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## SPECIAL ANALYSIS

# Mobility in the Teacher Workforce

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Additional information about the survey data and supplementary notes can be found in the full report. For a copy of *The Condition of Education 2005*, visit the NCES website (http://nces.ed.gov/pubsearch/pubsinfo.sap?pubid=2005094) or contact ED PUBs at 1-877-4ED-PUBS.

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# Mobility in the Teacher Workforce

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## Introduction

Each year teachers enter, leave, and move within the K–12 teacher workforce in the United States. Such movement affects not only the composition of teachers at individual schools and the institutional stability of these schools but also the demographics and qualifications of the teacher workforce as a whole. Understanding the dynamics of such change in the teacher workforce is important for policymakers weighing competing policies regarding such issues as teacher shortages, teacher attrition, and teacher quality. This special analysis describes the nature of the teacher workforce, looks at who joined and who left the workforce in 1999–2000, and compares these transitions with those in 1987–88, 1990–91, and 1993–94. The purpose of this special analysis is to provide a foundation for informed discussions of policies intended to address issues related to the teacher workforce.

Using the most recent national data on teachers, this special analysis addresses the following questions: What does the teacher workforce look like in a given year? How does the teacher workforce change within that year? Whom are schools hiring to be new teachers in that year? How many teachers do schools lose within that year? How long have teachers been at the same school when they leave? When and why do teachers leave a school or the profession?

The most recent national data on public and private school teachers come from two surveys sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES): the 1999–2000 Schools and Staffing Survey (SASS) and the related 2000–01 Teacher Follow-up Survey (TFS). The 1999–2000 SASS, administered between September 1999 and June 2000, asked a nationally representative sample of over 50,000 public and private school teachers about their work environment, classroom teaching, teaching qualifications, and other individual characteristics.[1] The 2000–01 TFS, administered between January and May 2001, asked a representative sample of over 5,000 SASS participants a series of follow-up questions about how their job had changed since the previous year.[2] Respondents included those who continued teaching the year after completing the initial SASS and those who left the profession. Unless otherwise noted, the data presented in this special analysis come from the 1999–2000 SASS or the 2000–01 TFS.

To describe the nature of the teacher workforce and look at who joined and who left the workforce within a given year, this special analysis begins with a profile of the demographics of the workforce. The next section examines how many new teachers are hired each of the years studied, how the characteristics of newly hired teachers differ from teachers already in the workforce, and how these new hires are distributed across different types of schools. The following section considers what proportion of teachers transfer or leave teaching each of the years studied, how these teachers differ from teachers who continue to teach, and how their rates of departure vary for different types of schools. It also examines differences in the length of time teachers who left their school had taught in that school. The next section examines the reasons teachers give for leaving and transferring. At the conclusion of the special analysis is a summary of the key findings.

It is important to recognize several important points about this special analysis. First, unless otherwise stated, this special analysis reports all percentages as percentages of the entire teacher workforce or an entire subgroup of the workforce (e.g., all private school teachers). This is done to allow readers to make comparisons easily across time and between subgroups. Second, this special analysis can identify and describe types of changes in the teacher workforce that occur within a year, but it cannot measure exactly how the teacher

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workforce as a whole changed from the beginning of one year to the beginning of the next year because of the limitations of SASS and TFS data.[3] Third, while this special analysis provides a foundation for understanding how the teacher workforce changes, it does not attempt to sort out the causes or determinants of such changes.

### What Does the Teacher Workforce Look Like?

During the 1999–2000 school year, a total of about 3,450,000 teachers worked in public and private elementary and secondary schools across the country—representing about 2.7 percent of the overall U.S. workforce that year.[4] Elementary and secondary school teachers constituted a greater percentage of the workforce than physicians (0.5 percent), legal professionals (0.8 percent), postsecondary faculty (0.9 percent), engineers (1.0 percent), firemen and law enforcement workers (1.0 percent), registered nurses (1.5 percent), or any other professional group that year. Elementary and secondary school teachers constituted about the same percentage of the workforce as all secretaries and administrative assistants (2.7 percent) and slightly less than retail workers (2.8 percent) (U.S. Department of Labor 2002). The statistics that follow attempt to profile this large workforce by describing its basic features and its distributions of demographic and professional characteristics.

The majority of teachers (90 percent) worked full time, 4 percent worked part time, 3 percent were itinerant teachers, and less than 0.5 percent worked as long-term substitutes.[5] Eighty-seven percent (3,000,000 teachers) worked in public schools, and 13 percent (450,000 teachers) worked in private schools.[6]

As has historically long been true in the United States, females made up the majority of the teacher workforce in 1999–2000: a total of 2,590,000 teachers were female, while 860,000 teachers were male (75 vs. 25 percent). The percentages of female and male teachers were similar in both public and private schools: female teachers made up 75 percent of public school teachers and 76 percent of private school teachers. However, the distribution of teachers by sex differed widely by grade level. Among those teaching in the elementary grades, 1,340,000 teachers were female, while 140,000 teachers were male (91 vs. 9 percent). In contrast, at the high school level, 570,000 teachers were female, while 470,000 teachers were male (55 vs. 45 percent). In the middle grades, there were 660,000 female and 250,000 male teachers (73 vs. 27 percent).[7]

The average age of brand-new teachers in 1999–2000 was 29 years old (the median was 26 years old), suggesting that many teachers do not enter the teacher workforce in their early twenties—an age that is traditionally associated with being "right out of college." The average age of all elementary, middle, and high school teachers was 42 (the median was 44 years old).[8] About 29 percent of teachers were under age 35, 42 percent were ages 35–49, and 29 percent were age 50 or older (see figure 1 for further detail).

The average number of years of teaching experience for all teachers was 14 years in 1999–2000. More than one-third of teachers (36 percent) had 19 or more years of teaching experience, 24 percent had 10–18 years, 24 percent had 4–9 years, and 17 percent had 3 or fewer years (see figure 2 for further detail). As this analysis will show, many teachers leave the teaching profession for a period of time for various reasons, and some enter it later in life. As a result, many older teachers have less teaching experience than one might expect. For example, 19 percent of teachers between the age of 45 and 49 in 1999–2000 had less than 10 years of teaching experience, and 9 percent of teachers between the age of 50 and 59 had less than 10 years of teaching experience.

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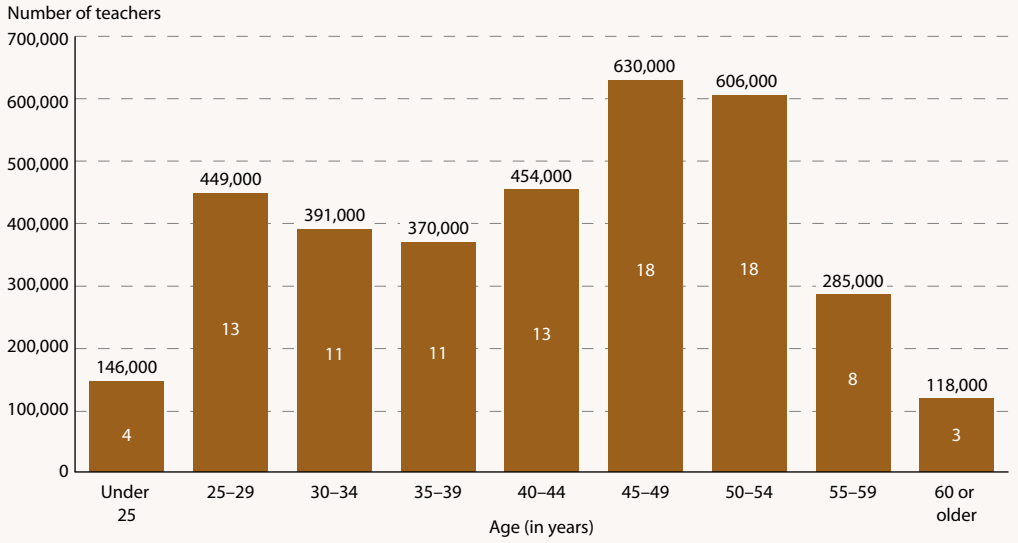
**Figure 1. Number and percentage distribution of public and private K–12 teachers in the U.S. teaching workforce, by age: 1999–2000**




NOTE: The number in the bar represents the percentage of public and private K–12 teachers in the category. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

In 1999–2000, the highest degree attained for the majority of teachers (53 percent) was a bachelor's degree. Forty-two percent of teachers had attained a master's degree as their highest degree, and 4 percent had attained a doctorate, professional, or education specialist degree. Less than 2 percent of all teachers had completed no more than an associate's degree.

Although teachers' academic degrees and their average years of experience have been traditional indicators of the qualifications of the teacher workforce, research has not found the highest degree attained by teachers to be a good predictor of gains in student achievement (Rivkin, Hanushek, and Kain 2005; also see Hanushek 1996; Hedges, Laine, and Greenwald 1994). Number of years of teaching experience has also proven to be problematic in predicting such gains. Generally, beginning teachers (those with 3 or fewer years of teaching experience) are not as effective as teachers with more years of teaching experience, with brand-new teachers typically being the least effective teachers (Rivkin, Hanushek, and Kain 2005; Rockoff 2004; Murnane 1975). Research has consistently found that brand-new teachers make "important gains in teaching quality in the first year and smaller gains over the next few career years"; however, there is not a consistent linear relationship between years of teaching experience and student achievement after the initial three years of teaching, making it difficult to say whether there are any discernible differences among more veteran teachers—for example, between teachers with 7–10 years of experience and teachers with 20 or more years of experience (Rivkin, Hanushek, and Kain 2005, p. 449; Murnane and Phillips 1981). A better predictor of student achievement—and hence a better indicator of the qualifications

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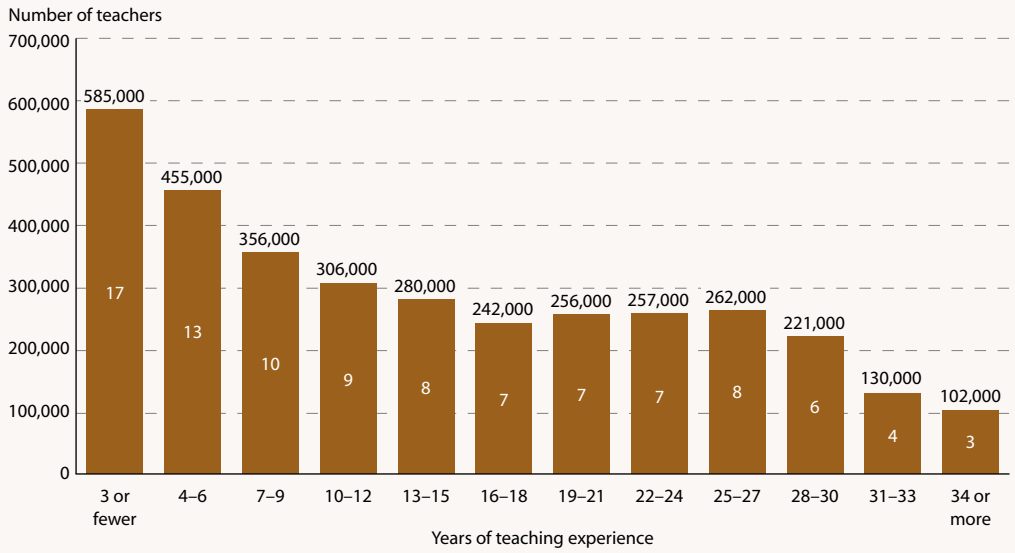
**Figure 2. Number and percentage distribution of public and private K–12 teachers in the U.S. teaching workforce, by years of teaching experience: 1999–2000**




NOTE: The number in the bar represents the percentage of public and private K–12 teachers in the category. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire,""Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

of the teacher workforce—is whether teachers have training and certification in the field they teach (Monk 1994; Goldhaber and Brewer 1997, 2000). Those who have neither an undergraduate or graduate major nor certification in the field they teach are known as "out-of-field" teachers. Research has suggested that high school students in mathematics and science learn less from out-of-field teachers than they do from teachers with a major or certification in the field they teach (Goldhaber and Brewer 1997, 2000; for a summary of this research, see Seastrom et al. (2002), pp. 1–2).

In 1999–2000, among all teachers at all grade levels, an average of 12 percent were teaching out-of-field in their main assignment area; however, this percentage varied greatly by school control, subject area, and level.[9] For example, 30 percent of private school teachers taught out-of-field compared with 10 percent of public school teachers. Similarly, about 37 percent of all vocational education teachers lacked an appropriate major or certification to teach vocational education. In contrast, 6 percent of all social science teachers, 9 percent of all English teachers, 10 percent of all science teachers, and 14 percent of all mathematics teachers were teaching out-of-field. Among public school teachers who taught in the middle school grades, 8 percent of social science teachers, 11 percent of English teachers, 13 percent of science teachers, and 18 percent of mathematics teachers were teaching out-of-field. However, among public high school teachers, 2 percent of social science teachers, 2 percent of English teachers, 3 percent of science teachers, and 5 percent of mathematics teachers were teaching out-of-field (Seastrom et al. 2002, pp. 55–56).[10] The rates of out-of-field teaching by subject and level for private school teachers cannot be

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**Continued**

reliably calculated from SASS data because of the small sample sizes of private school teachers for each subject area.

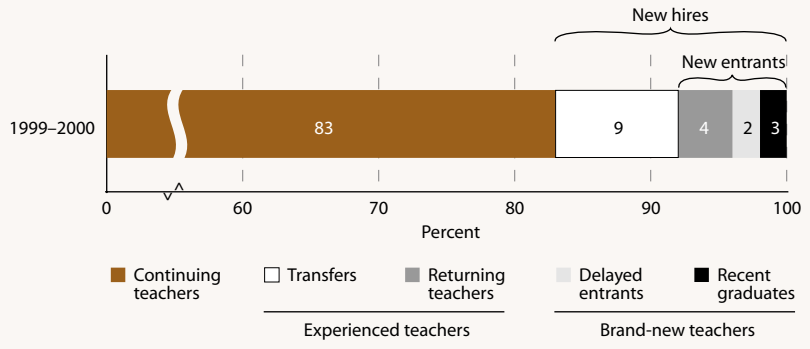
### How Many New Teachers Are Hired in a Year?

During the 1999–2000 school year, about 2,870,000 teachers (83 percent of all teachers) continued to teach in the same school in which they had taught the year before (figure 3). About 580,000 teachers (17 percent of all teachers) were "new hires" at their school. Most of these new hires replaced teachers who had left the school—in other words, they filled the positions created as a result of "teacher turnover" from the previous year. However, some of these new hires filled new positions in the teacher workforce—which grew by 3 percent, on average, over the previous 2 years (U.S. Department of Education 2003, table 66). Not all new hires were new teachers. New hires included teachers who transferred from another school, former teachers who re-entered the profession after a hiatus from teaching, individuals who did not work the previous year as an elementary or secondary school teacher and were not enrolled in an undergraduate or graduate program, and individuals who were enrolled in an undergraduate or graduate program the previous year. For simplicity's sake, these various categories of new hires will be referred to, respectively, as *transfers, returning teachers, delayed entrants,* and *recent graduates* in this analysis.[11]

Transfers made up 9 of the 17 percent of teachers who were new hires at their school. This category of teachers includes individuals who changed schools either voluntarily or involuntarily (e.g., due to a school closing or reorganization, staff reduction, reassignment, or termination for unsatisfactory performance). Transfers may have moved from a school in a different district or from a school within the same district.

Returning teachers made up 4 of the 17 percent of teachers who were new hires at their school. This category of teachers (also sometimes referred to as "re-entrants") includes individuals who taught in an elementary, middle, or high school either full time or part time for at least a year and then left teaching. The year before re-

**Figure 3. Percentage distribution of public and private K–12 teachers by their employment background: 1999–2000**




NOTE: New hires refers to teachers who are new to their school. New entrants refers to teachers who entered the teacher workforce this year. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

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**Continued**

turning to teach, 36 percent of returning teachers worked in a nonteaching job, 11 percent cared for family members, and 9 percent completed further schooling.[12] It is not possible to calculate how long of a hiatus most returning teachers took before re-entering the teacher workforce because SASS did not collect such data.

Delayed entrants made up about 2 of the 17 percent of teachers who were new hires at their school. This category of teachers includes individuals who were never employed as teachers in an elementary, middle, or high school before and who were not students the previous year. Most teachers in this category (57 percent) worked the previous year in a nonteaching job, though 6 percent taught in a preschool and 3 percent taught at a college or university.[13] The number of years between earning their bachelor's degree and starting to teach varied for teachers in this category: 56 percent started to teach within 5 years of earning their bachelor's degree, 17 percent started 6–10 years after earning their bachelor's degree, 16 percent started 11–20 years after, and 10 percent started more than 20 years after (data not shown in table).

Recent graduates made up about 3 of the 17 percent of teachers who were new hires at their school. This category of teachers includes individuals who were never employed as teachers in an elementary, middle, or high school before and who were undergraduate or graduate students the previous year.

Comparing the percentages for the different categories of new hires in 1999–2000 with those in the earlier administrations of SASS—in 1987–88, 1990–91, and 1993–94—reveals that schools replaced a larger percentage of teachers at the start of the 1999–2000 school year than at the start of any of the earlier SASS years (table 1). Despite this increase (relative to the earlier years), the percentage of brand-new teachers (delayed entrants and recent graduates) in the teacher workforce in 1999–2000 remained small (4 percent)[14] and was not measurably different from the percentages in 1990–91

**Table 1. Number and percentage distribution of public and private K–12 teachers by their workforce categories and employment background: 1987–88, 1990–91, 1993–94, and 1999–2000**

| Workforce categories and employment background | 1987–88 | | 1990–91 | | 1993–94 | | 1999–2000 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Total workforce at the start of the year** | **2,630,000** | **100** | **2,916,000** | **100** | **2,940,000** | **100** | **3,451,000** | **100** |
| Continuing teachers | 2,261,000 | 86 | 2,518,000 | 86 | 2,558,000 | 87 | 2,874,000 | 83 |
| New hires | 370,000 | 14 | 398,000 | 14 | 381,000 | 13 | 577,000 | 17 |
| Transfers at the start of the year | 229,000 | 9 | 227,000 | 8 | 196,000 | 7 | 294,000 | 9 |
| New entrants | 141,000 | 5 | 171,000 | 6 | 185,000 | 6 | 283,000 | 8 |
| Returning teachers | 61,000 | 2 | 49,000 | 2 | 46,000 | 2 | 130,000 | 4 |
| Delayed entrants | 35,000 | 1 | 51,000 | 2 | 60,000 | 2 | 67,000 | 2 |
| Recent graduates | 45,000 | 2 | 71,000 | 2 | 80,000 | 3 | 86,000 | 3 |

NOTE: All numbers are estimates with confidence intervals varying from ± 2,200 to ± 47,000. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire" and "Private Teacher Questionnaire," 1987–88; "Public Teacher Questionnaire" and "Private Teacher Questionnaire," 1990–91; "Public Teacher Questionnaire" and "Private Teacher Questionnaire," 1993–94; "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

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and 1993–94.[15] Most teachers who are newly hired in schools each year are experienced teachers—either transfers or returning teachers—and 1999–2000 was no exception. That year, new hires who were experienced teachers[16] constituted 73 percent of all new hires and 12 percent[17] of the teacher workforce—the latter being a greater percentage than in 1987–88, 1990–91, or 1993–94. These are important points because they make clear that (1) increased teacher turnover does not necessarily mean that there will be greater proportions of inexperienced teachers in the workforce, and (2) without a major change in the dynamics of the workforce, attempts to improve the supply of new teachers can effect only small changes in the teacher workforce each year.

### What Are the Characteristics of New Hires?

Although new hires who transfer from one school to another change the distribution of individual teachers among individual schools, from a policy perspective, they do not change the overall profile of the teacher workforce because they do not affect the demographics or the level of training of the teacher workforce as a whole. In contrast, new hires who are new entrants into the teacher workforce (i.e., returning teachers, delayed entrants, and recent graduates) can raise, lower, or maintain the profile of the workforce in such dimensions. For some sense of how new hires change the workforce, this special analysis compares the average characteristics of new hires to continuing teachers. Because of the limitations of SASS data, it is not possible to compare the characteristics of newly hired teachers with those of the teachers they replaced, which is what one would need to do to measure the actual change in the profile of the workforce between two school years.[18] In general, in the 1999–2000 school year, new hires were more likely to be young and to teach out-of-field than continuing teachers (table 2).[19]

Specifically, transfers tended to be younger than continuing teachers (38 vs. 43 years old) and less experienced (10 vs. 16 years of teaching experience). Delayed entrants and recent graduates were also younger, on average, than continuing teachers (33 and 27, respectively,

**Table 2. Average age, average years of experience, percentage female, percentage out-of-field, percentage with both a major and certification in field, and percentage working full time for public and private K–12 teachers, by employment background: 1999–2000**

| Employment background | Average age | Average years of teaching experience | Percent female | Percent teaching out-of-field | Percent with both major and certification in main assignment field | Percent full time |
|---|---|---|---|---|---|---|
| **All teachers** | **42** | **14** | **75** | **12** | **61** | **90** |
| Continuing teachers | 43 | 16 | 75 | 11 | 63 | 93 |
| Transfers | 38 | 10 | 75 | 15 | 55 | 80 |
| Returning teachers | 41 | 11 | 75 | 26 | 45 | 58 |
| Delayed entrants | 33 | 1 | 75 | 38 | 27 | 85 |
| Recent graduates | 27 | 1 | 73 | 17 | 47 | 90 |

NOTE: Average years of experience includes the 1999–2000 school year in its count of years of teaching. "Out-of-field" teachers have neither an undergraduate or graduate major nor certification in the field of their main teaching assignment.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

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**Continued**

vs. 43 years old) and, by definition (given that this was their first year of teaching), less experienced. Returning teachers were about the same age as continuing teachers (41 vs. 43 years old) but, as would be expected given their hiatus from teaching, were less experienced (11 vs. 16 years of teaching experience). Approximately 75 percent of the teachers were female, regardless of whether they were continuing teachers or any of these categories of new hires.

All four categories of new hires were more likely to teach out-of-field and less likely to have both a major and certification in the field of their main teaching assignment (i.e., henceforth referred to as "highly qualified") than continuing teachers. However, delayed entrants stood out among new hires because they were more likely to teach out-of-field than any other category of new hires and more than three times as likely to do so as continuing teachers (38 vs. 11 percent). This high proportion of out-of-field teachers among delayed entrants is due to the fact that a greater percentage of delayed entrants than continuing teachers, transfers, or recent graduates were hired without majors in their main teaching assignments and with either no certification at all (19 vs. 6, 7, and 10 percent, respectively) or provisional/alternative certification[20] (12 vs. 2, 6, and 7 percent, respectively) (table 3). Approximately 19 percent of both returning teachers and delayed entrants reported no certification, but returning teachers were less likely to have provisional/alternative certification than delayed entrants (6 vs. 12 percent).[21]

All of the four categories of new hires were less likely to be employed full time than continuing teachers (table 2). However, returning teachers were two to five times more likely than any other category of new hires to be employed as part-time teachers, and more likely to be employed as itinerant teachers than any other category except transfers (data not shown).[22]

The data in this section illustrate average characteristics of the different categories of new hires. However, it is important to keep in

**Table 3. Percentage distribution of public and private K–12 teachers by certification status, by employment background: 1999–2000**

| | Type of certificate held in main teaching field | | | | | | No certificate in main teaching field | |
|---|---|---|---|---|---|---|---|---|
| Employment background | Regular | Probationary | Provisional or other type for "alternative certification program" | Temporary | Emergency or waiver | Currently in program to obtain certificate | But has one in another field | And none in any other field |
| **All teachers** | **80** | **4** | **3** | **1** | **1** | **3** | **1** | **7** |
| Continuing teachers | 84 | 3 | 2 | 1 | # | 2 | 1 | 6 |
| Transfers | 72 | 6 | 6 | 2 | 1 | 4 | 2 | 7 |
| Returning teachers | 59 | 5 | 6 | 2 | 1! | 5 | 4 | 18 |
| Delayed entrants | 30 | 10 | 12 | 5 | 5 | 20 | 1! | 19 |
| Recent graduates | 47 | 17 | 7 | 3 | 2 | 12 | 2! | 10 |

# Rounds to zero.

! Interpret data with caution (standard errors are large relative to the estimate).

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

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

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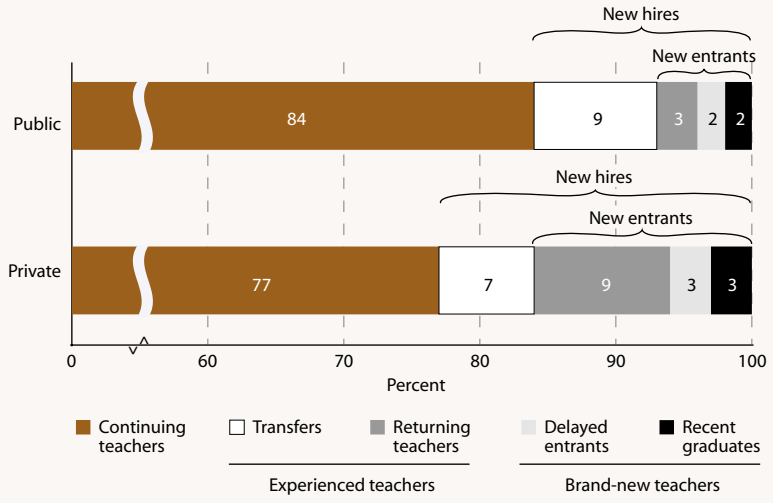
mind that these are aggregate averages, which means that within each of these categories of new hires there may be a wide range of variation. Likewise, it is important to remember that not all schools had the same proportions of these categories of new hires.

### How Do the Proportions of New Hires Differ by School Control and Poverty?

Previous research has found higher rates of teacher turnover among private school teachers than public school teachers and has suggested that public schools with higher percentages of poor students have greater difficulty retaining teachers than schools with relatively few poor students (Broughman and Rollefson 2000; Ingersoll 2001, pp. 16–17). To investigate how these factors are related to the rate at which a school hires new teachers, this special analysis compared the proportions of new hires in publicly controlled and privately controlled schools and in low- and high-poverty public schools.[23] Schools were considered low poverty if less than 15 percent of their students were eligible for free or reduced-price lunch and high poverty if 75 percent or more of their students were eligible.[24] This special analysis could not examine the poverty differences in private schools because a large proportion of private schools do not participate in the free or reduced-price lunch program.[25] The differences between the proportions of new hires in public and private schools indicate that private schools are more likely to hire brand-new teachers than public schools; however, no such difference was detectable between low- and high-poverty public schools.[26]

During the 1999–2000 school year, public school teachers were more likely than private school teachers to have continued to teach in the same school in which they had taught the previous year (84 vs. 77 percent) (figure 4).

**Figure 4. Percentage distribution of K–12 teachers by their employment background, by control of school: 1999–2000**




NOTE: New hires refers to teachers who are new to their school. New entrants refers to teachers who entered the teacher workforce this year. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000.

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**Continued**

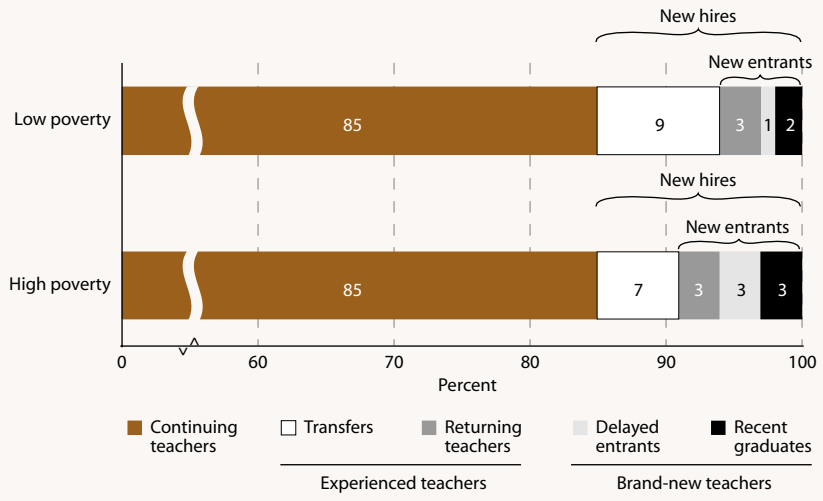
Thus, there was a smaller percentage of new hires in the ranks of public school teachers than private school teachers (16 vs. 23 percent). There were also differences between public and private school teachers in the proportions of the different categories of new hires: a greater percentage of public school teachers than private school teachers were transfers from another school (9 vs. 7 percent), while three times as many private school teachers as public school teachers were returning teachers (9 vs. 3 percent). Overall, a smaller percentage of public school teachers than private school teachers were brand-new teachers (4 vs. 6 percent).

In both low- and high-poverty public schools, the average percentage of new hires was about the same (about 15 percent each), and new hires differed only in the percentage of delayed entrants hired by each kind of school (figure 5). No other apparent differences, including those for transfers, were measurable, and the overall percentage of brand-new teachers in low- and high-poverty public schools was about the same (4 vs. 5 percent).[27]

### How Many Teachers Do Schools Lose at the End of the Year?

At the end of the 1999–2000 school year, public and private schools lost a total of about 550,000 teachers (or 16 percent of the teacher workforce) due to teacher turnover. Roughly 270,000 of these teachers (8 percent) transferred to a different school, and the other 280,000 (8 percent) left teaching for various reasons (figure 6). The teachers who left teaching—or "leavers" for the purpose of this analysis—consisted of teachers who retired (2 percent), took a job other than elementary

**Figure 5. Percentage distribution of public K–12 school teachers by their employment background, by poverty of school: 1999–2000**




NOTE: New hires refers to teachers who are new to their school. New entrants refers to teachers who entered the teacher workforce this year. Schools were considered low poverty if less than 15 percent of students were eligible for free or reduced-price lunch and high poverty if 75 percent or more of their students were eligible. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire" and "Charter Teacher Questionnaire," 1999–2000.

# Mobility in the Teacher Workforce

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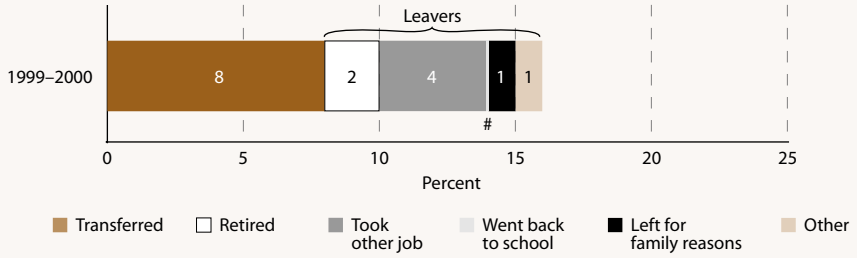
**Figure 6. Percentage of 1999–2000 public and private K–12 teachers who did not teach in the same school the following school year, by the reason teachers left**




#Rounds to zero.

NOTE: Not shown in this figure is the percentage of 1999–2000 public and private school teachers who did teach in the same school the following year. If this percentage were shown, this figure would total 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

or secondary teaching[28] (4 percent), returned to school for further education (0.3 percent), left for family reasons (e.g., to raise children or take care of other family members) (1 percent), and left for miscellaneous other reasons (1 percent).

The percentage of total teacher turnover at the end of 1999–2000 was larger than at the end of 1987–88, 1990–91, or 1993–94 (16 vs. 14, 13, and 14 percent, respectively) (table 4). However, only two categories of leavers at the end of 1999–2000 were measurably larger than the corresponding category of leavers at the end of the earlier years. The percentage of teachers who took another job other than elementary or secondary teaching was higher at the end of 1999–2000 than at the end of 1990–91 or 1987–88 (4 vs. 2 percent for both earlier years). Also, the percentage of teachers who retired at the end of 1999–2000 was higher than that at the end of 1987–88 (2 vs. 1 percent). Increases in these two categories of leavers account for virtually all of the relative increase in turnover observed at the end of 1999–2000. The percentages for all the other categories of leavers at the end of 1999–2000 and for teachers who transferred to a new school at the end of 1999–2000 were not measurably different from the percentages for the corresponding categories at the end of 1987–88, 1990–91, or 1993–94.

It is important to recognize that while turnover measures the number of teachers that schools need to hire to keep the same number of teachers from one year to the next, teacher turnover is not a direct measure of loss in the workforce or of change in the size of the workforce from one year to the next because it includes transfers. As noted in the introduction, the data used for this special analysis do not permit one to measure exactly how much the teacher workforce as a whole changed from the beginning of one year to the beginning of the next year. However, comparing the data from the various years for which SASS and TFS data are available indicates that, between 1987–88 and 1999–2000, the total size of the teacher workforce increased (table 1) while the proportions of the categories of new hires and leavers remained relatively stable.

It is also important to recognize that teacher turnover has different implications depending

# Mobility in the Teacher Workforce

**Continued**

**Table 4. Number and percentage of 1987–88, 1990–91, 1993–94, and 1999–2000 public and private K–12 teachers who did not teach in the same school the following year, by turnover categories**

| Turnover categories | 1987–88 | | 1990–91 | | 1993–94 | | 1999–2000 | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| **Total turnover at the end of the year** | **391,000** | **14** | **383,000** | **13** | **418,000** | **14** | **546,000** | **16** |
| Transfers at the end of the year | 218,000 | 8 | 209,000 | 7 | 205,000 | 7 | 269,000 | 8 |
| Leavers | 173,000 | 6 | 174,000 | 6 | 213,000 | 7 | 278,000 | 8 |
| Retired | 35,000 | 1 | 46,000 | 2 | 48,000 | 2 | 66,000 | 2 |
| Took other job | 64,000 | 2 | 56,000 | 2 | 90,000 | 3 | 126,000 | 4 |
| Went back to school | 11,000 | # | 13,000 | # | 8,000 | # | 12,000 | # |
| Left for family reasons | 48,000 | 2 | 33,000 | 1 | 35,000 | 1 | 47,000 | 1 |
| Other | 14,000 | 1 | 25,000 | 1 | 30,000 | 1 | 26,000 | 1 |

# Rounds to zero.

NOTE: All numbers are estimates with confidence intervals varying from ± 2,000 to ± 34,000. Denominator used to calculate the percentage is the total number of teachers in the workforce during the TFS year. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 1988–89, 1991–92, 1994–95, and 2000–2001.

on whether one looks at it from the administrative point of view of a school (or school district) or from a national perspective. From an administrative point of view, teachers who transfer to another school and teachers who leave teaching are both examples of teacher turnover that require a school or district to hire new teachers to replace them (unless the school is downsizing or enrollment has dwindled). From a national point of view, transfers are less interesting because they are teachers who have not left the teacher workforce and thus do not change its size or composition. In contrast, leavers are of particular interest because they represent attrition in the workforce that can change both its size and its overall demographics and level of training. Yet not all attrition is equal. Some attrition is desirable (e.g., teachers leaving who are not well suited to teach), but some is not (e.g., highly qualified teachers leaving). Some attrition is temporary (e.g., teachers leaving to complete a master's degree, raise a family, or take a sabbatical who then return to teach), and some is inevitable (e.g., teachers retiring).

### Who Tends to Leave? Who Tends to Transfer?

At the end of 1999–2000, leavers who retired, naturally, tended to be older teachers, who, on average, had taught for 29 years in elementary, middle, or high school (table 5).[29] The average age of retirees was 58, though 25 percent were 50–54 years old when they retired, 38 percent were 55–59 years old, and 36 percent were 60 or older.[30] The apparent difference between the proportion of females among retirees in table 5 and continuing teachers in table 2 was not statistically significant. Likewise, there was no measurable difference between the percentages of retirees and continuing teachers who were highly qualified and were teaching out-of-field due to the small sample size and large standard errors.

Leavers who took another job other than elementary and secondary teaching were disproportionately male when compared with continuing teachers (32 vs. 25 percent). On average, these leavers were 39 years old and had 10 years of teaching experience before they left. These leavers were less likely to be

# Mobility in the Teacher Workforce

**Continued**

**Table 5. Among public and private K–12 teachers who left teaching between 1999–2000 and 2000–01, average age, average years of teaching experience, percentage female, percentage out-of-field, and percentage with both a major and certification in field, by the reason teachers left**

| Reason teachers left | Average age | Average years of teaching experience | Percent female | Percent teaching out-of-field the previous year | Percent with both major and certification in field taught in the previous year |
|---|---|---|---|---|---|
| **All leavers** | **42** | **15** | **76** | **20** | **54** |
| Retired | 58 | 29 | 71 | 16 | 65 |
| Took other job | 39 | 10 | 68 | 24 | 50 |
| Went back to school | 30 | 4 | 77 | 22 | 52 |
| Left for family reasons | 34 | 9 | 99 | 16 | 53 |
| Other | 40 | 13 | 84 | 19 | 47 |

NOTE: "Out-of-field" teachers have neither an undergraduate or graduate major nor certification in the field of their main teaching assignment.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000 and Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

highly qualified than teachers who continued to teach in the same school (50 vs. 63 percent) and were twice as likely to have been teaching out-of-field (24 vs. 11 percent).

Leavers who pursued further education tended to be new to the teaching profession, having taught on average for 4 years. The average age of these leavers was 30. There was no measurable difference between the percentage of these leavers who were female and the corresponding percentage for continuing teachers. These leavers were twice as likely to have been teaching out-of-field as teachers who continued to teach in the same school (22 vs. 11 percent); however, apparent differences between them in the percentages of highly qualified teachers were not statistically significant (52 vs. 63 percent).

Leavers who left teaching for family reasons were overwhelmingly female (99 percent). On average, these leavers were 34 years old and had 9 years of teaching experience before they left. These leavers were less likely to be highly qualified than teachers who continued to teach in the same school (53 vs. 63 percent) and were more likely to have been teaching out-of-field (16 vs. 11 percent). Although there are various family reasons that may prompt a teacher to leave the profession, research has found that "a substantial amount of teacher attrition is directly related to the birth of new children" (Stinebrickner 2002, p. 208).

Leavers who left for miscellaneous "other" reasons were, on average, 40 years old with 13 years of teaching experience. Due to the small sample size and the large standard errors of this category of leavers, there were no measurable differences in the percentage who were female or in the percentages of highly qualified and out-of-field teachers between these leavers and teachers who continued in the same school. Leavers in this category left teaching for a variety of personal reasons, ranging from "starting their own business" to becoming "a member of a contemplative religious community." However, the most common reason reported by leavers who left for "other" reasons was to take a year-long sabbatical or leave of absence from teaching.

# Mobility in the Teacher Workforce

**Continued**

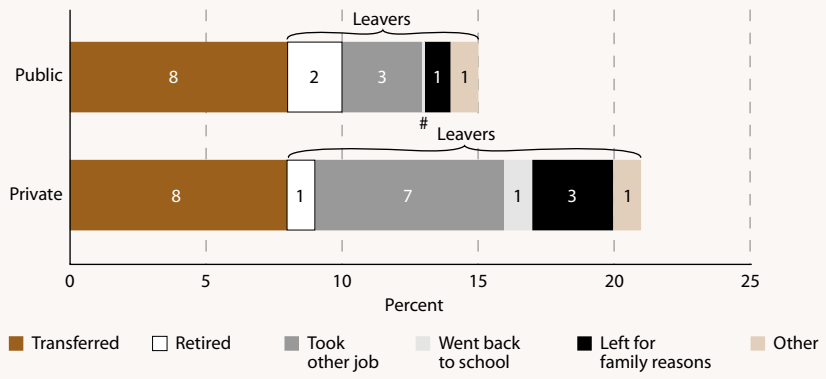
Teachers who transferred, as noted earlier, tended to be younger and less experienced than continuing teachers. In particular, beginning teachers (those with 3 or fewer years of teaching experience) were more likely to transfer than teachers with 10 or more years of experience (data not shown). Transfers were less likely to be highly qualified than teachers who continued to teach in the same school (55 vs. 63 percent) and were more likely to have been teaching out-of-field before they transferred (15 vs. 11 percent).[31]

### How Do Turnover Rates Differ by School Control and Poverty?

Between the 1999–2000 and 2000–01 school years, private schools lost a greater percentage of teachers than public schools (21 vs. 15 percent) (figure 7). This difference is reflected in the fact that a greater percentage of private school teachers than public school teachers left teaching for another job (7 vs. 3 percent), further schooling (0.7 vs. 0.3 percent), and family reasons (3 vs. 1 percent). However, public schools lost a greater percentage of teachers to retirement than private schools (2 vs. 1 percent). The proportion of public and private school teachers who transferred to another school was not discernibly different (both about 8 percent). However, public and private school teachers differed in where they moved: the majority of public school teachers who transferred moved to another public school—either one within their school district (45 percent of the transfers of public school teachers) or to a public school in another district (53 percent) (data not shown). Only 2 percent of public school teachers who transferred moved to private schools, whereas 53 percent of their private school counterparts moved to public schools (data not shown).

The apparent difference between the rate of total teacher turnover in low- and high-poverty public schools (14 vs. 18 percent) was not sta-

**Figure 7. Percentage of 1999–2000 public and private K–12 teachers who did not teach in the same school the following school year, by control of school and the reason teachers left**




#Rounds to zero.

NOTE: Not shown in this figure is the percentage of 1999–2000 public and private school teachers who did teach in the same school the following year. If this percentage were shown, this figure would total 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

# Mobility in the Teacher Workforce

**Continued**

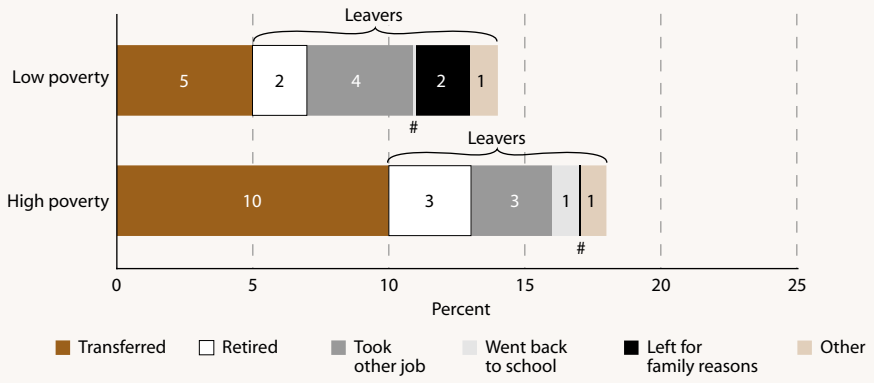
tistically significant due to the small sample size and large standard errors (figure 8). However, the nature of this turnover in these schools differed markedly in one respect: teachers in high-poverty public schools were about twice as likely to move to another school as their counterparts in low-poverty public schools (10 vs. 5 percent).[32] This higher rate of transferring out of high-poverty schools than out of low-poverty schools is consistent with research that has found that teachers in Texas tend to move from high- to lower-poverty schools (Hanushek, Kain, and Rivkin 2004). However, TFS data cannot reveal if this is the case nationally because these data only reveal which schools teachers *left from*, they do not reveal which schools teachers *moved to*.

### How Long Have Teachers Been at the Same School When They Leave?

The Schools and Staffing Survey asked teachers how many years they had taught in the school where they worked in 1999–2000. Examining these data for those teachers who transferred or left teaching at the end of the 1999–2000 school year—the sources of institutional instability for individual schools—provides information on the average length of stay of leavers and transfers at their last school.[33] It also allows one to explore how years of teaching experience, qualifications for main teaching assignment, control of school, and the poverty level of the school are related to differences in their average length of stay at their last school.[34]

On average, teachers who transferred to a new school for the 2000–01 school year had worked consecutively in their last school for 5 years, while those who left teaching at this time had worked consecutively in their last school for 9 years (figure 9). Thus, in general, transfers worked fewer years in their last school than those who left teaching. This generalization, however, does not hold true for

**Figure 8. Percentage of 1999–2000 public K–12 teachers who did not teach in the same school the following school year, by poverty level of school and the reason teachers left**




#Rounds to zero.

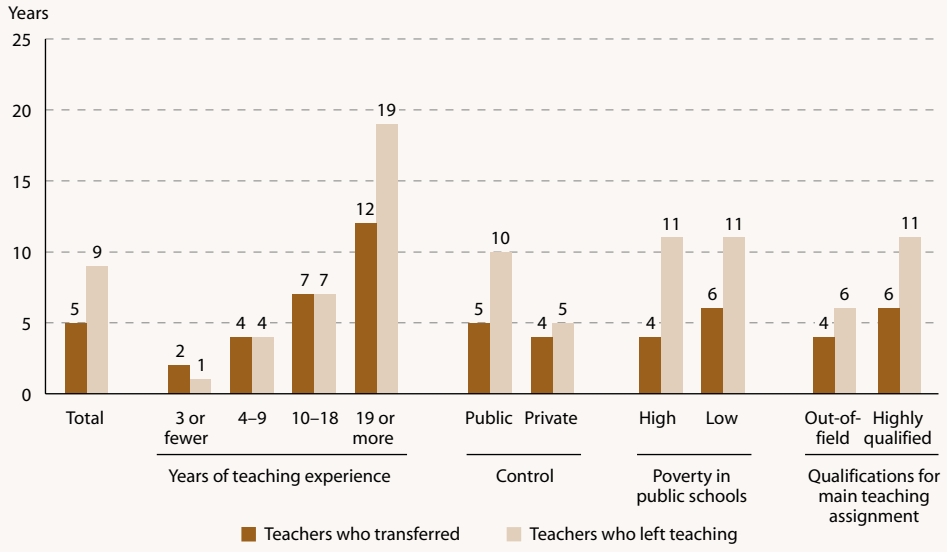
NOTE: Schools were considered "low poverty" if less than 15 percent of students were eligible for free or reduced-price lunch and "high poverty" if 75 percent or more of their students were eligible. Not shown in this figure is the percentage of 1999–2000 public and private school teachers who did teach in the same school the following year. If this percentage were shown, this figure would total 100 percent.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

# Mobility in the Teacher Workforce

**Continued**

**Figure 9. Average number of years teaching at the same school for teachers who did not teach in the same school in 2000–01 as in 1999–2000, by years of teaching experience, control of the school, poverty of the school, qualifications for main teaching assignment, and turnover status**




NOTE: Schools were considered "low poverty" if less than 15 percent of students were eligible for free or reduced-price lunch and "high poverty" if 75 percent or more of their students were eligible. It is not possible to examine the poverty differences in private schools because a large proportion of private schools do not participate in the free or reduced-price lunch program. "Out-of-field" teachers have neither an undergraduate or graduate major nor certification in the field of their main teaching assignment. "Highly qualified" teachers have both a major and certification in the field of their main teaching assignment.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public Teacher Questionnaire," "Charter Teacher Questionnaire," and "Private Teacher Questionnaire," 1999–2000 and Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

transfers and leavers with less than 19 years of teaching experience, which means that most of the difference between transfers and leavers in the average length of stay at their last school is due to teachers with 19 or more years of teaching experience.

A comparison of public and private school leavers' average length of stay at their last school reveals that the average number of years that private school leavers spent consecutively in their last school before leaving was about half that of their public school counterparts (5 vs. 10 years).

There is no difference between the average length of stay at their last school for high- and low-poverty public school leavers (11 years for both). This suggests that the poverty level of a school is not a factor in how long public school teachers teach in their last school on average. This average, however, does not mean that the distribution of years in their last school was the same for public school teachers in high- and low-poverty schools. For example, it is possible that a greater percentage of leavers from high-poverty schools than from low-poverty schools had among the fewest years of teaching experience and that a greater percentage also had among the most years of teaching experi-

# Mobility in the Teacher Workforce

**Continued**

ence. This fine-grained difference, however, is not measurable using TFS data because of the large standard errors associated with these percentages.

A comparison of out-of-field leavers with highly qualified leavers reveals that out-of-field leavers had worked consecutively in their last school for fewer years than highly qualified leavers (6 vs. 11 years). The same is true for out-of-field transfers compared with highly qualified transfers (4 vs. 6 years).

### Why Do Teachers Leave?

Although the foregoing analysis has examined where transfers and leavers went after they left their school, one gets a slightly more nuanced picture of turnover if one asks teachers why they left their school. There are numerous reasons for teachers to leave their school in a given year, but teachers reported some reasons more frequently than others. When leavers were asked in the 2000–01 Teacher Follow-up Survey (TFS) to identify which of 17 factors were "very important" in their decision to leave teaching, they most commonly identified retirement (20 percent), followed by family reasons (16 percent), pregnancy/child rearing (14 percent), wanting a better salary and benefits (14 percent), and wanting to pursue a different kind of career (13 percent).[35] Among the factors least often reported as "very important" in their decision to leave were teachers' perceptions that the "school received little support from the community" and that there were too many policy changes at the school (both about 2 percent).

Besides asking teachers what factors influenced their decision to leave, the 2000–01 TFS also asked them how satisfied they were with various features of the school they left. The five most commonly reported sources of dissatisfaction among teachers who transferred to another school were lack of planning time (65 percent), too heavy a workload (60 percent), too low a salary (54 percent), problematic student behavior (53 percent), and a lack of influence over school policy (52 percent).[36] Among leavers, the five most commonly reported sources of dissatisfaction were a lack of planning time (60 percent), too heavy a workload (51 percent), too many students in a classroom (50 percent), too low a salary (48 percent), and problematic student behavior (44 percent) (table 6). Examining the sources of dissatisfaction among out-of-field teachers and highly qualified teachers who left teaching reveals that a greater percentage of out-of-field teachers than highly qualified teachers reported dissatisfaction with salary (62 vs. 42 percent), while a greater percentage of highly qualified teachers than out-of-field teachers reported dissatisfaction with lack of planning time (64 vs. 49 percent).[37]

## Summary

Drawing upon data from the 1999–2000 SASS and 2000–01 TFS, this special analysis has reported the average characteristics of the 1999–2000 teacher workforce, new hires in that year, and 1999–2000 teachers who were no longer teaching in the same school in 2000–01. It has examined how new hires and teacher turnover tend to change the composition of the teacher workforce, as well as how years of experience, school control, and school poverty are related to the movement of teachers into other schools and out of teaching. The main findings of this analysis are as follows:

- At the start of 1999–2000, 17 percent of the teacher workforce were new hires at their school. However, only a relatively small percentage of the workforce—about 4 percent—were brand-new teachers that school year.

- Brand-new teachers—delayed entrants and recent graduates—represented 27 percent

# Mobility in the Teacher Workforce

**Continued**

**Table 6. Percentage of all, out-of-field, and highly qualified public and private K–12 teachers who did not teach in the same school in 2000–01 as in 1999–2000 and who reported being "strongly" or "somewhat" dissatisfied with particular features of the school they left, by turnover status and top reported sources of dissatisfaction**

| Transfers | | Leavers | |
|---|---|---|---|
| **Source of dissatisfaction** | **Percent** | **Source of dissatisfaction** | **Percent** |
| | **All teachers** | | |
| Not enough time for planning/preparation | 65 | Not enough time for planning/preparation | 60 |
| Teaching workload too heavy | 60 | Teaching workload too heavy | 51 |
| Salary | 54 | Classes too large | 50 |
| Student behavior was a problem | 53 | Salary | 48 |
| Not enough influence over school's policies and practices | 52 | Student behavior was a problem | 44 |
| Classes too large | 49 | Not enough influence over school's policies and practices | 42 |
| School facilities in need of significant repair | 48 | Computer resources | 41 |
| Computer resources | 44 | Opportunities for professional advancement | 41 |
| Little support from parents | 41 | School facilities in need of significant repair | 39 |
| Required professional development activities did not match career goals | 40 | Required professional development activities did not match career goals | 39 |
| | **Out-of-field teachers** | | |
| Salary | 60 | Salary | 62 |
| Teaching workload too heavy | 57 | Not enough time for planning/preparation | 49 |
| Not enough time for planning/preparation | 54 | Teaching workload too heavy | 47 |
| Not enough influence over school's policies and practices | 51 | Not enough influence over school's policies and practices | 45 |
| Computer resources | 50 | Opportunities for professional advancement | 45 |
| | **Highly qualified teachers** | | |
| Not enough time for planning/preparation | 66 | Not enough time for planning/preparation | 64 |
| Teaching workload too heavy | 60 | Classes too large | 51 |
| Student behavior was a problem | 54 | Teaching workload too heavy | 50 |
| Classes too large | 52 | Salary | 42 |
| Not enough influence over school's policies and practices | 51 | Student behavior was a problem | 39 |

NOTE: Teachers were asked a series of questions about their satisfaction with 31 different aspects of their job in 1999–2000. Teachers could respond "strongly disagree," "somewhat disagree," "neither agree nor disagree," "somewhat agree," and "strongly agree" to each question. The percentages in this table reflect the proportion of teachers who answered "strongly agree" or "somewhat agree" to questions that reflected dissatisfaction with their job (e.g., "Student behavior was a problem"), and "strongly disagree" or "somewhat disagree" to questions that reflected satisfaction with their job (e.g., "I was satisfied with my salary"). "Out-of-field" teachers have neither an undergraduate or graduate major nor certification in the field of their main teaching assignment. Teachers who have both a major and certification in the field of their main teaching assignment are considered "highly qualified."

SOURCE: U.S. Department of Education, National Center for Education Statistics, Teacher Follow-up Survey (TFS), "Current Teacher Questionnaire" and "Former Teacher Questionnaire," 2000–01.

# Mobility in the Teacher Workforce

**Continued**

of new hires. Experienced teachers—transfers and returning teachers—made up the majority (73 percent) of new hires in 1999–2000.

- In general, new hires are more likely to be younger and to teach out-of-field than continuing teachers. The average age of brand-new teachers was 29 in 1999–2000, suggesting that many teachers do not enter the teacher workforce "right out of college."

- The differences between the rates of new hires in public and private schools indicate that private schools are more likely to have brand-new teachers than public schools. No such measurable difference was found between low- and high-poverty public schools.

- At the end of 1999–2000, about 16 percent of the teacher workforce "turned over" or did not continue teaching in the same school during the 2000–01 school year.

- The turnover was larger at the end of 1999–2000 than at the end of 1987–88, 1990–91, or 1993–94 (16 vs. 14, 13, and 14 percent, respectively).

- About half of teacher turnover can be attributed to the transfer of teachers between schools.

- Teachers transfer at higher rates to public schools than to private schools. Public school teachers in high-poverty schools are twice as likely as their counterparts in low-poverty public schools to transfer to another school.

- The percentage of teachers who retired at the end of the 1999–2000 school year was small relative to rates of total turnover: only 2 out of 16 percent.

- The percentage of teachers who left teaching and took a job other than elementary or secondary teaching at the end of 1999–2000 was twice as large as that of teachers who retired (4 vs. 2 percent). Teachers who took a job other than elementary or secondary teaching were disproportionately male compared with continuing teachers.

- The percentage of teachers who left teaching for family reasons, to return to school, or for other reasons at the end of 1999–2000 was less than 2 percent. Virtually all teachers who left for family reasons were female. Teachers who left to return to school had an average of 4 years of teaching experience.

- Not all teachers who leave the teacher workforce do so permanently: about a quarter of newly hired teachers in 1999–2000 (4 out of 17 percent) were returning teachers.

- Private school teachers are more likely to leave teaching than public school teachers.

- Teachers who left at the end of 1999–2000 most commonly identified retirement (20 percent) as a reason for leaving teaching, followed by family reasons (16 percent), pregnancy/child rearing (14 percent), wanting a better salary and benefits (14 percent), and wanting to pursue a different kind of career (13 percent).

- Both teachers who left teaching and teachers who transferred at the end of 1999–2000 reported a lack of planning time, too heavy a workload, too low a salary, and problematic student behavior among their top five sources of dissatisfaction with the school they left.

# Mobility in the Teacher Workforce

**Continued**

## Notes

[1] The 1999–2000 SASS Teacher surveys were administered from September 1999 through June 2000. The SASS School surveys were administered from October 1999 through June 2000. The SASS District surveys were administered from September 1999 through June 2000. These various timeframes include the selection of the teacher sample and the first mailings of the surveys through final telephone and field follow-up of nonrespondents.

[2] The 2000–01 TFS surveys were administered from September 2000 through May 2001. Again, this timeframe includes initial determination of the teacher's status and the first mailings of the surveys through final telephone and field follow-up of nonrespondents.

[3] SASS and TFS data reveal a great deal of information about teacher transitions, and data from one administration can be compared with data collected during other administrations of SASS and TFS to have some sense of whether the characteristics of teachers who join and leave the teacher workforce change over time. However, the data on newly hired teachers are from one year and the data on teachers who leave are from the following year. Thus, they can neither reveal how one year's newly hired teachers compare with the teachers they replaced nor allow one to compare the patterns of turnover change from each of the years studied by SASS and TFS.

[4] Both teachers who taught prekindergarten and teacher aides were excluded from this analysis. The categories "elementary schools" and "secondary schools" included all levels of schools, both graded and ungraded.

[5] The remaining 2 percent of teachers were administrators (principals, assistant principals, etc.), librarians, or other support staff (counselors, social workers, etc.) who taught classes. These percentages do not sum to 100 because of rounding.

[6] The category "public schools" throughout this analysis means all public schools—both traditional and charter public schools.

[7] The elementary grades are K–4, but teachers who taught grades 5–9 were classified as teaching in the "elementary grades" if they identified themselves as elementary or special education teachers. The middle grades are grades 5–8, but teachers who teach a combination of grades K–9 were classified as teaching in the "middle grades" if (1) they have a main assignment field other than elementary education or special education, and (2) they do not teach any grade higher than grade 9. High school teachers either teach only 9th-grade students or teach students in any of the grades 9–12. Prekindergarten teachers were excluded from this special analysis. Ungraded teachers are included in totals but not in distributions by grade level taught.

[8] Throughout this analysis, the phrase "all elementary, middle, and high school teachers" means all K–12 public and private school teachers regardless of whether they taught in a graded or ungraded school; in an elementary, middle, or high school; or in a combined school.

[9] There are various ways to measure out-of-field teaching. In Seastrom et al. (2002), NCES reports four measures. The percentages of out-of-field teachers reported here—based on whether a teacher had neither a major nor certification in the main assignment field—yield the lowest estimates of these four measures because this measure ignores the cases where teachers have some classes that are outside their main assignment areas. Percentages of out-of-field teachers based on all classes taught tend to produce the highest estimates of these four measures because this measure gives equal weight to all teachers with any out-of-field classes, regardless of the number of classes. Measures based on the number of classes taught and based on the number of students taught usually fall in between these two teacher-based measures. For more details, see Seastrom et al. (2002), pp. 21–23.

[10] The percentage of teachers who are teaching out-of-field also varied by school poverty concentrations and by minority enrollment. See U.S. Department of Education 2004, *indicator 24*.

[11] In Luekens, Lyter, and Fox (2004), these categories are referred to, respectively, as *transfers, re-entrants, delayed entrants*, and *new hires*. This special analysis uses different labels to make it easier for nontechnical readers to recognize and remember who is included in each category.

This special analysis uses these standard four broad categories to provide a general overview of transitions in the teacher workforce. However, there can be a great deal of heterogeneity in these categories. For example, *transfers* include teachers transferring between schools within a district, teachers transferring from a school in one district to a school in another district, teachers transferring from private to public schools (or vice versa), as well as some combination of these types of transfers. Similarly, *returning teachers* include teachers who may be returning after a year break from teaching as well as teachers who may be returning after a 20-year hiatus. Thus, readers should keep in mind that the findings of this special analysis only provide a sense of the broad contours of teacher mobility nationally.

[12] The rest were engaged in some uncategorized individual pursuit (37 percent); taught in a preschool (2 percent) or at a college or university (2 percent); were retired (1 percent) or unemployed (1 percent); or were in the military (less than 1 percent). These percentages do not sum to 100 percent because of rounding.

[13] The rest were engaged in some uncategorized individual pursuit (28 percent); took care of family members (4 percent); were unemployed (2 percent); were in the military (1 percent); or were retired (less than 1 percent). These percentages do not sum to 100 percent because of rounding.

[14] The apparent difference between the total estimate (4 percent) and the individual estimates for delayed entrants and recent graduates (2 and 3 percent, respectively) is because of rounding.

[15] Brand-new teachers represented a larger percentage of the teacher workforce in 1999–2000 than in 1987–88 (4 vs. 3 percent). See note 14 for an explanation of the apparent difference between the total estimate for brand-new teachers presented here and the individual estimates for delayed entrants and recent graduates in figure 3.

[16] The number of years of teaching experience that experienced new hires in 1999–2000 brought to their new schools varied: 27 percent had taught between 1 and 3 years, 31 percent had taught 4–9 years, 23 percent had taught 10–18 years, and 19 percent had taught 19 or more years (data not shown).

[17] The apparent difference between the total estimate (12 percent) and the individual estimates for transfers and returning teachers (9 and 4 percent, respectively) is because of rounding.

[18] For information on the limitations of SASS data, see note 3.

[19] It is important to note that new hires are not the only source of change in the demographics and level of training of the teacher workforce: e.g., teachers age and gain more experience naturally over time; teachers who change assignments within a school may cease teaching subjects out of their field of training and start teaching in their field; and professional development and additional academic coursework can augment teachers' knowledge and competence.

# Mobility in the Teacher Workforce

## Continued

[20] Some states and districts have developed provisional and alternative certification programs to provide a way for individuals to teach who (1) have not prepared for teaching as their initial occupation through regular teacher education programs and (2) do not meet regular certification requirements, but do have qualifications that the state or district deems adequate to teach a particular subject. In this analysis, teachers who held provisional/alternative certification, temporary certification, or emergency certification were considered out-of-field unless they majored in the field of their main teaching assignment.

[21] For delayed entrants with no certification or with provisional/alternative certification to be classified in a category other than out-of-field, they would have to have majored in the subject they were hired to teach.

[22] Among returning teachers, 10 percent accepted jobs as itinerant teachers versus 11 percent among transfers, 1 percent among delayed entrants, and 3 percent among recent graduates.

[23] The small sample size for private school teachers and for low- and high-poverty public school teachers precludes further in-depth analysis of these categories of teachers.

[24] These categories for low- and high-poverty schools are the lowest and highest of five categories that *The Condition of Education* uses standardly in analyses in order to permit comparisons across indicators. For this special analysis, all five categories were examined, but the only significant differences were between the highest and lowest categories.

[25] About 24 percent of private schools answered "don't know" when asked whether any students in their school were eligible for free or reduced-price lunch.

[26] Differences by region and community type were analyzed, but few differences were measurable. Moreover, differences that were measurable were less informative than differences by school control and poverty. See supplemental table SA-1 in appendix 1 for further details.

[27] Differences between the aggregate percentages in the text and the percentages for the constitutive categories in figure 5 are due to rounding.

[28] This category includes some teachers who became principals or took nonteaching jobs in elementary or secondary schools or in a school district.

[29] Most state teacher retirement plans specify minimum age and service requirements before a teacher is eligible to receive a full retirement pension. Twenty-six states allow public school teachers to retire with a full pension at any age if they have a minimum number of years of credited service; the most common minimum is 30 years of such service. Some states allow a teacher to retire with full benefits if the sum of his or her age and years of service equals or exceeds a specified number, such as 80 (Lohman 2002).

[30] One percent of retirees were ages 40–49.

[31] It is not possible to determine what percentage of transfers became "in-field" teachers in their new position after transferring because TFS does not ask respondents about their main teaching assignment as is done in SASS.

[32] Teachers who left low-poverty schools also were more likely to do so for family reasons than teachers who left high-poverty schools (1.7 vs. 0.4 percent). But none of the other apparent differences between low- and high-poverty public school leavers were statistically significant due to the small sample size and large standard errors.

[33] "The average length of stay of leavers and transfers at their last school" in this analysis means the number of years that a teacher taught consecutively at the same school when measured upon their departure from that school.

[34] Because these data are not from a longitudinal sample, they cannot provide statistics on the career histories of all teachers (e.g., how many schools the average teacher works at during his or her lifetime or the average length of time he or she stays at each school before transferring or leaving teaching). In addition, if there were external factors influencing teachers' decisions to transfer or leave at the end of 1999–2000 that were different from those in other years, the average lengths of stay in their last school could be depressed or inflated compared with other years.

[35] Teachers in the 1999–2000 SASS sample who were no longer teaching in 2000–01 were asked a series of questions about which factors influenced their decision to leave the teaching profession. Teachers could respond "extremely important," "very important," "somewhat important," "slightly important," and "not at all important" to each question.

[36] Leavers reported that they were "strongly" or "somewhat" dissatisfied with these factors at their school.

[37] Unfortunately, it is not possible to compare these rates of dissatisfaction with those of teachers who continued teaching in the same school because continuing teachers were not asked these questions in the TFS.

# Mobility in the Teacher Workforce

**Continued**

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