

Documentation for the 2012-13 Principal Follow-up Survey: Restricted-Use Version

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Chapter 1. Overview

Background

The Principal Follow-up Survey (PFS) is a component of the Schools and Staffing Survey (SASS), which is sponsored by the National Center for Education Statistics (NCES) of the Institute of Education Sciences within the U.S. Department of Education and conducted by the U.S. Census Bureau. In order to provide a comprehensive picture of American public and private elementary and secondary schools and their staff, SASS has been collecting data on the characteristics of teachers, principals, schools, school districts, and library media centers since the 1987-88 school year. For more information about SASS, please see *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming) or the SASS website at <http://nces.ed.gov/surveys/sass>.

NCES administered the 2012-13 PFS in order to provide attrition rates for principals in K-12 public and private schools. The goal was to assess how many principals in the 2011-12 school year still worked as a principal in the same school in the 2012-13 school year, how many had moved to become a principal in another school, and how many had left principalship. The PFS sample included all principals interviewed in SASS. Schools that had returned a completed 2011-12 SASS principal questionnaire were mailed the PFS form in the spring of 2013. The form collected information about the current occupational status of the principal who had been a principal in the previous school year (i.e., 2011-12). Additionally, as a separate study, a validation study was conducted concurrently with the PFS. This study analyzed the validity of the responses to the PFS by re-interviewing the principals directly.

The PFS data produce national, regional, and state estimates for principals in public schools and national, regional, and affiliation estimates for principals in private schools. The PFS data files include responses to question one of the PFS form (principal's occupational status) and have been merged with the 2011-12 SASS principal data files for the convenience of data users. This combined data file can be merged with the other SASS data files (i.e., school district, school, teacher, and library media center data files) to provide a rich dataset for analyzing principals in K-12 schools in the United States. The Principal Status Forms for public and private schools can be found in appendix B.

Principal Status Forms

The 2012-13 PFS included four questionnaires: the Principal Status Form for Public Schools (form PFS-1A), the School Head/Principal Status Form for Private Schools (form PFS-1B), the Principal Status Form for Public School Principals (form PFS-1C), and the School Head/Principal Status Form for Private School Principals (form PFS-1D). The PFS-1A and PFS-1B consisted of two questions. Question one asked about the current occupational status of the principal who had been the principal during the previous school year, when the SASS data were collected (i.e., 2011-12). Question two collected the name of the previous year's principal.¹ The PFS-1C and PFS-1D consisted of one question, and were used for both the regular PFS and the validation study. Question one was the same as question one on the PFS-1A and PFS-1B, with

¹ Principals' names were collected for internal use only and are not disclosed or part of the dataset.

minor wording changes to reflect addressing the principal directly rather than any respondent at the school.

The response options for the current occupational status for the PFS were used to divide the principals into four general categories: stayers, movers, leavers, and other. “Stayers” are principals who were principals in the same school in 2012-13 as in 2011-12. “Movers” are principals who were principals in a different school in 2012-13 than in 2011-12. “Leavers” are principals who were no longer principals in 2012-13. “Other” includes principals who had left their 2011-12 school, but for whom the responding school was unable to provide sufficient information to determine a mover or leaver status in 2012-13. For exact response options for each status category, please see the forms in appendix B.

The validation study information was collected on the PFS-1C and PFS-1D, as mentioned above. However, the response options were classified into six main categories (rather than four) once the data were collected for the purposes of the PFS validation study: stayers, movers, and 4 groups of leavers. “Stayers” and “Movers” are defined the same as above. Group 1 of “Leavers” are principals who were no longer principals in 2012-13, but are still working in a school. Group 2 of “Leavers” are principals who were no longer principals in 2012-13, but who are still working in the field of education. Group 3 of “Leavers” are principals who were no longer principals in 2012-13, but who are working in another occupational field. Group 4 of “Leavers” are principals who were no longer principals in 2012-13, and not working. For exact response options for each status category, please see the forms in appendix B.

Target Population and Sample

The target population for the 2012-13 PFS includes principals in public, public charter, and private schools, with students in any of grades K-12 or in comparable ungraded levels, which were in operation in school year 2011-12. All public and private school principals who replied to a 2011-12 SASS principal questionnaire were included in the PFS sample; therefore, any discussion of PFS methodology builds upon the preceding SASS methodology.

SASS Sampling Frames and Sample Selection

Public schools. The starting point for the 2011-12 SASS public school sampling frame was the preliminary 2009-10 Common Core of Data (CCD) nonfiscal school universe data file. The CCD includes regular and nonregular schools (special education, alternative, vocational, or technical), and public charter schools. The sampling frame was adjusted from the CCD in order to fit the definition of a school eligible for SASS. To be eligible for SASS, a school was defined as an institution, or part of an institution, that provides classroom instruction to students; has one or more teachers to provide instruction; serves students in one or more of grades K-12 or the ungraded equivalent; and is located in one or more buildings apart from a private home. It was possible for two or more schools to share the same building; in this case, they were treated as different schools if they had different administrators (i.e., principal or school head).

The SASS definition of a school is generally similar to the CCD definition, with some exceptions. SASS is confined to the 50 states plus the District of Columbia and excludes the other jurisdictions and Department of Defense overseas schools, which are included in the CCD.

The CCD also includes some schools that do not offer teacher-provided classroom instruction in grades 1-12 or the ungraded equivalent. In some instances, schools in the CCD are essentially administrative units that may oversee entities that provide classroom instruction or may only provide funding and oversight. CCD schools with the same location, address, and phone number were collapsed during the SASS frame building on the assumption that the respondent would consider them to be one school. Because SASS allows schools to define themselves, Census Bureau staff observed that schools generally report as one entity in situations where the administration of two or more schools in the CCD is the same. A set of rules was applied in certain states to determine in which instances school records should be collapsed. When school records were collapsed, the student and teacher counts, grade ranges, and names as reported to the CCD were all modified to reflect the change.

Finally, additional school records were added to the sampling frame. Most of these records were for Career Technical Centers or alternative, special education, or juvenile justice facilities in California, Pennsylvania, New York, and other states. For a detailed list of frame modifications, see the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming). After adding, deleting, and collapsing school records, the SASS public school sampling frame consisted of 90,527 traditional public schools, and 5,079 public charter schools.

The SASS sample is a stratified probability-proportionate-to-size (PPS) sample. All schools underwent multiple levels of stratification. The sample was allocated so that national-, regional-, and state-level elementary, secondary, and combined public school estimates could be made. The sample was allocated to each state by grade range (elementary, secondary, and combined) and school type (traditional public and public charter). For a full description of the allocation procedure, see the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming). Within each stratum, all schools were systematically selected using a PPS algorithm. The measure of size used for the schools was the square root of the number of full-time-equivalent teachers reported, or imputed, for each school during the sampling frame creation. Any school with a measure of size greater than the sampling interval (the inverse of the rate at which the sample is selected) was included in the sample with certainty and thus automatically excluded from the probability sampling operation. (For a more detailed explanation of PPS sampling, consult *Sampling Techniques* [Cochran 1977].) These sampling procedures resulted in a total public school sample of 11,000 public schools (including both traditional public and public charter schools) in the 2011-12 SASS.

Private schools. The 2011-12 SASS private school frame was based on the 2009-10 Private School Universe Survey (PSS).² The PSS is designed to gather data on a biennial basis for the total number of private schools, students, and teachers and to build a universe of private schools in the 50 states and the District of Columbia. PSS serves as a sampling frame of private schools for NCES sample surveys, such as SASS. Prior to each PSS collection, NCES updates the list of schools to be included in the PSS by collecting membership lists from private school associations and religious denominations, as well as private school lists from state education departments. This list-frame update is intended to improve coverage by adding new private schools as well as private schools not previously included in the PSS. Since the list-frame update for the 2011-12 PSS preceded the SASS frame building, the SASS private school sample frame was augmented

² For more information about the PSS, see <http://nces.ed.gov/surveys/pss>.

with the private schools discovered during this update. The SASS private school frame also includes schools in the 2009-10 PSS area frame. The area frame includes schools that were not found in membership or state lists and thus were not included in the list-building operation. In a sample of 124 geographical areas (out of 2,062), local field staff used such resources as local telephone directories and local resource guides to identify schools. The resultant lists of schools were matched to the PSS list frame, and any school that was not part of the list frame was added as an area-frame school.

During the creation of the SASS private school sampling frame, schools with kindergarten as the highest grade level were deleted from the frame. Also, private school records that were missing information necessary for the SASS school sample selection were amended. For example, the school grade range was needed to stratify SASS schools during the private school sampling process. If this information was missing, values were assigned in one of four ways: taking information from earlier PSS data, using information from the school's name (e.g., middle school), calling the school to determine the grade range, or, as a last resort, assigning a grade level of combined (both elementary and secondary levels). Missing information on school affiliation and student and teacher counts were assigned in a similar manner. After these changes, the private school sampling frame consisted of 27,110 private schools, which consisted of 26,858 list frame schools and 252 area frame schools. Private schools were stratified by affiliation, grade level (elementary, secondary, and combined), and census region (Northeast, Midwest, South, and West). The number of private school affiliation strata is 11. The current affiliation strata include

- Catholic—parochial;
- Catholic—diocesan;
- Catholic—private;
- Baptist;
- Jewish;
- Lutheran;
- Seventh-Day Adventist;
- Other religious;
- Nonsectarian—regular;
- Nonsectarian—special emphasis; and
- Nonsectarian—special education.

Within each stratum, private schools in the list frame were systematically selected using a PPS algorithm. The measure of size used was the square root of the number of full-time-equivalent teachers. Any school with a measure of size larger than the sampling interval was excluded from the probability sampling process and included in the sample with certainty. The sample included 3,000 private schools of which 2,748 schools were from the list frame and 252 were from the area frame.

Principals. In the 2011-12 SASS, the principal of each sampled school was automatically selected. Altogether, 14,000 school principals were sampled (11,000 public and 3,000 private). The 2012-13 PFS sample included all principals who completed SASS interviews in eligible schools. A total of 9,235 schools were included in the sample for this survey (7,512 public and 1,723 private); 4,765 eligible schools were not included because the principal did not respond to

the Principal Questionnaire during the 2011-12 SASS. However, only 9,228 schools were contacted for this survey; 7 schools that completed a SASS interview were deemed ineligible from the 2011-12 SASS because their district refused participation after the SASS and were not contacted during the 2012-13 PFS. These 7 schools were considered eligible nonrespondents for the PFS for purposes of weighting.

The 2011-12 SASS was designed to produce national, regional, and state estimates for public elementary and secondary school principals and national, regional, and affiliation estimates for private school principals. The PFS allows for similar types of estimates as SASS. For more detailed information about SASS sampling frames or estimation, see the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Methodology

All schools whose principals provided sufficient data during the 2011-12 administration of SASS and were not deemed ineligible prior to the PFS were mailed the Principal Status Form (9,228 schools). Any knowledgeable person at the school was asked to complete the form by indicating the current occupational status of the previous year's principal. The Census staff at the National Processing Center in Jeffersonville, Indiana, mailed the forms, along with cover letters, to the schools and processed the returned forms.

Reminder letters with a second copy of the form were mailed to all schools. Schools that had already returned a completed form were thanked and instructed to disregard the second copy. If no response was received, a telephone follow-up was conducted, at which point interviewers asked respondents to complete the form over the phone. If after telephone follow-up no response was received, a Principal Status Form was mailed directly to the principals' home address, if available. If no response was received, a reminder email was sent to the principals' home and work email addresses, if available. A telephone follow-up was conducted for any nonresponding principals, at which point interviewers asked the principals to complete the form over the phone. For more information about the data collection, see chapter 2.

Validation Study Methodology

The validation sample—intended to be 800 principals—was divided between those principals in the same job (“stayers”) and those reported to be doing something else (“nonstayers”). The principals' status was then verified by contacting them at their home or using the personal contact information provided on the SASS form (if provided) rather than using school contact information again. The nonstayers were stratified by the major status category, whose values were as follows:

1. Working as a principal at another school;
2. Working in a K-12 school but not as a principal;
3. Working in K-12 education but not at a school;
4. Working outside of K-12 education; and
5. Not working (including retired, deceased, on leave).

Each of these status categories was allocated an approximately equal sample.

As proxy responses were received, validation study cases were selected for sample on a flow basis. The actual sampling process resulted in 690 cases selected for sample. Of these 690, a total of 193 cases were not attempted for validation because no home contact information was provided in SASS. There were an additional 49 cases that were not interviewed for the validation study because they refused or otherwise could not be contacted. For information about the results of the validation study, see chapter 6.

Respondent Status

All SASS respondents who completed the 2011-12 SASS Principal Questionnaire were included in the 2012-13 PFS sample. Complete “interviews” include the respondents who completed their form and answered question one. The numbers of respondents who were sampled for the PFS and completed the interview are presented in table 1.

Table 1. Number of schools sampled and number of schools interviewed, by sector: 2012-13

Interview status	Total	School sector	
		Public	Private
Sampled	9,235	7,512	1,723
Interviewed	9,174	7,491	1,697

NOTE: Sampled cases consist of all SASS respondents who completed the 2011-12 SASS Principal Questionnaire. Interviewed cases include cases for which data were collected.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), “Public School Principal Status and Private School Principal Status Documentation Data Files,” 2012-13.

Structure of This Report

This report contains chapters on data collection (chapter 2), response rates (chapter 3), data processing (chapter 4), weighting and variance estimation (chapter 5), data quality (chapter 6), and the structure of the PFS data files and merging the PFS principal data with the 2011-12 SASS data files (chapter 7). The information in these chapters is supported by material in the following appendixes:

- *Appendix A*—Key terms used in the PFS and SASS;
- *Appendix B*—2012-13 PFS questionnaires and cover letters and 2011-12 SASS Principal Questionnaires; and
- *Appendix C*—PFS created variables.

Chapter 2. Data Collection

Overview of Data Collection

The 2012-13 PFS utilized a primarily mail-based collection methodology, with telephone and e-mail follow-up for nonrespondents. Interviewers were provided with classroom training, including a portion intended for self-study and a call script to follow.

All questionnaires were mailed in an envelope with the U.S. Department of Education and SASS logos, but the envelope did not include a direct reference to the name of the survey. Altogether, 9,228 schools were contacted for this survey.

The schedule for the data collection is presented in table 2.

Table 2. Data collection time schedule: 2012-13

Activity	Date of activity
Introductory letter and the Principal Status Form mailed to schools	March 2013
Second Principal Status Form mailed to nonresponding schools	March 2013
Telephone follow-up of nonresponding schools	April 2013
Introductory letter and the Principal Status Form mailed to validation study principals	April-May 2013
Email reminder to nonresponding validation study principals	April-May 2013
Telephone follow-up of nonresponding validation study principals	April-June 2013
Introductory letter and the Principal Status Form mailed to principals	May 2013
Email reminder to nonresponding principals	May 2013
Telephone follow-up of nonresponding principals	May-June 2013
Data collection close-out	June 2013

SOURCE: U.S. Department of Education, National Center for Education Statistics, Principal Follow-Up Survey, 2012-13.

Data Collection Procedures

Initial Mailings of Questionnaires

On March 5, 2013, an introductory letter and the Principal Status Form were mailed to sampled schools. The letter introduced the survey and asked the school to complete and mail the questionnaire in the return envelope. The packages were addressed to the principal, or, if the principal name had not been provided during the 2011-12 SASS data collection, to the “School Principal/Administrator” for public schools and the “School Head/Principal” for private schools. Public and private schools received slightly different versions of the form, with answer categories to question one tailored specifically for each school type. Eligible respondents for the Principal Status Form included any school employee knowledgeable about the current status of last year’s principal.

Initial Mailings of Questionnaires to Principals Selected for Validation Study

As completed school-level questionnaires were received, principals were sampled to be a part of the validation study. For further information about the validation study, please refer to Chapter 1: Overview.

On April 1, 2013, an introductory letter and a Principal Status Form were mailed to the sampled principal's home for the validation study. The letter introduced the study and asked the principal to complete and mail the questionnaire in the enclosed return envelope. The packages were addressed to the principal, or, if the principal name had not been provided during the 2011-12 SASS data collection, to 'The 2011-12 <school name> principal'. Public and private schools received slightly different versions of the form, with answer categories tailored specifically for each school type. These packages were mailed weekly until May 6, 2013, as eligible principals were sampled. At this point, any outstanding cases from the initial mailing to the schools were sent a Principal Status Form directly to the principal's home. Any completed responses from the mailing sent directly to the principal were eligible to be sampled for the validation study. However, if the principal was sampled for the validation study, that status also served as the 'validation study' response to avoid the principal validating a response that they had mailed in themselves.

Eligible respondents for the Principal Status Form selected for the validation study were the sampled principal. In some cases, proxy interviews by a person residing at the sampled principal's home address who was knowledgeable about the occupational status of the sampled principal were allowed.

Initial Mailings of Questionnaires to Principals

On May 6, 2013, any outstanding principals from the initial mailing to the schools in March 2013 were mailed an introductory letter and the Principal Status Form directly to the principal's home. The letter introduced the survey and asked the principal to complete and mail the questionnaire in the return envelope. Only cases that had a principal name and valid home address were included in this mailing, therefore the packages were addressed to the principal. Public and private school principals received slightly different versions of the form, with answer categories to question one tailored specifically for each school type. Eligible respondents for the Principal Status Form sent to the principal's home address were the sampled principal. In some cases, proxy interviews by a person residing at the sampled principal's home address who was knowledgeable about the occupational status of the sampled principal were allowed.

Reminder Mailings

On March 18, 2013, a reminder letter and a second copy of the Principal Status Form were mailed to any outstanding sampled schools. The letter reminded schools to complete and return the questionnaire. Schools that had already returned a completed questionnaire were thanked and instructed to disregard the second copy.

Nonresponse Follow-up to Schools

Telephone nonresponse follow-up of schools was conducted from April 11, 2013 to April 26, 2013. During this operation, telephone interviewers attempted to reach the person most knowledgeable about the status of last year's principal. Interviewers specified that the most appropriate respondent might be the current principal or principal's assistant. The purpose of the telephone nonresponse follow-up operation was to complete the Principal Status Form over the phone if the respondent was willing to do so. A telephone version of the Principal Status Form

was provided for the interviewers to use when completing the interview. The telephone version included additional general answer options for the interviewer to mark if, after probing, the respondent did not know the specific status of last year's principal.

Although all follow-up to the schools was completed prior to May 2013, mailed questionnaires were accepted through early June 2013.

Nonresponse Follow-up to Principals Selected for the Validation Study

Telephone nonresponse follow-up directly to the principal's home for those selected for the validation study was conducted from April 22, 2013 to June 7, 2013. During this operation, telephone interviewers attempted to reach the principal directly at home to receive his or her occupational status from the prior school year to verify the schools' response to the Principal Status Form. The purpose of the telephone nonresponse follow-up operation was to complete the Principal Status Form over the phone if the respondent was willing to do so. A telephone version of the Principal Status Form was provided for the interviewers to use when completing the interview. The telephone version included additional general answer options for the interviewer to mark if, after probing, the respondent did not know or refused the specific status of last year's principal.

Mailed questionnaires were accepted through early June 2013.

Nonresponse Follow-up to Principals

Telephone nonresponse follow-up directly to the principal's home was conducted from May 20, 2013 to June 7, 2013. During this operation, telephone interviewers attempted to reach the principal directly at home to receive his or her occupational status from the prior school year. The purpose of the telephone nonresponse follow-up operation was to complete the Principal Status Form over the phone if the respondent was willing to do so. A telephone version of the Principal Status Form was provided for the interviewers to use when completing the interview. The telephone version included additional general answer options for the interviewer to mark if, after probing, the respondent did not know or refused the specific status of last year's principal.

Mailed questionnaires were accepted through early June 2013.

Remailing of Questionnaires

At all stages of data collection, procedures were in place to re-mail questionnaires by request. During the telephone nonresponse follow-up, interviewers were also prepared to fax questionnaires, if requested. However, no re-mails or faxes were requested during the entire data collection period.

Discrepancy Checks During Data Collection

A discrepancy report was produced regularly throughout data collection; it included any cases in which respondents sent in multiple completed questionnaires with conflicting answers to question one, which occurred in 412 schools. All cases were researched and resolved on a flow basis. For more information on data processing, refer to chapter 4.

Chapter 3. Response Rates

This chapter presents the survey response rates for the 2012-13 PFS. First, the unit response rates are addressed. Next, the item response rates are presented in detail. Finally, bias analysis is discussed.

Survey Response Rates

The unit response rate is the rate at which the sampled units respond by completing the questionnaire. Unit response rates can be calculated as unweighted or weighted. The unweighted response rate is the number of interviewed sampled units divided by the number of eligible sampled units. The weighted unit response rate is produced by dividing the base-weighted number of respondents who completed the questionnaire by the base-weighted number of eligible sampled cases.³ The base weight is the product of the initial basic weight (the inverse of the sampled unit's probability of selection at the time of initial selection) and the sampling adjustment factor, which is applied to account for any additional circumstances impacting the probability of selection such as merged schools or split schools. See chapter 5 for further discussion of the weighting.

Unit Response Rates

Since PFS consisted of only one item and had a response rate of nearly 100 percent, this item and variables derived from it were added to the 2011-12 SASS public and private school principal data files. Since no reweighting was necessary, PFS unit response rates are therefore the same as SASS principal unit response rates. The unit response rate was calculated both unweighted and weighted. The unweighted and weighted response rate for the SASS and PFS, by survey population, are included in table 3. For detailed information on the SASS principal unit response rates, refer to chapter 6 of the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Table 3. Unweighted and base-weighted SASS and PFS response rates, by survey population: 2012-13

Survey population	Unweighted overall response rate (percent)	Weighted overall response rate (percent)
Public school principals	73.1	72.7
Traditional public school	73.3	72.9
Charter school	70.3	69.7
Private school principals	64.4	64.7

NOTE: Response rates were weighted using the inverse of the probability of selection.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Status and Private School Principal Status Documentation Data Files," 2013.

Item Response Rates

Item response rates indicate the percentage of respondents who answered a given survey item. The weighted item response rate is produced by dividing the number of sampled cases

³ For the formula used to calculate the unit response rate, see the *NCES Statistical Standards* (U.S. Department of Education 2003).

responding to an item by the number of sampled cases eligible to answer the item and adjusting by the base weight. The PFS was treated as a single item. Although there are different versions of the PFS form—one for schools and one for principals (please refer to Chapter 1: Overview, for additional information)—question 1, which asked about the current occupational status of the principal who had been the principal during the previous school year was the same on both form types. Therefore, the responses from the different forms types were combined into one item response rate, regardless of which forms was completed.

Table 4. Unweighted and base-weighted PFS item response rates, by survey population: 2012-13

Survey population	Unweighted response rate (percent)	Base-weighted response rate (percent)
Public school principals	99.7	99.7
Traditional public school	99.7	99.7
Charter school	99.4	99.1
Private school principals	97.6	96.3

NOTE: Response rates were weighted using the inverse of the probability of selection.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Status and Private School Principal Status Documentation Data Files," 2013.

Unit Bias Analysis

Overview of Methodology

Since the PFS status item had a better than 99 percent response rate, and is not considered a survey separate from SASS, no additional unit bias analysis was conducted. 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, all 2011-12 SASS principal data files were 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. Described here is a summary of the SASS bias analysis results for principals. For detailed information on the SASS bias analysis, refer to chapter 6 of the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Relative bias was estimated for variables known for respondents and nonrespondents. There are a number of variables available for each data file from the 2011-12 SASS sampling frames. The variables used are presented in exhibit 1.

Exhibit 1. Variables used in the SASS principal unit nonresponse bias analysis: 2011-12

Regular public and public charter principals	Private principals
<ul style="list-style-type: none"> • Enrollment (5 categories each for regular and charter) • Percent races other than White (7) • Percent free lunch eligible (4) • Locale (4) • Pupil-teacher ratio (4) • Grade level (4) • Region (4) • Number of teachers (5) • Title 1 status (3) • State¹ (51) • State by enrollment¹ (255) • State by locale¹ (204) • State by grade level¹ (204) 	<ul style="list-style-type: none"> • Affiliation (12) • Locale (4) • Enrollment (6) • Number of teachers (5) • Grade level (3) • Region (4) • Affiliation by grade level (36) • Affiliation by region (48) <p style="text-align: center;">Total categories-118</p>
Total categories-793	

¹State was not used for charter school principals.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), 2011-12.

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 computed, and the variables listed above were 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 mean and the nonresponse-adjusted respondent mean, which evaluates the effectiveness of the noninterview adjustment in mitigating nonresponse bias. Sample units found to be ineligible for SASS were excluded from the analysis.

Public Principals

Tables 5 through 7 contain summary statistics of the findings.

Table 5. Summary of SASS public school principal (2A) unit nonresponse bias—national items: 2011-12

Nonresponse bias statistics	Total
Before noninterview adjustment	
Mean estimated percent relative bias (absolute value)	9.9
Median estimated percent relative bias (absolute value)	6.4
Percent of variable categories significantly biased	43.1
After noninterview adjustment	
Mean estimated percent relative bias (absolute value)	4.0
Median estimated percent relative bias (absolute value)	2.3
Percent of variable categories significantly biased	7.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Documentation Data File," 2011-12.

Table 6. Summary of SASS public school principal (2A) unit nonresponse bias—state summary items: 2011-12

Nonresponse bias statistics	Total
Before noninterview adjustment	
Mean estimated percent relative bias (absolute value)	16.3
Median estimated percent relative bias (absolute value)	8.1
Percent of variable categories significantly biased	20.1
After noninterview adjustment	
Mean estimated percent relative bias (absolute value)	14.1
Median estimated percent relative bias (absolute value)	6.9
Percent of variable categories significantly biased	11.5

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Documentation Data File," 2011-12.

Table 7. Effects of nonresponse adjustment on bias reduction—SASS public school principal (2A) unit nonresponse bias: 2011-12

Before nonresponse adjustment	Change in absolute difference	After nonresponse adjustment	National	State
Not significant	-	Significant	2	10
Significant	>50% Reduction	Not significant	45	40
		Significant	4	1
	10%-50% Reduction	Not significant	3	22
		Significant	1	22
	<10% Reduction	Not significant	0	4
		Significant	2	26
	Increase in difference	Not significant	0	1
		Significant	1	18

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Documentation Data File," 2011-12.

Summary of Conclusions

As shown in tables 5 through 7, the weighting adjustments eliminated some, but not all, significant bias. For all respondents, 43 percent of the variable categories at the national level and 20 percent of state estimates were significantly biased before nonresponse weighting adjustments. After the adjustments, 8 percent of categories at the national level and 11 percent of state estimates were significantly biased. Table 7 reveals that for national estimates, bias was substantially reduced for most items while some state-level estimates remained biased.

Private Principals

Tables 8 through 10 contain summary statistics of the findings.

Table 8. Summary of SASS private school principal (2B) unit nonresponse bias—national items: 2011-12

Nonresponse bias statistics	Total
Before noninterview adjustment	
Mean estimated percent relative bias (absolute value)	9.16
Median estimated percent relative bias (absolute value)	6.20
Percent of variable categories significantly biased	47.06
After noninterview adjustment	
Mean estimated percent relative bias (absolute value)	3.05
Median estimated percent relative bias (absolute value)	1.66
Percent of variable categories significantly biased	5.88

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Private School Principal Documentation Data File," 2011-12.

Table 9. Summary of SASS private school principal (2B) unit nonresponse bias—affiliation summary items: 2011-12

Nonresponse bias statistics	Total
Before noninterview adjustment	
Mean estimated percent relative bias (absolute value)	11.87
Median estimated percent relative bias (absolute value)	6.99
Percent of variable categories significantly biased	7.14
After noninterview adjustment	
Mean estimated percent relative bias (absolute value)	9.99
Median estimated percent relative bias (absolute value)	5.83
Percent of variable categories significantly biased	3.57

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Private School Principal Documentation Data File," 2011-12.

Table 10. Effects of nonresponse adjustment on bias reduction—SASS private school principal (2B) unit nonresponse bias: 2011-12

Before nonresponse adjustment	Change in absolute difference	After nonresponse adjustment	National	Affiliation
Not significant	-	Significant	0	0
Significant	>50% Reduction	Not significant	14	1
		Significant	1	0
	10%-50% Reduction	Not significant	0	2
		Significant	1	0
	<10% Reduction	Not significant	0	0
		Significant	0	0
	Increase in difference	Not significant	0	0
		Significant	0	3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Private School Principal Documentation Data File," 2011-12.

Summary of Conclusions

As shown in tables 8 through 10, the weighting adjustments eliminated some, but not all, significant bias. For all respondents, 9 percent of the variable categories at the national level and 12 percent of affiliation estimates were significantly biased before nonresponse weighting adjustments. After the adjustments, 3 percent of categories at the national level and 10 percent of the affiliation estimates were significantly biased. Table 10 reveals that bias was substantially reduced for most items for both national and affiliation-level estimates.

Chapter 4. Data Processing

Questionnaire Check-in and Data Capture

Respondents to the 2012-13 PFS were encouraged to complete and mail back the questionnaire sent to the school. Questionnaires mailed to the U.S. Census Bureau's National Processing Center (NPC) were immediately checked into the Automatic Tracking and Control (ATAC) system by clerical staff. Questionnaires received an outcome code of "complete" if question one was answered. Additional outcome codes included refusals, blanks, duplicates, out-of-scope and Undeliverable as Addressed (UAA).

Census Bureau telephone interviewers updated the status of cases during data collection. Interviewers assigned an outcome code indicating the status (i.e., unable to contact, refusal, etc.) of each questionnaire using a paper-based tracking system. Once this was completed, all questionnaires were shipped to the Census Bureau clerical processing staff at the NPC. There, the questionnaires were assigned a check-in code that indicated their completion status.

The data were captured (converted from paper to electronic format) using manual data keying and imaging technology, facilitated by the ATAC system. Responses to the two questions on the form were recorded into the ATAC system and sent to Census Bureau analysts in Suitland, Maryland.

Reformatting

As the questionnaire data were being captured, output files were reformatted into tab-delimited files in order to facilitate the remaining data processing and cleaning. The reformatted output files were sent weekly to Census Bureau analysts in Suitland, Maryland, for data review.

Discrepancy Resolution and Preliminary Data Review

During data review, two major types of discrepancies were uncovered. The first type occurred when two questionnaires were returned and the responses on the two were inconsistent with one another. This could occur if both copies of the school-level questionnaire mailed to the schools were returned, if one copy of the school-level questionnaire and one copy of the principal-level questionnaire mailed directly to the principals home were returned, or if a respondent returned one copy of either the school-level or principal-level questionnaire by mail and also completed the questionnaire over the phone with telephone center staff before being removed from the follow-up operation. This occurred in 412 instances. These cases were identified through weekly discrepancy reports and were researched and resolved on a flow basis by Census Bureau analysts.

The second type of discrepancy occurred when a respondent marked two different answers to question one on a single copy of the questionnaire. These cases were identified by ATAC staff during the check-in process and were referred to Census Bureau analysts for review. This occurred in approximately 143 schools. All cases were researched and resolved on a flow basis by Census Bureau analysts.

During the review process for the two discrepancies, school websites were checked and the schools were called. Frequently the schools were called even if one of the names from the questionnaire was on the website as principal, unless the website principal matched the name on the more recent questionnaire received.

Interview Status Recode (ISR_PF) Classification

The Interview Status Recode (ISR_PF) was a determination of whether each case was a completed interview or a noninterview. Cases in which the respondent answered question one were classified as completed interviews (ISR_PF = 1). Cases with UAA with or without address correction, cases with incomplete or blank forms, cases that were general noninterviews, and cases in which the district refused to participate were classified as noninterviews (ISR_PF = 2). Cases that were considered out-of-scope cases were classified as (ISR_PF = 3). The ISR_PF is used in the calculation of the unit response rate, which is the number of interviewed sampled units (ISR_PF = 1) divided by the number of eligible (in-scope) sampled units, which include respondents plus nonrespondents (ISR_PF = 1 or 2) but not ineligible (out-of-scope) units (ISR_PF = 3).

The ISR counts for each survey population are shown in Table 11.

Table 11. Interview Status Recode (ISR) counts for PFS, by survey population: 2012-13

Survey population	Interviews	Noninterviews	Out of scope
Public school principals	7491	19	2
Traditional Public	7021	16	2
Charter	470	3	0
Private school principals	1683	40	0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Status and Private School Principal Status Documentation Data Files," 2013.

Chapter 5. Weighting and Variance Estimation

This chapter describes the weighting procedures used for 2012-13 PFS. The final weights must be employed during analysis in order for the sample estimates to reflect the target survey population. Variances are computed to estimate the reliability of statistics and are a product of the weighting procedure.

Weighting

The general purpose of weighting is to scale up the sample estimates to represent the target survey population. Since all responding SASS principals were included in the PFS and 99.8 percent of public school principals and 97.7 percent of private school principals in the PFS sample responded to the survey, the 2011-12 SASS weights could be used to represent the target sample population. All units, respondents and nonrespondents to the PFS, are included in the file and no adjustments were made for nonresponse. Therefore, new weights were not calculated for the PFS, and data users should employ the 2011-12 SASS public and private principal weights when analyzing the public and private principal status data files, respectively.

Nonresponse to the PFS could have occurred through a number of different scenarios, which are included in the following categories of the principal occupational status (STATUS) variable: “blank form returned,” “incomplete form,” “Undeliverable as Addressed (UAA) with address correction,” “Undeliverable as Addressed (UAA) without address correction,” “district refusal,” “general refusal,” or “closed or merged”. A “district refusal” occurred when the district of the sampled school refused to allow the school to participate in the survey. There were also principal occupational status (STATUS) categories reserved for “duplicate” but this scenario did not occur during data collection. For more information on SASS weighting, please refer to the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Variance Estimation

This section describes the variance estimation used for the 2012-13 PFS, how the replicates were produced, and how to use the replicate weights to compute variances.

Producing Replicate Weights

In surveys with complex sample designs, such as SASS, direct estimates of sampling errors that assume a simple random sample will typically underestimate the variability in the estimates. The SASS sample design and estimation include procedures that deviate from the assumption of simple random sampling, such as stratifying the school sample, oversampling new teachers, and sampling with differential probabilities.

Variance estimation techniques, known as replication, can be used to estimate the impact on the variances of these complexities in the sample design and estimation. Thus, accurate variances estimates can be produced by using the resulting replicate weights. As with the main PFS weights, described above, because the PFS nonresponse rate was extremely low, no new replicate weights were calculated for the 2012-13 PFS. Instead, the 2011-12 SASS public and private principal replicate weights should be used when analyzing the public and private

principal status data files, respectively. For information on the SASS replicate weights, please see the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Applying Replicate Weights

Each SASS data file includes a set of 88 replicate weights designed to produce variance estimates. The replicate weights were created for each of the 88 SASS samples using the same estimation procedures used for the full sample and are included in the data files. Most of the replicate weights were produced using a bootstrap procedure.⁴

Data users can use these replicate weights to compute sampling errors with any of the following software: WesVar Complex Sample Software, SUDAAN (Research Triangle Institute 2001), AM Statistical Software, STATA 9, or SAS version 9.2 or higher.

- *WesVar*. The user needs to create a new WesVar data file by specifying the full sample weight variable, the replicate weight variables (as defined above), and the replication method: balanced repeated replication (BRR). The replicate weights and the full sample weight can be highlighted and dragged to their appropriate place in the “New WesVar Data File” window. For more information, visit http://www.westat.com/westat/expertise/information_systems/wesvar/index.cfm.
- *SUDAAN*. The user needs to specify the sample design as a balanced repeated replication as well as specify the replicate weight variables. Specifying the sample design (DESIGN = BRR) is done in the procedure call statement (i.e., PROC DESCRIPT DESIGN = BRR;). The specification of the replicate weights is done with the REPWGT statement (i.e., to produce the sampling errors for estimates from the principal files, use the following statement: REPWGT AREPWT1-AREPWT88;). For more information, visit www.rti.org/sudaan.
- *AM*. 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 the replication method; BRR should be selected. For more information, visit <http://am.air.org>.
- *STATA*. The use of replicate weights for the generation of standard errors is a feature new to STATA 9. First, the user needs to “survey set” the data (SVY SET) by defining the probability weight ([pw =]), the balanced repeated replication weights (brrweight(varlist)), and the variance estimation type (vce(brr)) and turning on the mean square error formula (mse). Once these parameters are set, users are able to call up the survey settings and tell STATA which type of standard errors to produce using the SVY BRR command. SVY BRR also allows users to specify the statistics to be collected

⁴ For further information on the bootstrap procedure, see Efron, B., and Tibshirani, R. (1986). Bootstrap Methods for Standard Errors, Confidence Intervals, and Other Measures of Statistical Accuracy. *Statistical Science*, 1(1): 54-75.

(exp_list) and the command to perform (e.g., mean or tab). For more information, visit <http://www.stata.com>.

- *SAS*. Within the PROC SURVEYFREQ procedure, the user will specify the VARMETHOD=BRR. The user can provide replicate weights for BRR variance estimation by using a REPWEIGHTS statement. PROC SURVEYFREQ estimates the parameter of interest (a proportion, total, odds ratio, or other statistic) from each replicate, and then uses the variability among replicate estimates to estimate the overall variance of the parameter estimate. For more information about SAS, visit <http://www.sas.com/contact/intro.html>.

Chapter 6. Reviewing the Quality of the PFS Data

PFS data were subjected to a range of data quality reviews before release. These reviews incorporated a number of checks to examine general data quality and nonresponse, while ensuring a timely release of the data.

General Data Quality

General data quality checks for the 2012-13 PFS involved an examination of the individual responses and patterns of response. In addition, summary statistics for the two created status variables (a 3-level and a 4-level), the ISR code, and the STATUS variable from which the collapsed 3- and 4-level versions are created were examined to ensure internal consistency.

Nonresponse

Due to the high response rates for the 2012-13 PFS, it was not necessary to conduct a bias analysis in addition to that conducted following the 2011-12 SASS. Refer to tables 3 through 8 in chapter 3 for the unweighted and base-weighted PFS response rates. For detailed information on the SASS bias analysis, refer to chapter 6 of the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Validation Study Results

In addition to the general data quality checks described above, data quality was assessed by examining the results of the validation study. For detailed information about the validation study methodology, see chapter 1.

In general, more variation in response was found than was expected. This is particularly troublesome for the stayer category, where the expectation was that the principal's current status would be fairly unambiguous. Anecdotal evidence gathered seems to point to confusion over the term "principal" and precisely who it may apply to at a particular school. Further research may suggest that adding or revising answer categories to make it more clear what the sample principal from SASS is doing if they are still an administrator at the school but not the "principal" in the proxy respondent's mind.

The ability to draw definitive conclusions was limited by the small sample size captured by the study and the inability to reach a substantial minority of the original validation study sample. In particular, subpopulations could not be compared, so it is not clear under what circumstances it may be acceptable to accept proxy responses. The recommendation is to conduct another study with a larger sample size.

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Appendix A. Key Terms for the PFS and SASS

The following terms are defined as they apply to the 2012-13 Principal Follow-up Survey (PFS) and the 2011-12 Schools and Staffing Survey (SASS). All key terms are from the 2011-12 SASS unless otherwise indicated.

Affiliation stratum. SASS uses 11 categories into which all private schools are divided based on religious orientation and association membership. These categories are Catholic, parochial; Catholic, diocesan; Catholic, private; Baptist; Jewish; Lutheran; Seventh-day Adventist; other religious; nonsectarian, regular; nonsectarian, special emphasis; and nonsectarian, special education. Schools with multiple affiliations are classified by their first affiliation in the above list. These categories represent the private school sampling strata for SASS; therefore, the SASS private school sample is designed to support estimates for each of these affiliation categories.

Base weight. The base weight is the product of the initial basic weight (the inverse of the sampled unit's probability of selection at the time of initial selection) and the sampling adjustment factor, which is applied to account for any additional circumstances impacting the probability of selection such as merged schools or split schools. See chapter 8 and the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming) for details on the weighting procedure.

Charter (or public charter) school. A charter school is a public school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school. Meets all school criteria; receives public funding as primary support; provides a free public elementary and/or secondary school education to eligible students.

Combined school. 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 were 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.

Common Core of Data (CCD). The CCD is the Department of Education's primary database on public elementary and secondary education in the United States. The CCD is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts and contains data that are designed to be comparable across all states. The objectives of the CCD are twofold: first, to provide an official listing of public elementary and secondary schools and school districts in the nation, which can be used to select samples for other National Center for Education Statistics surveys; and second, to provide basic information and descriptive statistics on public elementary and secondary schools and schooling in general.

District. A local education agency (LEA), or public school district, is defined as a government agency that employs elementary- or secondary-level teachers and is administratively responsible for providing public elementary and/or secondary instruction and educational support services. Districts that do not operate schools but do employ teachers are included; for example, some

states have special education cooperatives that employ special education teachers who teach in schools in more than one school district. Supervisory unions are also included.

Elementary school. A school is classified as elementary if it has one or more of grades K-6 and does not have any grades higher than grade 8. For example, schools with grades K-6, 1-3, or 6-8 are classified as elementary.

Final weight. This is the product of the initial basic weight, sampling adjustment factor, separate adjustments for nonresponse at each stage of selection, and one or more stages of ratio adjustment to the frame or to independent sources. The final weight is used to produce weighted estimates from the survey data. See chapter 8 and the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming) for details on the weighting procedure.

Initial basic weight. This is the inverse of the probability of selection from the initial sampling procedure. In contrast, the **base weight** is the inverse of the probability of selection covering all sampling, including any adjustments to the probability of selection due to schools determined to be splits or mergers during field operations. See chapter 8 and the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming) for details on the weighting procedure.

Leavers (from the 2012-13 PFS). These are school principals in the 2011-12 school year who were no longer principals in the 2012-13 school year.

Missing data. SASS is a fully imputed dataset. Consequently, the only survey items that lack responses are those that are part of a skip pattern (and should not have been answered by a particular respondent) or write-in responses (which include data too specific to reasonably impute from another respondent's data). Variables pulled from the frame (i.e., the Common Core of Data or the Private School Universe Survey) are not necessarily imputed for missing data. In these instances, a value of -9, indicating missing data, is provided for that variable.

Movers (from the 2012-13 PFS). These are school principals who were principals in 2011-12 and 2012-13, but had moved to a different school after the 2011-12 school year.

Other (from the 2012-13 PFS). These are school principals who had left their 2011-12 school, but for whom the school was unable to provide sufficient information to determine a mover or leaver status in the 2012-13 school year.

Principal. A principal is the administrator who has primary responsibility for the overall day-to-day functioning of the school.

Private school (see "School"). This meets all school criteria; does not receive public funding as primary support; does not operate within the public school system.

Private School Universe Survey (PSS). The PSS is a biennial survey designed to collect data from all K-12 private schools in the 50 states and the District of Columbia. It is the universe from which the sample for the private school component of SASS is selected.

Public school (see "School"). A public school is defined as an institution that provides educational services for at least one of grades 1-12 (or comparable ungraded levels), has one or

more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education agency. Public charter schools, schools in juvenile detention centers, and schools located on domestic military bases and operated by the Department of Defense are included.

Sampling adjustment factor. In the weighting process for each SASS respondent, the sampling adjustment factor is applied to the initial basic weight to account for any additional circumstances affecting the probability of selection. The product of the initial basic weight and the sampling adjustment factor is the base weight. See the definitions for “initial basic weight” and “base weight.” See chapter 8 and the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming) for details on the weighting procedure.

School. An institution or part of an institution that has one or more teachers who provide instruction to students, has students in one or more of grades 1-12 (or the ungraded equivalent), has its own principal/administrator if it shares a building with another school or institution, is in operation during the 2011-12 school year, and is not primarily a postsecondary or adult basic education institution. The following are not considered a school: schools located exclusively in a private home, Department of Defense (DoD) schools located outside of the United States, offices of special education in an LEA, tutoring services, homeschool clearinghouses, and adult learning facilities.

School head. A school head is defined as the person who holds presiding rank at a private school and who assumes final responsibility for its overall operation.

Secondary school. A school is classified as 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, 10-12, or 7-8 are classified as secondary.

State school. State schools are typically run by a state department of education and are not overseen by a district (e.g., schools in juvenile detention centers and schools for the blind).

Status (from the 2012-13 PFS). This is the occupational status of the 2011-12 principal in school year 2012-13, based on question one of the PFS form.

Stayers (from the 2012-13 PFS). These are principals who were principals in the same school in school year 2012-13 as in school year 2011-12.

Teachers. A teacher is defined as a full-time or part-time teacher who teaches any regularly scheduled classes in any of grades K-12. This includes administrators, librarians, and other professional or support staff who teach regularly scheduled classes on a part-time basis. Itinerant teachers are included, as well as long-term substitutes who are filling the role of a regular teacher on a long-term basis. An itinerant teacher is defined as a teacher who teaches at more than one school (e.g., a music teacher who teaches 3 days per week at one school and 2 days per week at another). Short-term substitute teachers and student teachers are not included.

Traditional public school. Traditional public schools are publicly funded schools other than public charter schools. They include regular, special education, vocational/technical, and alternative schools. They also include schools in juvenile detention centers and domestic schools

located on military bases and operated by the Department of Defense. See also the definitions for public and public charter schools.

Typology, private school. Private schools were assigned to one of three major categories (i.e., Catholic, other religious, and nonsectarian). Within each of these major categories, three additional subcategories were assigned. As a result, two typology-based variables exist in the private sector data files: a “three-level typology” (RELIG) and a “nine-level typology” (TYPOLOGY). The categories and subcategories are

1. Catholic—parochial, diocesan, and private;
2. Other religious—conservative Christian, affiliated with a religious school association, and not affiliated with a religious school association; and
3. Nonsectarian—regular, special program emphasis, and special education.

Ungraded. This refers to schools that have an alternative means of classifying students, other than by grade level.

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.

Valid skip. Certain survey items direct respondents to skip subsequent items based on their answers to the original item, or stem question. For instance, if a respondent answered “None” to item 4 in the 2011-12 SASS Principal Questionnaire (“SINCE becoming a principal, how many years of elementary or secondary teaching experience have you had?”), he or she was directed to skip item 5 (“In addition to serving as principal, are you currently teaching in this school?”) and to “GO TO item 6 on page 5.” Because the respondent answered that he or she had not had any years of teaching experience, asking if the respondent was currently teaching was not applicable. In instances when an item should not have been answered by the respondent, a value of -8, which designates a valid skip, is applied to that variable(s). In addition, the created variables from the 2012-13 PFS (STATUS_P4 and STATUS_P3) have a value of -8 for the nonresponding schools in 2012-13.

Appendix B. 2012-13 PFS Questionnaires and Cover Letters and 2011-12 SASS Principal Questionnaires

Questionnaires can be found here: <http://nces.ed.gov/surveys/sass/question1213pfs.asp>.

Appendix C. PFS Created Variables

Variables from the Principal Follow-up Survey (PFS) are based on the survey variable, STATUS. These variables have been added to the data files to facilitate data analysis.

These created variables are listed below, along with a brief description. The code used to produce the variables is also detailed. For information on the frequency distributions of these created variables, please see the *User's Manual for the 2011-12 Schools and Staffing Survey and 2012-13 Principal Follow-up Survey Volume 4: Public and Private School Principal Data Files, updated to include the 2012-12 Principal Follow-up data* (Goldring et al. 2014).

For information on the created variables from the 2011-12 SASS principal data files, please see the *Documentation for the 2011-12 Schools and Staffing Survey* (Cox et al. forthcoming).

Variable name	Description and specifications
ISR_PF	<p>Interview status of the PFS. Categories include</p> <p>1 = interview; and 2 = noninterview.</p> <p>Coded as follows:</p> <p>If ATAC in (20-42, 50) then ISR_PF = 1; if ATAC in (2 - 10, 12, 13, 96-99) then ISR_PF = 2; if ATAC = 03 then ISR_PF = 3</p>
STATUS_P3	<p>Respondents to the PFS are classified as either stayers, nonstayers, other, or missing. Stayers are 2011-12 principals who were principals in the same school in school year 2012-13. Non- stayers are 2011-12 principals who were no longer principals in the same school in school year 2012-13. "Other" includes principals who had left their 2011-12 school, but for whom the school was unable to provide sufficient information to determine a non-stayer status in school year 2012-13. "Other" also includes schools that reported there was no principal at the school the previous year. Missing includes any noninterviews. Categories include</p> <p>1 = stayer; 2 = non-stayer; and 3 = other. -9 = missing.</p> <p>Coded as follows:</p> <p>If ATAC in ('20', '34') then STATUS_P3 = 1; else if ATAC in ('21', '22', '23', '24', '25', '38', '26', '27', '28', '29', '30', '31', '32', '33', '35', '36', '37', '39', '40', '41', '42') then STATUS_P3 = 2; else if ATAC in ('50') then STATUS_P3 = 3; else STATUS_P3 = -9;</p>

Variable name	Description and specifications
STATUS_P4	<p>Respondents to the PFS are classified as stayers, movers, leavers, other or missing. Stayers are 2011-12 principals who were principals in the same school in school year 2012-13. Movers are 2011-12 principals who were principals in a different school in school year 2012-13. Leavers are 2011-12 principals who were no longer principals in school year 2012-13. "Other" includes principals who had left their 2011-12 school, but for whom the school was unable to provide sufficient information to determine a mover or leaver status in school year 2012-13. "Other" also includes schools that reported there was no principal at the school the previous year. Missing includes any noninterviews. Categories include</p> <p>1 = stayer; 2 = mover; 3 = leaver; and 4 = other. -9= missing.</p> <p>Coded as follows:</p> <p>If ATAC in ('20', '34') then STATUS_P4 = 1; else if Q1_STATUS in ('21', '22', '23', '24', '25', '38') then STATUS_P4= 2; else if ATAC in ('26', '27', '28', '29', '30', '31', '32', '33', '35', '39', '40', '42') then STATUS_P4= 3; else if ATAC in ('36', '37', '41', '50') then STATUS_P4=4; else STATUS_P4 = -9;</p>

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