# Student Attrition Lookup Tool (SALT) 

Technical Supplement

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## Introduction

The Student Attrition Lookup Tool (SALT, http://www.air.org/resource/student-attrition-lookup-tool-salt) provides empirical estimates of student mobility rates to help researchers plan for student attrition when conducting studies in U.S. public schools. ${ }^{1}$ Student-level, school-based longitudinal evaluations often encounter study attrition when students move away from, or drop out of, study schools. In some cases, this mobility-induced attrition simply decreases sample size, weakening the study's power to detect a treatment effect. At worst, attrition can distort the composition of the original sample in a way that introduces bias into an otherwise well-designed study and threatens the study's internal and external validity.

With SALT, researchers can get student mobility estimates for different student and school subpopulations and for different transition periods from kindergarten to Grade 12. Mobility rates are broken down into three types of mobility that correspond to different types of data collection:

1. Any move out of the student's original school (attrition when only collecting data from specific study schools)
2. Any move out of the student's original school district (attrition when only collecting data from specific school districts)
3. Any move out of the state public school system, including moves to a private school or dropping out of high school (attrition when only collecting data from specific states)

SALT can help researchers proactively plan for student attrition during the study design phase. For example, researchers can use SALT to incorporate realistic assumptions about student attrition into a power analysis. Researchers can also use SALT to inform decisions about the breadth of data collection efforts. By comparing rates across the three types of mobility, researchers can determine whether, for example, the use of a statewide database rather than a district database will retain enough students in the study to warrant the extra efforts required to secure access to the statewide data.

This technical supplement describes how we estimated the student mobility rates included in SALT.

[^0]
## Data Sources and Transition Periods

To estimate mobility rates for different transition periods, we constructed analytic data files from four National Center for Education Statistics (NCES) longitudinal survey data files:

- The Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:11)
- The Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K:99)
- High School Longitudinal Study (HSLS)
- Education Longitudinal Study (ELS)

With these four surveys, we examined mobility across six transition periods (see Exhibit 1). We selected the four surveys and six transition periods to estimate mobility rates for nationally representative baseline samples and capture different grade-level transitions across the elementary and high school grades. ${ }^{2}$ For example, since the ECLS-K:99 survey resampled students in $1^{\text {st }}$ grade to have a nationally representative sample of $1^{\text {st }}$ graders, we used the ECLSK:99 to look at transitions starting in $1^{\text {st }}$ grade. Since the ECLS-K:11 survey did not include a similar "refresh" sample, we used the ECLS-K:11 to look at transitions starting in kindergarten. Because the surveys were conducted in different time periods, one should not conclude that differences in mobility rates between two surveys are entirely due to differences in transition periods. Differences could be partially influenced by temporal factors (e.g., changes in economic conditions over time), and such factors should be kept in mind when using mobility rates from an older time period to inform the planning of a current study.

Exhibit 1. Transition Periods Defined in Each Analytic File

| Source | K | 1st | 2nd | 3rd | 4th | 5th | MS | 9th | 10th | 11th | 12th |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ECLS-K:11 | $\bullet$ |  |  |  |  |  |  |  |  |  |  |
| ECLS-K:11 | $\xrightarrow{\bullet}$ |  |  |  |  |  |  |  |  |  |  |
| ECLS-K:99 |  | $\bullet$ |  |  |  |  |  |  |  |  |  |
| ECLS-K:99 | $\xrightarrow{\bullet}$ |  |  |  |  |  |  |  |  |  |  |
| HSLS |  |  |  |  |  |  |  | $\xrightarrow{\longrightarrow}$ |  |  |  |
| ELS |  |  |  |  |  |  |  |  |  |  |  |

Note. All surveys were administered during the spring of the school year, with the exception of the HSLS ninth-grade survey, which was administered during the fall of Grade 9.

To accurately estimate student mobility rates during each transition period, we restricted the analytic files to students in the appropriate longitudinal follow-up waves and to students who in the baseline year (where baseline is defined as the starting grade in a given transition period) attended public schools with a grade range that includes the transition period (e.g., the ECLSK:99 Grades 1-3 analytic file is restricted to students attending public schools with Grades 1 and 3). The definition of each analytic sample is summarized in Exhibit 2.

[^1]Schools were defined as public schools if they had a valid (i.e., nonmissing) NCES public school ID. We restricted the analysis to students attending schools with an inclusive grade range to avoid attributing mobility to structural school transitions (e.g., a student transitioning from a $\mathrm{K}-1$ primary school to a 2-5 elementary school). More specifically, we defined schools as not having an inclusive grade range if all baseline students left the school by the follow-up survey and the school did not have reported enrollment for the follow-up grade level based on the survey data or the Common Core of Data (CCD). This was only a concern for the ECLS-K:11 and ECLS-K:99 data, because all baseline public schools in the HSLS and ELS data included the grade-level transitions of interest. Restricting the analysis to schools with an inclusive grade range resulted in excluding the following percentage of students from each transition period: 3 percent of students in the ECLS-K:11 K-1 transition; 4 percent of students in the ECLS-K:11 K-2 transition; 4 percent of students in the ECLS-K:99 1-3 transition; and 13 percent of students in the ECLS-K:99 1-5 transition.

Exhibit 2. Summary of Data Sources, Transition Periods, and Analytic File Sample Sizes

| Data <br> Source | Transition Period | Survey Waves (Child Weight) | Analytic File Sample |
| :---: | :---: | :---: | :---: |
| ECLS-K:11 | Kindergarten (spring 2011) to Grade 1 (spring 2012) | Wave 2 to wave 4 (W4C4P_20) | 10,300 students in waves 2 to 4 longitudinal sample and in a wave 2 public school with kindergarten and Grade 1 |
| ECLS-K:11 | Kindergarten (spring 2011) to Grade 2 (spring 2013) | Wave 2 to wave 6 (W6C6P_20) | 9,350 students in waves 2 to 6 longitudinal sample and in a wave 2 public school with kindergarten and Grade 2 |
| ECLS-K:99 | Grade 1 (spring 2000) to Grade 3 (spring 2002) | Wave 4 to wave 5 (C45CW0) | 10,220 students in waves 4 to 5 longitudinal sample and in a wave 4 public school with Grades 1 and 3 |
| ECLS-K:99 | Grade 1 (spring 2000) to Grade 5 (spring 2004) | Wave 4 to wave 6 (C456CW0) | 7,280 students in waves 4 to 6 longitudinal sample and in a wave 4 public school with Grades 1 and 5 |
| HSLS | Grade 9 (fall 2009) to Grade 11 (spring 2012) | Wave 1 to wave 2 (W2W1STU) | 15,160 students in waves 1 to 2 longitudinal sample and in a wave 1 public school |
| ELS | Grade 10 (spring 2002) to Grade 12 (spring 2004) | Wave 1 to wave 2 (F1PNLWT) | 10,900 students in waves 1 to 2 longitudinal sample and in a wave 1 public school |

Note. All sample sizes are rounded to the nearest 10 per IES publication policy.

## Student Mobility Definition

Each survey includes a unique identifier for the student's school of attendance at each survey wave. To classify students into mobility categories during each transition period, we compared students' school identifiers in the earlier survey administration to the school identifiers in the subsequent wave. For this purpose, we used the school identifiers in the survey data (NCES IDs) that match the identifiers in the NCES CCD, which allowed us to classify students into four mutually exclusive mobility categories:

- Remained in same school at follow-up (no change)
－Remained in the same school district at follow－up but changed schools within the district （within－district change）
－Remained in the same state at follow－up but changed school districts（within－state change）
－Left the state public school system at follow－up（left state，which includes students who transferred to private schools and students who dropped out of high school）

For SALT，we report three＂nested＂combinations of these mutually exclusive mobility categories that correspond to different types of data collection（see Exhibit 3）：

1．＂Left school＂data：Any move out of the student＇s original school（attrition when only collecting data from specific study schools）

2．＂Left district＂data：Any move out of the student＇s original school district（attrition when only collecting data from specific school districts）

3．＂Left state＂data：Any move out of the state public school system，including moves to a private school or dropping out of high school（attrition when only collecting data from specific states）

Exhibit 3．Mobility Classification for SALT

All students in
baseline school
（d）Left state public school system at follow－up


大
（c）Same state but different school district at follow－up
（b）Same district but different school at follow－up
（a）Remained in same school at follow－up

Mobility classification for Student Attrition Lookup Tool

Any move out of the state public school system，including moves to a private school or dropping out of high school （attrition when only collecting data from specific states）
（d）$\dot{\lambda} \dot{\lambda}$

Any move out of the student＇s original school district（attrition when only collecting data from specific school districts） （ $\mathrm{c}+\mathrm{d}$ ）六人六人六

Any move out of the student＇s original school（attrition when only collecting data from specific study schools）


With the exception of the ELS data file，we used the NCES public school ID to identify the schools that students attended during base－year and follow－up data collections，because the NCES ID contains information about the district（the first seven digits）and state（the first two
digits) in which each school is located. The ELS data file did not provide the NCES ID for the school that students attended during the follow-up data collection. As a result, for the analysis of ELS data, we used the survey-generated school ID and a separate variable that identified the state in which the school was located to identify students who switched schools between the baseline and follow-up period and students who left the state public school system. However, data limitations precluded us from distinguishing, using ELS data, between students who transferred between schools within the same district and students who transferred outside of the school district but within the same state. Therefore, for the ELS data, we cannot report mobility rates for the "left district" category.

## Student Characteristics

For each analytic data file, we identified a set of key student characteristics that represent typical subgroups of interest in education research. Data for some characteristics were not available in all four data sources. Exhibit 4 summarizes the key student characteristics we included in the analytic data files, by data source, and how we defined subgroups based on each characteristic.

Exhibit 4. Student Subgroups Included in SALT, by Data Source

| Characteristic | Subgroups Included in <br> SALT | ECLS- <br> K:11 | ECLS- <br> K:99 | HSLS | ELS |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Gender | Female <br> Male | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Race | African American <br> Asian/Pacific Islander <br> Latino/Hispanic <br> White | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| SES (NCES-defined <br> quintiles) | Low (bottom two quintiles) <br> High (top two quintiles) | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Baseline reading <br> achievement | Low (bottom two quintiles) <br> High (top two quintiles) | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Baseline <br> mathematics <br> achievement | Low (bottom two quintiles) <br> High (top two quintiles) | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Student disability <br> status | Student with a disability <br> Student without a disability | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Home or native <br> language | English is home/native <br> language <br> English is not home/native <br> language | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |

Note. SES = socioeconomic status. The NCES-defined SES index is based on household income, parent education, and parent occupation.

## School Characteristics

In addition to student characteristics, we identified a set of key school characteristics that represent typical subgroups of interest in education research. We focused exclusively on the characteristics of the school students attended during the baseline survey administration. We merged the analytic data files with the CCD public school universe files to measure school characteristics. Using the CCD allowed us to examine a common set of school characteristics across the analytic data files and also allowed us to present results based on data researchers are likely to use when selecting school samples for their studies. Schools in the analytic data files were merged with the CCD using the NCES ID that is common in both data sources. To ensure high match rates for each analytic file, we merged each analytic file with 3 years of CCD data: the baseline year, the year prior to baseline, and the year following baseline. Priority was given to the baseline-year CCD data, then the prior-year data. For each of the six analytic files, more than 99 percent of the students had a public school record that matched with the CCD files. For cases with missing CCD data, we utilized school-level (administrator) data from the NCES longitudinal survey data files if available.

Exhibit 5 summarizes the key school characteristics we included in the analytic data files and how we defined subgroups based on each characteristic. Because we used school characteristics from the CCD, all the school characteristics are available in each analytic file. For the school size and district size categories, we defined subgroup sizes based on the distribution of schools in the data, taking into account the number of students in each subgroup and the substantive meaning of the subgroup given a particular cut point. Because school enrollment and the number of schools in a district are markedly different at the elementary and high school levels, we used different subgroup cut points for elementary and high schools. For subgroups based on the concentration of students within schools, we used the same cut points across measures and schooling level.

Exhibit 5. School Subgroups Included in SALT

| Characteristic | Subgroups Included in SALT |
| :--- | :--- |
| Title I status | Title I school <br> Not a Title I school |
| Geographic region | Northeast <br> Midwest <br> South <br> West |
| Location | City <br> Suburb <br> Rural or town |
| School size (enrollment) | Small (less than 500 students for elementary schools, <br> 1,500 for high schools) <br> Large (500 or more students for elementary schools, 1,500 <br> for high schools) |
| Concentration of underrepresented <br> minorities | Low (less than 25\% of total enrollment) <br> Medium (25\%-49\% of total enrollment) <br> High (50\% or more of total enrollment) |
| Concentration of students eligible for <br> free/reduced-price lunch program | Low (less than 25\% of total enrollment) <br> Medium (25\%-49\% of total enrollment) <br> High (50\% or more of total enrollment) |
| District size (number of schools in the <br> district with a grade range that <br> includes the transition period) | Small (less than 5 schools) <br> Medium (5-19 schools for elementary schools, 5-9 schools <br> for high schools) <br> Large (at least 20 schools for elementary schools, 10 for <br> high schools) |

## Estimation of Student Mobility Rates

We estimated student mobility rates for each transition period and mobility category described in the previous sections. We then estimated rates for the total sample, for each student and school subgroup described in the previous sections, and for different combinations of student and school subgroups. In particular, we estimated mobility rates for each two-group combination of school-by-school subgroups (e.g., Title I rural schools), school-by-student subgroups (e.g., female students in suburban schools), and student-by-student subgroups (e.g., African American male students). For reliability and confidentiality purposes, we do not report mobility rates for subgroups when less than 10 students comprise the "mover" category.

To account for the multistage nature of the survey designs, we used Taylor-series linearization when estimating the student mobility rates and standard errors for each mobility rate estimate. This method incorporates the student-level panel weight, primary sampling units, and sampling strata. Using the survey panel weights allowed us to calculate mobility rates that are generalizable to the U.S. public school student population (or the specific student subgroup of interest) in the baseline grade (e.g., kindergarteners in the ECLS-K:11 and ninth graders in the HSLS). To indicate the amount of uncertainty associated with a particular mobility rate estimate, we provided options in SALT to view the standard error for each mobility rate estimate and each
estimate's 95 percent confidence interval. The confidence intervals were defined as $\pm 2$ times the standard error.

## Supplemental Student Mobility Rate Tables

This section includes a series of mobility rate tables to supplement the mobility rates available on the SALT website. The rates in these supplemental tables are presented in the mutually exclusive mobility categories described earlier, rather than the "nested" categories used for SALT. The supplemental tables also include some more-detailed breakdowns by student and school characteristics. For example, the tables report mobility rates for each SES quintile rather than collapsing SES into coarser low and high categories for SALT. SALT uses the coarser categories to facilitate reporting mobility for subgroup combinations. The supplemental tables report mobility for only one subgroup at a time.

Exhibit 6. Student Mobility From Kindergarten to First Grade, by Student Characteristics (ECLS-K:11)

| Student Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 10,300 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Male | 5,290 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| Female | 5,000 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| Race/ethnicity: |  |  |  |  |  |  |  |  |  |  |  |
| African American | 1,280 | 80\% | (2\%) | 15\% | (2\%) | 4\% | (1\%) | 1\% | (0\%) | 20\% | (2\%) |
| Asian/Pacific Islander | 800 | 91\% | (2\%) | 6\% | (2\%) | 2\% | (1\%) | 1\% | (0\%) | 9\% | (2\%) |
| Latino/Hispanic | 2,650 | 85\% | (1\%) | 8\% | (1\%) | 5\% | (1\%) | 1\% | (0\%) | 15\% | (1\%) |
| White | 4,980 | 91\% | (1\%) | 5\% | (1\%) | 2\% | (0\%) | 2\% | (0\%) |  | (1\%) |
| Other | 570 | 87\% | (2\%) | 8\% | (2\%) | 3\% | (1\%) | 2\% | (1\%) | 13\% | (2\%) |
| Family SES: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,230 | 83\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 1\% | (0\%) | 17\% | (1\%) |
| Quintile 2 | 2,190 | 87\% | (1\%) | 8\% | (1\%) | 4\% | (1\%) | 2\% | (0\%) | 13\% | (1\%) |
| Quintile 3 | 2,040 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (1\%) | 2\% | (1\%) | 12\% | (1\%) |
| Quintile 4 | 1,990 | 91\% | (1\%) | 6\% | (1\%) | 2\% | (0\%) | 2\% | (0\%) | 9\% | (1\%) |
| Quintile 5 (highest) | 1,820 | 92\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 3\% | (1\%) | 8\% | (1\%) |
| Family composition: |  |  |  |  |  |  |  |  |  |  |  |
| Two-parent family | 7,790 | 90\% | (1\%) | 6\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 10\% | (1\%) |
| Single-parent family | 2,480 | 82\% | (1\%) | 12\% | (1\%) | 5\% | (1\%) | 1\% | (0\%) | 18\% | (1\%) |
| Reading achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,780 | 83\% | (1\%) | 11\% | (1\%) | 4\% | (1\%) | 2\% | (0\%) | 17\% | (1\%) |
| Quintile 2 | 2,080 | 87\% | (1\%) | 8\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 13\% | (1\%) |
| Quintile 3 | 2,110 | 90\% | (1\%) | 5\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 10\% | (1\%) |
| Quintile 4 | 2,180 | 89\% | (1\%) | 6\% | (1\%) | 3\% | (1\%) | 2\% | (0\%) | 11\% | (1\%) |
| Quintile 5 (highest) | 2,100 | 90\% | (1\%) | 6\% | (1\%) | 2\% | (1\%) | 2\% | (1\%) | 10\% | (1\%) |
| Math achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,900 | 82\% | (1\%) | 12\% | (1\%) | 5\% | (1\%) | 1\% | (0\%) | 18\% | (1\%) |
| Quintile 2 | 2,060 | 88\% | (1\%) | 7\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 12\% | (1\%) |
| Quintile 3 | 2,060 | 89\% | (1\%) | 7\% | (1\%) | 3\% | (1\%) | 2\% | (1\%) | 11\% | (1\%) |
| Quintile 4 | 2,100 | 90\% | (1\%) | 6\% | (1\%) | 2\% | (1\%) | 2\% | (0\%) | 10\% | (1\%) |
| Quintile 5 (highest) | 2,120 | 91\% | (1\%) | 5\% | (1\%) | 2\% | (0\%) | 2\% | (1\%) | 9\% | (1\%) |
| Disability status: |  |  |  |  |  |  |  |  |  |  |  |
| Students with a disability | 1,700 | 87\% | (1\%) | 8\% | (1\%) | 3\% | (1\%) | 2\% | (0\%) | 13\% | (1\%) |
| Nondisabled students | 6,840 | 89\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 11\% | (1\%) |
| Home language: |  |  |  |  |  |  |  |  |  |  |  |
| Not English | 1,970 | 86\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 14\% | (1\%) |
| English | 8,310 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| First-time kindergartener: |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 9,720 | 88\% | (1\%) |  | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| No | 480 | 82\% | (3\%) | 12\% | (2\%) | 4\% | (2\%) | 1\% | (1\%) | 18\% | (3\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 7. Student Mobility From Kindergarten to Second Grade, by Student Characteristics (ECLS-K:11)

| Student Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 9,350 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (0\%) | 19\% | (1\%) |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Male | 4,800 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (0\%) | 19\% | (1\%) |
| Female | 4,550 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 19\% | (1\%) |
| Race/ethnicity: |  |  |  |  |  |  |  |  |  |  |  |
| African American | 1,090 | 70\% | (3\%) | 19\% | (3\%) | 5\% | (1\%) | 5\% | (2\%) | 30\% | (3\%) |
| Asian/Pacific Islander | 730 | 85\% | (2\%) | 8\% | (1\%) | 5\% | (1\%) | 2\% | (1\%) | 15\% | (2\%) |
| Latino/Hispanic | 2,470 | 79\% | (1\%) | 12\% | (1\%) | 7\% | (1\%) | 2\% | (0\%) | 21\% | (1\%) |
| White | 4,560 | 85\% | (1\%) | 8\% | (1\%) | 4\% | (0\%) | 3\% | (1\%) | 15\% | (1\%) |
| Other | 490 | 75\% | (5\%) | 16\% | (4\%) | 4\% | (1\%) | 5\% | (1\%) | 25\% | (5\%) |
| Family SES: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,030 | 75\% | (2\%) | 17\% | (1\%) | 7\% | (1\%) | 2\% | (0\%) | 25\% | (2\%) |
| Quintile 2 | 1,960 | 81\% | (1\%) | 10\% | (1\%) | 6\% | (1\%) | 3\% | (1\%) | 19\% | (1\%) |
| Quintile 3 | 1,850 | 82\% | (2\%) | 10\% | (1\%) | 5\% | (1\%) | 4\% | (1\%) | 18\% | (2\%) |
| Quintile 4 | 1,800 | 84\% | (2\%) | 8\% | (1\%) | 3\% | (1\%) | 4\% | (1\%) | 16\% | (2\%) |
| Quintile 5 (highest) | 1,680 | 86\% | (1\%) | 7\% | (1\%) | 2\% | (1\%) | 4\% | (1\%) | 14\% | (1\%) |
| Family composition: |  |  |  |  |  |  |  |  |  |  |  |
| Two-parent family | 7,140 | 84\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 3\% | (0\%) | 16\% | (1\%) |
| Single-parent family | 2,180 | 73\% | (2\%) | 18\% | (1\%) | 6\% | (1\%) | 3\% | (1\%) | 27\% | (2\%) |
| Reading achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,610 | 77\% | (2\%) | 14\% | (1\%) | 6\% | (1\%) | 4\% | (1\%) | 23\% | (2\%) |
| Quintile 2 | 1,880 | 78\% | (2\%) | 13\% | (1\%) | 6\% | (1\%) | 3\% | (1\%) | 22\% | (2\%) |
| Quintile 3 | 1,940 | 84\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 3\% | (1\%) | 16\% | (1\%) |
| Quintile 4 | 1,970 | 82\% | (1\%) | 10\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 18\% | (1\%) |
| Quintile 5 (highest) | 1,910 | 84\% | (1\%) | 9\% | (1\%) | 3\% | (1\%) | 4\% | (1\%) | 16\% | (1\%) |
| Math achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,700 | 74\% | (2\%) | 15\% | (1\%) | 7\% | (1\%) | 3\% | (1\%) | 26\% | (2\%) |
| Quintile 2 | 1,870 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 19\% | (1\%) |
| Quintile 3 | 1,890 | 82\% | (2\%) | 10\% | (1\%) | 4\% | (1\%) | 3\% | (1\%) | 18\% | (2\%) |
| Quintile 4 | 1,880 | 83\% | (1\%) | 10\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 17\% | (1\%) |
| Quintile 5 (highest) | 1,950 | 85\% | (1\%) | 9\% | (1\%) | 3\% | (1\%) | 3\% | (1\%) | 15\% | (1\%) |
| Disability status: |  |  |  |  |  |  |  |  |  |  |  |
| Students with a disability | 1,560 | 82\% | (1\%) | 11\% | (1\%) | 4\% | (1\%) | 3\% | (0\%) | 18\% | (1\%) |
| Nondisabled students | 6,230 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 4\% | (1\%) | 19\% | (1\%) |
| Home language: |  |  |  |  |  |  |  |  |  |  |  |
| Not English | 1,840 | 81\% | (1\%) | 12\% | (1\%) | 4\% | (1\%) | 3\% | (1\%) | 19\% | (1\%) |
| English | 7,490 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 19\% | (1\%) |
| First-time kindergartener: |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 8,840 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (0\%) | 19\% | (1\%) |
| No | 420 | 76\% | (3\%) | 16\% | (2\%) | 7\% | (2\%) | 2\% | (1\%) | 24\% | (3\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 8. Student Mobility From First Grade to Third Grade, by Student Characteristics (ECLS-K:99)

| Student Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 10,220 | 71\% | (1\%) | 17\% | (1\%) | 8\% | (1\%) | 4\% | (0\%) | 29\% | (1\%) |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Male | 5,160 | 70\% | (1\%) | 18\% | (1\%) | 9\% | (1\%) | 3\% | (0\%) | 30\% | (1\%) |
| Female | 5,060 | 72\% | (1\%) | 15\% | (1\%) | 8\% | (1\%) | 5\% | (1\%) | 28\% | (1\%) |
| Race/Ethnicity: |  |  |  |  |  |  |  |  |  |  |  |
| African American | 1,510 | 62\% | (3\%) | 27\% | (2\%) | 8\% | (1\%) | 4\% | (1\%) | 38\% | (3\%) |
| Asian/Pacific Islander | 880 | 73\% | (2\%) | 17\% | (2\%) | 6\% | (1\%) | 3\% | (1\%) | 27\% | (2\%) |
| Latino/Hispanic | 2,000 | 70\% | (2\%) | 18\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 30\% | (2\%) |
| White | 5,380 | 75\% | (1\%) | 13\% | (1\%) | 8\% | (1\%) | 4\% | (1\%) | 25\% | (1\%) |
| Other | 440 | 69\% | (4\%) | 17\% | (4\%) | 10\% | (2\%) | 4\% | (1\%) | 31\% | (4\%) |
| Family SES: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,900 | 65\% | (2\%) | 23\% | (2\%) | 10\% | (1\%) | 2\% | (1\%) | 35\% | (2\%) |
| Quintile 2 | 1,920 | 69\% | (2\%) | 18\% | (2\%) | 10\% | (1\%) | 3\% | (1\%) | 31\% | (2\%) |
| Quintile 3 | 1,940 | 73\% | (2\%) | 15\% | (2\%) | 7\% | (1\%) | 4\% | (1\%) | 27\% | (2\%) |
| Quintile 4 | 1,840 | 72\% | (2\%) | 13\% | (2\%) | 8\% | (1\%) | 6\% | (1\%) | 28\% | (2\%) |
| Quintile 5 (highest) | 1,840 | 78\% | (2\%) | 13\% | (2\%) | 5\% | (1\%) | 5\% | (1\%) | 22\% | (2\%) |
| Family composition: |  |  |  |  |  |  |  |  |  |  |  |
| Two-parent family | 7,120 | 74\% | (1\%) | 14\% | (1\%) | 7\% | (1\%) | 4\% | (1\%) | 26\% | (1\%) |
| Single-parent family | 2,150 | 65\% | (2\%) | 21\% | (2\%) | 11\% | (1\%) | 3\% | (1\%) | 35\% | (2\%) |
| Reading achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,170 | 66\% | (2\%) | 22\% | (2\%) | 9\% | (1\%) | 3\% | (0\%) | 34\% | (2\%) |
| Quintile 2 | 2,060 | 70\% | (2\%) | 16\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 30\% | (2\%) |
| Quintile 3 | 1,980 | 74\% | (2\%) | 15\% | (1\%) | 8\% | (1\%) | 4\% | (1\%) | 26\% | (2\%) |
| Quintile 4 | 1,940 | 73\% | (2\%) | 14\% | (1\%) | 8\% | (1\%) | 5\% | (1\%) | 27\% | (2\%) |
| Quintile 5 (highest) | 1,780 | 75\% | (2\%) | 13\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 25\% | (2\%) |
| Math achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,240 | 67\% | (2\%) | 20\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 33\% | (2\%) |
| Quintile 2 | 2,090 | 69\% | (2\%) | 19\% | (1\%) | 10\% | (1\%) | 3\% | (1\%) | 31\% | (2\%) |
| Quintile 3 | 2,020 | 72\% | (2\%) | 17\% | (1\%) | 7\% | (1\%) | 4\% | (1\%) | 28\% | (2\%) |
| Quintile 4 | 1,930 | 74\% | (2\%) | 13\% | (2\%) | 8\% | (1\%) | 4\% | (1\%) | 26\% | (2\%) |
| Quintile 5 (highest) | 1,900 | 74\% | (2\%) | 12\% | (2\%) | 8\% | (1\%) | 6\% | (1\%) | 26\% | (2\%) |
| Disability status: |  |  |  |  |  |  |  |  |  |  |  |
| Students with a disability | 1,490 | 66\% | (2\%) | 20\% | (2\%) | 9\% | (1\%) | 6\% | (1\%) | 34\% | (2\%) |
| Nondisabled students | 7,750 | 73\% | (1\%) | 15\% | (1\%) | 8\% | (1\%) | 4\% | (0\%) | 27\% | (1\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 9. Student Mobility From First Grade to Fifth Grade, by Student Characteristics (ECLS-K:99)

| Student Characteristic | $N$ | Same <br> School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 7,280 | 54\% | (2\%) | 27\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) | 46\% | (2\%) |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |
| Male | 3,640 | 53\% | (2\%) | 26\% | (2\%) | 14\% | (1\%) | 7\% | (1\%) | 47\% | (2\%) |
| Female | 3,640 | 56\% | (2\%) | 27\% | (2\%) | 12\% | (1\%) | 6\% | (1\%) | 44\% | (2\%) |
| Race/ethnicity: |  |  |  |  |  |  |  |  |  |  |  |
| African American | 960 | 43\% | (5\%) | 41\% | (4\%) | 11\% | (3\%) | 5\% | (1\%) | 57\% | (5\%) |
| Asian/Pacific Islander | 680 | 54\% | (3\%) | 29\% | (3\%) | 11\% | (2\%) | 6\% | (1\%) | 46\% | (3\%) |
| Latino/Hispanic | 1,500 | 54\% | (3\%) | $25 \%$ | (2\%) | 17\% | (2\%) | 3\% | (1\%) | 46\% | (3\%) |
| White | 3,860 | 58\% | (2\%) | 22\% | (2\%) | 12\% | (1\%) | 8\% | (1\%) | 42\% | (2\%) |
| Other | 300 | 60\% | (5\%) | 16\% | (3\%) | 17\% | (6\%) | 7\% | (2\%) | 40\% | (5\%) |
| Family SES: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,330 | 51\% | (4\%) | 33\% | (3\%) | 13\% | (2\%) | 3\% | (1\%) | 49\% | (4\%) |
| Quintile 2 | 1,400 | 53\% | (3\%) | 29\% | (3\%) | 12\% | (2\%) | 6\% | (1\%) | 47\% | (3\%) |
| Quintile 3 | 1,400 | 49\% | (2\%) | 28\% | (2\%) | 17\% | (2\%) | 6\% | (2\%) | 51\% | (2\%) |
| Quintile 4 | 1,310 | 63\% | (3\%) | 20\% | (2\%) | 12\% | (2\%) | 5\% | (1\%) | 37\% | (3\%) |
| Quintile 5 (highest) | 1,320 | 60\% | (3\%) | 18\% | (2\%) | 8\% | (2\%) | 14\% | (2\%) | 40\% | (3\%) |
| Family composition: |  |  |  |  |  |  |  |  |  |  |  |
| Two-parent family | 5,210 | 57\% | (2\%) | 23\% | (2\%) | 12\% | (1\%) | 8\% | (1\%) | 43\% | (2\%) |
| Single-parent family | 1,440 | 48\% | (3\%) | $34 \%$ | (3\%) | 13\% | (2\%) | 4\% | (1\%) | 52\% | (3\%) |
| Reading achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,520 | 46\% | (3\%) | $34 \%$ | (3\%) | 15\% | (2\%) | 6\% | (1\%) | 54\% | (3\%) |
| Quintile 2 | 1,460 | 56\% | (3\%) | $22 \%$ | (2\%) | 16\% | (2\%) | 6\% | (2\%) | 44\% | (3\%) |
| Quintile 3 | 1,410 | 57\% | (3\%) | 25\% | (3\%) | 14\% | (2\%) | 5\% | (1\%) | 43\% | (3\%) |
| Quintile 4 | 1,400 | 55\% | (3\%) | 28\% | (3\%) | 11\% | (2\%) | 6\% | (1\%) | 45\% | (3\%) |
| Quintile 5 (highest) | 1,290 | 61\% | (3\%) | 21\% | (3\%) | 9\% | (2\%) | 10\% | (2\%) | 39\% | (3\%) |
| Math achievement: |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 1,550 | 52\% | (3\%) | 30\% | (2\%) | 14\% | (2\%) | 4\% | (1\%) | 48\% | (3\%) |
| Quintile 2 | 1,480 | 51\% | (3\%) | $27 \%$ | (2\%) | 15\% | (2\%) | 7\% | (1\%) | 49\% | (3\%) |
| Quintile 3 | 1,440 | 54\% | (3\%) | 29\% | (3\%) | 11\% | (2\%) | 6\% | (1\%) | 46\% | (3\%) |
| Quintile 4 | 1,390 | 58\% | (3\%) | 25\% | (2\%) | 13\% | (2\%) | 5\% | (1\%) | 42\% | (3\%) |
| Quintile 5 (highest) | 1,370 | 59\% | (3\%) | 20\% | (3\%) | 11\% | (2\%) | 10\% | (2\%) | 41\% | (3\%) |
| Disability status: |  |  |  |  |  |  |  |  |  |  |  |
| Students with a disability | 1,010 | 53\% | (3\%) | 28\% | (3\%) | 13\% | (3\%) | 7\% | (2\%) | 47\% | (3\%) |
| Nondisabled students | 5,620 | 55\% | (2\%) | 26\% | (1\%) | 13\% | (1\%) | 7\% | (1\%) | 45\% | (2\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 10. Student Mobility From Ninth Grade to 11th Grade, by Student Characteristics (HSLS)

|  |  |  | Left Baseline School |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Student Characteristic | $N$ | Same School | Same District | Same State | Left State | $\begin{gathered} \text { All } \\ \text { Leavers } \end{gathered}$ | High School Dropouts |
| All students | 15,160 | 84\% (1\%) | 4\% (0\%) | 5\% (0\%) | 7\% (0\%) | 16\% (1\%) | 3\% (0\%) |

## Gender:

| Male | 7,660 | 83\% (1\%) | 4\% (1\%) | 5\% (0\%) | 8\% | (1\%) | 17\% (1\%) | 3\% (0\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 7,500 | 84\% (1\%) | 4\% (0\%) | $5 \%$ (0\%) | 7\% | (0\%) | 16\% (1\%) | 3\% (0\%) |
| Race/ethnicity: |  |  |  |  |  |  |  |  |
| African American | 1,570 | 77\% (1\%) | 8\% (1\%) | 8\% (1\%) | 8\% | (1\%) | 23\% (1\%) | 4\% (1\%) |
| Asian/Pacific Islander | 1,290 | 91\% (2\%) | 3\% (1\%) | $3 \%$ (1\%) | 3\% | (1\%) | 9\% (2\%) | 1\% (0\%) |
| Latino/Hispanic | 2,460 | 80\% (2\%) | 7\% (1\%) | 4\% (1\%) | 9\% | (2\%) | 20\% (2\%) | 3\% (1\%) |
| White | 8,350 | 87\% (1\%) | 2\% (0\%) | 4\% (0\%) | 7\% | (0\%) | 13\% (1\%) | 2\% (0\%) |
| Other | 1,500 | 81\% (2\%) | 4\% (1\%) | 6\% (1\%) | 8\% | (1\%) | 19\% (2\%) | 2\% (1\%) |

Family SES:

| Quintile 1 (lowest) | 2,700 | 77\% (2\%) | 7\% (1\%) | 5\% (1\%) | 11\% (1\%) | 23\% (2\%) | 6\% (1\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quintile 2 | 2,920 | 82\% (1\%) | 4\% (1\%) | 6\% (1\%) | 7\% (1\%) | 18\% (1\%) | 3\% (0\%) |
| Quintile 3 | 3,170 | 84\% (1\%) | 4\% (1\%) | 5\% (1\%) | 7\% (1\%) | 16\% (1\%) | $3 \% \quad(0 \%)$ |
| Quintile 4 | 3,180 | 87\% (1\%) | $3 \%$ (1\%) | 4\% (0\%) | 6\% (1\%) | 13\% (1\%) | 1\% (0\%) |
| Quintile 5 (highest) | 3,210 | 90\% (1\%) | 2\% (0\%) | 3\% (0\%) | 5\% (1\%) | 10\% (1\%) | 0\% (0\%) |

Family composition:

| Two-parent family | 9,150 | $88 \%(1 \%)$ | $3 \%(0 \%)$ | $4 \%(0 \%)$ | $6 \%$ | $(0 \%)$ | $12 \%$ | $(1 \%)$ | $1 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Single-parent family | 2,710 | $78 \%(2 \%)$ | $7 \%(1 \%)$ | $6 \%(1 \%)$ | $9 \%$ | $(1 \%)$ | $22 \%$ | $(2 \%)$ | $4 \%$ |

Ninth-grade math achievement:

| Quintile 1 (lowest) | 2,620 | 77\% (2\%) | 6\% (1\%) | 5\% (1\%) | 12\% (1\%) | 23\% (2\%) | 7\% (1\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Quintile 2 | 2,790 | 82\% (1\%) | $5 \%$ (1\%) | 6\% (1\%) | 8\% (1\%) | 18\% (1\%) | 3\% (0\%) |
| Quintile 3 | 3,080 | 83\% (1\%) | 5\% (1\%) | $5 \%$ (1\%) | 7\% (1\%) | 17\% (1\%) | 2\% (0\%) |
| Quintile 4 | 3,270 | 88\% (1\%) | 2\% (0\%) | 4\% (0\%) | 5\% (1\%) | 12\% (1\%) | 1\% (0\%) |
| Quintile 5 (highest) | 3,400 | 90\% (1\%) | 2\% (0\%) | 3\% (0\%) | 5\% (1\%) | 10\% (1\%) | 0\% (0\%) |

Disability status:

| Students with a disability | 1,440 | $83 \%(1 \%)$ | $4 \%(1 \%)$ | $5 \%(1 \%)$ | $8 \%$ | $(1 \%)$ | $17 \%$ | $(1 \%)$ | $4 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Nondisabled students | 5,230 | $86 \%(1 \%)$ | $3 \%(0 \%)$ | $4 \%$ | $(0 \%)$ | $7 \%$ | $(1 \%)$ | $14 \%$ | $(1 \%)$ |
| Missing disability status | 8,500 | $83 \%(1 \%)$ | $5 \%(0 \%)$ | $5 \%(0 \%)$ | $8 \%$ | $(1 \%)$ | $17 \%$ | $(1 \%)$ | $3 \%$ |
|  | $(0 \%)$ |  |  |  |  |  |  |  |  |

Age at start of ninth grade:

| 15 or older | 2,360 | 73\% (2\%) | 6\% (1\%) | 5\% (1\%) | 16\% | (2\%) | 27\% (2\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Younger than 15 | 12,790 | 86\% (1\%) | 4\% (0\%) | 5\% (0\%) | 6\% | (0\%) | 14\% (1\%) |  | ) |
| English language learner status: |  |  |  |  |  |  |  |  |  |
| English language learner | 2,580 | 84\% (1\%) | 6\% (1\%) | 3\% (1\%) | 7\% | (1\%) | 16\% (1\%) |  |  |
| Not English language learner | 12,590 | 84\% (1\%) | 4\% (0\%) | 5\% (0\%) | 8\% | (0\%) | 16\% (1\%) |  |  |

Note. High school dropouts are included in the "left state" and "all leavers" categories. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

## Exhibit 11. Student Mobility From 10th Grade to 12th Grade, by Student Characteristics (ELS)

| Student Characteristic | N | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Same } \\ & \text { District } \end{aligned}$ | Same State ${ }^{1}$ |  | Left State |  | All Leavers |  | High School Dropouts |  |
| All students | 10,890 | 86\% | (0\%) | na | 6\% | (0\%) | 8\% | (0\%) | 14\% | (0\%) | 7\% | (0\%) |
| Gender: |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 5,370 | 85\% | (1\%) | na | 6\% | (0\%) | 9\% | (1\%) | 15\% | (1\%) | 8\% | (0\%) |
| Female | 5,520 | 87\% | (1\%) | na | 6\% | (0\%) | 7\% | (0\%) | 13\% | (1\%) | 6\% | (0\%) |
| Race/ethnicity: |  |  |  |  |  |  |  |  |  |  |  |  |
| African American | 1,610 | 79\% | (1\%) | na | 10\% | (1\%) | 12\% | (1\%) | 21\% | (1\%) | 10\% | (1\%) |
| Asian/Pacific Islander | 1,180 | 90\% | (1\%) | na | 6\% | (1\%) | 4\% | (1\%) | 10\% | (1\%) | 2\% | (0\%) |
| Latino/Hispanic | 1,680 | 80\% | (1\%) | na | 8\% | (1\%) | 12\% | (1\%) | 20\% | (1\%) | 11\% | (1\%) |
| White | 5,820 | 89\% | (1\%) | na | 4\% | (0\%) | 7\% | (0\%) | 11\% | (1\%) | 5\% | (0\%) |
| Other | 600 | 82\% | (2\%) | na | 7\% | (1\%) | 11\% | (2\%) | 18\% | (2\%) | 8\% | (1\%) |
| Family SES: |  |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,560 | 78\% | (1\%) | na | 8\% | (1\%) | 14\% | (1\%) | 22\% | (1\%) | 13\% | (1\%) |
| Quintile 2 | 2,390 | 82\% | (1\%) | na | 7\% | (1\%) | 10\% | (1\%) | 18\% | (1\%) | 9\% | (1\%) |
| Quintile 3 | 2,300 | 87\% | (1\%) | na | 6\% | (1\%) | 7\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) |
| Quintile 4 | 2,070 | 91\% | (1\%) | na | 4\% | (1\%) | 5\% | (1\%) | 9\% | (1\%) | 3\% | (0\%) |
| Quintile 5 (highest) | 1,570 | 94\% | (1\%) | na | 3\% | (1\%) | 3\% | (1\%) | 6\% | (1\%) | 1\% | (0\%) |
| Family composition: |  |  |  |  |  |  |  |  |  |  |  |  |
| Two-parent family | 8,220 | 88\% | (1\%) | na | 5\% | (0\%) | 7\% | (0\%) | 12\% | (1\%) | 6\% | (0\%) |
| Single-parent family | 2,680 | 80\% | (1\%) | na | 8\% | (1\%) | 11\% | (1\%) | 20\% | (1\%) | 9\% | (1\%) |
| 10th-grade reading achievement: |  |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,460 | 77\% | (1\%) | na | 9\% | (1\%) | 15\% | (1\%) | 23\% | (1\%) | 13\% | (1\%) |
| Quintile 2 | 2,370 | 82\% | (1\%) | na | 7\% | (1\%) | 10\% | (1\%) | 18\% | (1\%) | 9\% | (1\%) |
| Quintile 3 | 2,110 | 87\% | (1\%) | na | 6\% | (1\%) | 7\% | (1\%) | 13\% | (1\%) | 5\% | (1\%) |
| Quintile 4 | 2,030 | 91\% | (1\%) | na | 4\% | (1\%) | 4\% | (1\%) | 9\% | (1\%) | 3\% | (0\%) |
| Quintile 5 (highest) | 1,930 | 94\% | (1\%) | na | 3\% | (0\%) | 3\% | (1\%) | 6\% | (1\%) | 2\% | (0\%) |


| Student Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District | Same State ${ }^{1}$ |  | Left State |  | All <br> Leavers |  | High School Dropouts |  |
| 10th-grade math achievement: |  |  |  |  |  |  |  |  |  |  |  |  |
| Quintile 1 (lowest) | 2,410 | 75\% | (1\%) | na | 9\% | (1\%) | 16\% | (1\%) | 25\% | (1\%) | 15\% | (1\%) |
| Quintile 2 | 2,270 | 82\% | (1\%) | na | 7\% | (1\%) | 11\% | (1\%) | 18\% | (1\%) | 9\% | (1\%) |
| Quintile 3 | 2,180 | 89\% | (1\%) | na | 5\% | (1\%) | 6\% | (1\%) | 11\% | (1\%) | 4\% | (1\%) |
| Quintile 4 | 2,020 | 91\% | (1\%) | na | 4\% | (1\%) | 5\% | (1\%) | 9\% | (1\%) | 3\% | (1\%) |
| Quintile 5 (highest) | 2,010 | 95\% | (1\%) | na | 2\% | (0\%) | 2\% | (0\%) | 5\% | (1\%) | 1\% | (0\%) |
| Disability status: |  |  |  |  |  |  |  |  |  |  |  |  |
| Students with a disability | 780 | 79\% | (2\%) | na | 6\% | (1\%) | 15\% | (2\%) | 21\% | (2\%) | 13\% | (1\%) |
| Nondisabled students | 4,980 | 87\% | (1\%) | na | 5\% | (0\%) | 7\% | (1\%) | 13\% | (1\%) | 6\% | (0\%) |
| Missing disability status | 5,140 | 86\% | (1\%) | na | 6\% | (1\%) | 8\% | (1\%) | 14\% | (1\%) | 6\% | (0\%) |
| Age at start of 10th grade: |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 or older | 1,660 | 70\% | (1\%) | na | 7\% | (1\%) | 23\% | (1\%) | 30\% | (1\%) | 21\% | (1\%) |
| Less than 16 | 9,200 | 89\% | (0\%) | na | 6\% | (0\%) | 6\% | (0\%) | 11\% | (0\%) | 4\% | (0\%) |
| English language learner status: |  |  |  |  |  |  |  |  |  |  |  |  |
| English language learner | 1,980 | 81\% | (1\%) | na | 7\% | (1\%) | 12\% | (1\%) | 19\% | (1\%) | 10\% | (1\%) |
| Not English language learner | 8,680 | 87\% | (0\%) | na | 6\% | (0\%) | 8\% | (0\%) | 13\% | (0\%) | 6\% | (0\%) |

[^2]Exhibit 12. Student Mobility From Kindergarten to First Grade, by School Characteristics (ECLS-K:11)

| School Characteristic | N | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 10,300 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 12\% | (1\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 1,520 | 91\% | (2\%) | 5\% | (1\%) | 3\% | (0\%) | 1\% | (0\%) | 9\% | (2\%) |
| Midwest | 2,220 | 88\% | (1\%) | 7\% | (1\%) | 3\% | (1\%) | 2\% | (1\%) | 12\% | (1\%) |
| South | 3,950 | 88\% | (1\%) | 9\% | (1\%) | 2\% | (1\%) | 1\% | (0\%) | 12\% | (1\%) |
| West | 2,610 | 85\% | (1\%) | 7\% | (1\%) | 5\% | (1\%) | $3 \%$ | (1\%) | 15\% | (1\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |
| City | 3,300 | 84\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 2\% | (1\%) | 16\% | (1\%) |
| Suburb | 3,630 | 89\% | (1\%) | 7\% | (1\%) | 3\% | (1\%) | 2\% | (0\%) | 11\% | (1\%) |
| Town | 880 | 87\% | (2\%) | 10\% | (1\%) | 2\% | (0\%) | 1\% | (0\%) | $13 \%$ | (2\%) |
| Rural | 2,490 | 91\% | (2\%) | 4\% | (1\%) | 3\% | (1\%) | 1\% | (1\%) | 9\% | (2\%) |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 7,990 | 86\% | (1\%) | 8\% | (1\%) | 4\% | (0\%) | 2\% | (0\%) | 14\% | (1\%) |
| Not Title I school | 2,280 | 94\% | (1\%) | 3\% | (1\%) | 1\% | (0\%) | 2\% | (0\%) | 6\% | (1\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 300 students | 1,320 | 82\% | (3\%) | 11\% | (3\%) | 4\% | (1\%) | 3\% | (1\%) | 18\% | (3\%) |
| 300-499 students | 3,100 | 90\% | (1\%) | 6\% | (1\%) | 3\% | (1\%) | 1\% | (0\%) | 10\% | (1\%) |
| 500-749 students | 4,100 | 86\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 14\% | (1\%) |
| 750 or more students | 1,690 | 91\% | (1\%) | 5\% | (1\%) | 2\% | (0\%) | 2\% | (1\%) | 9\% | (1\%) |
| Percentage free or reduced-price lunch: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 2,310 | 91\% | (2\%) | 4\% | (2\%) | 3\% | (1\%) |  | (0\%) | 9\% | (2\%) |
| 25\%-49\% | 3,030 | 91\% | (1\%) | 5\% | (1\%) | 2\% | (0\%) | 2\% | (1\%) | 9\% | (1\%) |
| 50\%-74\% | 2,210 | 89\% | (1\%) | 6\% | (1\%) | 4\% | (1\%) | 2\% | (0\%) | 11\% | (1\%) |
| 75\%-100\% | 2,750 | 81\% | (2\%) | 14\% | (2\%) | 4\% | (1\%) | 1\% | (0\%) | 19\% | (2\%) |
| Percentage underrepresented minority: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 4,510 | 94\% | (1\%) | 3\% | (0\%) | 2\% | (0\%) | 2\% | (0\%) | 6\% | (1\%) |
| 25\%-49\% | 2,140 | 86\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 2\% | (1\%) | 14\% | (2\%) |
| 50\%-74\% | 1,260 | 82\% | (3\%) | $12 \%$ | (2\%) | 4\% | (1\%) | 2\% | (1\%) | 18\% | (3\%) |
| 75\%-100\% | 2,390 | 82\% | (2\%) | 11\% | (2\%) | 5\% | (1\%) | 2\% | (0\%) | 18\% | (2\%) |
| District size: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 schools | 2,910 | 89\% | (1\%) | 6\% | (1\%) | 4\% | (1\%) | 1\% | (0\%) | 11\% | (1\%) |
| 5-9 schools | 1,240 | 92\% | (1\%) | 5\% | (1\%) | 2\% | (1\%) | 1\% | (0\%) | 8\% | (1\%) |
| 10-19 schools | 1,880 | 86\% | (2\%) | 7\% | (1\%) | 4\% | (1\%) | 3\% | (1\%) | 14\% | (2\%) |
| 20 or more schools | 4,170 | 86\% | (1\%) | 10\% | (1\%) | 2\% | (0\%) | 2\% | (0\%) | 14\% | (1\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 13. Student Mobility From Kindergarten to Second Grade, by School Characteristics (ECLS-K:11)

| School Characteristic | N | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 9,350 | 81\% | (1\%) | 11\% | (1\%) | 5\% | (1\%) | 3\% | (0\%) | 19\% | (1\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 1,390 | 86\% | (2\%) | 8\% | (2\%) | 5\% | (1\%) | 1\% | (0\%) | 14\% | (2\%) |
| Midwest | 1,990 | 82\% | (2\%) | 10\% | (2\%) | 3\% | (1\%) | 4\% | (1\%) | 18\% | (2\%) |
| South | 3,550 | 80\% | (2\%) | 14\% | (2\%) | 4\% | (1\%) | 3\% | (1\%) | 20\% | (2\%) |
| West | 2,420 | 79\% | (2\%) | 9\% | (1\%) | 7\% | (1\%) | 5\% | (1\%) | 21\% | (2\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |
| City | 2,970 | 77\% | (2\%) | 13\% | (1\%) | 5\% | (1\%) | 4\% | (1\%) | 23\% | (2\%) |
| Suburb | 3,280 | 82\% | (2\%) | 10\% | (1\%) | 4\% | (1\%) | 3\% | (1\%) | 18\% | (2\%) |
| Town | 800 | 84\% | (3\%) | 9\% | (3\%) | 4\% | (1\%) | 2\% | (1\%) | 16\% | (3\%) |
| Rural | 2,290 | 84\% | (2\%) | 10\% | (1\%) | 4\% | (1\%) | 2\% | (1\%) | 16\% | (2\%) |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 7,240 | 79\% | (1\%) | 12\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 21\% | (1\%) |
| Not Title I school | 2,090 | 88\% | (1\%) | 5\% | (1\%) | 2\% | (1\%) | 4\% | (1\%) | 12\% | (1\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 300 students | 1,190 | 75\% | (4\%) | 15\% | (3\%) | 5\% | (1\%) | 5\% | (2\%) | 25\% | (4\%) |
| 300-499 students | 2,800 | 84\% | (1\%) | 10\% | (1\%) | 4\% | (1\%) | 2\% | (1\%) | 16\% | (1\%) |
| 500-749 students | 3,780 | 80\% | (2\%) | 12\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 20\% | (2\%) |
| 750 or more students | 1,530 | 84\% | (2\%) | 8\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 16\% | (2\%) |
| Percentage free or reduced-price lunch: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 2,130 | 86\% | (2\%) | 5\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 14\% | (2\%) |
| 25\%-49\% | 2,770 | 83\% | (2\%) | 8\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 17\% | (2\%) |
| 50\%-74\% | 2,000 | 82\% | (2\%) | 10\% | (2\%) | 5\% | (1\%) | 2\% | (1\%) | 18\% | (2\%) |
| 75\%-100\% | 2,450 | 74\% | (2\%) | 19\% | (2\%) | 5\% | (1\%) | 3\% | (1\%) | 26\% | (2\%) |
| Percentage underrepresented minority: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 4,170 | 89\% | (1\%) | 5\% | (1\%) | 3\% | (1\%) | 3\% | (0\%) | 11\% | (1\%) |
| 25\%-49\% | 1,900 | 78\% | (3\%) | 14\% | (2\%) | 4\% | (1\%) | 4\% | (1\%) | 22\% | (3\%) |
| 50\%-74\% | 1,110 | 76\% | (3\%) | 15\% | (3\%) | 6\% | (2\%) | 3\% | (1\%) | 24\% | (3\%) |
| 75\%-100\% | 2,170 | 73\% | (2\%) | 16\% | (2\%) | 7\% | (1\%) | 4\% | (1\%) | 27\% | (2\%) |
| District size: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 Schools | 2,620 | 84\% | (2\%) | 9\% | (1\%) | 5\% | (1\%) | 2\% | (1\%) | 16\% | (2\%) |
| 5-9 schools | 1,130 | 83\% | (3\%) | 11\% | (3\%) | 4\% | (1\%) | 2\% | (1\%) | 17\% | (3\%) |
| 10-19 schools | 1,760 | 81\% | (2\%) | 9\% | (1\%) | 5\% | (1\%) | 5\% | (2\%) | 19\% | (2\%) |
| 20 or more schools | 3,750 | 79\% | (2\%) | 14\% | (1\%) |  | (1\%) | 4\% | (1\%) | 21\% | (2\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 14. Student Mobility From First Grade to Third Grade, by School Characteristics (ECLS-K:99)

| School Characteristic | N | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 10,220 | 71\% | (1\%) | 17\% | (1\%) | 8\% | (1\%) | 4\% | (0\%) | 29\% | (1\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 1,790 | 76\% | (2\%) | 12\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 24\% | (2\%) |
| Midwest | 2,400 | 73\% | (2\%) | 12\% | (2\%) | 10\% | (1\%) | 4\% | (1\%) | 27\% | (2\%) |
| South | 3,590 | 67\% | (2\%) | 21\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 33\% | (2\%) |
| West | 2,450 | 72\% | (2\%) | 16\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 28\% | (2\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |
| City | 3,390 | 65\% | (1\%) | 24\% | (1\%) | 8\% | (1\%) | 3\% | (1\%) | 35\% | (1\%) |
| Suburb | 3,730 | 70\% | (2\%) | 16\% | (2\%) | 10\% | (1\%) | 4\% | (0\%) | 30\% | (2\%) |
| Town | 820 | 74\% | (3\%) | 11\% | (2\%) | 10\% | (3\%) | 4\% | (1\%) | 26\% | (3\%) |
| Rural | 2,280 | 81\% | (2\%) | 8\% | (1\%) | 6\% | (1\%) | 6\% | (2\%) | 19\% | (2\%) |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 6,580 | 70\% | (1\%) | 17\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 30\% | (1\%) |
| Not Title I school | 3,260 | 73\% | (2\%) | 15\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 27\% | (2\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 300 students | 1,560 | 70\% | (3\%) | 17\% | (2\%) | 8\% | (2\%) | 4\% | (1\%) | 30\% | (3\%) |
| 300-499 students | 3,060 | 73\% | (2\%) | 16\% | (1\%) | 8\% | (1\%) | 3\% | (0\%) | 27\% | (2\%) |
| 500-749 students | 3,310 | 70\% | (2\%) | 17\% | (2\%) | 9\% | (1\%) | 4\% | (1\%) | 30\% | (2\%) |
| 750 or more students | 2,240 | 72\% | (2\%) | 16\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 28\% | (2\%) |

Percentage free or reduced-price lunch:

| Less than 25\% | 3,040 | $77 \%$ | $(2 \%)$ | $10 \%$ | $(1 \%)$ | $9 \%$ | $(1 \%)$ | $4 \%$ | $(1 \%)$ | $23 \%$ | $(2 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $25 \%-49 \%$ | 2,600 | $70 \%$ | $(2 \%)$ | $17 \%$ | $(2 \%)$ | $8 \%$ | $(1 \%)$ | $6 \%$ | $(1 \%)$ | $30 \%$ | $(2 \%)$ |
| $50 \%-74 \%$ | 2,050 | $67 \%$ | $(2 \%)$ | $21 \%$ | $(2 \%)$ | $8 \%$ | $(1 \%)$ | $4 \%$ | $(1 \%)$ | $33 \%$ | $(2 \%)$ |
| $75 \%-100 \%$ | 2,120 | $68 \%$ | $(2 \%)$ | $22 \%$ | $(2 \%)$ | $8 \%$ | $(1 \%)$ | $2 \%$ | $(1 \%)$ | $32 \%$ | $(2 \%)$ |

Percentage underrepresented minority:

| Less than 25\% | 5,300 | 77\% | (1\%) | 12\% | (1\%) | 7\% | (1\%) | 4\% | (1\%) | 23\% | (1\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25\%-49\% | 1,700 | 66\% | (3\%) | 17\% | (3\%) | 11\% | (1\%) | 6\% | (2\%) | 34\% | (3\%) |
| 50\%-74\% | 1,140 | 62\% | (4\%) | 26\% | (4\%) | 10\% | (2\%) | 3\% | (1\%) | 38\% | (4\%) |
| 75\%-100\% | 2,040 | 67\% | (2\%) | 22\% | (2\%) | 8\% | (1\%) | 3\% | (1\%) | 33\% | (2\%) |
| District size: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 schools | 2,610 | 77\% | (3\%) | 10\% | (3\%) | 10\% | (1\%) | 3\% | (1\%) | 23\% | (3\%) |
| 5-9 schools | 1,940 | 74\% | (2\%) | 13\% | (2\%) | 9\% | (1\%) | 3\% | (1\%) | 26\% | (2\%) |
| 10-19 schools | 1,560 | 70\% | (2\%) | 15\% | (2\%) | 10\% | (1\%) | 5\% | (2\%) | 30\% | (2\%) |
| 20 or more schools | 4,030 | 66\% | (1\%) | 24\% | (1\%) | 6\% | (1\%) | 4\% | (1\%) | 34\% | (1\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

Exhibit 15. Student Mobility From First Grade to Fifth Grade, by School Characteristics (ECLS-K:99)

| School Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  |
| All students | 7,280 | 54\% | (2\%) | 27\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) | 46\% | (2\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 1,190 | 63\% | (3\%) | 17\% | (3\%) | 14\% | (2\%) | 6\% | (1\%) | 37\% | (3\%) |
| Midwest | 1,720 | 55\% | (3\%) | 20\% | (3\%) | 20\% | (3\%) | 5\% | (1\%) | 45\% | (3\%) |
| South | 2,510 | 48\% | (3\%) | 35\% | (3\%) | 9\% | (2\%) | 7\% | (1\%) | 52\% | (3\%) |
| West | 1,860 | 58\% | (2\%) | 24\% | (2\%) | 12\% | (2\%) | 6\% | (1\%) | 42\% | (2\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |
| City | 2,410 | 44\% | (2\%) | 36\% | (2\%) | 14\% | (2\%) | 5\% | (1\%) | 56\% | (2\%) |
| Suburb | 2,570 | 56\% | (3\%) | 22\% | (2\%) | 15\% | (2\%) | 7\% | (1\%) | 44\% | (3\%) |
| Town | 540 | 60\% | (7\%) | 25\% | (7\%) | 10\% | (4\%) | 5\% | (2\%) | 40\% | (7\%) |
| Rural | 1,770 | 65\% | (3\%) | 18\% | (3\%) | 9\% | (2\%) | 8\% | (2\%) | 35\% | (3\%) |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 4,620 | 54\% | (2\%) | 27\% | (2\%) | 14\% | (1\%) | 5\% | (1\%) | 46\% | (2\%) |
| Not Title I school | 2,430 | 55\% | (2\%) | 26\% | (2\%) | 10\% | (2\%) | 9\% | (1\%) | 45\% | (2\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |
| Less than 300 students | 1,030 | 54\% | (4\%) | 25\% | (4\%) | 15\% | (3\%) | 5\% | (2\%) | 46\% | (4\%) |
| 300-499 students | 2,120 | 56\% | (2\%) | 24\% | (2\%) | 15\% | (2\%) | 4\% | (1\%) | 44\% | (2\%) |
| 500-749 students | 2,400 | 52\% | (2\%) | 28\% | (2\%) | 13\% | (2\%) | 7\% | (1\%) | 48\% | (2\%) |
| 750 or more students | 1,680 | 54\% | (3\%) | 29\% | (3\%) | 9\% | (1\%) | 8\% | (2\%) | 46\% | (3\%) |

## Percentage free or reduced-price lunch:

| Less than $25 \%$ | 2,260 | $59 \%$ | $(3 \%)$ | $16 \%$ | $(2 \%)$ | $14 \%$ | $(2 \%)$ | $10 \%$ | $(1 \%)$ | $41 \%$ | $(3 \%)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $25 \%-49 \%$ | 1,740 | $54 \%$ | $(3 \%)$ | $28 \%$ | $(3 \%)$ | $11 \%$ | $(2 \%)$ | $6 \%$ | $(1 \%)$ | $46 \%$ | $(3 \%)$ |
| $50 \%-74 \%$ | 1,470 | $50 \%$ | $(3 \%)$ | $32 \%$ | $(3 \%)$ | $15 \%$ | $(2 \%)$ | $4 \%$ | $(1 \%)$ | $50 \%$ | $(3 \%)$ |
| $75 \%-100 \%$ | 1,490 | $51 \%$ | $(4 \%)$ | $34 \%$ | $(3 \%)$ | $11 \%$ | $(2 \%)$ | $4 \%$ | $(1 \%)$ | $49 \%$ | $(4 \%)$ |

Percentage underrepresented minority:

| Less than $25 \%$ | 3,940 | $59 \%$ | $(2 \%)$ | $21 \%$ | $(2 \%)$ | $11 \%$ | $(2 \%)$ | $8 \%$ | $(1 \%)$ | $41 \%$ | $(2 \%)$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $25 \%-49 \%$ | 1,100 | $54 \%$ | $(4 \%)$ | $25 \%$ | $(4 \%)$ | $15 \%$ | $(3 \%)$ | $6 \%$ | $(1 \%)$ | $46 \%$ | $(4 \%)$ |
| $50 \%-74 \%$ | 770 | $49 \%$ | $(4 \%)$ | $33 \%$ | $(3 \%)$ | $14 \%$ | $(3 \%)$ | $3 \%$ | $(1 \%)$ | $51 \%$ | $(4 \%)$ |
| $75 \%-100 \%$ | 1,440 | $46 \%$ | $(4 \%)$ | $35 \%$ | $(3 \%)$ | $14 \%$ | $(2 \%)$ | $4 \%$ | $(1 \%)$ | $54 \%$ | $(4 \%)$ |
| District size |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 schools | 1,730 | $63 \%$ | $(4 \%)$ | $13 \%$ | $(3 \%)$ | $18 \%$ | $(3 \%)$ | $7 \%$ | $(1 \%)$ | $37 \%$ | $(4 \%)$ |
| $5-9$ schools | 1,370 | $58 \%$ | $(4 \%)$ | $25 \%$ | $(4 \%)$ | $13 \%$ | $(2 \%)$ | $4 \%$ | $(1 \%)$ | $42 \%$ | $(4 \%)$ |
| $10-19$ schools | 1,170 | $56 \%$ | $(3 \%)$ | $25 \%$ | $(3 \%)$ | $10 \%$ | $(2 \%)$ | $9 \%$ | $(2 \%)$ | $44 \%$ | $(3 \%)$ |
| 20 or more schools | 2,950 | $47 \%$ | $(1 \%)$ | $35 \%$ | $(2 \%)$ | $12 \%$ | $(2 \%)$ | $6 \%$ | $(1 \%)$ | $53 \%$ | $(1 \%)$ |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.

## Exhibit 16. Student Mobility From Ninth Grade to 11th Grade, by School Characteristics (HSLS)

| School Characteristic | N | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All Leavers |  | High School Dropouts |  |
| All students | 15,160 | 84\% | (1\%) | 4\% | (0\%) | 5\% | (0\%) | 7\% | (0\%) | 16\% | (1\%) | 3\% | (0\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 2,200 | 89\% | (4\%) | 2\% | (1\%) | 4\% | (1\%) | 5\% | (2\%) | 11\% | (4\%) | 2\% | (1\%) |
| Midwest | 3,930 | 84\% | (1\%) | 3\% | (0\%) | 5\% | (0\%) | 7\% | (1\%) | 16\% | (1\%) | 3\% | (0\%) |
| South | 6,280 | 83\% | (1\%) | 5\% | (0\%) | 4\% | (0\%) | 8\% | (1\%) | 17\% | (1\%) | 3\% | (0\%) |
| West | 2,760 | 81\% | (1\%) | 6\% | (1\%) | 5\% | (1\%) | 8\% | (1\%) | 19\% | (1\%) | 2\% | (0\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| City | 3,610 | 79\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 9\% | (1\%) | 21\% | (2\%) | 3\% | (1\%) |
| Suburb | 4,480 | 84\% | (1\%) | 5\% | (1\%) | 5\% | (0\%) | 6\% | (0\%) | 16\% | (1\%) | 2\% | (0\%) |
| Town | 2,220 | 88\% | (1\%) | 1\% | (1\%) | 4\% | (1\%) | 7\% | (1\%) | 12\% | (1\%) | 3\% | (1\%) |
| Rural | 4,870 | 86\% | (1\%) | 2\% | (0\%) | 5\% | (0\%) | 7\% | (1\%) | 14\% | (1\%) | 2\% | (0\%) |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 7,540 | 83\% | (1\%) | 5\% | (0\%) | 4\% | (0\%) | 8\% | (1\%) | 17\% | (1\%) | 3\% | (0\%) |
| Not Title I school | 7,500 | 84\% | (1\%) | 4\% | (0\%) | 5\% | (0\%) | 7\% | (1\%) | 16\% | (1\%) | 2\% | (0\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 500 students | 1,930 | 85\% | (1\%) | 1\% | (0\%) | 7\% | (1\%) | 7\% | (1\%) | 15\% | (1\%) | 4\% | (1\%) |
| 500-999 students | 3,300 | 84\% | (2\%) | 3\% | (1\%) | 5\% | (1\%) | 8\% | (1\%) | 16\% | (2\%) | 3\% | (1\%) |
| 1,000-1,499 students | 3,590 | 83\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 8\% | (1\%) | 17\% | (1\%) | 3\% | (1\%) |
| 1,500-1,999 students | 3,090 | 84\% | (1\%) | 4\% | (1\%) | 4\% | (1\%) | 8\% | (1\%) | 16\% | (1\%) | 2\% | (0\%) |
| 2,000 or more students | 3,250 | 83\% | (1\%) | 7\% | (1\%) | 4\% | (1\%) | 6\% | (1\%) | 17\% | (1\%) | 2\% | (0\%) |
| Percent free or reduced-price lunch: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 8,180 | 88\% | (1\%) | 1\% | (0\%) | 4\% | (0\%) | 6\% | (0\%) | 12\% | (1\%) | 2\% | (0\%) |
| 25\%-49\% | 3,510 | 83\% | (1\%) | 5\% | (1\%) | 4\% | (1\%) | 7\% | (1\%) | 17\% | (1\%) | 2\% | (0\%) |
| 50\%-74\% | 2,160 | 79\% | (2\%) | 7\% | (1\%) | 5\% | (1\%) | 9\% | (1\%) | 21\% | (2\%) | 3\% | (1\%) |
| 75\%-100\% | 1,320 | 77\% | (3\%) | 7\% | (1\%) | 6\% | (1\%) | 9\% | (2\%) | 23\% | (3\%) | 5\% | (1\%) |


| School Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District |  | Same State |  | Left State |  | All <br> Leavers |  | High School Dropouts |  |
| Percent underrepresented minority: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 4,250 | 88\% | (1\%) | 2\% | (0\%) | 4\% | (0\%) | 6\% | (1\%) | 12\% | (1\%) | 1\% | (0\%) |
| 25\%-49\% | 5,930 | 85\% | (1\%) | 3\% | (0\%) | 4\% | (0\%) | 7\% | (1\%) | 15\% | (1\%) | 2\% | (0\%) |
| 50\%-74\% | 4,060 | 80\% | (2\%) | 6\% | (1\%) | 6\% | (1\%) | 8\% | (1\%) | 20\% | (2\%) | 4\% | (1\%) |
| 75\%-100\% | 880 | 78\% | (2\%) | 6\% | (2\%) | 5\% | (1\%) | 11\% | (1\%) | 22\% | (2\%) | 6\% | (1\%) |
| District size: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 schools | 8,910 | 87\% | (1\%) | 1\% | (0\%) | 5\% | (0\%) | 7\% | (0\%) | 13\% | (1\%) | 3\% | (0\%) |
| 5-9 schools | 2,890 | 83\% | (1\%) | 5\% | (1\%) | 5\% | (1\%) | 7\% | (1\%) | 17\% | (1\%) | 3\% | (1\%) |
| 10 or more schools | 3,370 | 78\% | (1\%) | 9\% | (1\%) | 4\% | (1\%) | 9\% | (1\%) | 22\% | (1\%) | 3\% | (1\%) |

Note. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.
Exhibit 17. Student Mobility From 10th Grade to 12th Grade, by School Characteristics (ELS)

| School Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District | Same State ${ }^{1}$ |  | Left State |  | All <br> Leavers |  | High School Dropouts |  |
| All students | 10,900 | 86\% | (0\%) | na | 6\% | (0\%) | 8\% | (0\%) | 14\% | (0\%) | 7\% | (0\%) |
| Geographic region: |  |  |  |  |  |  |  |  |  |  |  |  |
| Northeast | 1,850 | 90\% | (1\%) | na | 2\% | (1\%) | 8\% | (1\%) | 10\% | (1\%) | 7\% | (1\%) |
| Midwest | 2,640 | 87\% | (1\%) | na | 5\% | (1\%) | 8\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) |
| South | 4,120 | 84\% | (1\%) | na | 7\% | (1\%) | 8\% | (0\%) | 16\% | (1\%) | 7\% | (0\%) |
| West | 2,280 | 84\% | (1\%) | na | 7\% | (1\%) | 9\% | (1\%) | 16\% | (1\%) | 7\% | (1\%) |
| Location: |  |  |  |  |  |  |  |  |  |  |  |  |
| City | 2,930 | 81\% | (1\%) | na | 8\% | (1\%) | 11\% | (1\%) | 19\% | (1\%) | 9\% | (1\%) |
| Suburb | 3,990 | 88\% | (1\%) | na | 5\% | (1\%) | 7\% | (1\%) | 12\% | (1\%) | 5\% | (1\%) |
| Town | 1,330 | 87\% | (1\%) | na | 4\% | (1\%) | 8\% | (1\%) | 13\% | (1\%) | 7\% | (1\%) |
| Rural | 2,640 | 87\% | (1\%) | na | 5\% | (1\%) | 8\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) |


| School Characteristic | $N$ | Same School |  | Left Baseline School |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Same District | Same State ${ }^{1}$ |  | Left State |  | All <br> Leavers |  | High School Dropouts |  |
| Title I status: |  |  |  |  |  |  |  |  |  |  |  |  |
| Title I school | 2,540 | 84\% | (1\%) | na | 7\% | (1\%) | 9\% | (1\%) | 16\% | (1\%) | 8\% | (1\%) |
| Not Title I school | 7,770 | 87\% | (1\%) | na | 5\% | (0\%) | 8\% | (0\%) | 13\% | (1\%) | 6\% | (0\%) |
| Student enrollment: |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 500 students | 1,490 | 88\% | (1\%) | na | 5\% | (1\%) | 7\% | (1\%) | 12\% | (1\%) | 6\% | (1\%) |
| 500-999 students | 2,430 | 87\% | (1\%) | na | 5\% | (1\%) | 8\% | (1\%) | 13\% | (1\%) | 6\% | (1\%) |
| 1,000-1,499 students | 2,630 | 86\% | (1\%) | na | 6\% | (1\%) | 7\% | (1\%) | 14\% | (1\%) | 6\% | (1\%) |
| 1,500-1,999 students | 1,920 | 86\% | (1\%) | na | 6\% | (1\%) | 9\% | (1\%) | 14\% | (1\%) | 7\% | (1\%) |
| 2,000 or more students | 2,410 | 83\% | (1\%) | na | 7\% | (1\%) | 10\% | (1\%) | 17\% | (1\%) | 8\% | (1\%) |
| Percent free or reduced-price lunch: |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 6,000 | 89\% | (1\%) | na | 5\% | (0\%) | 7\% | (0\%) | 11\% | (1\%) | 5\% | (0\%) |
| 25\%-49\% | 2,170 | 85\% | (1\%) | na | 7\% | (1\%) | 9\% | (1\%) | 15\% | (1\%) | 7\% | (1\%) |
| 50\%-74\% | 1,300 | 80\% | (2\%) | na | 9\% | (2\%) | 11\% | (1\%) | 20\% | (2\%) | 9\% | (1\%) |
| 75\%-100\% | 1,420 | 80\% | (1\%) | na | 8\% | (1\%) | 12\% | (1\%) | 20\% | (1\%) | 11\% | (1\%) |
| Percent underrepresented minority: |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 25\% | 5,350 | 88\% | (1\%) | na | 5\% | (0\%) | 7\% | (0\%) | 12\% | (1\%) | 5\% | (0\%) |
| 25\%-49\% | 3,500 | 86\% | (1\%) | na | 6\% | (1\%) | 9\% | (1\%) | 14\% | (1\%) | 7\% | (1\%) |
| 50\%-74\% | 1,520 | 80\% | (2\%) | na | 10\% | (1\%) | 11\% | (1\%) | 20\% | (2\%) | 9\% | (1\%) |
| 75\%-100\% | 420 | 77\% | (3\%) | na | 7\% | (2\%) | 16\% | (2\%) | 23\% | (3\%) | 14\% | (2\%) |
| District size: |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 5 schools | 6,070 | 89\% | (1\%) | na | 4\% | (0\%) | 7\% | (0\%) | 11\% | (1\%) | 6\% | (0\%) |
| 5-9 schools | 2,030 | 83\% | (1\%) | na | 7\% | (1\%) | 10\% | (1\%) | 17\% | (1\%) | 8\% | (1\%) |
| 10 or more schools | 2,780 | 82\% | (1\%) | na | 8\% | (1\%) | 10\% | (1\%) | 18\% | (1\%) | 8\% | (1\%) |

Note. na = not available. High school dropouts are included in the "left state" and "all leavers" categories. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.
${ }^{1}$ ELS did not provide information to distinguish between students who switched districts within the same state. Therefore, the presented mobility rates for "same state" include students who remained in the same district and students who remained in the same state but left the baseline district.

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## Making Research Relevant


[^0]:    ${ }^{1}$ SALT was developed as part of a study funded with research grant R305D150026 from the U.S. Department of Education's Institute of Education Sciences (IES). The opinions expressed in the SALT documentation are those of the authors and do not represent the views of the Institute or the U.S. Department of Education.

[^1]:    ${ }^{2}$ To date, NCES has not conducted a longitudinal survey with a baseline sample in the middle school grades.

[^2]:    Note. na = not available. High school dropouts are included in the "left state" and "all leavers" categories. Standard errors are shown in parentheses. All sample sizes are rounded to the nearest 10 per IES publication policy.
    ${ }^{1}$ ELS did not provide information to distinguish between students who switched districts within the same state. Therefore, the presented mobility rates for "same state" include students who remained in the same district and students who remained in the same state but left the baseline district.

