	99.8	Q11	99.6	99.4
Q4L_GRD	100.0	100.0	Q12A	99.6	99.5
Q4L_ENRL	99.8	99.8	Q12B	99.8	99.7
Q4M_GRD	100.0	100.0	Q13A	99.4	99.4
Q4M_ENRL	99.8	99.8	Q13B	99.8	99.8
Q4N_GRD	100.0	100.0	Q13C	100.0	100.0
Q4N_ENRL			Q13C_CATHOLIC		
Q4O_GRD	99.5	99.5		100.0	100.0
-	100.0	100.0	Q14	99.6	99.6
Q4O_ENRL	99.5	99.4	Q15	99.9	99.9
Q4P_GRD	100.0	100.0	Q16	99.5	99.5
Q4P_ENRL	99.5	99.4	Q17	100.0	100.0
Q4Q_GRD	100.0	100.0	Q18A	98.5	97.9
Q4Q_ENRL	99.5	99.5	Q18B	99.3	99.1
Q5_TOTAL	99.9	100.0	Q19A	99.8	99.8
			Q19B	98.1	98.2

NOTE: Traditional schools are those for which the highest grade is 1 through 12 or ungraded.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), "Documentation Data File," 2015–16.

Table E-4. PSS item response rates for kindergarten-terminal private schools: 2015–16

T	Unweighted	Final weighted	T. 1	Unweighted	Final weighted
Item number	response rate	response rate	Item number	response rate	response rate
Q4A_GRD	99.9	99.9	Q6A	99.5	99.4
Q4A_ENRL	99.9	99.9	Q6B	99.5	99.4
Q4B_GRD	100.0	100.0	Q6C	99.8	99.8
Q4B_ENRL	99.7	99.6	Q6D	94.9	93.6
Q4C_GRD	99.9	99.9	Q6E	94.9	93.5
Q4C_ENRL	99.7	99.7	Q6F	94.8	93.4
Q4D_GRD	99.9	99.9	Q6G	94.8	93.5
Q4D_ENRL	99.6	99.1	Q7A	94.8	93.4
Q4E_GRD	99.9	99.9	Q7B	94.8	93.5
Q4E_ENRL	100.0	100.0	Q8A	94.7	93.4
Q4F_GRD	99.9	99.9	Q8B	99.4	99.5
Q4F_ENRL	†	†	Q8C	97.4	97.2
Q4G_GRD	99.9	99.9	Q8D	100.0	100.0
Q4G_ENRL	†	†	Q9A	100.0	100.0
Q4H_GRD	99.9	99.9	Q9B	100.0	100.0
Q4H_ENRL	†	†	Q10_FT	100.0	100.0
Q4I_GRD	99.9	99.9	Q10_>3/4	99.3	99.3
Q4I_ENRL	†	†	Q10_>1/2	99.2	99.2
Q4J_GRD	99.9	99.9	Q10_>1/4	99.6	99.6
Q4J_ENRL	†	†	Q10_<1/4	99.6	99.6
Q4K_GRD	99.9	99.9	Q10_TOTAL	99.6	99.6
Q4K_ENRL	†	†	Q11	99.6	99.6
Q4L_GRD	99.9	99.9	Q12A	99.6	99.6
Q4L_ENRL	†	†	Q12B	99.6	99.6
Q4M_GRD	99.9	99.9	Q13A	99.7	99.7
Q4M_ENRL	†	†	Q13B	99.3	99.4
Q4N_GRD	99.9	99.9	Q13C	100.0	100.0
Q4N_ENRL	†	†	Q13C_CATHOLIC	99.6	99.6
Q4O_GRD	99.9	99.9	Q14	98.9	98.9
Q4O_ENRL	†	†	Q15	99.5	99.5
Q4P_GRD	99.9	99.9	Q16	92.5	92.4
Q4P_ENRL	99.7 +		Q10 Q17	100.0	100.0
Q4P_ENKL Q4Q_GRD	99.9	† 99.9	Q17 Q18A	94.7	93.6
Q4Q_GRD Q4Q_ENRL			Q18B	94.7 97.0	95.0 96.5
Q4Q_ENRL Q5_TOTAL	† 99.9	† 99.9	Q19A	97.0	96.3 99.3
			Q19B	97.7	97.9

† Not applicable.

NOTE: Kindergarten-terminal are schools in which the highest grade is kindergarten.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS),

<sup>&</sup>quot;Documentation Data File," 2015–16.

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## Appendix F. Pre-Edit Rejections of PSS Data and Changes Made During the Pre-Edit and Edit

Table F-1. Number and percentage of pre-edit rejections of PSS data, by rejection reason: 2015–16

Pre-edit		Records re	jected
number	Pre-edit rejection reason	Number	Percent
1.1	School has 50 percent more students than last PSS	782	3.1
1.2	School has 50 percent fewer students than last PSS	377	1.5
1.3	Total students reported for most of all lines in item 5	5	#
2.1	Total number of teachers is 0	123	0.5
2.2	More teachers than students	43	0.2
2.3	School has 50 percent more teachers than last PSS	373	1.5
2.4	School has 50 percent fewer teachers than last PSS	108	0.4
2.5	Student-teacher ratio is more than 40 to 1	106	0.4
2.6	Sum of teachers is greater than reported total	186	0.7
2.7	Teacher counts are reported but sum is less than reported total	133	0.5
3.1	"No" is marked in item 2d but one or more of grades K-12 expected but missing	25	0.1
3.2	All students are nursery/pre-K	35	0.1
3.3	Grade levels marked but two or more different from last PSS	549	2.2
3.4	Students are clustered in two or three grades (e.g., many students are reported in		
	grades 1 and 4, but none are reported in grades 2 and 3)	398	1.6
3.5	More than 100 students are reported for a grade and that count is twice as large		
	(or more) than count for previous grade or next grade	64	0.3
3.6	Sum of enrollments by grade is 10 percent greater than reported total	476	1.9
3.7	Enrollments are reported for some grades and the sum of those enrollments is less		
	than 90 percent of the reported total	137	0.6
3.8	Zero is reported for all marked grades in item 5	6	#
3.9	School has more than 30 K–12 students, all parts of race item have entries, and		
	sum is 50 percent or less of K–12 students	334	1.3
3.10	Sum of race item is greater than 30 and more than 150 percent of K–12 enrollment	750	3.0
3.11	Number of students in item 6 is greater than 0, number of ungraded students equals		
	entry in item 6, and students have been reported for any of grades pre-K-12	28	0.1
3.12	Total is not reported in item 6 and entry for ungraded appears to be total enrollment	0	0.0
3.13	Ungraded enrollment is greater than 100 and twice as big as next grade	19	0.1
3.14	Number of 12th grade enrollment is greater than 100 and twice as big as 11th grade	1	#
3.16	School has not indicated any kindergarten grades in item 4, item 9a is 1, 2, or 3, and	0	0.0
	responded to item 9b	0	0.0
4.1	School has changed from religious to not religious, or vice versa since last PSS	372	1.5
4.2	School has changed from one religion to another since last PSS, except other	640	2.6
4.3	School reported other religious affiliation but did not specify affiliation	35	0.1
4.4	School has reported that it is not religious but name includes "Christ" or "God"	154	0.6
4.5	School has reported that it is not religious but belongs to a religious association	73	0.3

Pre-edit		Records re	jected
number	Pre-edit rejection reason	Number	Percent
4.6	"Other" is marked for religious affiliation (may need to be recoded)	496	2.0
4.7	Other is marked but respondent did not mark Other and reported in last PSS	38	0.2
4.8	Other is marked but respondent did not mark other and did not report in last PSS	13	0.1
5.1	Type of school is different from previous PSS	532	2.1
5.2	Type of school is alternative (entry may need to be recoded into one of the other		
	categories)	1,038	4.2
5.3	School is not early childhood center, has any of grades 1–12, school day is less		
	than 4 hours per day, and entry is different from value in last PSS	55	0.2
5.4	School day is greater than 10 hours per day, and school is not a daycare center		
	or Montessori school, and entry is different from value from last PSS	73	0.3
5.5	Type of school is vocational	13	0.1
5.6	Number of students is greater than 30, school is not an early childhood center, and		
	item 13 indicates school is located in a private home	32	0.1
5.7	Any students are reported in item 5, item 10 indicates school has kindergarten, and		
	no kindergarten students are reported in item 5	797	3.2
5.8	School type is unknown and was not in last PSS	386	1.6
5.9	School type is unknown but type of school specified and not in last PSS	5	#
6.1	School is not in South Dakota, North Dakota, Oklahoma, Arizona, New Mexico, or Alaska and more than 30 percent of students are American Indian or Alaska		
	Native	59	0.2
6.2	Entries for students by race may be percentages (sum of entries is 99, 100, or 101)	86	0.3
6.3	School with more than 30 students is in Hawaii but less than half of students are	20	0.1
<i>c</i> 1	Asian or Pacific Islander	30	0.1
6.4	School is not in South Dakota, North Dakota, Oklahoma, Arizona, New Mexico, or		ш
<i>c</i>	Alaska and more than 100 students are American Indian or Alaska Native	6	#
6.5	School is not in Hawaii or California and more than 50 percent of K–12 students are Asian or Pacific Islander	189	0.0
6.6	School is not in Hawaii or California and more than 100 students are Asian or	189	0.8
0.0	Pacific Islander	142	0.6
6.7	School is Jewish and more than half the K–12 students are not White	9	#
6.8	School is Jewish and number of White students is 0	13	0.1
6.9	Entry for Hispanic students appears to be sum of other categories	116	0.5
7.1	School is all male but was not in last PSS	11	#
7.2	School is not all male but was in last PSS	30	0.1
7.3	School is all female but was not in last PSS	20	0.1
7.4	School is not all female but was in last PSS	33	0.1

Table F-1. Number and percentage of pre-edit rejections of PSS data, by rejection reason: 2015–16
—Continued

Pre-edit number		1100014510	jected
Hamber	Pre-edit rejection reason	Number	Percent
7.5	Coed is marked, but all students are male or no students are male	471	1.9
8.1	Total number of students is 10 or less and school is in a private home or supports		
	homeschooling	118	0.5
8.2	Number of teachers greater than or equal to number of students and school supports		
	homeschooling or is in a private home	22	0.1
8.3	School has more than 30 students, is not special ed or alternative, is not located in a		
	private home, and student-teacher ratio is less than 5 to 1	1,011	4.1
8.4	School supports homeschool and is located in a private home	59	0.2
8.5	School located in private home and does not support homeschooling	76	0.3
9.1	School had more graduates than 12th graders last year	164	0.7
9.2	Number of 12th graders this year is 30 percent more than number reported for		
	last year	73	0.3
9.3	Number of 12th graders this year is 30 percent less than number reported for last		
	year	53	0.2
	Entries in item 9d appear to be counts instead of percentages	123	0.5
9.5	Highest grade in school is 8th or lower, but 12th graders or graduates are reported		
	for last year	46	0.2
10.1	Days in school year are less than 150 and entry is different from value from last PSS	240	1.0
10.2	School is not Montessori, special ed, alternative, or early childhood, and days in		
	school year are more than 220, and entry is different from value from last PSS	207	0.8
10.3	Days in school year are less than the numbers of days in a week	8	#
10.4	Day in school year are less than or equal to the number of days in a month but more		
	than two weeks	3	#
14.1	"No" is marked for orientation but association is religious	73	0.3
14.2	Affiliation is Catholic but association is some other religion	3	#
14.4	Association is Islamic, Quaker, SDA, Catholic, Episcopal, Jewish, or Baptist but		
	affiliation is some other religion	0	0.0
14.5	Affiliation is "Christian, no specific denomination" but association is Islamic or		
	Jewish	0	0.0
14.6	Affiliation is Episcopal but association is some other religion	0	0.0
14.7	Affiliation is Quaker but association is AMCS or is some other religion	0	0.0
14.8	Affiliation is Islamic but association is some other religion	0	0.0
14.9	Affiliation is Jewish but association is some other religion	0	0.0
14.10	Affiliation is SDA but association is some other religion	1	#
14.11	Affiliation is Baptist but association is some other religion	0	0.0
14.12	Affiliation is Lutheran but association is some other religion	0	0.0
14.13	Affiliation is Amish but association is AMCS	0	0.0

# Rounds to zero.

Table F-2. Number of changes made to PSS variables during the pre-edit: 2015-16

			Percent of				
Τ.	Records		total	Τ.		ords where	Percent of
Item CRD	Variable values ch		records	Item	Variable valu		
Q4A_GRD	135	2	#	Q4P_GRD	285	0	0.0
Q4A_ENRL	140	8	#	Q4P_ENRL	290	0	0.0
Q4B_GRD	145	0	0.0	Q4Q_GRD	295	0	0.0
Q4B_ENRL	150	1	#	Q4Q_ENRL	300	0	0.0
Q4C_GRD	155	0	0.0	Q5_TOTAL	305	1,400	6.1
Q4C_ENRL	160	0	0.0	Q6A	320	0	0.0
Q4D_GRD	165	0	0.0	Q6B	330	0	0.0
Q4D_ENRL	170	0	0.0	Q6C	325	0	0.0
Q4E_GRD	175	0	0.0	Q6D	316	0	0.0
Q4E_ENRL	180	0	0.0	Q6E	318	0	0.0
Q4F_GRD	185	0	0.0	Q6F	310	0	0.0
Q4F_ENRL	190	0	0.0	Q6G	332	0	0.0
Q4G_GRD	195	0	0.0	Q7A	335	60	0.3
Q4G_ENRL	200	1	#	Q7B	340	49	0.2
Q4H_GRD	205	0	0.0	Q8A	345	0	0.0
Q4H_ENRL	210	1	#	Q8B	350	0	0.0
Q4I_GRD	215	0	0.0	Q8C	355	0	0.0
Q4I_ENRL	220	0	0.0	Q8D	360	0	0.0
Q4J_GRD	225	0	0.0	Q9A	365	0	0.0
Q4J_ENRL	230	0	0.0	Q9B	370	0	0.0
Q4K_GRD	235	0	0.0	Q10_FT	385	0	0.0
Q4K_ENRL	240	0	0.0	Q10_>3/4	390	0	0.0
Q4L_GRD	245	0	0.0	Q10_>1/2	395	0	0.0
Q4L_ENRL	250	0	0.0	Q10_>1/4	400	0	0.0
Q4M_GRD	255	0	0.0	Q10_<1/4	405	0	0.0
Q4M_ENRL	260	0	0.0	Q10_TOTAL	410	15	0.1
Q4N_GRD	265	0	0.0	Q11	415	881	3.9
Q4N_ENRL	270	0	0.0	Q12A	420	10	#
Q4O_GRD	275	0	0.0	Q12B	425	40	0.2
Q4O_ENRL	280	0	0.0	Q13A	430	22	0.1

Table F-2. Number of changes made to PSS variables during pre-edit: 2015-16—Continued

	Re	cords where			Re	cords where	
_		values	total			values	Percent of
Item	Variable	changed	records	Item	Variable	changed	total records
Q13B	435	129	0.6	Q14—Cont.	542	149	0.7
Q13C	440	670	2.9		545	81	0.4
Q13C_CATHOLIC	445	2	#		550	0	0.0
Q14	450	0	0.0		555	1	#
	455	9	#		575	0	0.0
	460	3	#		580	1	#
	465	0	0.0		585	0	0.0
	467	2	#		590	5	#
	468	4	#		600	0	0.0
	470	0	0.0		602	0	0.0
	480	1	#		605	40	0.2
	485	1	#		610	0	0.0
	490	0	0.0		620	3	#
	492	15	0.1		622	38	0.2
	495	1	#		625	0	0.0
	500	0	0.0		630	0	0.0
	505	7	#		635	5	#
	510	0	0.0		640	312	1.4
	515	0	0.0	Q15	645	0	0.0
	520	0	0.0	Q16_HR	650	0	0.0
	522	2	#	Q16_MIN	655	3	#
	525	0	0.0	Q17	660	0	0.0
	530	1	#	Q18A	661	0	
	535	604	2.6	Q18B	662	0	
	540	10	#	Q19A	663	0	
				Q19B_ALL	664	0	
				Q19B_WRITE	665	0	0.0

<sup>#</sup> Rounds to zero.

Table F-3. Number of changes made to PSS variables during the edit: 2015–16

		Records where				Records where	
Itam	Variable	values	Percent of total records	Itam	Variable	values	Percent of total records
Item Q4A_GRD				Item Q4P_GRD			
Q4A_GRD Q4A_ENRL	135	8,781	39.2	Q4F_ENRL	285	7,802	34.8
Q4A_ENRL Q4B_GRD	140	962	4.3	Q4I_ENRL Q4Q_GRD	290	799	3.6
Q4B_GRD Q4B_ENRL	145	3,612	16.1	Q4Q_GRD Q4Q_ENRL	295	7,861	35.0
Q46_ENKL Q4C_GRD	150	412	1.8	Q4Q_ENKL Q5_TOTAL	300	790	3.5
Q4C_GKD	155	2,717	12.1	Q5_TOTAL	305	55	0.2
Q4C_ENRL	160	364	1.6	Q6A	320	2,679	11.9
Q4D_GRD	165	8,128	36.2	Q6B	330	2,694	12.0
Q4D_ENRL	170	1,152	5.1	Q6C	325	2,933	13.1
Q4E_GRD	175	8,682	38.7	Q6D	316	3,152	14.1
Q4E_ENRL	180	1,097	4.9	Q6E	318	4,024	17.9
Q4F_GRD	185	3,422	15.3	Q6F	310	3,994	17.8
Q4F_ENRL	190	488	2.2	Q6G	332	3,678	16.4
Q4G_GRD	195	3,601	16.1	Q7A	335	95	0.4
Q4G_ENRL	200	462	2.1	Q7B	340	220	1.0
Q4H_GRD	205	3,679	16.4	Q8A	345	408	1.8
Q4H_ENRL	210	428	1.9	Q8B	350	47	0.2
Q4I_GRD	215	3,791	16.9	Q8C	355	220	1.0
Q4I_ENRL	220	452	2.0	Q8D	360	199	0.9
Q4J_GRD	225	3,872	17.3	Q9A	365	1,625	7.2
Q4J_ENRL	230	465	2.1	Q9B	370	13	0.1
Q4K_GRD	235	4,098	18.3	Q10_FT	385	203	0.9
Q4K_ENRL	240	501	2.2	Q10_>3/4	390	5,102	22.7
Q4L_GRD	245	4,495	20.0	Q10_>1/2	395	4,049	18.1
Q4L_ENRL	250	547	2.4	Q10_>1/4	400	5,129	22.9
Q4M_GRD	255	4,602	20.5	Q10_<1/4	405	5,487	24.5
Q4M_ENRL	260	564	2.5	Q10_TOTAL	410	406	1.8
Q4N_GRD	265	7,480	33.4	Q11	415	358	1.6
Q4N_ENRL	270	7,460	3.4	Q11 Q12A	420	0	0.0.
Q4O_GRD	275	7,636	34.0	Q12A Q12B	425	312	1.4
Q4O_ENRL	280	7,030	3.4	Q12B Q13A	430	393	1.4

Table F-3. Number of changes made to PSS variables during edit: 2015–16—Continued

		ecords where values	Percent of			decords where values	Percent of
Item	Variable	changed to	tal records	Item	Variable	changed	total records
Q13B	435	302	1.3	Q14—Cont.	542	2	#
Q13C	440	228	1.0		545	2	#
Q13C_CATHOLIC	445	0	0.0		550	0	0.0
Q14	450	947	4.2		555	1	#
	455	0	0.0		575	0	0.0
	460	0	0.0		580	3	#
	465	4	#		585	0	0.0
	467	0	0.0		590	2	#
	468	0	0.0		600	0	0.0
	470	1	#		602	1	#
	480	0	0.0		605	0	0.0
	485	0	0.0		610	0	.0.0
	490	0	0.0		620	0	0.0
	492	0	0.0		622	15	0.1
	495	.0	0.0		625	0	0.0
	500	2	#		630	1	#
	505	4	#		635	1	#
	510	0	0.0		640	0	0.0
	515	1	#	Q15	645	565	2.5
	520	0	0.0	Q16_HR	650	23	0.1
	522	0	0.0	Q16_MIN	655	2,203	9.8
	525	0	0.0	Q17	660	0	0.0
	530	0	0.0	Q18A	661	127	0.6
	535	0	0.0	Q18B	662	271	1.2
	540	2	#	Q19A	663	350	1.6
				Q19B_ALL Q19B_WRITE	664 E 665	372 0	1.7 0.0

<sup>#</sup> Rounds to zero.

### **Appendix G. Changes Made During Imputation**

Table G-1. PSS imputation variables: 2015–16

Matching v	variables: name and description	Values
TYP_9	Nine-level private school typology	
		2 = Catholic, diocesan
		3 = Catholic, private
		4 = Other religious, conservative Christian
		5 = Other religious, affiliated with an established religious group or denomination
		6 = Other religious, not affiliated with any established religious group or denomination
		7 = Nonsectarian, regular school
		8 = Nonsectarian, regular school
		9 = Nonsectarian, special education
TYP_3	Three-level private school typology	1 = Catholic
		2 = Other religious
		3 = Nonsectarian
ENR	School enrollment category	1 = Less than 150 students
		2 = 150-399 students
		3 = 400 students or more
LEVEL	School level	1 = Elementary
		2 = Secondary
		3 = Combined or ungraded
TYPE	School type	1 = Regular, Montessori, or Special Program Emphasis
		2 = Special education
		3 = Vocational education
		4 = Alternative
		5 = Early childhood/day care
UNGRADI	ED School organization	1 = All students are ungraded (not assigned to grades 1, 2, etc.)
		2 = Some or all students are assigned to grade levels
URB	Type of community where	1 = City
	school is located	2 = Suburb
		3 = Town
		4 = Rural

Table G-2. PSS imputation matching variables and collapsing order: 2015-16

Item	Matching variables	Order of collapse
4, 5	LEVEL, TYP_3, ENR, URB	URB, ENR
6	TYP_3, URB, ENR	ENR, URB,
7	TYP_3, LEVEL, URB, TYP_9	TYP_9, URB, LEVEL
8, 9	TYP_3, LEVEL, ENR, URB	URB, ENR, LEVEL
10	TYP_3, LEVEL, TYPE, ENR	ENR, TYPE, LEVEL
11, 12a	TYP_3, UNGRADED, LEVEL, TYP_9	TYP_9, LEVEL, UNGRADED
13b	TYP_3, TYP_9	TYP_9
15, 16, 17	TYP_3, TYP_9, LEVEL, TYPE	TYPE, LEVEL, TYP_9

Table G-3. Number of changes made to PSS variables during imputation: 2015–16

Item	Variable	Records where values changed	Percent of total records	Item	Variable	Records where values changed	Percent of total records
Q4A_GRD	135	10	#	Q4P_GRD	285	9	#
Q4A_ENRL	140	11	#	Q4P_ENRL	290	45	0.2
Q4B_GRD	145	7	#	Q4Q_GRD	295	9	#
Q4B_ENRL	150	30	0.1	Q4Q_ENRL	300	41	0.2
Q4C_GRD	155	9	#	Q5_TOTAL	305	30	0.1
Q4C_ENRL	160	28	0.1	Q6A	320	640	2.9
Q4D_GRD	165	9	#	Q6B	330	659	2.9
Q4D_ENRL	170	12	0.1	Q6C	325	646	2.9
Q4E_GRD	175	8	#	Q6D	316	652	2.9
Q4E_ENRL	180	8	#	Q6E	318	654	2.9
Q4F_GRD	185	8	#	Q6F	310	656	2.9
Q4F_ENRL	190	23	0.1	Q6G	332	660	2.9
Q4G_GRD	195	8	#	Q7A	335	35	0.2
Q4G_ENRL	200	24	0.1	Q7B	340	431	1.9
Q4H_GRD	205	8	#	Q8A	345	12	#
Q4H_ENRL	210	25	0.1	Q8B	350	87	0.4
Q4I_GRD	215	8	#	Q8C	355	81	0.4
Q4I_ENRL	220	25	0.1	Q8D	360	304	1.4
Q4J_GRD	225	8	#	Q9A	365	56	0.2
Q4J_ENRL	230	27	0.1	Q9B	370	81	0.4
Q4K_GRD	235	8	#	Q10_FT	385	77	0.3
Q4K_ENRL	240	27	0.1	Q10_>3/4	390	90	0.4
Q4L_GRD	245	8	#	Q10_>1/2	395	90	0.4
Q4L_ENRL	250	28	0.1	Q10_>1/4	400	94	0.4
Q4M_GRD	255	8	#	Q10_<1/4	405	94	0.4
Q4M_ENRL	260	24	0.1	Q10_TOTAL	410	49	0.2
Q4N_GRD	265	9	#	Q11	415	124	0.6
Q4N_ENRL	270	39	0.2	Q12A	420	52	#
Q4O_GRD	275	10	#	Q12B	425	0	0.0
Q4O_ENRL	280	43	0.2	Q13A	430	17	0.1

Table G-3. Number of changes made to PSS variables during imputation: 2015–16—Continued

Item	Variable	Records where values changed	Percent of total records	Item	Variablevalu	Records where	Percent of total
							records
Q13B	435	84	0.4	Q14—Cont.	542	0	0.0
Q13C	440	36	0.2		545	0	0.0
Q13C_CATHOLIC	445	50	0.2		550	0	0.0
Q14	450 455	0	0.0		555 575	0	0.0 0.0
	460	0	0.0		580	0	0.0
	465	0	0.0		585	0	0.0
	467	0	0.0		590	0	0.0
	468	0	0.0		600	0	0.0
	470	0	0.0		602	0	0.0
	480	0	0.0		605	0	0.0
	485	0	0.0		610	0	0.0
	490	0	0.0		620	0	0.0
	492	0	0.0		622	0	0.0
	495	0	0.0		625	0	0.0
	500	0	0.0		630	0	0.0
	505	0	0.0		635	0	0.0
	510	0	0.0		640	0	0.0
	515	0	0.0	Q15	645	444	2.0
	520	0	0.0	Q16_HR	650	229	1.0
	522	0	0.0	Q16_MIN	655	228	1
	525	0	0.0	Q17	660	68	0.3
	530	0	0.0	Q18A	661	438	2.0
	535	0	0.0	Q18B	662	827	3.7
	540	0	0.0	Q19A	663	469	2.1
				Q19B_ALL	664	263	1.2
# Rounds to zero				Q19B_WRITE	665	257	1.1

<sup>#</sup> Rounds to zero.

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# Appendix H. Variable Categories Used in Developing Adjustment Factor Cells for Weighting

A detailed listing of the weighting classes, or cells, is contained in this appendix. The nonresponse adjustment cells for list-frame schools are presented first, followed by the cells for area-frame schools. Refer to chapter VI on weighting for a more general description of the weighting procedure.

### Nonresponse Adjustment Cells for List-Frame Schools: Affiliation by Grade Level by Enrollment

Affiliation is also divided into four urban-centric community types (city, suburb, town, and rural). These divisions are not shown.

Grade level has four categories: K-terminal schools, elementary schools, secondary schools, and combined schools.

#### Catholic—Parochial Schools: Grade Level by Enrollment

K-terminal: No enrollment categories

Elementary: Less than 100, 100–149, 150–174, 175–199, 200–224, 225–249, 250–274,

275–299, 300–349, 350–449, 450–549, 550 or more

Secondary<sup>1</sup>: Less than 100, 100–149, 150–174, 175–199, 200–224, 225–249, 250–274,

275–299, 300–349, 350–449, 450–549, 550 or more

Combined<sup>1</sup>: Less than 100, 100–149, 150–174, 175–199, 200–224, 225–249, 250–274,

275–299, 300–349, 350–449, 450–549, 550 or more

#### Catholic—Diocesan: Grade Level by Enrollment

K-terminal: No enrollment categories

Elementary: Less than 75, 75–99, 100–124, 125–149, 150–174, 175–199, 200–224,

225–249, 250–274, 275–299, 300–349, 350–449, 450–549, 550–599,

600-649, 650-699, 700-749 750-849, 850-1,149,

1.150 or more

Secondary<sup>1</sup>: Less than 75, 75–99, 100–124, 125–149, 150–174, 175–199, 200–224,

225-249, 250-274, 275-299, 300-349, 350-449, 450-549, 550-599,

600-649, 650-699, 700-749 750-849, 850-1,149,

1,150 or more

Combined<sup>1</sup>: Less than 75, 75–99, 100–124, 125–149, 150–174, 175–199, 200–224,

225-249, 250-274, 275-299, 300-349, 350-449, 450-549, 550-599,

600-649, 650-699, 700-749 750-849, 850-1,149,

1,150 or more

<sup>&</sup>lt;sup>1</sup> Grade level is not divided into urbanicity types.

#### Catholic—Private: Grade Level by Enrollment

K-terminal: No enrollment categories

Elementary: Less than 55, 55–99, 100–174, 175–249, 250–349, 350 or more Less than 175, 175–274, 275–349, 350–449, 450–549, 550–749, Secondary:

750–949, 950 or more

Less than 200, 200–549, 550 or more Combined:

#### **Amish: Grade Level by Enrollment**

No enrollment categories K-terminal: Elementary<sup>2</sup>: Less than 25, 25 or more Secondary<sup>2</sup>: No enrollment categories Combined<sup>2</sup>: Less than 25, 25 or more

#### Assembly of God: Grade Level by Enrollment

K–terminal: No enrollment categories

Elementary: Less than 75, 75–124, 125–199, 200 or more

Secondary: No enrollment categories

Combined: Less than 35, 35–99, 100–249, 250 or more

#### **Baptist: Grade Level by Enrollment**

K-terminal: Less than 15, 15 or more

Less than 25, 25–49, 50–99, 100–149, 150–224, 225 or more Elementary:

Secondary: No enrollment categories

Combined: Less than 25, 25–49, 50–74, 75–99, 100–124, 125–149, 150–174,

175–199, 200–224, 225–249, 250–299, 300–349, 350–449,

450-549, 550 or more

#### **Episcopal: Grade Level by Enrollment**

K-terminal: No enrollment categories

Elementary: Less than 50, 50–99, 100–149, 150–224, 225–299, 300–374,

375 or more

No enrollment categories Secondary: Combined: Less than 650, 650 or more

<sup>&</sup>lt;sup>2</sup> Grade level is also divided into three regions (Northeast, Midwest, and South and West).

#### **Jewish: Grade Level by Enrollment**

K–terminal: No enrollment categories

Elementary: Less than 50, 50–99, 100–149, 150–199, 200–274, 275–449,

450 or more

Secondary: Less than 50, 50–99, 100–199, 200 or more Combined: Less than 225, 225–349, 350–649, 650 or more

#### Lutheran Church—Missouri Synod: Grade Level by Enrollment

K–terminal: No enrollment categories

Elementary: Less than 25, 25–49, 50–74, 75–99, 100–124, 125–149, 150–174,

175–199, 200–299, 300 or more

Secondary: Less than 200, 200 or more Combined: No enrollment categories

#### **Evangelical Lutheran Church—Wisconsin Synod: Grade Level by Enrollment**

K-terminal: No enrollment categories

Elementary: Less than 25, 25–49, 50–74, 75–99, 100–149, 150 or more

Secondary: No enrollment categories
Combined: No enrollment categories

#### Mennonite: Grade Level by Enrollment

K-terminal: No enrollment categories

Elementary: Less than 25, 25–49, 50 or more

Secondary: No enrollment categories

Combined: Less than 25, 25–49, 50–74, 75 or more

#### Pentecostal: Grade Level by Enrollment

K-terminal: No enrollment categories Elementary: Less than 50, 50 or more Secondary: No enrollment categories

Combined: Less than 25, 25–49, 50–99, 100 or more

#### Seventh-Day Adventist: Grade Level by Enrollment

K-terminal: No enrollment categories

Elementary: Less than 25, 25–49, 50–99, 100 or more

Secondary: Less than 125, 125 or more

Combined: Less than 27, 27–49, 50–124, 125 or more

#### Other Religious: Grade Level by Enrollment

K-terminal<sup>3</sup>: Less than 10, 10–19, 20 or more

Less than 25, 25–49, 50–99, 100–124, 125–149, 150–174, 175–199, Elementary:

200-274, 275-324, 325-374, 375-449, 450-549, 550-749,

750 or more

Secondary: Less than 25, 25–49, 50–99, 100–124, 125–149, 150–174, 175–199,

200-274, 275-324, 325-374, 375-449, 450-549, 550-749,

750 or more

Combined: Less than 25, 25–49, 50–99, 100–124, 125–149, 150–174, 175–199,

200-274, 275-324, 325-374, 375-449, 450-549, 550-749,

750 or more

#### Nonsectarian—Regular: Grade Level by Enrollment

K-terminal<sup>3</sup>: Less than 6, 6–9, 10–14, 15–19, 20–22, 23 or more

Less than 25, 25–49, 50–74, 75–99, 100–124, 125–149, 150–184, Elementary:

185–224, 225–274, 275–349, 350 or more

Secondary: Less than 25, 25–49, 50–74, 75–124, 125–274, 275 or more

Combined: Less than 25, 25–49, 50–84, 85–144, 145–274, 275–449, 450–649,

650–849, 850 or more

#### Nonsectarian—Special Emphasis: Grade Level by Enrollment

K-terminal<sup>3</sup>: Less than 10, 10–19, 20 or more

Elementary<sup>3</sup>: Less than 25, 25–34, 35–49, 50–74, 75–99, 100–124, 125–149,

150–199, 200 or more

Secondary<sup>3</sup>: Less than 42, 42 or more

Less than 25, 25–49, 50–99, 100–199, 200 or more Combined<sup>3</sup>:

#### Nonsectarian—Special Education: Grade Level by Enrollment

K-terminal: No enrollment categories Less than 25, 25 or more Elementary: Secondary: Less than 25, 25 or more

Combined: Less than 16, 16–24, 25–34, 35–44, 45–59, 60–69, 70–89, 90–119,

120-149, 150 or more

<sup>&</sup>lt;sup>3</sup> Grade level is also divided into four regions (Northeast, Midwest, South, and West).

## Nonresponse Adjustment Cells for Area-Frame Schools: PSU Status by Three-Level Typology by Grade Level

### Certainty/Noncertainty PSU: Three-Level Typology by Grade Level

Catholic: K-terminal, elementary, secondary, combined
Other religious: K-terminal, elementary, secondary, combined
Nonsectarian: K-terminal, elementary, secondary, combined