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# Public School Districts in the United States: A Statistical Profile, 1987-88 to 1993-94 

# Public School Districts in the United States: A Statistical Profile, 1987-88 to 1993-94 

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## Highlights

The primary data sources for this report are the T eacher Demand and Shortage (TDS) Q uestionnaires from the 1987-88, 1990-91, and 1993-94 Schools and Staffing Surveys (SA SS). These data are used to discuss various attributes, policies, and practices of public school districts. W hen possible, findings from 1993-94 are compared with those of previous years. Highlights are summarized below.

## Characteristics of Public School Districts

- In 1993-94, only 4 percent of school districts were located in urban areas inside central cities. These urban central city districts were responsible for the education of 25 percent of the nation's public school students. Conversely, over half ( 56 percent) of all school districts in 1993-94 were found in nonurban areas. These nonurban school districts were also responsible for the education of 25 percent of the nation's public school students (figure 1.2).
- In 1993-94, districts with fewer than 1,000 students comprised 51 percent of all public school districts but accounted for only 7 percent of the total kindergarten through 12th grade enrollment in public school districts. Districts with 10,000 or more students made up only 5 percent of all school districts and served 46 percent of all kindergarten through 12th grade students enrolled in public school districts (figure 1.4).
- School districts with 10,000 or more students accounted for nearly one-tenth of the districts in the South and W est (i.e., 9 percent and 8 percent, respectively) in 1993-94 as compared with only 2 percent of districts in the N ortheast and M idwest (figure 1.5).
- In 1993-94, three-fifths (61 percent) of the nation's public school districts had predominantly white student populations in which fewer than 10 percent of students were from minority groups. These districts served 32 percent of the nation's students (figure 1.8).
- A lthough nearly half (49 percent) of all public school districts in 1993-94 had no minority teacher on their faculty, these districts served only 14 percent of the nation's public school students (figure 1.10).
- A larger proportion of school districts had between 10 and 50 percent minority enrollment in 1993-94 ( 29 percent) as compared with 1987-88 ( 22 percent), while the proportion with less than 10 percent minority students was smaller in 1993-94 ( 61 percent) compared with 1987-88 (65 percent) (table 1.2).


## Racial and Ethnic Composition of School Districts

- M inority students represented one-third ( 33 percent) of public school students in 199394 , while minority teachers represented 13 percent of the public school faculty (tables 2.1 and 2.2).
- The proportion of public school students from minority groups was slightly larger in 199394 ( 33 percent) as compared with 1987-88 ( 30 percent), while the proportion of public school teachers who were minority group members was slightly smaller ( 13 percent in 1993-94; 14 percent in 1987-88) (tables 2.1 and 2.2).
- In 1993-94, blacks were the largest minority group among students and teachers in every region except the W est where H ispanics and A sian/Pacific Islanders were more numerous (figures 2.2 and 2.11).


## Newly Hired Teachers

- In 1993-94, nearly 8 percent of the nation's teachers were newly hired by their school district. These newly hired teachers are teachers who were not employed by their school district as teachers the previous year -- they can be teachers who have never taught previously, teachers returning to teaching after periods of at least a year, or teachers previously employed in other districts or in private schools (appendix A , table 11).
- In 1993-94, the districts with the highest proportions of newly hired teachers were more likely to be found in the South ( 10 percent) and W est ( 9 percent) than in other regions ( 6 percent) (figure 3.1).
- A bout seven-eighths ( 87 percent) of the newly hired teachers in 1993-94 possessed regular or standard state certification to teach in their field of assignment. The proportions of newly hired teachers with regular state certification in their field of assignment were highest in districts in the $N$ ortheast ( 94 percent) and Midwest (96 percent). In districts in the South, 82 percent of the newly hired teachers possessed standard state certification in the field of assignment; in the W est, 81 percent (figure 3.2).
- In 1993-94, the percentage of newly hired teachers who were certified in their fields of assignment was much higher in districts with fewer than 10 percent minority students ( 94 percent) than in districts that were at least 50 percent minority ( 75 percent) (figure 3.2).
- N ewly hired teachers with emergency certification were found in over 20 percent of the nation's school districts in 1993-94. The proportions of newly hired teachers with emergency certification were much higher in the South ( 10 percent) and W est (12 percent) than in the $N$ ortheast ( 2 percent) or $M$ idwest ( 3 percent) (figure 3.4).
- Slightly more than 1 in 20 newly hired teachers in public school districts lacked either emergency or regular (standard) state certification for the field in which they were assigned to teach in 1993-94. The lack of certification was particularly prevalent in school districts in urban areas inside central cities in the South (14 percent) and the W est (13 percent) (appendix A , table 12).
- In 1993-94, in districts whose minority student enrollment exceeded 50 percent, 11 percent of the newly hired teachers lacked both regular and emergency certification in their fields of assignment. A $n$ additional 14 percent of the newly hired teachers in these districts had only emergency certification, as compared with 8 percent, nationally (figure 3.5 and appendix A , table 12).
- Standard state certification was the most common teacher qualification criterion that administrators of public school districts required of applicants for teaching positions in 1993-94. Five-sixths ( 83 percent) of public school districts had this requirement. A lthough this does not ensure that all newly hired teachers will be certified, a higher proportion of newly hired teachers were actually certified in districts that had this requirement, compared with districts that did not require its use (appen dix A , table 13).
- In 1993-94, 93 percent of the school districts in the N ortheast required that standard state certification be considered when hiring new teachers. This percentage was greater than in any other region. In comparison, only 70 percent of the districts in the South required that standard state certification be a consideration in the hiring of new teachers (figure 3.6).
- In 1993-94, the requirement that standard state certification be considered when hiring new teachers was more common in districts with fewer than 10,000 students ( 84 percent) than in districts serving 10,000 or more students ( 75 percent). This requirement was also more typical of school districts with a predominantly (at least 90 percent) white student population ( 87 percent, in contrast to 76 to 77 percent of districts with other student racial compositions) (figure 3.6).


## Teacher Demand and District Efforts to Recruit and Retain Teachers

- School districts were more successful in filling teaching position vacancies with permanent teachers in 1993-94 than in 1987-88. In 1987-88, the number of teaching positions that could not be filled by permanent teachers was 22,978 (or 1 percent of the full time equivalent [FT E] teachers in the country). By 1993-94, the number of positions that could not be filled by permanent teachers was 8,691 (or 0.3 percent of the country's FTE teachers) (appendix A , table 17).
- Between 1987-88 and 1993-94, the proportion of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in shortage fields increased from 8 percent to 15 percent; the proportion of school districts offering free training to prepare staff to teach in shortage areas increased from 12 percent to 19 percent. This finding suggests a growing problem in hiring teachers qualified to teach in specific shortage fields (appendix A , tables 20 and 24).
- U sing pay incentives or free training as indicators of shortage, the subject area in which shortages were greatest in 1993-94 was special education. O ther subject areas for which districts frequently used pay incentives or free training were (1) ESL or bilingual education and (2) mathematics (appendix A, tables 23 and 25).
- Special education teacher shortages appeared to be most severe in the largest districts, in districts in urban areas inside central cities, and in districts whose teaching staff was at least 20 percent minority (table 4.2).
- ESL or bilingual education teacher shortages were also more likely to found in the largest districts, in districts in urban areas inside central cities, in districts whose student population was at least 50 percent minority, and in districts whose teaching staff was at least 20 percent minority. This problem was characteristic of school districts in the W est and in the South (table 4.2).
- $M$ ath teacher shortages were more likely to be found in school districts in the South. H owever, math teacher shortages were as likely to be found in the largest districts (those with over 10,000 students) as in districts of other sizes (table 4.2).


## Teacher Compensation

- The average scheduled salary for all public school teachers with Bachelor's degrees and no experience was $\$ 21,923$ in 1993-94. A djusted for inflation, the average scheduled salary for comparably trained and educated teachers in 1990-91 was $\$ 21,742$. For public school teachers with a M aster's degree and no experience, average scheduled salaries were $\$ 23,956$ in 1993-94 and $\$ 23,691$ in 1990-91 (adjusted for inflation). For public school teachers with a M aster's degree and 20 years of teaching experience, average scheduled salaries were $\$ 37,213$ in 1993-94 and $\$ 36,249$ in 1990-91 (adjusted for inflation) (table 5.1).
- In 1993-94, scheduled salaries for public school teachers at all of the education and experience levels investigated (Bachelor's degree, no experience; M aster's degree, no experience; M aster's degree, 20 years teaching experience) were highest in the N ortheast ( $\$ 25,581 ; \$ 27,727 ; \$ 46,594$ ), followed by the W est ( $\$ 21,913 ; \$ 24,505 ; \$ 37,800$ ), the M idwest ( $\$ 20,879 ; \$ 23,013 ; \$ 35,718$ ), and the South ( $\$ 20,407 ; \$ 21,714 ; \$ 30,955$ ) (table 5.1).
- The prevalence of collective bargaining agreements was substantially higher in school districts in the N ortheast (98 percent) than it was in school districts in the South (12 percent) in 1993-94. Scheduled salaries at all of the education and experience levels investigated were higher in school districts that had collective bargaining agreements. This was true irrespective of district size, proportions of minority students or teachers, or metropolitan status (appendix A , tables 28 and 29).
- Retirement benefits were offered by nearly all school districts. In 1987-88, 1990-91, and 1993-94, 99 percent of the nation's school districts offered retirement benefits (appendix A , table 30).


## School District Programs and Policies

- $N$ ationally, the number of years of instruction in English, mathematics, physical/biological science, and social science that were required for high school graduation were greater in 1993-94 than in 1990-91 (figure 6.1).
- The proportion of districts with computer science high school graduation requirements was higher in 1993-94 (37 percent) than in 1990-91 (33 percent). H owever, the proportion of school districts in the South in urban areas inside central cities with computer science graduation requirements was lower in 1993-94 ( 21 percent) than in 1990-91 (40 percent) (appendix A , table 38).
- In contrast with computer science, the proportion of districts requiring completion of a foreign language course was about the same in 1993-94 (18 percent) and 1990-91 (19 percent) (figure 6.2).
- In 1993-94, graduation requirements in core subject areas (English, math, social science, and physical/biological science) in districts in the M idwest were usually lower than those in other regions (table 6.2).
- School districts in urban areas inside central cities, particularly in states in the W est, were most likely to have a foreign language high school graduation requirement in 1993-94. A bout 45 percent of these districts had a foreign language graduation requirement, in contrast to the national average of 18 percent (figure 6.4 and appendix A, table 39).
- Students eligible for participation in the $N$ ational School Lunch program were found in nearly all ( 93 percent) of the nation's school districts in 1993-94. Eligible students were more likely to be found in school districts in the South ( 98 percent), in districts with over 1,000 students ( 99 percent), in urban school districts (95-96 percent), in districts where the concentration of minority students was 10 percent or greater ( 96 percent), and in districts where there was at least one minority teacher (95-96 percent) (figure 6.5 and appendix A, table 43).
- In 1993-94, Chapter 1 programs (reauthorized through the Improving A merica's Schools A ct [Public Law 103-382] as the Title 1 program) were available in nearly all ( 92 percent) of the nation's school districts. Chapter 1 programs were more likely to be offered in districts with over 1,000 students (98-99 percent) and in districts where there was at least one minority teacher ( $95-96$ percent) (figure 6.6 and appendix A , table 41).
- In 1993-94, prekindergarten programs (day care, H ead Start, C hapter 1, special education, and other general prekindergarten programs) were available in about two-thirds ( 64 percent) of the nation's public school districts. These programs were most likely to be provided in districts enrolling 10,000 or more students ( 91 percent), followed by districts serving between 1,000 to 9,999 students ( 76 percent), and were least likely to be offered in districts enrolling less than 1,000 students ( 51 percent) (table 6.4).
- Prekindergarten programs were more available in districts in urban areas inside central cities ( 84 percent) than in other districts in 1993-94 (table 6.4).
- In 1993-94, about five-sixths (84 percent) of the school districts in the country disseminated information about their students' performance on standardized tests to the general public. The largest school districts (i.e., those with enrollments of at least 10,000 students) were the most likely to do this ( 95 percent); districts with enrollments of under 1,000, the least likely ( 77 percent) (appendix A , table 44 and figure 6.7).
- A bout 8 percent of the school districts in the country offered magnet school choice programs in 1993-94. These programs were most likely to be offered by districts with more than 10,000 students ( 33 percent), districts in central cities ( 24 percent), and districts with the highest concentrations ( 50 percent minority or more) of minority students ( 13 percent) and the highest concentrations ( 20 percent minority or more) of minority teachers ( 14 percent) (figure 6.8 and table 6.5).
- Nearly all (98 to 99 percent) of the country's school districts had written policies about student discipline and al cohol, drug, and tobacco use in 1993-94 (appendix A , table 46).


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## Introduction

## Context for Examining Public School Districts

Public elementary and secondary schools in the $U$ nited States are governed, for the most part, by elected school boards, with each board presiding over a local education agency (LEA ), more commonly known as a school district. ${ }^{1}$ A s the basic legal and fiduciary units of the public education system, a large percentage of decisions that affect schools are made at the district level. The administrative role of the district involves such activities as anticipating changes in student enrollment, establishing guidelines for hiring faculty, negotiating staff compensation, defining district-wide policies, and adopting programs to meet various student needs.

The publicly available statistical information on the nation's public school districts to date has been limited to certain demographic characteristics of districts, their student enrollment and racial composition, and their numbers of teachers (e.g., U.S. Department of Education 1995; Levine, M cLaughlin, and Sietsema 1996). This report expands the statistical information on public school districts with the description of a variety of attributes, policies, and practices of public school districts in the U nited States in 1993-94. Trends in some features of school districts from 1987-88 to 1993-94 are also identified. The report is a nontechnical resource of information about disparate aspects of public school districts based on the T eacher Demand and Shortage (TDS) Q uestionnaire of the Schools and Staffing Survey (SA SS) for 1987-88, 1990-91, and 1993-94. It is directed to a broad audience of educators, educational researchers, and policymakers in state, local, and federal agencies.

## Teacher Demand and Shortage (TDS) Questionnaire of the Schools and Staffing Survey (SASS)

The data sources for this report are the Teacher Demand and Shortage (TDS) questionnaires from the Schools and Staffing Surveys (SA SS) for 1987-88, 1990-91, and 1993-94. SA SS is a nationally representative survey of schools, teachers, principals, and public school districts conducted by the U.S. Department of Education's N ational C enter for Education Statistics (NCES). The objective of SA SS is to obtain information on the staffing, occupational, and organizational characteristics of elementary and secondary schools in the U nited States.

[^1]In each year of the Schools and Staffing Survey, the TDS questionnaires were mailed out to district administrators for a nationally representative sample of over 5,000 school districts. (See appendix C for more detailed information on the sample design for school districts in each year of the survey.) The three administrations of the TDS questionnaire were similar, but not identical. The 1993-94 TDS questionnaire covered a broader range of topics than the two earlier questionnaires.

The topics about which administrators were questioned in the 1993-94 T DS include, among others, the number and racial composition of students and teachers; the number and qualifications of new hires; hiring criteria; teacher demand; teacher compensation and incentives; programs and services provided by the district; district graduation requirements; and other student policies. This report provides statistical information on these topics for school districts in 1993-94. Trends among school districts from 1987-88 to 1993-94 are reported where the available data permitted such analyses; they are discussed in the report when differences over time were observed.

## Characteristics of School Districts

W ithin each topic area of this report, school districts are compared across three demographic and two geographic characteristics that were deemed to be of interest to educators and policymakers. These comparisons permit local educators and policymakers to use the information presented in figures or tables as a reference for comparing the situation in their school districts with similar types of districts nationally.

The geographic characteristics include the region and metropolitan status of a district. The demographic characteristics include the size of district enrollment, proportion of minority students enrolled in a district, and proportion of minority teachers on staff in a district. The classification of districts for each of these characteristics are as follows:

- Region of the country includes the N ortheast, M idwest, South, and W est. (See appendix C for a listing of states in each region.)
- M etropolitan statusincludes districts located in urban areas primarily inside central cities, districts located in urban areas primarily outside central cities, and districts located in nonurban areas.
- District sizeincludes districts with under 1,000 students, districts with 1,000 to 9,999 students, and districts with 10,000 or more students enrolled in kindergarten through 12th grade.
- Proportion of minority studentsin a district includes categories for districts with under 10 percent minority students, 10 percent to under 50 percent minority students, and 50 percent or more minority students.
- Proportion of minority teachersin a district includes categories for no minority teachers, some but under 20 percent minority teachers, and 20 percent or more minority teachers on the district's teaching staff.

A dditional technical information about these classification schemes can be found in appendix C.

Some school districts are administrative agencies and do not employ teachers. The findings presented in this report are not applicable to these kinds of districts. The findings are representative of public school districts that employ at least one teacher and are not exactly comparable with data presented in other reports that are based on all school districts.

W ith the exception of region, all of these district characteristics can change over time. In other words, a district's metropolitan status, size classification, proportion of minority students classification, and proportion of minority teachers classification can change, reflecting changes occurring in the district. The longitudinal data that are presented in this report classify districts according to their characteristics at either the time the sample was selected (metropolitan status) or when the classification data were collected (district size, proportion of minority students, proportion of minority teachers). For example, Iongitudinal data describe how districts with specific characteristics (e.g., more than 10,000 students in 1993-94) compare with districts that had the same characteristic (more than 10,000 students) in other years (e.g., 1987-88 or 1990-91).

## Organization of this Report

This is a descriptive report on various facets of public school districts. Each of the six chapters deals in some detail with a different aspect of school districts.

- C hapter 1 provides an overview of the geographic and demographic characteristics of school districts and describes selected trends in those characteristics.
- C hapter 2 examines the racial and ethnic composition of the students and teachers in public school districts and identifies trends in the proportions of students and teachers from minority groups in public school districts.
- C hapter 3 reports the percentage of teachers who have been newly hired by school districts in the past year, describes the qualification levels of these newly hired teachers, and examines the hiring criteria used by school districts.
- C hapter 4 assesses the ability of districts to fill vacancies and describes district efforts to recruit and retain teachers through pay incentives and training programs.
- C hapter 5 examines teacher salary levels and their relation to collective bargaining, and describes trends in salary schedules from 1990-91 to 1993-94.
- C hapter 6 describes a variety of school district policies and programs, including graduation requirements, district participation in national programs (e.g., the $N$ ational School Lunch program, the C hapter 1 program (reauthorized through the Improving A merica's Schools A ct [Public Law 103-382] as the Title 1 program), and prekindergarten programs), and recent state and local reforms that affect district policies and programs (i.e., reporting practices on student test
performance, school choice programs, and policies on student discipline, alcohol use, and drug use).
- C hapter 7 suggests ways in which these data might be used for further investigations of the nation's educational system.

This report does not require or assume any statistical expertise on the part of its readers. Differences and similarities discussed in the text, however, have been evaluated for statistical significance using Student'st statistic adjusted for multiple comparisons with the Bonferroni procedure at the $\propto=.05$ level. ${ }^{2}$

G raphs are used extensively in each chapter to provide a clear presentation of the findings. A summary of the major findings from each of the chapters is contained in the H ighlights section at the front of this report.

For those wanting additional information, appendix A contains a series of tables from which the information contained in the figures were obtained. A ppendix A also contains tables that present data on many of the topics covered in the report, by state. A ppendix B contains the standard errors for the tables in appendix A. A ppendix C contains technical notes that provide more detailed information on the survey design, overall accuracy of estimates, statistical procedures used in this report, and references to other NCES publications.

[^2]
## Chapter 1 <br> Geographic and Demographic C haracteristics

## Overview

A n overview of some basic characteristics of public school districts provides a context for the more detailed descriptions, in subsequent chapters, of district student and staffing characteristics, policies, practices, and programs. A ccordingly, descriptions of geographic and demographic characteristics of school districts for the 1993-94 school year and changes in these characteristics between the 1987-88 and 1993-94 school years are provided in this chapter.

## Region

The Schools and Staffing Survey (SA SS) estimates that there were 14,987 school districts at the start of the 1993-94 school year. The largest percent of districts were located in the Midwest and the fewest in the $W$ est (table 1.1).

Table 1.1-Percentage of public school districts and students, by region: 1993-94

| Region | Districts | Students |
| :--- | :---: | :---: |
| T otal | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |
| N ortheast | 20.6 | 18.2 |
| M idwest | 37.7 | 22.8 |
| South | 22.1 | 36.3 |
| W est | 19.6 | 22.7 |

SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

M ore than one-third (38 percent) of all school districts were located in the M idwest (table 1.1 and figure 1.1). A bout one-fifth of the nation's school districts were in each of the other three regions. H owever, the greatest proportion ( 36 percent) of the nation's public school students

[^3]were in the South and the smallest proportion (18 percent) were in schools in the N orth (table 1.1).

Figure 1.1-Percentage of public school districts, by region: 1993-94


SOU RC E: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Metropolitan Status

In 1993-94, over half ( 56 percent) of all public school districts were located in nonurban areas (figure 1.2 and appendix A , table 1). A nother 40 percent of districts were located in urban areas outside central cities. O nly 4 percent of all public school districts were located in urban areas inside central cities. N evertheless, these urban central city districts were responsible for the education of 25 percent of the nation's public school students (appendix A, table 10).

Figure 1.2-Percentage of districts and students, by metropolitan status: 1993-94


SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

A pproximately two-thirds of school districts in the M idwest ( 63 percent) and South ( 67 percent) were located in nonurban areas, compared with half ( 54 percent) of the districts in the W est and only one-third ( 34 percent) of the districts in the $N$ ortheast (figure 1.3 and appendix A, table 2). ${ }^{4}$ N early two-thirds ( 63 percent) of the school districts in the N ortheast were located in urban areas outside central cities. In each region, the smallest percentage of districts, ranging from 3 to 6 percent, were inside central cities.

[^4]Figure 1.3-Percentage of public schools districts by metropolitan status, by region: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire)

## District Size

In 1993-94, districts with enrollments of fewer than 1,000 students comprised one-half ( 51 percent) of all public school districts (figure 1.4 and appendix A , tables 1 and 10). H owever, these districts en rolled only 7 percent of students enrolled in all public school districts. Districts with 1,000 to 9,999 students comprised 44 percent of the school districts and served 47 percent of all public school students. The largest school districts ( 10,000 or more students) amounted to only 5 percent of all school districts. These districts, however, served nearly half (46 percent) of the students enrolled in public school districts.

Figure 1.4_Percentage of districts and students, by district size: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding. SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

A majority of the school districts in the Midwest ( 59 percent) and $W$ est ( 60 percent) had fewer than 1,000 students (figure 1.5 and appendix A, table 4). In the N ortheast and South, at least half of the school districts had enrollments of 1,000 to 9,999 students ( 59 and 50 percent, respectively). The largest school districts (10,000 or more students) made up a larger proportion of districts in the South ( 9 percent) and W est ( 8 percent) than in the $N$ ortheast or M idwest (2 percent each).

Figure 1.5_Percentage of public school districts by district size, by region: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Districts enrolling fewer than 1,000 students were most numerous in nonurban areas (figure 1.6 and appendix A , table 5), where they constituted about two-thirds ( 65 percent) of the districts (figure 1.7 and appendix A, table 5). The districts with 1,000 to 9,999 students were most numerous in urban areas outside central cities, where they made up 53 percent of all school districts. The largest districts, with enrollments of 10,000 or more students, were also most numerous in urban areas outside central cities (figure 1.6). H owever, the largest districts represented 44 percent of all school districts in urban areas inside central cities, compared with about 7 percent of districts in other urban areas and only about 1 percent of nonurban districts (figure 1.7).

Figure 1.6-Percentage of public school districts by metropolitan status, by district size: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding. SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Figure 1.7-Percentage of public school districts by district size, by metropolitan status: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Minority Students

In 1993-94, three-fifths ( 61 percent) of the nation's public school districts had predominantly white student populations (i.e., fewer than 10 percent of students were from a minority group) (figure 1.8 and appendix A , tables 1 and 10). H owever, about two-thirds ( 68 percent) of all students were enrolled in school districts that had minority compositions of at least 10 percent. On the other hand, only about one-tenth ( 11 percent) of districts were ones in which minority groups represented at least one-half of the district's student enrollment. Yet these school districts accounted for one-quarter ( 27 percent) of all students enrolled in public schools.

Figure 1.8-Percentage of districts and students, by proportion of minority student enrollment: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Fewer than 1 in 10 students were from minority groups in 84 percent of school districts in the M idwest, and 74 percent of the districts in the N ortheast, as compared with 41 percent of districts in the W est, and 26 percent in the South (figure 1.9 and appendix A , table 3).
Districts with between 10 and 50 percent minority enrollment characterized about half ( 52 percent) of the districts in the South and two-fifths ( 38 percent) of the districts in the W est. $M$ inority students made up at least half of the student population in one-fifth of the districts in the South ( 22 percent) and W est ( 21 percent). By comparison, minority students made up at least half of the student population in only 5 percent of districts in the $N$ ortheast and 2 percent of districts in the M idwest.

Figure 1.9-Percentage of public school districts by proportion of minority student enrollment, by region: 1993-94*


N ote: Details may not sum to 100.0 percent due to rounding.
(*) Excludes 45 districts with no students in 1993-94.
SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Minority Teachers

Nearly half ( 49 percent) of all public school districts had no minority teachers on their faculty. However, the districts with no minority teachers served only 14 percent of all students (figure 1.10 and appendix A, tables 1 and 10). O nly 7 percent of all districts had teaching staffs in which one-fifth or more of the teachers were from minority groups. H owever, these districts served one-quarter ( 25 percent) of all public school students.

Figure 1.10-Percentage of districts and students, by proportion of minority teachers: 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

The proportion of districts with no minority teachers was greatest in the M idwest, where 71 percent of school districts had no minority teachers, and was lowest in the South, where 22 percent of districts had no minority teachers (figure 1.11 and appendix A, table 6). One-fifth or more of the teaching staff were from minority groups in 21 percent of the districts in the South, compared with 9 percent of the districts in the W est and only 1 percent of the districts in the N ortheast and M idwest.

Figure 1.11—Percentage of public school districts by proportion of minority teachers, by region: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Changes in District Characteristics, 1987-88 to 1993-94

The proportions of districts with small and moderate proportions of minority students changed from 1987-88 to 1993-94 (table 1.2). Districts with low proportions of minority students (i.e., under 10 percent minority enrollment) dropped by 4 percentage points from 1987-88 to 1993-94, whereas districts with moderate proportions of minority students (i.e., 10 percent to under 50 percent) increased by 6 percentage points over the same time period (table 1.2). A general increase in minorities as a proportion of the student population may have contributed to such changes. ${ }^{5}$ The proportion of districts with 50 percent or more minority students was relatively constant in 1987-88 (13 percent) and in 1993-94 (11 percent).

[^5]Table 1.2-Percentage of public school districts, by percentage of minority student enrollment: 1987-88 and 1993-94

| Percent M inority Student Enrollment |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| School Year | U nder 10\% | 10\% to under 50\% | 50\% or more | TOTAL |
| 1987-88 | 65.0 | 22.4 | 12.6 | 100.0 |
| 1993-94 | 60.6 | 28.7 | 10.8 | 100.0 |
| $\begin{aligned} & \text { Change from } \\ & \text { 1987-88 } \\ & \hline \end{aligned}$ | -4.4 | +6.3 | -1.8 |  |
| (*) Excludes 82 districts with no students in 1987-88 and 45 districts with no students in 1993-94. <br> SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88 and 1993-94 (T eacher Demand and Shortage Q uestionnaire). |  |  |  |  |
| A comparison of the composition of teaching staffs across survey years indicates that the proportion of school districts with no minority teachers in 1993-94 (49 percent) was comparable with the proportion of such districts in 1987-88 (52 percent). H owever, a larger proportion of districts had at least one, but less than 20 percent minority teachers in 1993-94 (44 percent) as compared with 1987-88 ( 40 percent), while a smaller proportion of districts had 20 percent or more minority teachers in 1993-94 (7 percent) as compared with the 198788 school year ( 9 percent) ${ }^{6}$ (table 1.3). |  |  |  |  |

Table 1.3-Percentage of public school districts, by percentage of minority teachers: 1987-88 and 1993-94

${ }^{6}$ C hanges in the percentage distribution of public school districts by metropolitan status from 1987-88 to 1993-94 could not be analyzed because data were not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).

# Chapter 2 <br> R acial and E thnic Composition of School D istricts 

## Overview

Desegregation of public school districts has been a public policy issue for the last 40 years, during which the population of the U.S. has become increasingly diverse. C onsequently, the racial and ethnic composition of the student population and their teachers is a topic of general interest. The first part of this chapter describes the 1993-94 racial-ethnic composition of the student population and examines trends in minority student enrollment in public school districts from 1987-88 to 1993-94. The second part of the chapter describes the current racialethnic composition of the faculty in public school districts and examines trends in representation of minority teachers in public school districts.

## Minority Students

The proportion of minority students in the country increased gradually, but steadily, from 1987-88 to 1993-94 (table 2.1). In 1987-88, minority students represented 30 percent of the student population, compared with 33 percent in 1993-94.

Table 2.1-Percentage of minority students, by school year: 1987-88 to 1993-94

| Year | Percent |
| :---: | :---: |
| $1987-88$ | 30.4 |
| $1990-91$ | 31.7 |
| $1993-94$ | 33.2 |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Black students were the largest minority student group, making up 16 percent of the public school population in 1993-94, followed by Hispanics, ( 12 percent), and A sian/Pacific Islanders ( 4 percent) (figure 2.1 and appendix A , table 10). A merican Indian and A laska $N$ atives were the smallest minority group comprising about 1 percent of public school students.

Figure 2.1-Percentage distribution of students, by race and ethnicity: 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Regional Differences and Trends

The racial and ethnic diversity of public school students varies greatly by region. The student population was most homogenous in the M idwest, where 83 percent of students enrolled in public school districts in 1993-94 were white, non-H ispanic and only 17 percent of students were members of minority groups (figure 2.2 and appendix A , table 10). In contrast, 43 percent of students in the $W$ est and 39 percent of students in the South were from a minority group.

Blacks were the largest minority group in three of the four major regions of the country in 1993-94; however, in the W est, Hispanics and A sian and Pacific Islanders were more numerous (figure 2.2). Black students constituted one-quarter ( 26 percent) of the student population in the South, but only about one-sixteenth ( 6 percent) in the W est H ispanics were the largest minority group in the W est, where they comprised 26 percent of students. In the M idwest, H ispanics made up less than 3 percent of public school students. A sian and Pacific Islanders were the second largest minority group in the W est, where they comprised 9 percent of students. In contrast, they constituted only about 1.5 percent of students in the M idwest and the South. A merican Indian and A laska N ative students were the smallest minority group in every region, making up about 2.5 percent of students in the W est and 1 percent or less of students in other regions.

Figure 2.2-Percentage distribution of students by race and ethnicity, by region: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RCE: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Trends in the proportion of students from minority groups varied by region (figure 2.3 and appendix A , table 8). The Midwest and N ortheast not only had smaller proportions of minority students than the W est and South, but they also showed little change in the proportion of minority students between 1987-88 and 1993-94. In the W est, which had the largest representation of minorities, the proportion of minority students was nearly 5 percentage points greater in 1993-94 than in 1987-88. In the South, the proportion of minority students was nearly 4 percentage points greater in 1993-94 than 6 years earlier.

Figure 2.3-Percentage of minority students, by region: 1987-88, 1990-91, and 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

## Metropolitan Status Differences and Trends

The student populations of public school districts in nonurban areas and in urban areas outside of a central city were relatively homogenous in 1993-94 compared with central city school districts. W hite, non-H ispanics accounted for roughly three-quarters of the students in nonurban school districts ( 79 percent) and in districts in urban areas outside central cities ( 74 percent) (figure 2.4 and appendix A , table 10). In school districts in urban areas inside central cities, however, white, non-H ispanics represented only 41 percent of the students.

Black students were the largest minority group in central city and nonurban school districts. In urban districts outside of a central city, the proportions of Blacks and Hispanics were comparable. Each accounted for about one-tenth (i.e., 10 percent each) of the students in such districts. A merican Indian and A laska N ative students were the smallest minority group in urban school districts, but were more numerous than A sian and Pacific Islanders in nonurban districts.

Figure 2.4-Percentage distribution of students by race and ethnicity, by metropolitan status: 1993-94


N ote: Details may not sum to 100.0 percent due to rounding.
SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

All minority groups, except for A merican Indians and A laska N atives, were most heavily represented in central city school districts. Blacks accounted for 30 percent of students in central city school districts, compared with one-tenth of the students in other urban and nonurban school districts. Hispanics represented nearly one-quarter ( 23 percent) of students in school districts in urban areas inside central cities, compared with about one-tenth of students in other urban districts ( 11 percent) and one-twentieth ( 5 percent) of students in nonurban areas. Likewise, the representation of A sian and Pacific Islanders at 6 percent of the student population in school districts in urban areas inside central cities was greater than in other urban districts ( 4 percent) and nonurban areas (1 percent). A merican Indian and A laska $N$ atives, on the other hand, were more heavily represented in nonurban districts, where they made up 2.6 percent of the nonurban student population as compared with less than 1 percent of the students in urban school districts.

Shifts in the proportion of minority students within urban and nonurban districts are difficult to detect between 1990-91 and 1993-94 (figure 2.5 and appendix A , table 8). The proportion of minority students was constant during this period for both districts in urban areas inside central cities and districts in nonurban areas. A mong districts in urban areas outside central cities, minority students accounted for 26 percent of students in 1993-94, compared with 24 percent in 1987-88.

Figure 2.5-Percentage of minority students, by metropolitan status: 1990-91 and 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

## District Size Differences and Trends

The student populations in small school districts with fewer than 1,000 students and mediumsized districts of 1,000 to 9,999 students were less racially and ethnically diverse than large school districts of 10,000 or more students. W hite, non-H ispanics accounted for 87 percent of students in small school districts and 78 percent of students in medium-sized school districts, as compared with 52 percent of students in large school districts (figure 2.6 and appendix A, table 10). Black students were the most numerous of minority students in large school districts, where they accounted for 24 percent of all students and in medium-sized districts, where they accounted for 11 percent of students. Hispanics were the second largest minority group in these districts.

Figure 2.6-Percentage distribution of students by race and ethnicity, by district size: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Large- and medium-sized school districts experienced a modes trend toward a greater proportion of minority students in the 6-year period from 1987-88 to 1993-94 (figure 2.7 and appendix A, table 8). The proportion of minority students in large districts was 48 percent in 1993-94, compared with 46 percent in 1987-88. In medium-sized school districts, minority students accounted for 22 percent of students in 1993-94, compared with 19 percent in 198788. In small school districts, on the other hand, the proportion of students from minority groups remained relatively constant at about 13 percent.

Figure 2.7-Percentage of minority students, by district size: 1987-88, 1990-91, and 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

## Differences in Trends in Minority Enrollments by Proportion of Minority Teachers

The student population of school districts with no minority teachers was not diverse in 199394 , with white, non-H ispanics accounting for 96 percent of students (figure 2.8 and appendix A , table 10). A lthough these districts represented almost half of all public school districts, they served only 14 percent of all public school students (see chapter 1 ). The proportion of white, non-H ispanic students was lower in districts with high proportions of minority teachers. White, non-H ispanics represented about one-quarter ( 28 percent) of students in districts where the teaching staff consisted of 20 percent or more minority teachers, compared with three-quarters ( 76 percent) of students in districts in which some, but less than 20 percent of the faculty, were minorities.

Figure 2.8-Percentage distribution of students by race and ethnicity, by proportion of minority teachers on district staff: 1993-94


SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

In districts employing 20 percent or more minority teachers, black students were the largest racial and ethnic group, accounting for 39 percent of the student population. Hispanics and white, non-H ispanics each represented about one-quarter of the student population (27 percent for H ispanics and 28 percent for white non-H ispanics) in these districts. These districts represented 7 percent of public school districts and served one-quarter of all public school students (see chapter 1). In other districts employing minority teachers, black and Hispanic students each represented about 10 percent of the student population, although the number of blacks was still slightly larger than the number of H ispanics.

Districts that employed minority teachers showed a trend between 1987-88 and 1993-94 toward greater proportions of minority students (figure 2.9 and appendix A , table 8). In districts where 20 percent or more of the faculty were minority, the proportion of students from minority groups was 72 percent in 1993-94, compared with 65 percent in 1987-88. A nd, in districts that employed minority teachers as a lower proportion of the faculty, minority students represented 24 percent of all students in 1993-94, compared with 20 percent of students in 1987-88. In districts that employed no minority teachers, minority students represented a relatively constant 4 percent of the student population from 1987-88 to 199394.

Figure 2.9-Percentage of minority students, by proportion of minority teachers on district staff: 1987-88, 1990-91, and 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

## Minority Teachers

In contrast to the gradual growth in the proportion of students from minority groups, the proportion of teachers from minority groups was slightly smaller in 1993-94 compared with 1987-88 and 1990-91. Table 2.2 shows that minority teachers represented 13.0 percent of the teaching staff in 1993-94, compared with 13.6 percent in 1987-88 and 1990-91.

Table 2.2—Percentage of minority teachers, by school year: 1987-88 to 1993-94

| Year | Percent |
| :---: | :---: |
| $1987-88$ | 13.6 |
| $1990-91$ | 13.6 |
| $1993-94$ | 13.0 |

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Black teachers were the largest group of minority teachers in public schools in 1993-94, representing 8 percent of the teaching staff (figure 2.10 and appendix A , table 9). H ispanics were the second largest group at 3 percent. A sian and Pacific Islanders accounted for only 1
percent of public school teachers; A merican Indian and A laska $N$ atives, less than 1 percent of public school teachers.

Figure 2.10-Percentage distribution of teachers, by race and ethnicity: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## Regional Differences and Trends

A $s$ with the student population, teaching staffs were least diverse in the $M$ idwest, where 95 percent of public school teachers in 1993-94 were white, non-H ispanic (figure 2.11 and appendix A, table 9). H owever, at least four-fifths of teachers in every region were white, nonHispanics. The South had the lowest proportion at 81 percent.

Paralleling the situation among students, blacks were the largest minority group of teachers in every region in 1993-94, except for the W est where H ispanics and A sian and Pacific Islanders were more numerous. Blacks made up 14 percent of the teachers in the South, but only 3 percent in the W est.

Figure 2.11-Percentage distribution of teachers by race and ethnicity, by region: 1993-94


SOU RCE: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher D emand and Shortage Q uestionnaire).

Hispanics were the largest minority group in the $W$ est, where they represented about 7 percent of teachers. H owever, they made up less than 1 percent of teachers in the M idwest. A sian and Pacific Islanders were the second largest minority group in the W est, where they comprised 4 percent of teachers. A merican Indian and A laska $N$ ative teachers comprised less than 1 percent of teachers in every region.

Slightly smaller proportions of teachers from minority groups were observed in 1993-94 compared with 1987-88 in the M idwest and in the South (figure 2.12 and appendix A, table 7). In the M idwest, the proportion ofminority teachers was 9 percent in 1987-88, compared with 6 percent in 1993-94. In the South, the proportion of minority teachers was 21 percent in 1987-88 as compared with 19 percent in 1993-94. The percentages of teachers from minority groups in the N ortheast and W est in 1987-88 as compared with 1993-94 were about the same.

Figure 2.12-Percentage of minority teachers, by region: 1987-88, 1990-91, and 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

## Metropolitan Status Differences and Trends

Teachers in nonurban districts and in districts in urban areas outside central cities were not very diverse in 1993-94, compared with teachers in school districts within central cities. 0 ver 90 percent of the faculty of nonurban school districts and of school districts in urban areas outside central cities were white, non-Hispanic (figure 2.13 and appendix A , table 9). In central city school districts, white, non-H ispanics represented 73 percent of teachers. Black teachers were the largest minority group within each metropolitan status category of school districts. H ispanic teachers represented the second largest minority group within each metropolitan status category. A merican Indian and A laska N ative teachers were the smallest minority group in urban school districts, whereas A sian and Pacific Islanders constituted the fewest teachers of any minority group in nonurban districts.

Figure 2.13-Percentage distribution of teachers by race and ethnicity, by metropolitan status: 1993-94


SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

A ll groups of minority teachers, except for A merican Indians and A laska N atives, were more heavily represented on the faculty of central city school districts than in districts with other metropolitan statuses. A sa proportion of the faculty, Blacks accounted for 17 percent of the teachers in districts in urban areas inside central cities. This was about three times as great as the 5 to 6 percent that they represented on the faculty of other urban and nonurban districts. Similarly, Hispanics represented 7 percent of central city teachers, compared with 3 percent or less in other districts. A sians accounted for less than 3 percent of teachers in central city school districts, and less than 1 percent in other districts. A merican Indian and A laska $N$ ative teachers constituted less than 1 percent of the faculty, regardless of the metropolitan status of the district.

The proportion of minority teachers in urban districts remained constant between 1990-91 and 1993-94 at 27 percent for districts in urban areas inside central cities and 9 percent for districts in urban areas outside central cities (figure 2.14 and appendix A, table 7). In districts in nonurban areas, the proportion of minority teachers was 8 percent in 1993-94 compared with 9 percent in 1990-91.

Figure 2.14_Percentage of minority teachers, by metropolitan status: 1990-91 and 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

## District Size Differences and Trends

The faculty in small districts (i.e., fewer than 1,000 students) and medium-sized districts (i.e., 1,000 to 9,999 students) were less racially and ethnically diverse than the faculty in large school districts of 10,000 or more students (figure 2.15 and appendix A, table 9). This is similar to the situation for students. Minorities accounted for 4 percent of teachers in small school districts (i.e., fewer than 1,000 students) and 7 percent of teachers in medium-sized school districts (i.e., 1,000 to 9,999 students), compared with 21 percent of teachers in Iarge school districts of 10,000 or more students.

Figure 2.15-Percentage distribution of teachers by race and ethnicity, by district size: 1993-94


SOU RCE: U .S. Department of Education, N ational Center for Education Statistics, School and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Black teachers were the predominant minority group on the faculty of large and medium-sized school districts, where they accounted for 13 percent and 5 percent of teachers, respectively. H ispanics were the second largest minority group of teachers in these districts, representing 6 percent of teachers in large districts and 2 percent in medium-sized districts. M eanwhile, the number of Black, Hispanic, and A merican Indian or A laska $N$ ative teachers was about equal across the smaller districts that enrolled fewer than 1,000 students. Each of these three minority groups accounted for about 1 percent of teachers in small school districts. The proportions of minorities on the teaching staff of small and medium-sized districts in 1993-94 compared with 1987-88 was about the same whereas the proportion of minorities on the teaching staff of Iarge school districts was slightly smaller in 1993-94 compared with previous years (figure 2.16 and appendix A , table 7). A lthough the representation of minorities in the student population of large school districts appeared to be on the rise, the representation of minorities on the faculty of large school districts was diminishing.

Figure 2.16_Percentage of minority teachers, by district size: 1987-88, 1990-91, and 1993-94


SOU RCE: U .S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

## Differences and Trends by Proportion of Minority Students

A lthough a larger proportion of the faculty tended to be from minority groups in districts where minorities accounted for a larger proportion of student enrollment, white, nonHispanic teachers were the predominant racial-ethnic group regardless of the representation of minorities in the student population. A mong school districts in which 90 percent or more of the students were white, the faculty was almost exclusively white, non-H ispanic ( 99 percent) in 1993-94. A mong school districts with 10 to less than 50 percent minority enrollment, 9 out of 10 teachers ( 91 percent) were white, non-H ispanic (figure 2.17 and appendix A, table 9). In school districts in which minority students outnumbered white, non-H ispanic students, two-thirds ( 66 percent) of teachers were still of white, non-H ispanic origin. A similar pattern was found in every region of the country (appendix A , table 9).

Regardless of the percentage of minority students in a district, Black teachers represented the largest minority faculty group, followed by Hispanics (figure 2.17). Black teachers made up 21 percent, H ispanic teachers 10 percent, and A sian and Pacific Islanders 3 percent of the faculty in school districts where half or more of the students were from minority groups. A mong districts in which the minorities represented between 10 and less than 50 percent of students, the representation of Black and H ispanic teachers dropped to 7 percent and 2 percent, respectively. A sian and Pacific Islanders represented less than 1 percent of teachers in such school districts. A merican Indian and A laska $N$ ative teachers constituted less than 1 percent of the teachers regardless of the category of percentage of minority students.

Figure 2.17-Percentage distribution of teachers by race and ethnicity, by proportion of minority students in the district: 1993-94


SOU RCE: U S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

The trend between 1987-88 and 1993-94 among districts with fewer than 50 percent minority students was toward a slightly lower percentage of minorities on the teaching staff (figure 2.18 and appendix A, table 7). A mong districts with fewer than 10 percent minority students, the proportion of minority teachers was 2 percent in 1987-88, compared with 1 percent in 199394. A mong districts with 10 to 50 percent minority student enrollment, the representation of minorities on the faculty was about 10 percent in 1993-94, compared with 12 percent in 198788. M eanwhile, the representation of minorities on the faculty of districts with 50 percent or more minority student enrollment remained relatively constant.

Figure 2.18-Percentage of minority teachers, by proportion of minority students in district: 1987-88, 1990-91, and 1993-94


SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

# Chapter 3 Newly Hired T eachers 

## Overview

Seven-eighths ( 88 percent) of the school districts in the country reported hiring teachers in the 1993-94 school year who were not employed in the district as teachers in the previous year. These newly hired teachers included newly prepared teachers (i.e., first-year teachers who were attending college or earning their highest degree in the previous year), delayed entrants (e.g., first-year teachers who had engaged in other activities in the year(s) subsequent to earning their highest degrees), transfers (e.g., teachers who were employed as teachers in other states or in private schools in the previous year), and re-entrants (e.g., former teachers who were not teaching elementary or secondary school in the past year). ${ }^{7}$ A s a result there were approximately 200,000 newly hired full-time equivalent (FTE) teachers in 1993-94. A ccordingly, 8 percent of the FTE public school teachers in the country were either teaching in districts in which they had not taught in the previous year or were teaching for the first time (appendix A, table 11).

## Extent of New Hires in Public School Districts

Hiring rates were associated with the region of the country in which a district was located. Regionally, the percentages of newly hired teachers were highest for districts in the South ( 10 percent) followed by districts in the W est ( 9 percent), and lowest for districts in the N ortheast ( 6 percent) (figure 3.1). In eight states, at least 10 percent of the FTE teaching staff was newly hired teachers (appendix A, table 49). Each of these states were located in regions in the South (Georgia, M ississippi, N orth C arolina) or W est (A rizona, H awaii, Nevada, $N$ ew $M$ exico, and T exas) of the country.

N ewly hired teachers were most prevalent in urban areas inside central cities and other urban districts of the South, where they constituted 10 percent of the FTE teaching staff (appendix A , table 11). In contrast, only 4 percent of teachers in central city school districts in the N ortheast were newly hired. U nlike the situation in the South, urban areas inside central city school districts overall had a slightly lower percentage of newly hired teachers compared with other urban or nonurban districts (figure 3.1).

[^6]Figure 3.1-Percentage of full-time equivalent teaching staff that consists of newly hired teachers, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

## Certification of Newly Hired Teachers

## Standard State Certification

A lthough all states have standards for teacher certification, state certification is not a requirement for employment as a teacher. In 1993-94, 87 percent of newly hired teachers possessed regular or standard state certification in their field of assignment ${ }^{8}$ (appendix A, table 12).

The proportions of new teachers with standard state certification in their field of assignment were higher for districts in the M idwest ( 96 percent) and $N$ ortheast ( 94 percent), compared with districts in the South ( 82 percent) and W est ( 81 percent) (figure 3.2 ). In several states, nearly all ( 98 percent or more) of the newly hired teachers were fully certified in their field of assignment (appendix A, table 50). A lthough many of these states were in the M idwest and

[^7]N ortheast (e.g., N ew York, N orth Dakota, Rhode Island, V ermont), several states in the W est also reported these high levels of certification (A laska, M ontana, N evada, and W ashington).

Figure 3.2-Percentage of newly hired teachers (full-time equivalent) with standard state certification in assignment field, by selected district characteristics: 1993-94


SO URCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Proportionally fewer of the newly hired teachers in districts in urban areas inside central cities were certified in their field of assignment than those hired in other public school districts. In these central city school districts, 79 percent of the new teachers were certified in their field of assignment, compared with 88 percent in other urban districts and 89 percent in nonurban districts (figure 3.2).

The proportions of new hires with standard certification in their field of assignment were the lowest in large districts with an enrollment of 10,000 or more students. In these districts, 82 percent of newly hired teachers were fully certified in their field of assignment, compared with 90 percent of these teachers in districts with less than 1,000 students and 91 percent of these teachers in districts serving 1,000 to 9,999 students.

The percentage of newly hired teachers certified in their field of assignment was lowest in districts with the highest proportions of minority students, and was highest in districts with the lowest proportions of minority students. In predominantly white districts (i.e., with less than 10 percent minority enrollment), 94 percent of newly hired teachers were fully certified in their field of assignment, compared with only three-quarters of the teachers in districts where minorities constituted one-half or more of the student population. Similarly, the proportion of newly hired teachers with standard certification in their field of assignment was
highest in districts that employed only white teachers (95 percent) and was lower in districts with relatively more minority teachers. In districts where the teaching staff was comprised of 20 percent or more minority teachers, about three-quarters ( 74 percent) of the newly hired teachers were fully certified in their field of assignment.

Regional differences in proportions of newly hired teachers with certification in their field of assignment were particularly pronounced in districts in urban areas inside central cities (figure 3.3). The proportions certified in their field of assignment in central city districts of the M idwest and N ortheast were about 95 percent and 92 percent, respectively, compared with three-quarters ( 76 percent) of newly hired teachers in central city districts in the South and only two-thirds ( 67 percent) of newly hired teachers employed by districts in urban areas inside central cities in the W est.

Figure 3.3-Percentage of newly hired teachers (full-time equivalent) with standard state certification in assignment field in districts in urban areas inside central cities, by region: 1993-94


SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

## Emergency Certification

In lieu of regular or standard state certification, many newly hired teachers apply for and are granted emergency certificates. These emergency certificates are intended as short term measures for people with insufficient preparation for their teaching assignment. G rantees are required to complete a certification program in order to continue teaching in their assignment field. For example, in C alifornia, a teacher undergoing the additional training necessary for certification as a special educator is often fully certified in other teaching areas.

This person may be granted an emergency certificate or a waiver while taking additional course work required for employment as a special education teacher (Doorlag et al. 1994).

The practice of granting emergency certifications is fairly common. N ew teachers with emergency certifications were found in over one-fifth of the nation's school districts in 199394 (appendix A , table 12). In districts that employed this practice, over one-sixth (17 percent) of newly hired teachers had emergency certifications. A mong all newly hired teachers, about 8 percent were granted emergency certification. In other words, of the 14 percent of the nation's newly hired teachers who lacked regular or standard state certification in their field of assignment in 1993-94, over half ( 56 percent) had emergency certification.

The proportions of newly hired teachers with emergency certification were several times greater in the South ( 10 percent) and $W$ est ( 12 percent) than in the $N$ ortheast ( 2 percent) and $M$ idwest ( 3 percent) (figure 3.4). A bout one-fifth of newly hired teachers in C alifornia and Louisiana were granted emergency certification (appendix A , table 50).

The proportion of newly hired teachers with emergency certification was greater in districts in urban areas inside central cities ( 11 percent) than in other districts ( 6 to 7 percent) (figure 3.4). H owever, there was considerable regional variation among central city districts with respect to the proportions of newly hired teachers with emergency certification. One-fifth of the newly hired teachers in central city school districts in the W est had emergency certification, compared with one-tenth of such teachers in central city school districts in the South, 4 percent of newly hired teachers in central city school districts in the Midwest and 3 percent in the N ortheast (appendix A , table 12).

Figure 3.4-Percentage of newly hired full-time equivalent teachers with emergency certification, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

In districts where the student enrollment was predominantly minority, one in seven (14 percent) newly hired teachers lacked standard state certification for their position but had emergency certification (figure 3.4). This proportion was greater than in districts that were between 10 and 50 percent minority ( 6 percent), which, in turn, was greater than in districts that were less than 10 percent minority ( 3 percent). The same pattern characterized districts with the highest proportions of minority teachers, moderate proportions, and no minority teachers. In the districts with the highest proportions of minority teachers, over one in seven ( 15 percent) of the newly hired teachers had only emergency certification; in districts that had no minority teachers, only 3 percent of the newly hired teachers held emergency certification.

Finally, the proportion of new teachers with emergency certification was higher in school districts with at least 10,000 students ( 9 percent) than in districts of smaller sizes (about 6 percent).

## Newly Hired Teachers Lacking Emergency Certification or Standard State Certification in Their Field of Assignment

In 1993-94, 6 percent of the newly hired public school teachers in the country were neither certified in their fields of assignment, nor did they have emergency certification (appendix A, table 12). The largest percentages of newly hired teachers lacking both of these types of certification were in districts in the South ( 8 percent) and W est ( 7 percent). Fewer than 2 percent of newly hired teachers in the M idwest, compared with about 8 percent of newly hired teachers in the South, lacked regular (standard) and emergency certification for
teaching (figure 3.5). The proportion of newly hired teachers in districts in urban areas inside central cities (11 percent) that lacked either form of certification was at least twice that of newly hired teachers in other urban ( 5 percent) and nonurban (4 percent) districts. H owever, teachers lacking either form of certification could possess alternate route certifications or be certified in fields other than their fields of assignment. ${ }^{9}$
$N$ ew teachers lacking both state certification in their field of assignment and emergency certification were more prevalent in districts with a predominantly minority student population and in districts where more than 20 percent of the teachers were members of minority groups. A bout one quarter of the newly hired teachers in these districts had only emergency certification or lacked both standard and emergency certification (figure 3.5 and appendix A, table 12).

Figure 3.5-Certification status of newly hired teachers (full-time equivalent) lacking standard state certification in assignment field, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

[^8]
## District Criteria for Screening Applicants for Teaching

Districts use various criteria in considering applicants for teaching positions. These include the following: (a) full standard state certification in the field to be taught, (b) at least emergency or temporary state certification or endorsement in the field to be taught, (c) graduation from a state-approved teacher education program, (d) a college major or minor in the field to be taught, (e) passage of a STA TE test of basic skills, (f) passage of a STA TE test of subject knowledge, ( g ) passage of a local DISTRICT test of basic skills or subject knowledge, (h) passage of the $N$ ational Teachers Exam-C ore battery, and (i) passage of the N ational T eachers Examination-Professional Specialty A rea. In 1993-94, the most common criterion that districts reported requiring of teaching applicants was standard state certification (appendix A , table 13). Five-sixths ( 83 percent) of the country's school districts had this requirement. Of the remaining school districts, nearly all used but did not require state certification in considering teaching applicants. A Imost all districts ( 99.7 percent) reported that they at least used state certification as a criterion in considering teaching applicants.

It should be noted that requiring applicants to meet a specific criterion (such as possession of standard state certification for the field to be taught) does not mean that all successful applicants meet this criterion. In districts requiring that teaching applicants possess standard state certification for the field to be taught, 7 percent of the newly hired teachers lacked this qualification. N onetheless, the proportions of fully certified new teachers were highest in districts with a state certification employment requirement. Districts that used but did not require state certification for the field to be taught reported that 16 percent of their newly hired teachers lacked state certification for the field to be taught; districts that did not use this criterion reported 21 percent.

School districts in the N ortheast, compared with those in the South and the W est, were most likely to have a standard certification requirement (figure 3.6). A bout 93 percent of districts in the N ortheast required standard certification in the field to be taught of teaching applicants, in contrast to 70 percent of school districts in the South and 80 percent in the W est.

Figure 3.6-Percentage of school districts requiring standard state certification in field to be taught in considering applicants for teaching positions, by selected district characteristics: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-84 (T eacher Demand and Shortage Q uestionnaire).

Districts in urban areas inside central cities ( 77 percent) were less likely than other urban ( 86 percent) and nonurban ( 82 percent) districts to require standard teacher certification. However, this varies by region of the country. Comparable proportions of districts serving central cities, districts in urban areas outside central cities, and districts in nonurban areas in the South ( 74 percent) and in the M idwest ( 89 percent) required that standard certification in the field be used as a criterion in considering teaching applicants (appendix A , table 13). H owever, central city districts in the $N$ ortheast were less likely than nonurban districts in the N ortheast to mandate standard teacher certification in the field to be taught by applicants ( 86 percent in central city districts versus 94 percent in nonurban districts).

Districts with 10,000 or more students ( 75 percent) were less likely than districts of other sizes (about 84 percent) to require standard teacher certification in the field to be taught by applicants (figure 3.6). Similarly, districts with higher proportions of minority students (i.e., from 10 percent to less than 50 percent) were less likely to have this requirement than districts with lower proportions of minority students. A bout three-quarters ( 77 percent) of the districts with 10 percent to less than 50 percent minority students and about threequarters ( 76 percent) of the districts whose enrollment was predominantly minority (i.e., 50 percent or more) required standard certification in the field of assignment to be considered in evaluating teaching applicants, compared with about seven-eighths ( 87 percent) of the districts where minorities made up less than 10 percent of the student body. Districts in which minorities comprised at least 20 percent of the teaching staff were also less likely to have this requirement than districts employing proportionately fewer minority teachers. A bout three-quarters ( 73 percent of these districts required consideration of standard
certification in the field of assignment in evaluating teaching applicants compared with 82 percent of the districts that employed some, but proportionately few minority teachers and 86 percent of the districts that did not employ any minority teachers.

School districts reported that other factors were frequently required of teaching applicants (figure 3.7). A bout two-thirds of the districts required a college major or minor in the field to be taught ( 72 percent), emergency or temporary certification for the field to be taught ( 67 percent), or graduation from a state-approved teacher education program ( 67 percent). A bout half ( 51 percent) of the districts required passage of either state or district tests of basic skills or subject knowledge; less than one-third ( 31 percent) required passage of either the core battery or the professional specialty area of the $N$ ational T eachers Examination (NTE).

Figure 3.7—Percentage of school districts with various criteria required for considering applicants for teaching positions: 1993-94


SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

There were regional differences in the specification of testing requirements. Districts in the N ortheast were more likely than other districts to require that teaching applicants pass some part of the NTE (appendix A, table 13). H alf (50 percent) of the districts in the N ortheast required that applicants pass the NTE core battery or professional specialty area in order to be considered for teaching positions, in contrast to three-eighths ( 38 percent) of the districts in the South, about one-quarter (29 percent) of the districts in the W est, and one-sixth (17 percent) of the districts in the M idwest. Conversely, the districts in the N ortheast (41 percent) were less likely than districts in the South ( 69 percent) or W est ( 58 percent) to require that teaching applicants pass a state or district test in order to be considered for a teaching position.

Districts in regions with the lowest proportions of fully certified, newly hired teachers were more likely than other districts to require that passage of a state or district test of basic skills or subject knowledge be used in considering teaching applicants. O ver two-thirds ( 69 percent) of the districts in the South and 58 percent of the districts in the W est required passage of these tests.

# Chapter 4 <br> T eacher D emand and District Efforts to Recruit and Retain Teachers 

## Overview

Fears of an impending teacher shortage were raised by several well-publicized reports in the early 1980s. ${ }^{10}$ These fears were an underlying motivation for a large-scale national survey to permit monitoring of teacher supply and demand. The SA SS T eacher Demand and Shortage Questionnaire (TDS) collected information about a variety of teacher supply and demand indicators, such as the numbers and distribution of newly hired teachers and their qualifications; teacher hiring requirements (all discussed in chapter 3); the number and distribution of teacher vacancies that were unable to be filled by permanent teachers; the number and percentage of teaching positions abolished, withdrawn, or filled by substitute teachers because of budget cuts; the number of teachers laid off; and district efforts to recruit and retain teachers. These data provide information about the prevalence and distribution of teacher supply and demand imbalances and how they have changed over time.

In spite of projections of increasing demand for teachers and decreasing supply of teachers, teacher shortages did not manifest themselves as predicted. School districts have been very successful in filling their teacher vacancies. V ery few unfilled teaching positions were reported in either 1987-88, 1990-91, or 1993-94: the number of approved FT E teaching positions that were not filled by permanent teachers declined from 22,978 in 1987-88 (1.0 percent of the total number of FTE teaching positions) to 14,287 in 1990-91 ( 0.6 percent of the FTE teaching positions) to 8,691 in 1993-94 ( 0.3 percent of the FTE teaching positions) (appendix A, table 17). This was not a reflection of reduced demand for teachers. In 199394, almost no approved teaching positions ( 5,372 , or 0.2 percent) were abolished, withdrawn, or filled by substitute teachers because of budget cuts; very few teachers (11,910, or 0.5 percent) were laid off because of budget limitations, declining enrollments, or course elimination (appendix A , tables 18 and 19). Furthermore, the number of teachers employed in the nation's public elementary and secondary schools increased from 2,511,304 in 1987-88 to 2,565,862 in 1990-91 to 2,599,569 in 1993-94 (appendix A , table 7).

Even though the predicted shortages in the quantity of teachers have not occurred, many teachers are assigned to teach classes for which they lack a college major or minor. ${ }^{11}$ For example, in 1990-91, over half ( 56 percent) of the students en rolled in physical science

[^9]courses in grades 7 to 12 were taught by teachers who lacked at least a college minor in the field; over half in history or world civilization courses were taught by teachers lacking at least a minor in history. This mismatch is worse in certain kinds of school districts: in highpoverty districts, nearly three-quarters ( 71 percent) of secondary school students in physical science classes were taught by a teacher lacking at least a minor in the field; in low-poverty districts, 50 percent were taught by teachers lacking this educational background. ${ }^{12}$

In 1993-94, 4,357 districts offered pay incentives (i.e., cash bonuses, salary step increases, or other salary increases) and/or provided free training to hire or retain teachers to teach in particular content areas or to teach in less desirable locations. From a microeconomic perspective, these pay incentives and free training are indicators that the district feels that special measures need to be undertaken to deal with existing or potential teacher shortages in these content areas or locations.

From a macroeconomic perspective, small levels of shortages will invariably exist in broad and geographically diverse labor markets. Raising salaries to levels where shortages would be totally eliminated would be inefficient, creating teacher surpluses in other labor markets. From this perspective, the goal of pay incentives is not to eliminate all teacher shortages but to create an efficient labor market that matches supply and demand across labor markets without producing surplus. The large number of districts offering these incentive programs can be seen as an indication that the compensation system is responding efficiently to solve the problem of possible shortages in some districts without creating surpluses in others.

## Fields of Shortage

In 1993-94, some districts offered pay incentives and/or free staff training to deal with current or anticipated teacher shortages in specific fields. The largest districts (i.e., those serving at least 10,000 students) were more likely to take each of these actions than were districts of other sizes (table 4.1 and appendix A , table 22). In 1993-94, 20 percent of the largest districts offered pay incentives, and 35 percent offered free training to deal with teacher shortages. O nly 11 percent of districts enrolling 1,000 to 9,999 students and 9 percent of districts enrolling fewer than 1,000 students offered pay incentives for this purpose; only 19 percent of districts enrolling 1,000 to 9,999 students and 18 percent of the smaller districts offered free training for this purpose. C entral city school districts were much more likely to offer either of these pay incentives than districts located elsewhere. For example, 20 percent of the nation's central city districts offered any of these pay incentives, in contrast to about 10 percent of the other districts; 29 percent offered free training, in contrast to 18 percent of the districts in urban areas outside central cities and 20 percent of the nonurban districts.

[^10]Table 4.1-Percentage of school districts using pay incentives to recruit or retain teachers or offering free training to prepare staff members to teach in fields of shortage, by selected district characteristics: 1993-94

| District |  |  |
| :--- | :---: | :---: |
| Characteristic | Pay Incentives | Free Training |
| T O T A L |  |  |
|  | 10.2 | 19.0 |
| District Size |  |  |
| U nder 1,000 | 8.9 | 17.5 |
| 1,000 to 9,999 | 10.7 | 19.1 |
| 10,000 or more | 19.9 | 34.5 |
| M inority Students |  |  |
| U nder 10\% |  |  |
| 10\% to under 50\% | 7.3 | 15.0 |
| 50\% or more | 11.7 | 20.7 |
|  | 23.1 | 37.3 |
| M inority T eachers |  |  |
| N one | 7.6 | 14.4 |
| M ore than 0\% to under 20\% | 11.7 | 21.2 |
| 20\% or more | 19.1 | 38.0 |
| M etro Status |  |  |
| U rban -inside central city | 20.1 | 28.5 |
| U rban outside central city | 9.9 | 17.5 |
| N onurban area | 9.8 | 19.5 |
| Region |  |  |
| N ortheast | 6.0 | 13.5 |
| M idwest | 8.3 | 13.1 |
| South | 16.8 | 26.6 |
| W est | 11.0 | 27.7 |

(a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

There was also a strong relationship between the racial composition of a district's student population and the presence of shortage field incentives. Nearly one-quarter ( 23 percent) of school districts which were at least 50 percent minority provided pay incentives for this purpose (appendix A, table 22). A bout one-eighth (12 percent) of the districts with a student minority composition ranging from 10 percent to under 50 percent and just 7 percent of the districts with fewer than 10 percent minority students provided pay incentives for this purpose. Similarly, 37 percent of the predominantly minority districts offered free training for this purpose, in contrast with 21 percent of the districts whose student population ranged from 10 percent to under 50 percent minority and 15 percent of the districts with fewer than 10 percent minority students (table 4.1).

If prevalence of pay incentives is an indicator of shortage magnitude, the field in which shortages are greatest is special education (appendix A, table 23). Pay incentive and free training strategies to deal with special education teacher shortages were most prevalent in the largest (i.e., with enrollments of at least 10,000 students) districts. The largest districts were
more likely to use pay incentives ( 13 percent) and free training (19 percent) to deal with actual or anticipated special education teacher shortages than other districts ( 5 to 7 percent offering pay incentives; 12 percent offering free training) (table 4.2). Similarly, districts with the highest proportions ( 20 percent or more) of minority teachers were more likely to offer free training ( 22 percent) to recruit or retain special education teachers than other districts (10 to 13 percent).

Similarly, districts in urban areas inside central cities were more likely to use pay incentives (16 percent) to deal with actual or anticipated special education teacher shortages than other districts ( 6 percent). C entral city school districts were al so more likely to offer free special education teacher training ( 14 percent) than districts in urban areas outside central cities ( 9 percent).

In 1993-94, at least 3 percent of the nation's school districts used pay incentives and at least 10 percent offered free training to deal with teacher shortages in math and ESL or bilingual education instruction. The largest districts, the districts with the highest concentrations of minority students and teachers, districts in urban areas inside central cities, and districts in the W est and South were most likely to provide free training or pay incentives to deal with ESL/bilingual teacher shortage strategies. This may reflect their higher concentrations of Limited English Proficient/N on-English Proficient (LEP/N EP) students.

Efforts to prevent and reduce mathematics teacher shortages (i.e., through pay incentives and free training) were comparably prevalent in districts of different sizes. Pay incentives were offered in 4 percent of the smallest districts (under 1,000 students) and in 2 to 3 percent of the other districts; free math training was offered in 12 percent of the largest and smallest districts and in 11 percent of the districts serving between 1,000 and 9,999 students. Pay incentives for this purpose were more likely to be employed by school districts in the South ( 7 percent) than districts in other regions (ranging from 2 to 3 percent).

Table 4.2-Percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage or offering free training to prepare staff members to teach in fields of shortage by subject matter (special education, math, and ESL or bilingual education), by selected district characteristics: 1993-94

| District <br> Characteristic | Pay Incentives |  |  | Free Training |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Special Education | M ath | ESL or Bilingual Education | Special <br> Education | M ath | ESL or Bilingual Education |
| TOTAL | 6.2 | 3.2 | 3.2 | 12.2 | 11.3 | 10.1 |
| District Size |  |  |  |  |  |  |
| Under 1,000 | 5.0 | 4.0 | 1.6 | 12.0 | 11.7 | 8.9 |
| 1,000 to 9,999 | 6.8 | 2.3 | 4.3 | 11.6 | 10.7 | 10.2 |
| 10,000 or more | 12.8 | 2.8 | 9.9 | 18.6 | 12.2 | 23.1 |
| Minority Students |  |  |  |  |  |  |
| U nder 10\% | 4.5 | 2.2 | 1.0 | 10.5 | 10.1 | 6.1 |
| 10\% to under 50\% | 7.1 | 3.8 | 4.3 | 13.6 | 11.0 | 12.6 |
| $50 \%$ or more | 13.0 | 7.5 | 12.4 | 17.4 | 18.7 | 26.4 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 4.2 | 3.1 | 1.2 | 10.2 | 9.5 | 6.1 |
| M ore than 0\% to under 20\% | 7.4 | 3.2 | 4.3 | 12.7 | 11.9 | 13.0 |
| 20\% or more | 11.7 | 3.9 | 10.0 | 22.4 | 19.4 | 19.7 |
| M etro Status |  |  |  |  |  |  |
| U rban -inside central city | 16.2 | 3.3 | 11.0 | 14.3 | 7.7 | 20.3 |
| U rban -outside central city | 5.8 | 2.4 | 3.8 | 8.9 | 9.3 | 10.6 |
| $N$ onurban area | 5.7 | 3.8 | 2.2 | 14.4 | 12.9 | 9.1 |
| Region |  |  |  |  |  |  |
| $N$ ortheast | 3.7 | 1.8 | 0.9 | 9.2 | 9.3 | 5.9 |
| M idwest | 4.8 | 2.5 | 1.4 | 8.5 | 8.7 | 5.4 |
| South | 10.6 | 7.0 | 5.5 | 19.3 | 15.2 | 13.4 |
| W est | 6.3 | 1.8 | 6.4 | 14.2 | 13.9 | 20.1 |

[^11]
## Differences and Trends in the Prevalence of Pay Incentives

From 1987-88 to 1993-94, the proportions of school districts that used pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage nearly doubled, from 8 percent to 15 percent (appendix A , table 20). The prevalence of these practices increased in school districts regardless of their size, proportion of minority students, proportion of minority teachers, or metropolitan status (appendix A, table 20 and figure 4.1). These practices were more prevalent in 1993-94 than in 1987-88 in districts in the M idwest, South, and W est.

Figure 4.1-Percentage of districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in shortage fields, by selected district characteristics: 1987-88 and 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88 and 1993-94 (Teacher Demand and Shortage Questionnaires).

In districts in the N ortheast, their prevalence in 1993-94 (8 percent) was comparable to their prevalence in 1987-88 ( 6 percent). In 1993-94, districts in the South were more likely to use pay incentives for teacher recruitment and retention purposes than districts in other regions. A bout one-quarter ( 26 percent) of districts in the South offered these incentives, compared with 15 percent of districts in the W est, 12 percent of districts in the M idwest, and 8 percent of districts in the N ortheast. In M aine, V ermont, and N ew H ampshire, 2 percent or fewer of school districts offered these kinds of teacher incentives (appendix A , table 52).

Pay incentives are a strategy that can be used to deal with different kinds of shortages. In 1993-94, about 10 percent of the nation's districts reported using pay incentives to attract or retain teachers in fields of shortage; 10 percent reported using pay incentives to attract or retain teachers to work in less desirable locations (appendix A, tables 21 and 22). A bout 6 percent of the nation's districts offered these incentives both to deal with shortage fields and for encouraging teachers to work in less desirable locations; 5 percent of the districts offered them to deal with shortage fields only; and 4 percent, to encourage teachers to work in less desirable locations only.

Districts that had the lowest concentrations of minority students (under 10 percent) were less likely than districts serving 50 percent or more minority students to use pay incentives to deal with shortage fields concerns and less likely than districts with minority student compositions ranging from 10 percent to 50 percent to use pay incentives to recruit or retain teachers to teach in less desirable locations than other districts (figure 4.2). A lthough the largest districts (those with enrollments of at least 10,000 students) were more likely to offer pay
incentives to deal with shortage field issues, comparable proportions of the largest districts (9 percent) and districts serving fewer than 1,000 students ( 11 percent) used this strategy to motivate teachers to teach in less desirable locations. Similarly, districts in urban areas inside central cities ( 20 percent) were more likely to use pay incentives to recruit or retain teachers to teach in fields of shortage than other districts (10 percent) (appendix A , table 22). H owever, comparable proportions of districts in urban areas inside central cities (11 percent), nonurban districts (11 percent) and districts in urban areas outside central cities (8 percent) offered pay incentives to motivate teachers to teach in less desirable locations (appendix A, table 21).

Districts in the South (19 percent) were more likely to use pay incentives to motivate teachers to teach in less desirable locations than districts in the $W$ est ( 10 percent), M idwest ( 7 percent), and $N$ ortheast ( 5 percent) (figure 4.2 ). They were also more likely to use pay incentives to deal with shortage field problems ( 17 percent) than districts in the Midwest ( 8 percent) or $N$ ortheast ( 6 percent).

Figure 4.2-Percentage of districts using pay incentives to recruit or retain teachers to teach in a) shortage fields and b) less desirable locations, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaires)

## Differences and Trends in the Prevalence of Free Training to Prepare Teachers for Shortage Fields

In addition to pay incentives, districts can also offer free training to prepare staff members to teach in fields with current or anticipated shortages. The number of districts offering free training, like the number of districts offering pay incentives, increased substantially from 1987-88 (12 percent) to 1993-94 (19 percent) (appendix A , table 24). A nd, like pay incentives, in 1993-94 this practice was more prevalent in districts regardless of their size, proportion of minority students, proportion of minority teachers, or metropolitan status than in 1987-88 (appendix A , table 24 and figure 4.3). In addition, free training to deal with specific shortage fields was more prevalent in 1993-94 than it was in 1987-88 in districts in all regions of the country.

In 1993-94, school districts in the W est and South were more likely to provide free training to prepare teachers to teach in shortage areas than school districts in other regions. A bout one-quarter of the school districts in the W est ( 28 percent) and South ( 27 percent) offered this training, compared with 14 percent of districts in the Northeast, and 13 percent of districts in the Midwest. This finding may indicate that districts in the South and W est were having greater difficulties hiring teachers in shortage fields than were districts in other parts of the country.

Figure 4.3-Percentage of districts offering free training to prepare staff to teach in shortage fields, by selected district characteristics: 1987-88 and 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1987-88 and 1993-94 (T eacher Demand and Shortage Questionnaires).

## Chapter 5 <br> T eacher Compensation

## Overview

The issue of teacher compensation is one of importance for educators, policymakers, and the general public. This issue reflects the common belief that salary and benefit packages are important in attracting, motivating, and retaining quality teachers. ${ }^{13}$

Compensation patterns must reflect the forces of supply and demand and local labor markets. Teachers offer a variety of personal characteristics (knowledge, skills, experience) to their employers (the school districts). In turn, school districts offer a variety of working environments, conditions of employment, and compensation programs that reflect the values that districts assign to different personal characteristics. C ompensation patterns provide a means for measuring and comparing the values associated with different teacher and job characteristics both within and between school districts. ${ }^{14}$

In this chapter, responses to TDS items dealing with base salary and retirement benefits-two key components of teacher compensation-are discussed. ${ }^{15}$ A nalyses that compare salaries at different times incorporate adjustments for inflation. The consumer price indices for the 1990-91 and 1993-94 school years were used for this purpose. ${ }^{16}$

[^12]
## Scheduled Salaries

M ost (94 percent) of the nation's school districts had salary schedules for their teachers in 1990-91 and 1993-94. In these districts, comparisons of teacher sal aries with equival ent education and experience (i.e., bachel or's degree without experience, master's degree without experience, and master's degree with 20 years experience) were possible. To enable comparisons of changes over time, 1990-91 salaries were adjusted for inflation.

Table 5.1—Average scheduled salaries for teachers (in constant 1993-94 dollars) by education and teaching experience in districts with salary schedules, by selected district characteristics: 1990-91 and 1993-94

| District <br> C haracteristic | 1990-91 ${ }^{\text {a }}$ |  |  | 1993-94 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor's without experience | M aster's without experience | M aster's with 20 yrs . experience | Bachelor's without experience | M aster's without experience | M aster's with 20 yrs . experience |
| TOTAL | \$21,742 | \$23,691 | \$36,249 | \$21,923 | \$23,956 | \$37,213 |
| D istrict Size |  |  |  |  |  |  |
| U nder 1,000 | \$20,747 | \$22,546 | \$33,364 | \$20,817 | \$22,777 | \$34,360 |
| 1,000 to 9,999 | \$22,714 | \$24,802 | \$39,185 | \$22,940 | \$25,042 | \$39,934 |
| 10,000 or more | \$23,834 | \$26,163 | \$41,194 | \$23,212 | \$25,327 | \$39,657 |
| M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| U nder 10\% | \$21,231 | \$23,177 | \$35,461 | \$21,498 | \$23,597 | \$36,655 |
| 10\% to under 50\% | \$22,522 | \$24,485 | \$37,754 | \$22,445 | \$24,361 | \$38,246 |
| 50\% or more | \$22,935 | \$24,877 | \$37,419 | \$22,784 | \$24,784 | \$37,378 |
| M inority T eachers |  |  |  |  |  |  |
| None | \$20,829 | \$22,662 | \$34,226 | \$20,875 | \$22,882 | \$35,043 |
| M ore than 0\% to under 20\% | \$22,714 | \$24,793 | \$38,717 | \$22,979 | \$25,090 | \$39,810 |
| 20\% or more | \$22,139 | \$24,097 | \$35,412 | \$21,827 | \$23,533 | \$34,394 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | \$23,867 | \$25,521 | \$40,827 | \$23,476 | \$25,328 | \$39,857 |
| U rban-outside central city | \$23,446 | \$25,549 | \$40,927 | \$23,781 | \$26,060 | \$42,680 |
| N onurban area | \$20,384 | \$22,250 | \$32,624 | \$20,389 | \$22,247 | \$32,839 |
| R egion |  |  |  |  |  |  |
| N ortheast | \$24,604 | \$26,617 | \$43,453 | \$25,581 | \$27,727 | \$46,594 |
| M idwest | \$20,478 | \$22,490 | \$34,287 | \$20,879 | \$23,013 | \$35,718 |
| South | \$20,639 | \$22,006 | \$31,556 | \$20,407 | \$21,714 | \$30,955 |
| W est | \$22,458 | \$24,895 | \$38,006 | \$21,913 | \$24,505 | \$37,800 |

(a) A djusted using the C onsumer Price Index.
(b) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

The average scheduled salary, adjusted for inflation, for teachers with a master's degree and 20 years experience was greater in 1993-94 ( $\$ 37,213$ ) than it was in 1990-91 $(\$ 36,249)$
(table 5.1 and appendix A, table 27). Similarly, scheduled salaries for a teacher with a master's degree and no experience, after adjusting for inflation, were greater in 1993-94 $(\$ 23,956)$ than in 1990-91 ( $\$ 23,691$ ). Scheduled salaries for a teacher with a bachelor's degree and no experience, after adjusting for inflation, were comparable in 1993-94 $(\$ 21,923)$ and in 1990-91 ( $\$ 21,742$ ).

## Teachers with Bachelor's Degrees

A fter adjusting for inflation, scheduled salaries for inexperienced teachers with a bachelor's degree were greater in school districts in the $N$ ortheast and $M$ idwest in 1993-94 than they were in 1990-91. In districts in the N ortheast, these 1993-94 and 1990-91 scheduled salaries were $\$ 25,581$ and $\$ 24,604$, respectively; in districts in the M idwest, the scheduled salaries were $\$ 20,879$ and $\$ 20,478$, respectively. Conversely, in school districts in the South, inflation-adjusted salaries for teachers with a bachelor's degree and no experience were lower in 1993-94 $(\$ 20,407)$ than they were in 1990-91 $(\$ 20,639) .{ }^{17}$

The salaries for teachers with a bachelor's degree and no experience in 1993-94 were highest for teachers in the N ortheast $(\$ 25,581)$. Salaries for teachers with these qualifications in the W est $(\$ 21,913)$ were higher than those for comparable teachers in the M idwest $(\$ 20,879)$, which were greater than those in the South $(\$ 20,407)$.

In districts with fewer than 1,000 students, scheduled salaries for inexperienced teachers with a bachelor's degree were lower than in districts serving between 1,000 and 9,999 students $(\$ 20,817$ versus $\$ 22,940$ ). The 1993-94 scheduled sal aries for these teachers were highest $(\$ 23,212)$ in districts serving 10,000 or more students. Salaries for inexperienced teachers with bachelor's degrees were also lower in nonurban districts $(\$ 20,389)$ than in urban areas ( $\$ 23,476$ in districts in urban areas inside central cities; $\$ 23,781$ in districts in urban areas outside central cities).

These salaries were lower in districts in which the student minority composition was less than 10 percent than in districts in which the student minority composition exceeded 10 percent ( $\$ 21,498$ ) in contrast to $\$ 22,445$ in districts with student minority compositions ranging from 10 percent to under 50 percent and $\$ 22,784$ in districts whose student minority composition was at least 50 percent). The scheduled salaries for inexperienced teachers with bachelor's degrees were lowest in districts that did not employ any minority teachers ( $\$ 20,875$ ), intermediate in districts where minorities comprised at least 20 percent of the teaching staff ( $\$ 21,827$ ), and highest in districts with some but fewer than 20 percent minority teachers ( $\$ 22,979$ ) (table 5.1 and appendix A , table 27).

## Teachers with Master's Degrees

The pattern of regional variation that characterized inexperience teachers with bachelor's degrees was similar to the pattern of regional variation for salaries of teachers with a master's degree without any experience and for teachers with a master's degree and 20 years of

[^13]experience. A fter adjusting for inflation, scheduled salaries for a teacher with a master's degree and no experience were greater in school districts in the Northeast and Midwest in 1993-94 than they were in 1990-91 (table 5.1). In districts in the N ortheast, these 1993-94 and 1990-91 scheduled salaries were $\$ 27,727$ and $\$ 26,617$, respectively; in districts in the M idwest, the scheduled salaries were $\$ 23,013$ and $\$ 22,490$, respectively. C onversely, in school districts in the South, after adjusting for inflation, scheduled salaries for teachers with a master's degree and no experience were lower in 1993-94 (\$21,714) than they were in 1990-91 ( $\$ 22,006$ ). Inflation-adjusted salaries for teachers in school districts in the W est who had a master's degree and no experience were about the same in 1993-94 ( $\$ 24,505$ ) and in 1990-91 (\$24,895). Likewise, adjusted scheduled salaries for teachers with a master's degree and 20 years of experience were higher in 1993-94 than in 1990-91 for districts in the N ortheast ( $\$ 46,594$ versus $\$ 43,453$ ) and in the M idwest ( $\$ 35,718$ versus $\$ 34,287$ ). These salaries were lower in 1993-94 than in 1990-91 for comparable teachers in the South ( $\$ 30,955$ vs. $\$ 31,556$ ), and about the same for teachers with a master's degree and 20 years experience in the W est ( $\$ 37,800$ versus $\$ 38,006$ ).

In 1993-94, scheduled sal aries for teachers with a master's degree and no experience were higher in the N ortheast ( $\$ 27,727$ ) than in any other region. Salaries in the W est $(\$ 24,505)$ were greater than those in the M idwest $(\$ 23,013)$, which were greater than those in the South ( $\$ 21,714$ ). Likewise, after adjusting for inflation, scheduled sal aries for a teacher with a master's degree and 20 years of teaching experience were greater in school districts in the N ortheast ( $\$ 46,594$ ) in 1993-94 than they were in any other region. The salaries for these teachers in the W est $(\$ 37,800)$ were greater than those in the M idwest $(\$ 35,718)$, which were greater than those in the South $(\$ 30,955)$.

In districts with fewer than 1,000 students, scheduled salaries for inexperienced teachers with a master's degree were lower than in districts serving between 1,000 and 9,999 students ( $\$ 22,777$ versus $\$ 25,042$ ). The 1993-94 scheduled sal aries for these teachers were higher $(\$ 25,327)$ in districts serving 10,000 or more students. Similarly, in 1993-94, scheduled salaries for teachers with a master's degree and 20 years of teaching experience were lowest in districts with fewer than 1,000 students ( $\$ 34,360$ ). H owever, scheduled salaries for these teachers were comparable in districts serving between 1,000 and 9,999 students (\$39,934) and in larger districts $(\$ 39,657)$.

Scheduled sal aries for teachers with master's degrees and no experience $(\$ 22,247)$ and with 20 years of teaching experience $(\$ 32,839)$ were lower in nonurban districts than in urban districts. These salaries were intermediate in districts in urban areas inside central cities ( $\$ 25,328$ : no experience, $\$ 39,857$ : 20 years experience) and highest in urban areas outside central cities ( $\$ 26,060$ : no experience, $\$ 42,680$ : 20 years experience).

Salaries for inexperienced teachers with master's degrees in 1993-94 were lower in districts in which the student minority composition was less than 10 percent than in districts in which the student minority composition exceeded 10 percent ( $\$ 23,597$ in contrast to $\$ 24,361$ in districts with student minority compositions ranging from 10 percent to under 50 percent and $\$ 24,784$ in districts whose student minority composition was at least 50 percent). Salaries for teachers with master's degrees and 20 years of teaching experience were lower in districts in which fewer than 10 percent of the students were minorities $(\$ 36,655)$ than they were in districts in which minority students comprised from 10 percent up to 50 percent of the en rollment ( $\$ 38,246$ ). Salaries for these experienced teachers with master's degrees in districts with students minority compositions of 50 percent or more ( $\$ 37,378$ ) were comparable with salaries in districts with other student minority compositions.

Scheduled salaries for inexperienced teachers with master's degrees were lowest in districts that did not employ any minority teachers ( $\$ 22,882$ ), intermediate in districts where minorities comprised at least 20 percent of the teaching staff ( $\$ 23,533$ ), and highest in districts with some but fewer than 20 percent minority teachers ( $\$ 25,090$ ). For teachers with master's degrees and 20 years of experience, scheduled salaries were higher in districts with some but fewer than 20 percent minority teachers $(\$ 39,810)$ than in either districts with no minority teachers ( $\$ 35,043$ ) or in districts whose teaching staff was at least 20 percent minority ( $\$ 34,394$ ) (table 5.1 and appendix A , table 27).

## Collective Bargaining

Teachers' unions or other teachers' organizations typically represent their constituencies in salary negotiations with school districts. In 1993-94, most districts ( 71 percent) had an agreement with a teachers' union or organization for the purpose of bargaining. A bout twothirds ( 64 percent) of the nation's school districts had collective bargaining agreements (appendix A , table 28); 7 percent had meet-and-confer agreements. T eachers' scheduled sal aries in districts with and without collective bargaining agreements were compared. ${ }^{18}$

There were large regional differences in the proportions of school districts with collective bargaining agreements (figure 5.1). N early all of the school districts in the N ortheast (98 percent) had collective bargaining agreements-more than in any other region of the country. The proportions of districts in the M idwest (74 percent) and in the W est (68 percent) with collective bargaining agreements were much higher than in the South (12 percent). In M ississippi, N orth C arolina, South C arolina, T exas, V irginia, and W est Virginia, no districts reported collective bargaining agreements for their teachers (appendix A , table 56). Conversely, 99 percent or more of the districts in C onnecticut, the District of Columbia, H awaii, M aryland, N ew Jersey, N ew Y ork, Pennsylvania, Rhode Island, and W isconsin had collective bargaining agreements.

Collective bargaining agreements were most prevalent in districts that had fewer than 10 percent minority students ( 72 percent). In contrast, 55 percent of the districts that served between 10 and 50 percent minority students and 42 percent of the districts whose student en rollment was at least 50 percent minority had collective bargaining agreements. Collective bargaining agreements also were more prevalent in districts that had either no minority teachers ( 67 percent) or some but fewer than 20 percent minority teachers ( 66 percent) than in districts with higher proportions of minority teachers (31 percent) (figure 5.1).

[^14]Figure 5.1-Percentage of schools districts with collective bargaining agreements, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

## Collective Bargaining and Scheduled Salaries

Teachers' salaries in districts with collective bargaining agreements were higher than in districts without such agreements. For a beginning teacher with a bachelor's degree, salaries were 14 percent higher ( $\$ 22,850$ versus $\$ 20,127$ ) in districts with collective bargaining agreements; for beginning teachers with a master's degree, salaries were 16 percent higher ( $\$ 25,115$ versus $\$ 21,712$ ); and for teachers with a master's degree and 20 years of experience, salaries were 30 percent higher ( $\$ 40,375$ versus $\$ 31,088$ ) (figure 5.2). These associations characterized school districts regardless of their size, their proportions of minority students or teachers, or their metropolitan status (appendix A , table 29). ${ }^{19}$

[^15]Figure 5.2-Average scheduled salary for teachers, by education and teaching experience, in districts with and without collective bargaining agreements: 1993-94


SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire)

## Retirement Benefits

N early all (99 percent) of the nation's school districts offered retirement plans to their teachers in 1987-88, 1990-91, and 1993-94 (appendix A , table 30).

## Impacts of Within-State Transfers on Retirement Benefits

These retirement plans typically provided few barriers to the movement of teachers between districts within a state in that nearly all allowed teachers who moved to a job in another district in the state to receive either full credit ( 96 percent) or partial credit ( 2 percent) in the retirement system for their years of teaching experience (appendix A , table 31). H owever, 9 percent of the districts allowing credit for teachers transferring within the state required teachers to purchase this credit (appendix A, table 32).

In 1993-94, districts in the M idwest were less likely than those in the N ortheast or South to permit teachers to receive full tenure credit in their retirement system when they moved to another district within the state (appendix A, table 31). A bout 94 percent of districts in the M idwest provided this incentive, in contrast to 96 percent of districts in the W est, 98 percent in the $N$ ortheast, and 99 percent in the South.

## Impacts of Between-State Transfers on Retirement Benefits

Districts were less lenient in their retirement credit policies for teachers coming from other states. O nly 43 percent of districts permitted teachers moving from other states to receive full credit for their years of teaching experience; another 23 percent permitted partial credit (appendix A , table 31). M ost ( 81 percent) of these districts required teachers to purchase this credit (appendix A , table 32).

Districts in the W est were less likely than those in other regions to permit teachers from other states to receive full experience credit for their years of teaching in the district's retirement system (appendix A , table 31). A bout 22 percent of districts in the W est provided this incentive, in contrast to 54 percent of districts in the N ortheast, 53 percent in the South, and 41 percent in the $M$ idwest.

Districts in urban areas outside central cities ( 83 percent) and nonurban districts ( 79 percent) were less likely to permit teachers from other states to purchase retirement credits than districts in urban areas inside central cities ( 91 percent) (appendix A , table 32).

# Chapter 6 School D istrict Programs and Policies 

## Overview

School districts that grant high school diplomas invariably specify requirements for earning these diplomas. School districts al so establish programs and implement policies in a variety of other areas (such as student test reporting policies, choice programs, and written policies about student discipline and alcohol, drug, and tobacco use). They may also participate in federally sponsored programs, such as the $N$ ational School Lunch program and the Chapter 1 program, and may offer programs for prekindergarten students. The prevalence and distribution of these programs and policies are discussed in this chapter.

## Graduation Requirements: Background

In 1993-94, about three-quarters ( 76 percent) of the school districts in the country granted regular high school diplomas. These districts comprised almost all ( 99 percent) of the districts serving twelfth grade students. Nearly all ( 99.98 percent) of these diploma-granting districts required that students in the class of 1994 receive a specified amount of instruction in either English, mathematics, computer science, social science, physical or biological science, or a foreign language. In nearly all ( 99 percent) of these districts, these requirements reflected a 4-year program.

The publication of A $N$ ation at Risk in 1983 served as a stimulus for educational reform. A mong the recommendations made by the $N$ ational Commission on Excellence in Education, the authors of $A N$ ation at Risk, was that state and local education agencies require their students to take 4 years of English and 3 years each of mathematics, social studies, and science to graduate from high school. For purposes of presentation, these subject areas are referred to as core subjects.

District policies concerning high school graduation requirements are frequently linked to state policies. The state education agency requirements typically represent minimum standards, in that districts may specify more stringent criteria. ${ }^{20}$ In 1993-94, over 99 percent

[^16]of the $N$ ation's school districts had graduation requirements for each of the core subjects (table 6.1).

Table 6.1-Proportions of 4-year high school diploma-granting districts with graduation requirements, by subject areas: 1993-94

| English | M athematics | Social <br> Studies | Physical/B iological <br> Sciences | Computer <br> Science | Foreign <br> Language |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $99.8 \%$ | $99.7 \%$ | $99.5 \%$ | $99.2 \%$ | $36.5 \%$ | $17.6 \%$ |

SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

For noncore subjects such as computer science and foreign language, both state and local education agencies typically did not specify graduation requirements ${ }^{21}$. In 1993-94, only 37 percent of 4 -year high school diploma-granting districts had graduation requirements in computer science; only 18 percent, in foreign language (table 6.1). The prevalence of district high school graduation requirements (in districts that offer regular diplomas and 4-year high school programs) in both core and noncore subject areas and how they have changed from 1990-91 to 1993-94 are discussed below. A ssociations between district characteristics and different graduation requirements are also reviewed.

Some districts also specify community service graduation requirements. The prevalence of districts with this requirement in 1993-94 and the characteristics of districts more likely to have this requirement are also summarized.

## District Graduation Requirements in Core Subject Areas

In comparison with 1990-91, district graduation requirements in core subject areas in 199394 were more stringent. The numbers of years of instruction required in English increased from 3.8 to 3.9; in mathematics, from 2.4 to 2.5; in social sciences, from 2.9 to 3.0 ; and in physical/biological sciences, from 2.1 to 2.2 (figure 6.1). The combined graduation requirements in English, mathematics, social sciences, physical/biological sciences, computer science, and foreign language also increased, from 11.8 to 12.1 (appendix A , table 33).

G raduation requirements have been strongly associated with the region (and state) in which a district is located (table 6.2 and appendix A , tables 33-37). By 1993-94, most ( 85 percent) diploma-granting districts in the country required 4 years of high school English for graduation. On average, the typical districts in the $N$ ortheast and South required 4.0 years of English; the typical district in the W est, 3.9 years. H owever, the graduation requirements in English for districts in the M idwest were only 3.7 years.

[^17]Figure 6.1-Average high school graduation requirements (in years) in core subjects in diploma-granting districts with 4-year programs: 1990-91 and 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table 6.2-District high school graduation requirements, by region: 1993-94

|  |  | Region |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | M idwest | N ortheast | South | W est |
| English (in years) | 3.7 | 4.0 | 4.0 | 3.9 |
| M athematics (in years) | 2.3 | 2.7 | 2.8 | 2.3 |
| Social Science (in years) | 2.8 | 3.3 | 2.8 | 3.1 |
| Physical/Biological Science (years) | 2.0 | 2.3 | 2.4 | 2.1 |


| C omputer Science (\% requiring) | $37 \%$ | $32 \%$ | $39 \%$ | $36 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| Foreign Language (\% requiring) | $6 \%$ | $29 \%$ | $22 \%$ | $24 \%$ |
| C ommunity Service (\% requiring) | $3 \%$ | $6 \%$ | $2 \%$ | $4 \%$ |

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Districts in the M idwest also had the least stringent graduation requirements in physical/ biological sciences ( 2.0 years) lower, on average, than districts in any other region (whose requirements ranged from 2.1 to 2.4 years). Their graduation requirements in mathematics ( 2.3 years) were lower than districts in the South ( 2.8 years) and $N$ ortheast ( 2.7 years) and comparable with those in the W est ( 2.3 years). Similarly, graduation requirements in the $M$ idwest in social science ( 2.8 years) were lower than districts in the N ortheast ( 3.3 years) and $W$ est ( 3.1 years), and were comparable with those in the South ( 2.8 years).

## District Graduation Requirements in Other (Noncore) Areas

In the 1993-94 school year, about one-sixth (18 percent) of the nation's public school districts had a foreign language high school graduation requirement; about one-third ( 36 percent), a computer science requirement (figure 6.2). A bout 3 percent of the school districts al so specified a community service requirement for high school graduation.

Figure 6.2-Percentage of 4-year high school diploma-granting districts with graduation requirements in noncore subject areas: 1990-91 and 1993-94


NOTE: C ommunity Service graduation requirements were not assessed in 1990-91.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

## Computer Science Graduation Requirements

The proportions of districts in the M idwest with high school graduation requirements in computer science were similar to those of districts in other regions. In 1993-94, the proportion of districts with computer science graduation requirements in the country's different regions ranged from 31 to 39 percent, with districts in the M idwest at the upper end of the range ( 37 percent) (appendix A , table 38).

Proportionately more districts had computer science graduation requirements in 1993-94 (37 percent) than in 1990-91 (33 percent). H owever, this trend did not characterize all types of districts. In contrast to 1990-91, the proportion of large school districts (i.e., with 10,000 or more students) in 1993-94 with high school graduation requirements in computer science was lower than in 1990-91 ( 26 percent versus 20 percent) (figure 6.3).

Figure 6.3-Percentage of 4-year high school diploma-granting districts with graduation requirements in computer science, by district size: 1990-91 and 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (Teacher Demand and Shortage Q uestionnaire).

The decline in the proportion of school districts with computer science graduation requirements was most pronounced in school districts in the South in urban areas inside central cities (appendix A, table 38). In 1993-94, the proportion of these districts with computer science graduation requirements ( 21 percent) was about half the proportion in 1990-91 (40 percent). Some of these central city districts in the South dropped their computer science requirements since they wished to have the same requirements as their state education agency. In other words, since their state did not have an explicit computer science graduation requirement, they decided not to require computer science instruction for graduation. Other districts which dropped computer science gradation requirements indicated that computer technology was so well-integrated with other course work that a separate requirement was no longer felt to be necessary.

By 1993-94, more than twice as many small districts (46 percent) required their students to earn computer science credits to graduate than did large districts ( 20 percent) (figure 6.3). A nalogously, in 1993-94, the proportion of nonurban districts with computer science graduation requirements ( 41 percent) was about 50 percent higher than the proportion of districts in urban areas inside central cities ( 28 percent) (table 6.3 and appendix A, table 38).

Table 6.3-Percentage of districts with high school graduation requirements in computer science, by metropolitan status: 1990-91 to 1993-94

|  | School Year |  |
| :---: | :---: | :---: |
|  | $\begin{gathered} \text { 1990-91 } \\ \text { \% D istricts } \end{gathered}$ | $\begin{gathered} \text { 1993-94 } \\ \text { \% D istricts } \end{gathered}$ |
| TOTAL | 33.0 | 36.5 |
| M etro Status |  |  |
| U rban-inside central city | 30.5 | 28.1 |
| U rban-outside central city | 27.5 | 30.2 |
| N onurban area | 36.4 | 41.3 |

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Q uestionnaires).

## Foreign Language Graduation Requirements Language Graduation Requirements

The overall proportion of districts with graduation requirements in a foreign language was approximately the same in both 1993-94 (18 percent) and 1990-91 (19 percent) (figure 6.2). H owever, in 1993-94, fewer school districts with fewer than 10 percent minority students had a foreign language graduation requirement ( 13 percent) than in 1990-91 (17 percent) (appendix A , table 39).

In 1993-94, very few districts in the M idwest (only 6 percent) had foreign language high school graduation requirements (table 6.2). The proportion of districts in the M idwest with this requirement was much less than in any other region: less than one-third the proportions in the South ( 22 percent), W est ( 24 percent), or N ortheast ( 29 percent). Furthermore, in the M idwest, the proportion of districts with this requirement was significantly lower than it was in 1990-91 (10 percent) (appendix A , table 39). In other regions, the proportions of districts with foreign Ianguage graduation requirements were about the same in both 1990-91 and 1993-94.

A lthough about one-sixth of the nation's school districts had a foreign language high school graduation requirement in 1993-94, almost half (45 percent) of districts in urban areas inside central cities in the W est had a foreign language graduation requirement (figure 6.4). This percentage is more than double the proportions in other districts in urban areas inside central cities, and more than five times the proportion characterizing central city school districts in the M idwest. The proportion of central cities in the W est with foreign language graduation requirements was significantly higher than it was in 1990-91, when it was only 30 percent.

Districts with larger proportions of minority enrollment were more likely to have a foreign language requirement than districts with smaller proportions. In 1993-94, the proportion of predominantly minority districts with a foreign language graduation requirement ( 29 percent) was higher than the proportion in districts with moderate ( 10 percent to less than 50 percent) proportions of minority students ( 22 percent) (appendix A , table 39). It was also more than double the proportion of districts that had fewer than 10 percent minority students (13 percent).

Figure 6.4-Percentage of urban-inside central city, 4-year high school diplomagranting districts with foreign language graduation requirements, by region: 1990-91 and 1993-94


SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire)

## National Programs: Background

The federal government allocated $\$ 67.7$ billion in fiscal year (FY) 1993 for education programs. The largest proportion of these funds ( $\$ 30.5$ billion, or 45 percent) were allocated by the U.S. Department of Education. Substantial amounts (in excess of $\$ 1$ billion) were also allocated by the Departments of $H$ ealth and $H$ uman Services ( $\$ 10.9$ billion), A griculture ( $\$ 8.1$ billion), Labor ( $\$ 4.2$ billion), Defense ( $\$ 4.0$ billion), Energy ( $\$ 2.8$ billion), and V eterans A ffairs ( $\$ 1.1$ billion). The $N$ ational Science Foundation allocated $\$ 2.1$ billion; the N ational A eronautics and Space A dministration, $\$ 1.4$ billion (U.S. Department of Education 1994).

These funds enabled school districts to offer many different programs designed to benefit poorer students or younger (i.e., prekindergarten) children. Some of the largest of these programs were the N ational School Lunch program, C hapter 1 programs for disadvantaged students, and a variety of prekindergarten programs (supported through H ead Start, C hapter 1 , and other sources).

## National School Lunch Program

The N ational School Lunch program began in 1946 with the passage of Public Law 79-396, the $N$ ational School Lunch Act. Through this law, Department of A griculture funds were
provided to states to help support their school lunch programs. In 1993-94, $\$ 4.1$ billion was allocated for this program. Eligibility for participation is based on economic criteria. For this reason, in many different research studies, the proportion of students eligible for participation in this program has been used as an indicator of district poverty.

In 1993-94, 93 percent of the school districts in the country reported they had at least one student eligible for participation in the N ational School Lunch program (figure 6.5). N early all (98 percent) of the districts with eligible students reported that some students in their district received free or reduced-price lunches through the program. A bout 41 percent of the public school students (kindergarten or higher grades) in the nation were approved for participation in this program, and 31 percent actually received free or reduced-price lunches in 1993-94 (appendix A , table 43). ${ }^{22}$

Figure 6.5-Percentage of school districts with students eligible for participation in the National School Lunch program, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

In 1993-94, there were students eligible for participation in nearly all ( 98 percent) districts in the South (figure 6.5). Proportionally more districts in the South had students eligible for participation than any other region.

[^18]Districts with at least one student eligible for participation in the $N$ ational School Lunch program were more likely to have larger enrollments (i.e., 99 percent of the districts with enrollments over 10,000 students and 98 percent of the districts with enrollments between 1,000 and 9,999 students) than districts serving fewer than 1,000 students ( 88 percent). From a common sense perspective, the larger the district, the more likely it will have at least one student eligible for participation. So, the relationships between other direct characteristics and the proportions of districts with eligible students may reflect relationships with en rollment size. For example, proportionally more urban districts (districts in urban areas inside central cities: 96 percent; districts in urban areas outside central cities: 95 percent) than nonurban districts ( 90 percent) reported having eligible students.

In addition, districts with higher proportions of minority students (10 percent or more) and districts with minority teachers were more likely to have eligible students than districts with less than 10 percent minority student enrollments and districts with no minority teachers. There was at least one eligible student in 96 percent of the districts where minority students comprised at least 10 percent of the population. Of the districts with less than 10 percent minority students, 91 percent reported students eligible for participation. A nalogously, 95 to 96 percent of the districts with minority teachers reported at least one eligible student. In districts with no minority teachers, 89 percent reported students eligible for the N ational School Lunch program.

## Chapter 1 Programs

In 1965, the Elementary and Secondary Education A ct (Public Law 89-10) authorized grants for school programs for children of low-income families through the Title 1 program. The Education C onsolidation and Improvement A ct of 1981 (Public Law 97-35) consolidated 42 federally supported programs into 7 , and reauthorized the Title 1 program as the C hapter 1 program. The A ugustus F. Hawkins-R obert T. Stafford Elementary and Secondary School Improvement A mendments of 1988 (Public Law 100-297) reauthorized this program. M ore recently, through the Improving A merica's Schools A ct (Public Law 103-382), C hapter 1 was reauthorized as the Title 1 program. Chapter 1 programs are explicitly intended to break the link between poverty and low student achievement, especially in areas characterized by high concentrations of poverty (U.S. Department of Education 1994, p. 356). These programs provide educational services, such as remedial math and reading, to children in areas with high concentrations of low-income families. In FY 1993-94, a total of $\$ 6.8$ billion was allocated through C hapter 1 programs.

Chapter 1, like the $N$ ational School Lunch program, is a program that benefits nearly all of the nation's school districts. A bout 92 percent of districts provided students with C hapter 1 services in 1993-94, serving 5,954,190 students (appendix A , table 41). In 1993-94, C hapter 1 services were provided in proportionally more school districts in the South (97 percent than in the M idwest or W est (88 percent) (figure 6.6). The proportion of districts providing Chapter 1 services in the N ortheast ( 95 percent) was comparable to the proportion of districts in the South.

Since $C$ hapter 1 is intended to serve children in high-poverty areas, it is not surprising that the types of districts most likely to provide C hapter 1 services were generally those most likely to serve children eligible for participation in the $N$ ational School Lunch program. Like the $N$ ational School Lunch program, proportionally more of the districts with student
enrollments greater than 1,000 (98 to 99 percent) had children receiving C hapter 1 services than districts with enrollments of fewer than 1,000 students ( 86 percent). A nd, like the National School Lunch program, proportionally more central city districts ( 95 percent) than nonurban districts ( 89 percent) received these services.

Figure 6.6-Percentage of school districts with students receiving Chapter 1 services, by selected district characteristics: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Similarly, greater proportions of districts that served predominantly minority students and districts with the highest concentrations of minority teachers reported that their students received Chapter 1 services than did districts with fewer than 10 percent minority students and districts with no minority teachers. A bout 97 percent of the districts in which minority students made up at least half the student population reported that at least some of their students received C hapter 1 services. In 94 percent of the districts where the student minority composition ranged from 10 percent minority to less than 50 percent students received Chapter 1 services, and in districts with fewer than 10 percent minority students, 90 percent reported that at least one of their students received C hapter 1 services. In districts with minority teachers, 95 to 96 percent reported students receiving these services; 87 percent of the districts without minority teachers had students receiving Chapter 1 services.

## Prekindergarten Programs

In 1993-94, 64 percent of the nation's school districts offered programs during the school day for prekindergarten children (table 6.4). Some of these programs (like C hapter 1 prekindergarten programs and the H ead Start program), but not all, were funded by the federal government.

Table 6.4-Percentage of school districts with various types of programs for prekindergarten-age children, by selected district characteristics: 1993-94

| District <br> Characteristic | T ype of Prekindergarten Programs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H ead Start | C hapter 1 | Day <br> C are | Special Education | $G$ eneral | t least one type o Prekindergarten Program |
| TOTAL ${ }^{\text {a }}$ | 24.3 | 8.4 | 14.5 | 44.9 | 25.1 | 64.1 |
| D istrict Size |  |  |  |  |  |  |
| U nder 1,000 | 15.9 | 4.4 | 8.4 | 31.3 | 20.8 | 51.4 |
| 1,000 to 9,999 | 31.8 | 10.8 | 18.9 | 57.3 | 28.0 | 75.8 |
| 10,000 or more | 44.8 | 29.7 | 39.3 | 74.2 | 43.8 | 90.9 |
| M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| Under 10\% | 22.3 | 6.2 | 11.7 | 42.4 | 22.1 | 59.3 |
| 10\% to under 50\% | 24.3 | 10.8 | 19.0 | 48.4 | 28.7 | 69.5 |
| 50\% or more | 35.7 | 14.6 | 18.5 | 48.9 | 32.5 | 76.8 |
| M inority T eachers |  |  |  |  |  |  |
| $N$ one | 19.9 | 5.7 | 8.6 | 38.6 | 22.1 | 55.9 |
| M ore than 0\% to under 20\% | 26.4 | 9.9 | 19.9 | 50.7 | 26.6 | 70.4 |
| 20\% or more | 41.9 | 18.6 | 22.3 | 52.2 | 36.4 | 81.1 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 35.9 | 26.3 | 33.2 | 63.7 | 38.1 | 84.0 |
| U rban-outside central city | 20.3 | 6.4 | 17.5 | 45.5 | 25.1 | 63.5 |
| N onurban area | 26.4 | 8.7 | 11.2 | 43.2 | 24.2 | 63.2 |
| R egion |  |  |  |  |  |  |
| N ortheast | 16.3 | 8.1 | 12.5 | 36.5 | 19.5 | 54.1 |
| M idwest | 25.7 | 7.7 | 13.5 | 51.9 | 28.3 | 68.4 |
| South | 33.1 | 14.3 | 14.6 | 46.4 | 35.2 | 75.2 |
| W est | 20.1 | 3.7 | 18.7 | 38.5 | 13.4 | 53.8 |

(a) Totals sum to more than 100 percent since districts could provide more than one program.
(b) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Larger districts were more likely to offer prekindergarten programs than smaller districts. A bout 91 percent of districts with enrollments of 10,000 or more students offered these programs, in contrast to about three-quarters ( 76 percent) of districts enrolling between 1,000 and 9,999 students and about half ( 51 percent) of districts enrolling fewer than 1,000 students. Districts in the South ( 75 percent) were more likely to offer prekindergarten programs than districts in any other region.

Districts in the M idwest ( 68 percent) were more likely to provide these programs than districts in the N ortheast or W est ( 54 percent).

In 1993-94, 84 percent of urban areas inside central city school districts offered prekindergarten programs in 1993-94, compared with 63 percent of other districts. Prekindergarten programs were least likely to be offered in districts with fewer than 10 percent minority students ( 59 percent): 70 percent of the districts with student minority compositions ranging from 10 percent to under 50 percent and 77 percent of the districts with student minority compositions of 50 percent or greater offered these programs. Prekindergarten programs were offered in 56 percent of districts with no minority teachers; 70 percent of the districts with some, but fewer than 20 percent minority teachers, and 81 percent of the districts with at least 20 percent minority teachers.

## Head Start Programs

Head Start is a federally funded program that is intended to assist in the provision of developmental services for low-income, pre-school children aged 3 to 5 . These programs, supported by the U.S. Department of H ealth and H uman Services, focus on education, social and emotional development, physical and mental health, and nutrition. H ead Start also provides social services for families. In FY 1993, $\$ 2.7$ billion was allocated for this program, which served 713,943 students. ${ }^{23}$

A bout one-quarter (24 percent) of the school districts in the country offered H ead Start programs in 1993-94 (table 6.4). Proportionally more districts in the South (33 percent) offered these programs than in other regions. In addition, the larger the district, the more likely it was to offer H ead Start prekindergarten programs: H ead Start programs were available in 44 percent of the districts with enrollments of 10,000 or more; available in 32 percent of the districts with enrollments between 1,000 and 9,999 students; and available in 16 percent of districts with enrollments of less than 1,000 students. A bout 36 percent of districts in urban areas inside central cities offered these programs for prekindergarten children-a greater prevalence than in nonurban districts ( 26 percent). Both of these kinds of districts were more likely to offer H ead Start programs than urban areas outside central city (20 percent).

Head Start prekindergarten programs were more likely to be offered in districts in which minority students made up 50 percent or more of the student population ( 36 percent) than in districts in which minority students made up less than 10 percent of the student population ( 22 percent), and were more likely to be offered in districts where minority teachers made up 20 percent or more of the teaching staff than in districts with lower proportions of minority teachers. A bout one-third ( 36 percent) of the districts in which the proportion of minority students exceeded 50 percent offered $H$ ead Start prekindergarten programs, whereas only 22 to 24 percent of the districts with proportionately fewer minority students (from 10 percent to under 50 percent or under 10 percent minority enrollment) had H ead Start prekindergarten programs. A bout 42 percent of the districts in which minority teachers comprised at least 20 percent of the teaching staff offered these programs, in contrast to 26 percent of the districts with some but fewer than 20 percent minority teachers. Both of these proportions were larger than in districts with no minority teachers ( 20 percent).

[^19]
## Chapter 1 Prekindergarten Programs

A bout 8 percent of the school districts in the nation offered Chapter 1 prekindergarten programs in 1993-94 (table 6.4). Like programs funded by H ead Start, proportionally more districts in the South ( 14 percent) provided these programs than districts in other regions. Districts in the W est were least likely to offer these programs-only 4 percent provided them-compared with 8 percent of the districts in the $N$ ortheast and M idwest. A lso, like H ead Start programs, the larger the district, the more likely it was to offer C hapter 1 prekindergarten programs. They were most likely to be provided in districts with enrollments of 10,000 or more ( 30 percent); were less likely to be provided in districts with enrollments between 1,000 and 9,999 students ( 11 percent); and were least likely to be offered in districts with enrollments of fewer than 1,000 students ( 4 percent). Similar to H ead Start programs, C hapter 1 programs were also more likely to be offered in districts in urban areas inside central cities ( 26 percent); next most likely to be provided in nonurban districts ( 9 percent), and least likely to be provided in districts in urban areas outside central cities ( 6 percent).

C hapter 1 prekindergarten programs were also offered more in districts with the highest concentrations of minority students and teachers than in districts with lower proportions of minority students and teachers. For example, about 15 percent of the districts where the proportion of minority students exceeded 50 percent offered C hapter 1 prekindergarten programs; 11 percent of the districts with minority student compositions of between 10 percent to under 50 percent and only 6 percent of the districts with fewer than 10 percent minority students provided C hapter 1 prekindergarten programs. A bout 19 percent of the districts with the highest concentrations of minority teachers (i.e., at least 20 percent of the teaching staff) offered these programs, in contrast to 10 percent of the districts with some but fewer than 20 percent minority teachers. The lowest proportion of districts ( 6 percent) in which these programs were offered were those in which there were no minority teachers.

## Other Prekindergarten Programs

Day care programs, prekindergarten special education programs, and other general prekindergarten programs, either administered by the district or by an outside agency, were offered by 15 percent, 45 percent, and 25 percent, respectively, of the nation's school districts in 1993-94 (table 6.4). These programs are supported through a variety of funding sources, including federal, state, local, and private agencies.

Day care programs were as likely to be offered by school districts in the South ( 15 percent) as in any other region. In the N ortheast, 13 percent of the districts offered day care programs; in the M idwest, 14 percent; and in the W est, 19 percent. However, prekindergarten special education programs were more likely to be offered in school districts in the M idwest (52 percent) and South (46 percent) than in Northeast (37 percent) districts. They were also more prevalent in districts in the M idwest (52 percent) than in districts in the W est (39 percent) districts. General prekindergarten programs were more likely to be provided in districts in the South ( 35 percent) than in districts in the $N$ ortheast ( 20 percent), or in the W est (13 percent). A bout 28 percent of the districts in the M idwest offered general prekindergarten programs. This level is comparable to those found in districts in the South or N ortheast.

The probability of a district providing any of the other prekindergarten programs (i.e., day care, special education, or other general programs) was related to the district's size. Each of these kinds of prekindergarten programs was most likely to be provided in districts with enrollments of 10,000 or more; less likely to be provided in districts with enrollments between 1,000 and 9,999 students; and least likely to be offered in districts with enrollments of fewer than 1,000 students. Similarly, their prevalence was greater in districts in urban areas inside central cities than in either districts in urban areas outside central cities or nonurban districts.

All of these other prekindergarten programs were more likely to be in districts with the highest concentrations of minority teachers ( 20 percent or more) than in districts with no minority teachers.

## State and Local Reforms

State education agencies and school districts have implemented a variety of programs and policies that are commonly referred to as education reforms. These reforms include requiring districts to release standardized student test results to the general public; instituting "choice" programs, which allow students to enroll in schools outside of their attendance zone; and establishing written policies about discipline and student use of drugs, alcohol, and tobacco.

## Student Test-Performance Reporting Policies

Test-performance reporting policies prescribe the reporting and dissemination of information about student test performance on standardized tests. A bout five-sixths ( 84 percent) of the nation's school districts reported that they disseminated student test scores to the general public in 1993-94.

Test-performance reporting to the general public was more prevalent in the South, where 92 percent of the districts did so, than in the M idwest ( 81 percent), the $W$ est ( 82 percent), or the $N$ ortheast ( 85 percent) (figure 6.7). In spite of the fact that 17 states did not explicitly require reporting to the public, only two states had proportions of fewer than 65 percent of districts reporting results to the general public: N orth Dakota ( 38 percent) and M ontana ( 39 percent) (appendix A , table 61).

Test-score reporting was more prevalent in the largest districts (i.e., those with enrollments of 10,000 students or more); about 95 percent of these districts disseminated test scores to the general public (figure 6.7). Of the districts that served between 1,000 and 9,999 students, 92 percent had similar dissemination practices. The rates of test-performance reporting in both of these types of districts were greater than the 77 percent rate characteristic of districts serving fewer than 1,000 students.

Figure 6.7-Percentage of districts with a student test-performance reporting policy, by selected district characteristics: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Districts in urban areas outside central cities were more likely to report test scores than districts in nonurban areas. A bout 90 percent of these urban districts reported student test performance, while 80 percent of nonurban districts reported dissemination of testperformance results to the general public. A bout 84 percent of districts in central cities reported test scores.

Districts whose student racial composition was between 10 percent and 50 percent minority or was at least 50 percent minority were more likely to report student test performance to the general public than districts with fewer than 10 percent minority students ( 91 percent and 87 percent versus 81 percent, respectively). Similarly, districts with some but fewer than 20 percent minority teachers ( 91 percent) or than districts with 20 percent or more minority teachers ( 88 percent) were more likely to report test results to the general public than districts with no minority teachers ( 78 percent).

## Choice Programs

There are two broad classes of public school choice programs: intradistrict choice (i.e., within-district open enrollment), in which students may enroll in any school in their districts, and interdistrict choice (i.e., between-district transfers), in which students may en roll in other districts or districts can accept students from any district in the state (subject to availability and space requirements). M agnet school programs, in which schools offer distinctive curricula or instructional approaches to attract students for desegregation purposes, can be offered independently of or integrated with a district's intradistrict or interdistrict
choice programs. ${ }^{24}$ In 1993-94, about one-third ( 34 percent) of the school districts in the country offered some kind of choice program (table 6.5)

Table 6.5-Percentage of districts with choice programs by type of choice program, by selected district characteristics: 1993-94

| DistrictCharacteristic Any | A ny Choice Program | Magnet School | Within District Open | Interdistrict Choice |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Transfers 0 utside of District of District | Transfers into District |
| TOTAL | 34.1 | 7.8 | 13.8 | 28.5 | 25.6 |
| District Size |  |  |  |  |  |
| U nder 1,000 | 35.5 | 5.9 | 8.7 | 32.0 | 26.3 |
| 1,000 to 9,999 | 31.2 | 7.3 | 17.3 | 24.1 | 23.8 |
| 10,000 or more | 47.4 | 33.0 | 36.1 | 32.7 | 34.6 |
| Minority Students ${ }^{\text {a }}$ |  |  |  |  |  |
| Under 10\% | 36.3 | 6.7 | 12.6 | 30.9 | 27.3 |
| 10\% to under 50\% | 32.7 | 8.3 | 16.2 | 26.7 | 24.2 |
| 50\% or more | 27.1 | 12.8 | 14.3 | 20.7 | 20.6 |
| Minority T eachers |  |  |  |  |  |
| N one | 36.0 | 6.3 | 10.0 | 31.4 | 6.6 |
| M ore than 0\% to under 20\% | \% 32.6 | 8.6 | 17.6 | 26.2 | 24.8 |
| 20\% or more | 30.8 | 13.6 | 16.4 | 22.8 | 23.5 |
| M etro Status |  |  |  |  |  |
| U rban-inside central city | 42.6 | 24.3 | 29.3 | 26.2 | 28.2 |
| U rban-outside central city | 27.8 | 7.6 | 15.4 | 22.1 | 19.6 |
| $N$ onurban area | 38.1 | 6.9 | 11.7 | 33.2 | 29.7 |
| Region |  |  |  |  |  |
| N ortheast | 13.3 | 4.2 | 5.5 | 9.6 | 8.5 |
| M idwest | 41.6 | 7.7 | 15.0 | 34.6 | 29.7 |
| South | 29.5 | 7.7 | 10.4 | 24.0 | 23.8 |
| W est | 47.1 | 12.1 | 24.0 | 41.7 | 37.6 |

(a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

[^20]The most prevalent kinds of choice programs ( with respect to the numbers of districts offering choice programs) were interdistrict choice programs, in which districts permitted students to transfer to schools outside of their district or accepted transfers of students into their district. In 1993-94, 29 percent of the districts permitted outward transfers and 26 percent of the nation's school districts permitted students to transfer into their districts from other districts (table 6.5 and figure 6.8). The next most prevalent kind of choice programs were within-district open enrollment programs (intradistrict choice). These programs were offered by 14 percent of the county's school districts. M agnet schools, as choice programs, were offered in 8 percent of the county's school districts. ${ }^{25}$

Figure 6.8-Percentage of districts with choice programs, by type of choice program: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

The prevalence of choice program offerings is not an indicator of the numbers of students participating in these different types of programs. M any fewer students participated in interdistrict choice programs, the most prevalent program, than participated in either open

[^21]enrollment or magnet programs. ${ }^{26}$ It should also be remembered that choice programs must operate under capacity constraints. The capacity of a popular school to enroll students is limited. Even with choice programs, it is not possible for every student to enroll in his or her first choice of schools.

## Within-District Open Enrollment Programs

W ithin-district choice programs are viable options only in districts that have two or more schools serving students at a particular grade level. In other words, if there is only an elementary school, a middle school, and a high school in a district, there is no possibility of within district choice-students must go to the only school appropriate for their grade level. If there is only a single school in a district, within-district choice is a meaningless concept. However, between-district choice is an option for these small districts.

Districts with enrollments of 10,000 or more ( 36 percent) were much more likely to offer within-district open enrollment programs than in districts with enrollments between 1,000 and 9,999 (17 percent). Districts with fewer than 1,000 students were the least likely to offer this kind of choice program: only 9 percent of the districts offered this option (table 6.5). ${ }^{27}$

These programs were also characteristic of central city school districts. The prevalence of within-district open enrollment programs was highest in the districts in urban areas inside central cities ( 29 percent). Their prevalence in districts in urban areas outside central cities (15 percent) was comparable to their prevalence in nonurban districts (12 percent) (figure 6.9).

[^22]Figure 6.9-Percentage of districts with within-district open enrollment programs, by metropolitan status: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Proportionally fewer school districts in the $N$ ortheast ( 6 percent) offered these kinds of programs in 1993-94 than districts in the South (10 percent), M idwest ( 15 percent), or W est (24 percent) (figure 6.10).

Figure 6.10-Percentage of districts with within-district open enrollment programs, by region: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

## Magnet School Programs

The prevalence and distribution of magnet programs were similar to these patterns of withindistrict open enrollment programs. Proportionally fewer school districts in the N ortheast (4 percent) offered these kinds of programs in 1993-94 than districts in W est (12 percent), (figure 6.11). Eight percent of the districts in the South and M idwest offered magnet choice programs.

Figure 6.11—Percentage of districts with magnet schools, by region: 1993-94


SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

M agnet school programs were most prevalent in districts with enrollments of 10,000 or more (33 percent). Comparable proportions of districts with enrollments between 1,000 and 9,999 ( 7 percent), and districts with fewer than 1,000 students ( 6 percent) offered magnet programs (table 6.5). ${ }^{28}$ Similarly, the prevalence of magnet school programs was highest in districts in urban areas inside central cities ( 24 percent). C omparable proportions of districts in urban areas outside central cities ( 8 percent) and nonurban districts ( 7 percent) offered magnet programs (figure 6.12).

[^23]Figure 6.12-Percentage of districts with magnet schools, by metropolitan status: 1993-94


SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

M agnet school program prevalence was associated with the proportions of minority students and minority teachers in a district. Their prevalence was highest in districts with 50 percent or more minority students-with 13 percent of these districts offering magnet programs (table 6.5). This was greater than the prevalence in districts that were between 10 percent and 50 percent minority ( 8 percent) or in districts that had fewer than 10 percent minority students ( 7 percent). Likewise, magnet program prevalence rates ( 14 percent) were highest in districts where at least 20 percent of the teachers were minority. O nly 9 percent of the districts that had some, but fewer than 20 percent minority teachers, and 6 percent of the districts that had no minority teachers offered magnet programs.

## Between-District Transfer Programs

W hile 8 percent of the nation's school districts offered magnet school programs in 1993-94 and 14 percent offered within-district open enrollment programs, 29 percent of the districts allowed their students to enroll in other districts, and 26 percent permitted other students to enroll in their districts (table 6.5).

Interdistrict choice programs were most prevalent in districts in the W est (transferring out, in 42 percent of the districts; transferring in, 38 percent of the districts) and in the M idwest ( 35 percent permitting transferring out and 30 percent, transferring in). The proportion of districts offering an interdistrict transfer program in these regions was greater than the proportions offering these programs in the South ( 24 percent permitting transferring out; 24 percent, transferring in). Interdistrict choice programs were less likely to be offered by school
districts in the N ortheast ( 10 percent allowing transferring out and 9 percent allowing transferring in) than in any other region.

## Written District Policies about Student Discipline and Alcohol, Drug, and Tobacco Use

In 1993-94, nearly all (99 percent) of the nation's school districts had written policies about general student discipline, alcohol use, and drug use (appendix A, table 46). N early all (98 percent) also had written policies about tobacco use. These written policies undoubtedly differed. However, since only their prevalence was assessed in the Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire), comparisons with respect to policy content or intensity are not possible.

## Chapter 7 <br> Future R esearch Directions

This report provides descriptive summaries of the characteristics of school districts. For comparative purposes, districts were categorized with respect to general demographic features: their size (enrollment), the racial composition of their student body, the racial composition of their faculty, the region of the country in which they are located, and their metropolitan status. This permitted associations between district demographic features and the factors measured in the SA SS T eacher Demand and Shortage Q uestionnaires to be noted and reported. W henever possible, school district characteristics in 1987-88, 1990-91, and 199394 were compared.

M any significant relationships are noted. These relationships can lead to innumerable hypotheses about their causes, their impacts, and their possible persistence. Such hypotheses can be investigated in other studies. W e hope this descriptive report will stimulate further investigations.

Through use of common identifiers, it is possible to link data from the Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Q uestionnaire) with other NCES data collections. W ithin the Schools and Staffing Surveys (SA SS), information about a district's characteristics, as measured in the T eacher Demand and Shortage Questionnaire, can easily be linked with data about the districts' schools, principals, and teachers, as measured in other SA SS instruments. Linkages are also possible with other data sources, including 1990 C ensus data, which can be analyzed in the context of school districts and their characteristics. For example, these C ensus data can be used to categorize districts according to the proportion of their children who are living in poverty, enabling comparisons of the characteristics of high- and low-poverty school districts.

Even without additional data sources, there are many opportunities to use these data to address a variety of issues. For example, the T eacher Demand and Shortage Q uestionnaires provide information about the racial composition of both a district's students and its faculty. In 1993-94, districts with high concentrations of minority students were more likely to have high proportions of minority faculty than other districts. W ere these districts more likely to be found in certain states or regions? W ere they more likely to be large or small districts? In central cities or elsewhere? In large districts or in small? W hat would these relationships be like for H ispanic students and H ispanic teachers? For N ative A merican students and N ative A merican teachers?

W hen relationships between several different district demographic features and certain outcomes were observed, with which specific district demographic factor are they most strongly associated? Since there were significant associations between all of these demographic features (i.e., central city districts tend to be larger than other districts; Iarger
districts tend to have higher proportions of minority students and teachers than other types of districts), it is not clear with which of these factors a particular characteristic is most strongly associated. For example, in 1993-94, districts with over 10,000 students, districts in which 50 percent or more of the students were minorities, districts in which 20 percent or more of the staff were minorities, and central city school districts were more likely to offer pay incentives to recruit or retain teachers and to offer free training to prepare staff members to teach in fields of shortage. M ultivariate analyses can be employed to identify the factor(s) with which these incentives are most strongly associated, independent of other district characteristics, and to investigate other factors that might be compelling these districts to offer incentives.

Descriptive analyses do not explain why certain relationships are observed. For example, the general associations between higher scheduled salaries and the presence of collective bargaining units in nearly all kinds of districts in 1993-94 is worthy of further investigation. These findings are only suggestive and cannot be used to demonstrate causality.

M ultivariate analyses, to allow control for relationships among the district characteristics reported upon, can be conducted to inform about the importance of specific district characteristics. These analyses could also include data from external sources, to permit tests of hypotheses about associations with other factors of interest.

The reader is encouraged to refer to the Technical $N$ otes to learn more about how to obtain and use SA SS data.

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## A ppendix A <br> T ables of E stimates

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## Section 1

Selected D istrict C haracteristics' T ables

Table A-1. Number and percentage of school districts, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | N umber | Percent | Number | Percent |
| TOTAL | 15,244 | 100.0 | 15,512 | 100.0 | 14,987 | 100.0 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 7,953 | 52.2 | 8,430 | 54.3 | 7,626 | 50.9 |
| 1,000 to 9,999 | 6,654 | 43.7 | 6,405 | 41.3 | 6,652 | 44.4 |
| 10,000 or more | 637 | 4.2 | 678 | 4.4 | 708 | 4.7 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 9,862 | 65.0 | 10,008 | 64.6 | 9,047 | 60.6 |
| 10\% to under 50\% | 3,390 | 22.4 | 3,947 | 25.5 | 4,283 | 28.7 |
| 50\% or more | 1,910 | 12.6 | 1,528 | 9.9 | 1,611 | 10.8 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 7,855 | 51.5 | 7,962 | 51.3 | 7,295 | 48.7 |
| M ore than 0\% to under 20\% | 6,015 | 39.5 | 6,382 | 41.1 | 6,653 | 44.4 |
| 20\% or more | 1,373 | 9.0 | 1,168 | 7.5 | 1,039 | 6.9 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 684 | 4.4 | 561 | 3.7 |
| U rban-outside central city | - | - | 5,830 | 37.6 | 6,003 | 40.1 |
| Nonurban area | - | - | 8,998 | 58.0 | 8,423 | 56.2 |
| Region |  |  |  |  |  |  |
| N ortheast | 3,086 | 20.2 | 3,102 | 20.0 | 3,094 | 20.6 |
| M idwest | 5,903 | 38.7 | 5,922 | 38.2 | 5,652 | 37.7 |
| South | 3,475 | 22.8 | 3,415 | 22.0 | 3,306 | 22.1 |
| W est | 2,780 | 18.2 | 3,073 | 19.8 | 2,935 | 19.6 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire). a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A -2. Number and percentage of school districts by metropolitan status, by region: 1990-91 to 1993-94

| District <br> Characteristic | School Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent |
| TOTAL | 15,512 | 100.0 | 14,987 | 100.0 |
| Region by M etropolitan Status |  |  |  |  |
| N ortheast |  |  |  |  |
| U rban-inside central city | 101 | 0.6 | 85 | 0.6 |
| U rban-outside central city | 1,915 | 12.3 | 1,958 | 13.1 |
| $N$ onurban area | 1,086 | 7.0 | 1,050 | 7.0 |
| M idwest |  |  |  |  |
| U rban-inside central city | 154 | 1.0 | 157 | 1.0 |
| U rban-outside central city | 1,875 | 12.1 | 1,939 | 12.9 |
| $N$ onurban area | 3,894 | 25.1 | 3,556 | 23.7 |
| South |  |  |  |  |
| U rban-inside central city | 180 | 1.2 | 185 | 1.2 |
| U rban-outside central city | 881 | 5.7 | 896 | 6.0 |
| $N$ onurban area | 2,354 | 15.2 | 2,224 | 14.8 |
| W est |  |  |  |  |
| U rban-inside central city | 249 | 1.6 | 134 | 0.9 |
| U rban-outside central city | 1,160 | 7.5 | 1,209 | 8.1 |
| N onurban area | 1,664 | 10.7 | 1,592 | 10.6 |

Table A-3. N umber and percentage of school districts by percent minority students, by region: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | N umber | Percent | Number | Percent | Number | Percent |
| TOTAL | 15,244 | 100.0 | 15,512 | 100.0 | 14,987 | 100.0 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast |  |  |  |  |  |  |
| U nder 10\% | 2,541 | 16.7 | 2,490 | 16.1 | 2,273 | 15.2 |
| 10\% to under 50\% | 362 | 2.4 | 488 | 3.1 | 670 | 4.5 |
| $50 \%$ or more | 182 | 1.2 | 122 | 0.8 | 138 | 0.9 |
| M idwest |  |  |  |  |  |  |
| U nder 10\% | 4,937 | 32.4 | 4,976 | 32.1 | 4,702 | 31.4 |
| 10\% to under 50\% | 642 | 4.2 | 783 | 5.0 | 798 | 5.3 |
| 50\% or more | 274 | 1.8 | 153 | 1.0 | 125 | 0.8 |
| South |  |  |  |  |  |  |
| U nder 10\% | 1,233 | 8.1 | 1,085 | 7.0 | 866 | 5.8 |
| 10\% to under 50\% | 1,469 | 9.6 | 1,678 | 10.8 | 1,714 | 11.4 |
| $50 \%$ or more | 769 | 5.0 | 652 | 4.2 | 726 | 4.8 |
| W est |  |  |  |  |  |  |
| U nder 10\% | 1,151 | 7.6 | 1,457 | 9.4 | 1,206 | 8.0 |
| 10\% to under 50\% | 917 | 6.0 | 998 | 6.4 | 1,101 | 7.3 |
| 50\% or more | 685 | 4.5 | 601 | 3.9 | 621 | 4.1 |

Table A-4. Number and percentage of school districts by district size, by region: 1987-88 to 1993-94

## School Year

| District Characteristic | 1987-88 |  | 1990-91 |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N umber | Percent | N umber | Percent | N umber | Percent |
| TOTAL | 15,244 | 100.0 | 15,512 | 100.0 | 14,987 | 100.0 |
| Region by District Size |  |  |  |  |  |  |
| N ortheast |  |  |  |  |  |  |
| U nder 1,000 | 1,278 | 8.4 | 1,303 | 8.4 | 1,216 | 8.1 |
| 1,000 to 9,999 | 1,761 | 11.6 | 1,753 | 11.3 | 1,829 | 12.2 |
| 10,000 or more | 47 | 0.3 | 46 | 0.3 | 49 | 0.3 |
| M idwest |  |  |  |  |  |  |
| U nder 1,000 | 3,559 | 23.3 | 3,643 | 23.5 | 3,324 | 22.2 |
| 1,000 to 9,999 | 2,232 | 14.6 | 2,159 | 13.9 | 2,204 | 14.7 |
| 10,000 or more | 112 | 0.7 | 120 | 0.8 | 124 | 0.8 |
| South |  |  |  |  |  |  |
| U nder 1,000 | 1,458 | 9.6 | 1,473 | 9.5 | 1,338 | 8.9 |
| 1,000 to 9,999 | 1,733 | 11.4 | 1,655 | 10.7 | 1,664 | 11.1 |
| 10,000 or more | 283 | 1.9 | 287 | 1.8 | 305 | 2.0 |
| W est |  |  |  |  |  |  |
| U nder 1,000 | 1,657 | 10.9 | 2,011 | 13.0 | 1,748 | 11.7 |
| 1,000 to 9,999 | 927 | 6.1 | 838 | 5.4 | 955 | 6.4 |
| 10,000 or more | 195 | 1.3 | 224 | 1.4 | 231 | 1.5 |

Details may not add to totals and percentages may not sum to 100 due to rounding.
SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A -5. N umber and percentage of school districts by district size, by metropolitan status: 1990-91 to 1993-94

-- Too few cases for a reliable estimate.
Details may not add to totals and percentages may not sum to 100 due to rounding or cell suppression.
SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A -6. Number and percentage of school districts by percent minority teachers, by region: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent | Number | Percent |
| TOTAL | 15,244 | 100.0 | 15,512 | 100.0 | 14,987 | 100.0 |
| Region by Percent M inority T eachers |  |  |  |  |  |  |
| N ortheast |  |  |  |  |  |  |
| $N$ one | 1,757 | 11.5 | 1,703 | 11.0 | 1,525 | 10.2 |
| M ore than 0\% to under 20\% | 1,254 | 8.2 | 1,323 | 8.5 | 1,535 | 10.2 |
| 20\% or more | 74 | 0.5 | -- | -- | 34 | 0.2 |
| M idwest |  |  |  |  |  |  |
| None | 4,084 | 26.8 | 4,082 | 26.3 | 4,021 | 26.8 |
| M ore than 0\% to under 20\% | 1,661 | 10.9 | 1,719 | 11.1 | 1,555 | 10.4 |
| 20\% or more | 159 | 1.0 | 121 | 0.8 | 77 | 0.5 |
| South |  |  |  |  |  |  |
| N one | 890 | 5.8 | 894 | 5.8 | 718 | 4.8 |
| M ore than 0\% to under 20\% | 1,753 | 11.5 | 1,807 | 11.6 | 1,909 | 12.7 |
| 20\% or more | 832 | 5.5 | 713 | 4.6 | 679 | 4.5 |
| W est |  |  |  |  |  |  |
| None | 1,124 | 7.4 | 1,283 | 8.3 | 1,031 | 6.9 |
| M ore than 0\% to under 20\% | 1,348 | 8.8 | 1,533 | 9.9 | 1,654 | 11.0 |
| 20\% or more | 308 | 2.0 | 258 | 1.7 | 249 | 1.7 |

Table A-7. N umber of full and part time teachers and percentage minority, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic |  School Year <br> 1990-91-88  |  |  |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N umber of Teachers | Percent <br> Minority | N umber of Teachers | Percent <br> Minority | N umber of Teachers | Percent <br> Minority |
| TOTAL | 2,511,304 | 13.6 | 2,565,862 | 13.6 | 2,599,569 | 13.0 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 248,313 | 4.2 | 258,208 | 4.1 | 228,003 | 3.5 |
| 1,000 to 9,999 | 1,255,495 | 8.3 | 1,215,699 | 7.5 | 1,234,226 | 7.3 |
| 10,000 or more | 1,007,496 | 22.6 | 1,091,954 | 22.7 | 1,137,340 | 21.2 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 993,086 | 2.1 | 945,665 | 1.5 | 854,306 | 1.1 |
| 10\% to under 50\% | 875,562 | 11.6 | 983,937 | 10.3 | 1,070,211 | 9.5 |
| 50\% or more | 639,782 | 34.4 | 635,783 | 36.8 | 673,371 | 33.8 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 450,210 | 0.0 | 411,901 | 0.0 | 391,837 | 0.0 |
| M ore than 0\% to under 20\% | 1,406,698 | 6.1 | 1,522,993 | 6.3 | 1,580,684 | 6.5 |
| 20\% or more | 654,396 | 39.1 | 630,968 | 40.1 | 627,048 | 37.7 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 675,491 | 27.3 | 638,597 | 26.8 |
| U rban-outside central city | - | - | 1,221,535 | 8.7 | 1,282,092 | 9.0 |
| N onurban area | - | - | 668,836 | 8.8 | 678,880 | 7.8 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 566,673 | 9.0 | 558,104 | 8.0 | 543,742 | 9.2 |
| U nder 10\% | 306,479 | 1.6 | 303,841 | 1.0 | 252,730 | 0.8 |
| 10\% to under 50\% | 108,261 | 5.1 | 126,726 | 3.8 | 144,707 | 4.3 |
| 50\% or more | 151,933 | 26.6 | 127,284 | 29.0 | 145,535 | 28.6 |
| M idwest | 651,832 | 8.5 | 629,844 | 8.5 | 606,337 | 5.5 |
| U nder 10\% | 424,516 | 1.9 | 386,449 | 1.2 | 372,925 | 0.8 |
| 10\% to under 50\% | 143,303 | 8.2 | 155,199 | 6.9 | 168,895 | 5.7 |
| 50\% or more | 81,600 | 43.5 | 88,040 | 43.1 | 63,648 | 32.7 |
| South | 850,370 | 20.5 | 930,254 | 19.4 | 973,724 | 19.1 |
| U nder 10\% | 162,138 | 2.6 | 165,970 | 2.6 | 153,839 | 1.9 |
| 10\% to under 50\% | 430,879 | 15.3 | 512,269 | 13.6 | 531,782 | 12.9 |
| 50\% or more | 257,008 | 40.5 | 252,015 | 42.2 | 288,103 | 39.7 |
| W est | 442,429 | 13.9 | 447,660 | 16.0 | 475,765 | 14.7 |
| U nder 10\% | 99,953 | 3.2 | 89,405 | 2.5 | 74,812 | 1.9 |
| 10\% to under 50\% | 193,119 | 9.5 | 189,744 | 8.7 | 224,828 | 7.7 |
| 50\% or more | 149,240 | 26.6 | 168,443 | 31.2 | 176,084 | 28.9 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).
a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A-8. N umber of students and percentage minority, by selected district characteristics: 1987-88 to 1993-94 School Year

|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| District Characteristic | N umber of Students | Percent Minority | N umber of Students | Percent Minority | N umber of Students | Percent Minority |
| TOTAL | 39,761,316 | 30.4 | 40,930,167 | 31.7 | 42,302,143 | 33.2 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 2,980,475 | 12.6 | 3,138,848 | 13.1 | 2,964,507 | 13.5 |
| 1,000 to 9,999 | 19,333,146 | 19.2 | 18,813,338 | 19.2 | 19,788,834 | 21.9 |
| 10,000 or more | 17,447,695 | 45.8 | 18,977,982 | 47.2 | 19,548,801 | 47.7 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 14,942,783 | 3.4 | 14,410,735 | 3.7 | 13,380,715 | 3.8 |
| 10\% to under 50\% | 14,348,639 | 26.6 | 15,648,359 | 27.4 | 17,464,992 | 28.0 |
| 50\% or more | 10,469,894 | 74.0 | 10,871,073 | 75.1 | 11,456,436 | 75.5 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 6,152,291 | 3.6 | 5,897,828 | 4.4 | 5,868,267 | 4.3 |
| M ore than 0\% to under 20\% | 22,453,967 | 20.3 | 24,272,297 | 21.3 | 25,826,876 | 23.7 |
| 20\% or more | 11,155,059 | 65.4 | 10,760,042 | 70.1 | 10,607,000 | 72.3 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 10,888,873 | 57.9 | 10,602,701 | 59.3 |
| U rban-outside central city | - | - | 19,606,180 | 23.6 | 21,331,290 | 26.2 |
| N onurban area | - | - | 10,435,115 | 19.7 | 10,368,152 | 20.9 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 7,481,413 | 26.9 | 7,273,135 | 26.0 | 7,686,025 | 29.0 |
| U nder 10\% | 4,139,673 | 3.0 | 3,906,722 | 3.4 | 3,605,704 | 3.6 |
| 10\% to under 50\% | 1,235,455 | 23.1 | 1,504,876 | 22.4 | 1,952,873 | 22.2 |
| 50\% or more | 2,106,284 | 76.3 | 1,861,538 | 76.4 | 2,127,448 | 78.2 |
| M idwest | 9,863,597 | 18.6 | 9,892,476 | 18.8 | 9,634,486 | 17.1 |
| U nder 10\% | 6,241,205 | 2.9 | 6,160,743 | 3.3 | 5,986,544 | 3.4 |
| 10\% to under 50\% | 2,288,284 | 25.1 | 2,412,087 | 24.6 | 2,651,862 | 25.5 |
| 50\% or more | 1,334,108 | 80.7 | 1,319,646 | 81.1 | 996,080 | 77.4 |
| South | 14,149,220 | 35.5 | 14,612,010 | 37.0 | 15,366,030 | 39.1 |
| U nder 10\% | 2,804,619 | 4.1 | 2,647,609 | 4.1 | 2,416,770 | 4.3 |
| 10\% to under 50\% | 7,228,824 | 27.9 | 7,832,657 | 29.4 | 8,430,669 | 30.3 |
| 50\% or more | 4,115,777 | 70.3 | 4,131,744 | 72.5 | 4,518,591 | 74.1 |
| W est | 8,267,086 | 38.7 | 9,152,546 | 41.7 | 9,615,602 | 43.3 |
| U nder 10\% | 1,757,285 | 5.3 | 1,695,661 | 5.5 | 1,371,696 | 5.6 |
| 10\% to under 50\% | 3,596,076 | 26.1 | 3,898,740 | 26.9 | 4,429,589 | 27.7 |
| 50\% or more | 2,913,725 | 74.3 | 3,558,145 | 75.2 | 3,814,317 | 75.0 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A-9. Number of full and part time teachers and percentage by race and ethnicity, by selected district characteristics: 1993-94

| District Characteristic | $\frac{\text { Total }}{\text { Teachers }}$ | Percent by Race and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A merican Indian | A sian | Hispanic | Black | W hite |
| TOTAL | 2,599,569 | 0.3 | 1.0 | 3.4 | 8.2 | 87.0 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 228,003 | 1.0 | 0.3 | 1.1 | 1.2 | 96.5 |
| 1,000 to 9,999 | 1,234,226 | 0.3 | 0.4 | 1.8 | 4.8 | 92.7 |
| 10,000 or more | 1,137,340 | 0.3 | 1.9 | 5.6 | 13.4 | 78.8 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 854,306 | 0.1 | 0.2 | 0.3 | 0.5 | 98.9 |
| 10\% to under 50\% | 1,070,211 | 0.4 | 0.6 | 1.9 | 6.7 | 90.5 |
| 50\% or more | 673,371 | 0.6 | 2.8 | 9.9 | 20.5 | 66.2 |
| M inority T eachers |  |  |  |  |  |  |
| $N$ one | 391,837 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| M ore than 0\% to under 20\% | 1,580,684 | 0.3 | 0.6 | 1.7 | 3.8 | 93.5 |
| 20\% or more | 627,048 | 0.6 | 2.8 | 9.8 | 24.5 | 62.3 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 638,597 | 0.3 | 2.7 | 7.0 | 16.9 | 73.2 |
| U rban-outside central city | 1,282,092 | 0.3 | 0.7 | 2.7 | 5.3 | 91.0 |
| $N$ onurban area | 678,880 | 0.6 | 0.2 | 1.4 | 5.6 | 92.2 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 543,742 | 0.1 | 0.6 | 2.6 | 5.9 | 90.9 |
| U nder 10\% | 252,730 | 0.1 | 0.1 | 0.3 | 0.3 | 99.2 |
| 10\% to under 50\% | 144,707 | 0.1 | 0.3 | 1.1 | 2.8 | 95.7 |
| $50 \%$ or more | 145,535 | 0.1 | 1.6 | 8.1 | 18.9 | 71.4 |
| M idwest | 606,337 | 0.2 | 0.2 | 0.6 | 4.5 | 94.5 |
| U nder 10\% | 372,925 | 0.1 | 0.1 | 0.2 | 0.3 | 99.2 |
| 10\% to under 50\% | 168,895 | 0.2 | 0.4 | 0.8 | 4.3 | 94.3 |
| $50 \%$ or more | 63,648 | 0.5 | 0.5 | 1.9 | 29.8 | 67.3 |
| South | 973,724 | 0.3 | 0.3 | 4.2 | 14.3 | 80.9 |
| U nder 10\% | 153,839 | 0.2 | 0.1 | 0.2 | 1.5 | 98.1 |
| 10\% to under 50\% | 531,782 | 0.4 | 0.3 | 1.6 | 10.7 | 87.1 |
| 50\% or more | 288,103 | 0.3 | 0.4 | 11.0 | 27.9 | 60.3 |
| W est | 475,765 | 0.9 | 4.1 | 6.5 | 3.1 | 85.4 |
| U nd er 10\% | 74,812 | 0.4 | 0.7 | 0.7 | 0.2 | 98.1 |
| 10\% to under 50\% | 224,828 | 0.7 | 1.7 | 3.9 | 1.5 | 92.3 |
| 50\% or more | 176,084 | 1.3 | 8.7 | 12.5 | 6.5 | 71.1 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.
SO U RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-10. N umber of students and percentage by race and ethnicity, by selected district characteristics: 1993-94

| District | Total | Percent by Race and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristic | Students | A merican Indian | A sian | Hispanic | Black | W hite |
| TOTAL | 42,302,143 | 1.1 | 3.6 | 12.3 | 16.2 | 66.8 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 2,964,507 | 3.2 | 0.9 | 5.8 | 3.6 | 86.5 |
| 1,000 to 9,999 | 19,788,834 | 1.2 | 2.1 | 7.7 | 10.9 | 78.1 |
| 10,000 or more | 19,548,801 | 0.7 | 5.5 | 17.9 | 23.5 | 52.3 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 13,380,715 | 0.4 | 0.9 | 1.1 | 1.4 | 96.2 |
| 10\% to under 50\% | 17,464,992 | 1.3 | 3.4 | 8.1 | 15.2 | 72.0 |
| 50\% or more | 11,456,436 | 1.7 | 6.9 | 31.8 | 35.0 | 24.5 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 5,868,267 | 0.8 | 0.6 | 1.5 | 1.4 | 95.7 |
| M ore than 0\% to under 20\% | 25,826,876 | 1.1 | 3.4 | 8.9 | 10.3 | 76.3 |
| 20\% or more | 10,607,000 | 1.3 | 5.7 | 26.5 | 38.8 | 27.7 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 10,602,701 | 0.6 | 6.3 | 22.9 | 29.5 | 40.7 |
| U rban-outside central city | 21,331,290 | 0.7 | 3.7 | 10.5 | 11.4 | 73.8 |
| N onurban area | 10,368,152 | 2.6 | 0.6 | 5.3 | 12.4 | 79.1 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 7,686,025 | 0.3 | 3.7 | 10.1 | 14.9 | 71.0 |
| U nder 10\% | 3,605,704 | 0.2 | 1.1 | 1.0 | 1.4 | 96.4 |
| 10\% to under 50\% | 1,952,873 | 0.3 | 5.0 | 6.6 | 10.4 | 77.8 |
| 50\% or more | 2,127,448 | 0.5 | 6.9 | 28.8 | 42.0 | 21.8 |
| M idwest | 9,634,486 | 0.9 | 1.6 | 2.6 | 11.9 | 82.9 |
| U nder 10\% | 5,986,544 | 0.4 | 0.9 | 1.0 | 1.2 | 96.6 |
| 10\% to under 50\% | 2,651,862 | 1.8 | 2.9 | 4.5 | 16.2 | 74.5 |
| 50\% or more | 996,080 | 2.1 | 2.8 | 7.3 | 65.3 | 22.6 |
| South | 15,366,030 | 0.8 | 1.5 | 10.9 | 25.9 | 60.9 |
| U nder 10\% | 2,416,770 | 0.2 | 0.4 | 0.8 | 2.8 | 95.7 |
| 10\% to under 50\% | 8,430,669 | 1.0 | 1.9 | 5.7 | 21.7 | 69.7 |
| 50\% or more | 4,518,591 | 0.9 | 1.2 | 25.8 | 46.2 | 25.9 |
| W est | 9,615,602 | 2.4 | 8.9 | 26.1 | 6.0 | 56.7 |
| U nder 10\% | 1,371,696 | 1.0 | 1.3 | 2.7 | 0.5 | 94.4 |
| 10\% to under 50\% | 4,429,589 | 2.0 | 6.0 | 15.3 | 4.3 | 72.3 |
| 50\% or more | 3,814,317 | 3.4 | 14.8 | 46.9 | 10.0 | 25.0 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.
SO URCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-11. Total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by selected district characteristics: 1993-94

| District Characteristic | Total FTE Teachers | Percent New Hires |
| :---: | :---: | :---: |
| TOTAL | 2,501,112 | 7.9 |
| District Size |  |  |
| U nder 1,000 | 220,375 | 8.7 |
| 1,000 to 9,999 | 1,196,629 | 7.5 |
| 10,000 or more | 1,084,109 | 8.2 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 826,141 | 6.7 |
| 10\% to under 50\% | 1,029,081 | 8.5 |
| $50 \%$ or more | 644,247 | 8.3 |
| M inority T eachers |  |  |
| N one | 380,915 | 6.9 |
| M ore than 0\% to under 20\% | 1,520,281 | 8.0 |
| 20\% or more | 599,916 | 8.2 |
| M etro Status |  |  |
| U rban-inside central city | 608,886 | 7.3 |
| U rban-outside central city | 1,232,452 | 8.1 |
| N onurban area | 659,775 | 8.1 |
| Region by M etro Status |  |  |
| N ortheast | 518,626 | 5.7 |
| U rban-inside central city | 140,208 | 4.3 |
| U rban-outside central city | 301,144 | 6.0 |
| $N$ onurban area | 77,274 | 6.6 |
| M idwest | 584,495 | 6.5 |
| U rban-inside central city | 120,577 | 5.3 |
| U rban-outside central city | 273,959 | 6.5 |
| $N$ onurban area | 189,959 | 7.2 |
| South | 945,971 | 9.6 |
| U rban-inside central city | 225,775 | 10.0 |
| U rban-outside central city | 421,155 | 10.1 |
| $N$ onurban area | 299,040 | 8.7 |
| W est | 452,020 | 8.7 |
| U rban-inside central city | 122,325 | 7.7 |
| U rban-outside central city | 236,193 | 9.0 |
| N onurban area | 93,502 | 9.1 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage
Questionnaire).

Table A-12. Number of newly hired FTE teachers and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by selected district characteristics: 1993-94

| District Characteristic | Number of N ewly Hired Teachers | Percent N ewly H ired with Regular State Certification in Field of A ssignment | Percent N ewly Hired with Emergency Certification | Percent N ewly Hired lacking R egular State or Emergency Certification in Field of A ssignment |
| :---: | :---: | :---: | :---: | :---: |
| TOTAL | 197,323 | 86.5 | 7.6 | 5.9 |
| District Size |  |  |  |  |
| U nder 1,000 | 19,091 | 90.9 | 6.3 | 2.8 |
| 1,000 to 9,999 | 89,388 | 90.2 | 6.1 | 3.7 |
| 10,000 or more | 88,844 | 81.8 | 9.3 | 8.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 55,621 | 93.9 | 2.9 | 3.2 |
| 10\% to under 50\% | 87,880 | 88.8 | 6.4 | 4.8 |
| 50\% or more | 53,682 | 75.0 | 14.3 | 10.7 |
| M inority T eachers |  |  |  |  |
| N one | 26,152 | 94.5 | 3.2 | 2.3 |
| M ore than 0\% to under 20\% | 121,806 | 90.0 | 5.7 | 4.4 |
| 20\% or more | 49,364 | 73.7 | 14.5 | 11.8 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 44,389 | 79.0 | 10.5 | 10.5 |
| U rban-outside central city | 99,613 | 88.4 | 6.4 | 5.2 |
| N onurban area | 53,322 | 89.2 | 7.2 | 3.6 |
| Region by M etro Status |  |  |  |  |
| $N$ ortheast | 29,303 | 94.4 | 2.2 | 3.4 |
| U rban-inside central city | 6,004 | 91.7 | 3.3 | 5.1 |
| U rban-outside central city | 18,199 | 94.7 | 1.7 | 3.5 |
| N onurban area | 5,100 | 96.2 | 2.6 | 1.2 |
| M idwest | 37,916 | 95.5 | 2.7 | 1.8 |
| U rban-inside central city | 6,431 | 95.2 | 4.2 | 0.6 |
| U rban-outside central city | 17,794 | 96.2 | 2.1 | 1.7 |
| N onurban area | 13,691 | 94.7 | 2.8 | 2.5 |
| South | 90,906 | 82.4 | 9.5 | 8.1 |
| U rban-inside central city | 22,499 | 76.0 | 10.3 | 13.7 |
| U rban-outside central city | 42,412 | 84.3 | 8.3 | 7.3 |
| N onurban area | 25,995 | 84.7 | 10.7 | 4.5 |
| W est | 39,198 | 81.4 | 11.7 | 6.8 |
| U rban-inside central city | 9,456 | 67.0 | 20.0 | 13.0 |
| U rban-outside central city | 21,206 | 84.6 | 10.3 | 5.1 |
| N onurban area | 8,536 | 89.6 | 6.2 | 4.2 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals and percentages may not sum to 100 due to rounding.
SO URCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-13. Percentage of school districts with different criteria for considering applicants for teaching positions, by selected district characteristics: 1993-94

| District Characteristic | Certification Type |  |  | G raduate of <br> Teacher Ed. Program | Special Knowledge Test |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Standard | Emergency/ Temporary | College <br> Major/Minor in Teaching Field |  | District <br> or State | $N$ ational Teacher Exam |
| TOTAL | 83.3 | 67.4 | 71.9 | 66.9 | 51.2 | 30.7 |
| District Size |  |  |  |  |  |  |
| U inder 1,000 | 83.8 | 63.7 | 73.7 | 65.1 | 48.6 | 24.1 |
| 1,000 to 9,999 | 83.6 | 70.4 | 70.2 | 69.9 | 53.5 | 37.7 |
| 10,000 or more | 74.5 | 80.4 | 68.1 | 57.7 | 57.7 | 37.0 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 87.3 | 64.4 | 75.1 | 73.0 | 43.0 | 30.1 |
| 10\% to under 50\% | 77.2 | 70.6 | 67.5 | 58.2 | 61.0 | 30.8 |
| $50 \%$ or more | 76.4 | 76.6 | 65.5 | 55.2 | 70.2 | 34.1 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 86.0 | 63.4 | 76.2 | 72.1 | 43.6 | 26.2 |
| M ore than 0\% to under 20\% | 81.9 | 70.0 | 67.7 | 62.4 | 57.7 | 33.2 |
| 20\% or more | 73.0 | 79.1 | 68.9 | 58.8 | 62.9 | 47.2 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 76.5 | 81.8 | 67.7 | 60.2 | 61.8 | 32.5 |
| U rban-outside central city | 86.1 | 67.5 | 65.9 | 62.7 | 55.1 | 31.6 |
| $N$ onurban area | 81.7 | 66.5 | 76.5 | 70.3 | 47.8 | 30.0 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | 93.0 | 61.3 | 56.7 | 63.7 | 40.8 | 50.0 |
| U rban-inside central city | 86.3 | 66.5 | 39.0 | 55.1 | 49.2 | 50.9 |
| U rban-outside central city | 92.6 | 58.1 | 51.9 | 60.4 | 43.0 | 54.0 |
| $N$ onurban area | 94.3 | 66.8 | 67.0 | 70.7 | 36.1 | 42.5 |
| M idwest | 87.5 | 63.8 | 81.3 | 77.3 | 43.1 | 17.0 |
| U rban-inside central city | 89.1 | 78.7 | 92.8 | 71.2 | 39.9 | 27.5 |
| U rban-outside central city | 89.0 | 64.5 | 77.7 | 76.6 | 49.4 | 16.2 |
| $N$ onurban area | 86.6 | 62.8 | 82.8 | 78.0 | 39.8 | 17.0 |
| South | 70.1 | 78.2 | 73.6 | 62.0 | 68.6 | 38.1 |
| U rban-inside central city | 73.5 | 86.4 | 58.8 | 59.8 | 71.4 | 28.2 |
| U rban-outside central city | 69.6 | 80.2 | 69.4 | 63.0 | 68.9 | 35.4 |
| $N$ onurban area | 70.0 | 76.8 | 76.5 | 61.7 | 68.3 | 40.1 |
| W est | 79.8 | 68.8 | 67.9 | 55.7 | 58.1 | 28.5 |
| U rban-inside central city | 59.8 | 89.0 | 68.9 | 50.8 | 82.2 | 32.7 |
| U rban-outside central city | 83.1 | 78.0 | 67.0 | 44.1 | 73.5 | 17.4 |
| $N$ onurban area | 78.9 | 60.1 | 68.4 | 64.8 | 44.5 | 36.6 |

a) Districts without students were excluded for this characteristic only.

SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-14. Number and percentage of full time equivalent (FTE) teachers with standard state certification in their field of assignment, by selected district characteristics: 1993-94

| District <br> Characteristic | Total FTE <br> Teachers |  |
| :--- | ---: | :---: |
| TOTA L | $2,501,112$ |  |
|  |  |  |
| Percent |  |  |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage
Questionnaire).

Table A-15. Number and percentage of full time equival ent (FTE) itinerant teachers and the number and percentage of school districts employing itinerant teachers, by selected district characteristics: 1993-94

| District Characteristic | FTE Itinerant T eachers |  | Districts Employing Itinerant T eachers |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | N umber | Percent |
| TOTAL | 102,282 | 4.1 | 8,387 | 56.0 |
| District Size |  |  |  |  |
| U nder 1,000 | 10,455 | 4.7 | 2,708 | 35.5 |
| 1,000 to 9,999 | 51,003 | 4.3 | 5,042 | 75.8 |
| 10,000 or more | 40,825 | 3.8 | 637 | 89.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| Under 10\% | 38,380 | 4.6 | 4,789 | 52.9 |
| 10\% to under 50\% | 39,414 | 3.8 | 2,565 | 59.9 |
| 50\% or more | 24,242 | 3.8 | 998 | 62.0 |
| M inority T eachers |  |  |  |  |
| $N$ one | 18,196 | 4.8 | 3,278 | 44.9 |
| M ore than 0\% to under 20\% | 62,293 | 4.1 | 4,425 | 66.5 |
| 20\% or more | 21,794 | 3.6 | 685 | 66.0 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 27,497 | 4.5 | 446 | 79.5 |
| U rban-outside central city | 47,561 | 3.9 | 3,788 | 63.1 |
| $N$ onurban area | 27,224 | 4.1 | 4,154 | 49.3 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 31,064 | 6.0 | 2,099 | 67.8 |
| U rban-inside central city | 10,214 | 7.3 | 79 | 92.3 |
| U rban-outside central city | 17,019 | 5.7 | 1,367 | 69.8 |
| $N$ onurban area | 3,830 | 5.0 | 653 | 62.2 |
| M idwest | 29,709 | 5.1 | 3,013 | 53.3 |
| U rban-inside central city | 7,281 | 6.0 | 125 | 79.5 |
| U rban-outside central city | 12,583 | 4.6 | 1,240 | 63.9 |
| $N$ onurban area | 9,845 | 5.2 | 1,649 | 46.4 |
| South | 27,707 | 2.9 | 1,938 | 58.6 |
| U rban-inside central city | 6,511 | 2.9 | 149 | 80.5 |
| U rban-outside central city | 11,278 | 2.7 | 594 | 66.3 |
| $N$ onurban area | 9,918 | 3.3 | 1,194 | 53.7 |
| W est | 13,803 | 3.1 | 1,337 | 45.6 |
| U rban-inside central city | 3,490 | 2.9 | 93 | 69.8 |
| U rban-outside central city | 6,681 | 2.8 | 586 | 48.5 |
| N onurban area | 3,631 | 3.9 | 657 | 41.3 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-16. Percentage of school districts with at least one approved teaching position not filled by a permanent teacher, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Percent | Percent | Percent |
| total | 21.4 | 14.5 | 14.3 |
| District Size |  |  |  |
| U nder 1,000 | 15.5 | 8.0 | 7.9 |
| 1,000 to 9,999 | 26.5 | 19.6 | 18.3 |
| 10,000 or more | 42.2 | 46.1 | 46.3 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 19.5 | 10.9 | 9.2 |
| 10\% to under 50\% | 20.2 | 16.5 | 18.3 |
| 50\% or more | 32.5 | 33.0 | 32.5 |
| M inority T eachers |  |  |  |
| N one | 16.2 | 8.4 | 8.5 |
| M ore than 0\% to under 20\% | 24.3 | 18.8 | 16.6 |
| 20\% or more | 39.0 | 32.3 | 40.4 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 32.7 | 40.9 |
| U rban-outside central city | - | 18.5 | 16.3 |
| N onurban area | - | 10.4 | 11.1 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 18.9 | 14.9 |
| U rban-inside central city | - | 34.3 | 33.8 |
| U rban-outside central city | - | 19.8 | 17.2 |
| $N$ onurban area | - | 15.8 | 9.2 |
| M idwest | - | 9.3 | 9.5 |
| U rban-inside central city | - | 34.4 | 33.1 |
| U rban-outside central city | - | 14.3 | 8.7 |
| N onurban area | - | 5.8 | 8.9 |
| South | - | 17.4 | 19.0 |
| U rban-inside central city | - | 47.4 | 39.1 |
| U rban-outside central city | - | 16.9 | 20.9 |
| $N$ onurban area | - | 15.3 | 16.5 |
| W est | - | 16.8 | 17.6 |
| U rban-inside central city | - | 20.4 | 57.1 |
| Urban-outside central city | - | 24.4 | 23.4 |
| N onurban area | - | 10.9 | 9.8 |

Table A-17. Number and percentage of approved full time equivalent (FTE) teaching positions not filled by permanent teachers, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | 1987-88 |  | $\begin{gathered} \text { School Year } \\ \underline{1990-91} \end{gathered}$ |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N umber of Positions | Percent of Total FTE | N umber of Positions | Percent of Total FTE | N umber of Positions | Percent of Total FTE |
| TOTAL | 22,978 | 1.0 | 14,287 | 0.6 | 8,691 | 0.3 |
| District Size |  |  |  |  |  |  |
| Under 1,000 | 3,222 | 1.5 | 1,475 | 0.7 | 730 | 0.3 |
| 1,000 to 9,999 | 10,345 | 0.9 | 5,047 | 0.5 | 2,712 | 0.2 |
| 10,000 or more | 9,410 | 1.0 | 7,766 | 0.8 | 5,248 | 0.5 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Under 10\% | 9,385 | 1.0 | 3,705 | 0.4 | 1,265 | 0.2 |
| 10\% to under 50\% | 7,898 | 1.0 | 3,298 | 0.4 | 2,532 | 0.2 |
| $50 \%$ or more | 5,629 | 1.0 | 7,240 | 1.2 | 4,866 | 0.8 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 4,028 | 1.0 | 1,679 | 0.4 | 853 | 0.2 |
| M ore than 0\% to under 20\% | 13,636 | 1.0 | 5,964 | 0.4 | 3,435 | 0.2 |
| 20\% or more | 5,314 | 0.9 | 6,644 | 1.1 | 4,403 | 0.7 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 6,236 | 1.1 | 3,928 | 0.6 |
| U rban-outside central city | - | - | 5,626 | 0.5 | 3,080 | 0.2 |
| $N$ onurban area | - | - | 2,426 | 0.4 | 1,683 | 0.3 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | - | - | 2,383 | 0.5 | 1,319 | 0.3 |
| U rban-inside central city | - | - | 542 | 0.4 | 521 | 0.4 |
| U rban-outside central city | - | - | 1,425 | 0.5 | 651 | 0.2 |
| $N$ onurban area | - | - | 416 | 0.5 | 148 | 0.2 |
| M idwest | - | - | 2,728 | 0.5 | 1,405 | 0.2 |
| U rban-inside central city | - | - | 1,355 | 1.0 | 718 | 0.6 |
| U rban-outside central city | - | - | 749 | 0.3 | 268 | 0.1 |
| $N$ onurban area | - | - | 624 | 0.3 | 419 | 0.2 |
| South | - | - | 5,285 | 0.6 | 3,193 | 0.3 |
| U rban-inside central city | - | - | 2,700 | 1.3 | 1,393 | 0.6 |
| U rban-outside central city | - | - | 1,555 | 0.4 | 907 | 0.2 |
| $N$ onurban area | - | - | 1,030 | 0.4 | 893 | 0.3 |
| W est | - | - | 3,891 | 0.9 | 2,774 | 0.6 |
| U rban-inside central city |  | - | 1,639 | 1.3 | 1,296 | 1.1 |
| U rban-outside central city | - | - | 1,897 | 0.9 | 1,253 | 0.5 |
| N onurban area | - | - | 355 | 0.4 | 225 | 0.2 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire). a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A-18. Number and percentage of approved full time equivalent (FTE) teaching positions abol ished, withdrawn, or filled by substitute teachers because of budget cutbacks, and the number and percentage of school districts affected, by selected district characteristics: 1993-94

| District Characteristic | FTE Positions |  | Districts A ffected |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| TOTAL | 5,372 | 0.2 | 1,342 | 9.0 |
| District Size |  |  |  |  |
| U nder 1,000 | 846 | 0.4 | 563 | 7.4 |
| 1,000 to 9,999 | 3,017 | 0.3 | 719 | 10.8 |
| 10,000 or more | 1,510 | 0.1 | 61 | 8.5 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nd der 10\% | 2,374 | 0.3 | 757 | 8.4 |
| 10\% to under 50\% | 2,025 | 0.2 | 375 | 8.8 |
| 50\% or more | 962 | 0.1 | 205 | 12.7 |
| M inority T eachers |  |  |  |  |
| $N$ one | 1,074 | 0.3 | 515 | 7.1 |
| M ore than 0\% to under 20\% | 3,697 | 0.2 | 751 | 11.3 |
| 20\% or more | 601 | 0.1 | 75 | 7.3 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 993 | 0.2 | 59 | 10.6 |
| U rban-outside central city | 2,758 | 0.2 | 588 | 9.8 |
| $N$ onurban area | 1,621 | 0.2 | 694 | 8.2 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 942 | 0.2 | 293 | 9.5 |
| U rban-inside central city | 266 | 0.2 | 16 | 18.3 |
| U rban-outside central city | 516 | 0.2 | 192 | 9.8 |
| N onurban area | 160 | 0.2 | 85 | 8.1 |
| M idwest | 1,891 | 0.3 | 494 | 8.7 |
| U rban-inside central city | 210 | 0.2 | 22 | 14.3 |
| U rban-outside central city | 1,175 | 0.4 | 188 | 9.7 |
| $N$ onurban area | 506 | 0.3 | 284 | 8.0 |
| South | 1,038 | 0.1 | 217 | 6.6 |
| U rban-inside central city | 255 | 0.1 | 11 | 6.0 |
| U rban-outside central city | 264 | 0.1 | 41 | 4.6 |
| $N$ onurban area | 519 | 0.2 | 165 | 7.4 |
| W est | 1,501 | 0.3 | 337 | 11.5 |
| U rban-inside central city | 262 | 0.2 | 10 | 7.7 |
| U rban-outside central city | 803 | 0.3 | 167 | 13.8 |
| N onurban area | 436 | 0.5 | 160 | 10.1 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-19. Number and percentage of school districts that laid off teachers and the number and percentage of full time equivalent (FTE) teachers laid off, by selected district characteristics: 1993-94

| District Characteristic | Districts with T eachers Laid Off |  | Teachers |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of Districts | Percent of All Districts | Number of FTEs Laid 0 ff | Percent of All FTE T eachers |
| TOTAL | 1,996 | 13.3 | 11,910 | 0.5 |
| District Size |  |  |  |  |
| U nder 1,000 | 802 | 10.5 | 1,401 | 0.6 |
| 1,000 to 9,999 | 1,066 | 16.0 | 6,131 | 0.5 |
| 10,000 or more | 128 | 18.0 | 4,378 | 0.4 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 1,149 | 12.7 | 4,434 | 0.5 |
| 10\% to under 50\% | 614 | 14.3 | 5,210 | 0.5 |
| 50\% or more | 217 | 13.4 | 2,219 | 0.3 |
| M inority T eachers |  |  |  |  |
| N one | 894 | 12.3 | 1,919 | 0.5 |
| M ore than 0\% to under 20\% | 963 | 14.5 | 8,326 | 0.5 |
| 20\% or more | 139 | 13.4 | 1,665 | 0.3 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 114 | 20.2 | 2,688 | 0.4 |
| U rban-outside central city | 840 | 14.0 | 6,310 | 0.5 |
| N onurban area | 1,042 | 12.4 | 2,912 | 0.4 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 492 | 15.9 | 1,999 | 0.4 |
| U rban-inside central city | 22 | 25.7 | 539 | 0.4 |
| U rban-outside central city | 317 | 16.2 | 1,227 | 0.4 |
| $N$ onurban area | 152 | 14.5 | 234 | 0.3 |
| M idwest | 856 | 15.1 | 5,916 | 1.0 |
| U rban-inside central city | 58 | 37.3 | 1,231 | 1.0 |
| U rban-outside central city | 374 | 19.3 | 3,683 | 1.3 |
| $N$ onurban area | 423 | 11.9 | 1,003 | 0.5 |
| South | 341 | 10.3 | 1,697 | 0.2 |
| U rban-inside central city | 18 | 9.8 | 226 | 0.1 |
| U rban-outside central city | 78 | 8.8 | 435 | 0.1 |
| $N$ onurban area | 244 | 11.0 | 1,035 | 0.3 |
| W est | 308 | 10.5 | 2,299 | 0.5 |
| U rban-inside central city | 15 | 11.2 | 692 | 0.6 |
| U rban-outside central city | 70 | 5.8 | 965 | 0.4 |
| N onurban area | 223 | 14.0 | 641 | 0.7 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A -20. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Percent | Percent | Percent |
| total | 7.5 | 11.2 | 14.6 |
| District Size |  |  |  |
| U nder 1,000 | 8.4 | 11.5 | 14.7 |
| 1,000 to 9,999 | 6.1 | 10.2 | 13.7 |
| 10,000 or more | 10.0 | 16.6 | 22.8 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 6.6 | 8.7 | 10.5 |
| 10\% to under 50\% | 7.8 | 12.0 | 18.2 |
| 50\% or more | 10.9 | 24.1 | 28.0 |
| M inority T eachers |  |  |  |
| N one | 6.7 | 9.5 | 11.6 |
| M ore than 0\% to under 20\% | 8.0 | 11.0 | 16.3 |
| 20\% or more | 9.3 | 23.4 | 24.8 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 10.5 | 24.5 |
| U rban-outside central city |  | 10.9 | 12.9 |
| $N$ onurban area | - | 11.4 | 15.2 |
| Region by District Size |  |  |  |
| $N$ ortheast | 5.8 | 8.3 | 8.4 |
| U nder 1,000 | 6.7 | 5.7 | 6.5 |
| 1,000 to 9,999 | 5.0 | 10.1 | 9.4 |
| 10,000 or more | 9.6 | 12.0 | 16.4 |
| M idwest | 6.6 | 7.9 | 11.6 |
| U nder 1,000 | 7.8 | 8.5 | 13.3 |
| 1,000 to 9,999 | 4.7 | 7.1 | 8.9 |
| 10,000 or more | 6.6 | 6.8 | 12.1 |
| South | 11.4 | 17.8 | 25.5 |
| U nder 1,000 | 14.5 | 22.6 | 32.1 |
| 1,000 to 9,999 | 8.9 | 13.0 | 19.9 |
| 10,000 or more | 10.7 | 20.7 | 26.8 |
| W est | 6.2 | 13.0 | 14.8 |
| U nder 1,000 | 5.6 | 12.6 | 9.4 |
| 1,000 to 9,999 | 6.3 | 12.9 | 22.2 |
| 10,000 or more | 11.1 | 17.5 | 24.8 |

Table A-21. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations by type of pay incentive, by selected district characteristics: 1993-94

| District Characteristic | Type of Pay Incentive |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A ny Incentive | Cash <br> Bonus | Salary Step Increase | O ther Salary Increase |
| TOTAL | 9.9 | 2.1 | 5.4 | 3.6 |
| District Size |  |  |  |  |
| U nder 1,000 | 11.3 | 1.9 | 6.2 | 4.5 |
| 1,000 to 9,999 | 8.4 | 2.2 | 4.6 | 2.6 |
| 10,000 or more | 9.4 | 3.7 | 3.3 | 3.3 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 7.2 | 0.7 | 5.5 | 1.8 |
| 10\% to under 50\% | 12.8 | 3.5 | 4.5 | 6.3 |
| 50\% or more | 17.3 | 6.5 | 6.9 | 5.9 |
| M inority T eachers |  |  |  |  |
| N one | 8.4 | 1.2 | 5.5 | 2.6 |
| M ore than 0\% to under 20\% | 10.7 | 2.7 | 5.1 | 4.2 |
| 20\% or more | 14.8 | 5.3 | 6.4 | 6.3 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 11.0 | 2.2 | 6.5 | 3.6 |
| U rban-outside central city | 8.0 | 2.2 | 4.6 | 1.7 |
| N onurban area | 11.2 | 2.1 | 5.8 | 4.9 |
| Region by District Size |  |  |  |  |
| N ortheast | 5.1 | 0.5 | 4.2 | 0.6 |
| U nder 1,000 | 5.0 | 0.3 | 4.6 | 0.4 |
| 1,000 to 9,999 | 5.2 | 0.7 | 4.0 | 0.8 |
| 10,000 or more | 0.0 | 0.0 | 0.0 | 0.0 |
| M idwest | 7.4 | 0.7 | 6.2 | 1.4 |
| U nder 1,000 | 9.2 | 0.8 | 7.6 | 1.9 |
| 1,000 to 9,999 | 5.0 | 0.6 | 4.3 | 0.7 |
| 10,000 or more | 3.3 | 0.0 | 3.3 | 0.8 |
| South | 18.9 | 6.1 | 4.9 | 10.9 |
| U nder 1,000 | 26.1 | 8.2 | 4.7 | 17.0 |
| 1,000 to 9,999 | 14.4 | 4.3 | 5.4 | 7.4 |
| 10,000 or more | 12.3 | 6.8 | 3.4 | 3.4 |
| W est | 9.6 | 2.1 | 5.5 | 2.4 |
| U nder 1,000 | 8.4 | 0.4 | 5.9 | 2.5 |
| 1,000 to 9,999 | 11.7 | 5.0 | 5.1 | 1.6 |
| 10,000 or more | 10.7 | 2.4 | 4.0 | 5.2 |

a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-22. Percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage by type of pay incentive, by selected district characteristics: 1993-94

| District Characteristic | Type of Pay Incentive |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Any Incentive | Cash <br> Bonus | Salary Step Increase | Other Salary Increase |
| TOTAL | 10.2 | 1.8 | 4.8 | 4.2 |
| District Size |  |  |  |  |
| Under 1,000 | 8.9 | 1.0 | 4.6 | 3.9 |
| 1,000 to 9,999 | 10.7 | 2.2 | 4.9 | 4.1 |
| 10,000 or more | 19.9 | 8.0 | 5.8 | 7.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 7.3 | 0.5 | 5.0 | 2.3 |
| 10\% to under 50\% | 11.7 | 2.6 | 4.4 | 5.4 |
| $50 \%$ or more | 23.1 | 7.7 | 4.6 | 11.7 |
| M inority T eachers |  |  |  |  |
| N one | 7.6 | 0.7 | 4.9 | 2.4 |
| M ore than 0\% to under 20\% | 11.7 | 2.4 | 4.8 | 5.2 |
| 20\% or more | 19.1 | 6.2 | 4.3 | 9.9 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 20.1 | 5.9 | 7.1 | 8.3 |
| U rban-outside central city | 9.9 | 2.3 | 5.3 | 2.7 |
| $N$ onurban area | 9.8 | 1.2 | 4.3 | 5.0 |
| Region by District Size |  |  |  |  |
| $N$ ortheast | 6.0 | 0.2 | 5.1 | 1.0 |
| U nder 1,000 | 5.1 | 0.0 | 4.5 | 0.6 |
| 1,000 to 9,999 | 6.4 | 0.3 | 5.2 | 1.1 |
| 10,000 or more | 16.4 | 2.1 | 12.3 | 4.3 |
| M idwest | 8.3 | 0.4 | 6.2 | 2.2 |
| U nder 1,000 | 8.5 | 0.2 | 6.4 | 2.6 |
| 1,000 to 9,999 | 7.8 | 0.7 | 5.8 | 1.6 |
| 10,000 or more | 10.4 | 1.6 | 7.0 | 2.6 |
| South | 16.8 | 4.9 | 2.4 | 10.4 |
| U nder 1,000 | 18.4 | 4.3 | 1.5 | 13.1 |
| 1,000 to 9,999 | 14.3 | 4.0 | 2.8 | 8.3 |
| 10,000 or more | 23.5 | 12.1 | 4.2 | 10.1 |
| W est | 11.0 | 2.8 | 4.5 | 4.3 |
| U nder 1,000 | 5.2 | 0.5 | 3.6 | 1.8 |
| 1,000 to 9,999 | 19.3 | 5.9 | 5.8 | 8.0 |
| 10,000 or more | 20.8 | 7.2 | 5.9 | 8.5 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-23. Percentage of school districts using pay incentives to recruit or retain teachers to fields of shortage by subject matter, by selected district characteristics: 1993-94

| District <br> Characteristic | Special Education | M ath | Comp. Physical |  | ect M atter |  | Foreign Language | Vocational Education | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Biological Sciences | ESL or Bilingual <br> Education |  |  |  |
|  |  |  | Sci. | Science |  |  |  |  |  |
| TOTAL | 6.2 | 3.2 | 1.7 | 2.7 | 2.8 | 3.2 | 2.0 | 2.5 | 1.1 |
| District Size |  |  |  |  |  |  |  |  |  |
| U nder 1,000 | 5.0 | 4.0 | 1.7 | 3.0 | 3.4 | 1.6 | 2.0 | 2.7 | 1.0 |
| 1,000 to 9,999 | 6.8 | 2.3 | 1.8 | 2.4 | 2.2 | 4.3 | 2.2 | 2.4 | 1.3 |
| 10,000 or more | 12.8 | 2.8 | 0.6 | 2.1 | 2.2 | 9.9 | 1.0 | 2.5 | 1.3 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| U nder 10\% | 4.5 | 2.2 | 1.3 | 2.1 | 2.2 | 1.0 | 1.7 | 2.1 | 1.0 |
| 10\% to under 50\% | 7.1 | 3.8 | 2.2 | 3.0 | 3.2 | 4.3 | 2.4 | 3.1 | 1.3 |
| 50\% or more | 13.0 | 7.5 | 2.2 | 5.7 | 5.5 | 12.4 | 3.3 | 3.6 | 1.1 |
| M inority T eachers |  |  |  |  |  |  |  |  |  |
| N one | 4.2 | 3.1 | 1.4 | 2.4 | 2.9 | 1.2 | 2.1 | 2.3 | 1.0 |
| M ore than 0\% to under 20\% | \% 7.4 | 3.2 | 1.9 | 3.0 | 2.6 | 4.3 | 1.8 | 2.6 | 1.2 |
| 20\% or more | 11.7 | 3.9 | 1.6 | 3.2 | 3.5 | 10.0 | 3.3 | 3.8 | 1.3 |
| M etro Status |  |  |  |  |  |  |  |  |  |
| U rban-inside central city | 16.2 | 3.3 | 1.3 | 2.9 | 3.0 | 11.0 | 1.2 | 3.0 | 1.1 |
| U rban-outside central city | 5.8 | 2.4 | 1.3 | 2.0 | 1.8 | 3.8 | 1.6 | 2.3 | 0.7 |
| N onurban area | 5.7 | 3.8 | 2.0 | 3.2 | 3.6 | 2.2 | 2.4 | 2.7 | 1.4 |
| Region by District Size |  |  |  |  |  |  |  |  |  |
| N ortheast | 3.7 | 1.8 | 0.8 | 1.7 | 1.0 | 0.9 | 0.4 | 0.8 | 0.7 |
| U nder 1,000 | 3.2 | 3.1 | 0.2 | 0.9 | 0.2 | 0.7 | 0.0 | 0.5 | 0.5 |
| 1,000 to 9,999 | 3.9 | 0.9 | 1.3 | 2.2 | 1.4 | 1.0 | 0.6 | 1.0 | 0.8 |
| 10,000 or more | 9.9 | 2.2 | 0.0 | 2.2 | 2.2 | 4.3 | 0.0 | 4.3 | 2.2 |
| M idwest | 4.8 | 2.5 | 1.6 | 2.4 | 2.3 | 1.4 | 2.5 | 2.4 | 1.5 |
| U nder 1,000 | 4.5 | 2.7 | 1.7 | 2.6 | 2.6 | 1.3 | 2.8 | 2.7 | 1.3 |
| 1,000 to 9,999 | 5.1 | 2.4 | 1.5 | 2.0 | 1.9 | 1.6 | 2.3 | 2.1 | 1.8 |
| 10,000 or more | 7.7 | 1.1 | 0.0 | 1.1 | 1.1 | 0.0 | 0.0 | 1.6 | 0.8 |
| South | 10.6 | 7.0 | 3.0 | 5.4 | 6.3 | 5.5 | 2.9 | 5.3 | 0.9 |
| U nder 1,000 | 9.3 | 11.0 | 3.5 | 7.8 | 10.1 | 3.3 | 2.9 | 6.2 | 0.6 |
| 1,000 to 9,999 | 10.1 | 4.1 | 2.9 | 3.9 | 3.7 | 6.0 | 3.3 | 4.8 | 1.0 |
| 10,000 or more | 18.6 | 5.0 | 1.1 | 3.4 | 3.7 | 12.2 | 0.8 | 3.6 | 2.0 |
| W est | 6.3 | 1.8 | 1.2 | 1.5 | 1.9 | 6.4 | 1.9 | 1.4 | 1.1 |
| U nder 1,000 | 3.8 | 2.0 | 1.4 | 1.6 | 2.1 | 1.5 | 1.2 | 1.5 | 1.0 |
| 1,000 to 9,999 | 10.5 | 1.6 | 1.2 | 1.6 | 1.7 | 13.7 | 2.9 | 1.4 | 1.3 |
| 10,000 or more | 8.6 | 0.9 | 0.5 | 0.9 | 0.9 | 13.4 | 2.1 | 1.3 | 0.5 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-24. Percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Percent | Percent | Percent |
| TOTAL | 11.7 | 10.3 | 19.0 |
| District Size |  |  |  |
| U nder 1,000 | 9.9 | 7.9 | 17.5 |
| 1,000 to 9,999 | 12.8 | 11.7 | 19.1 |
| 10,000 or more | 22.9 | 28.1 | 34.5 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 8.6 | 7.4 | 15.0 |
| 10\% to under 50\% | 13.7 | 14.3 | 20.7 |
| 50\% or more | 24.4 | 19.6 | 37.3 |
| M inority T eachers |  |  |  |
| $N$ one | 8.7 | 6.3 | 14.4 |
| M ore than 0\% to under 20\% | 11.8 | 12.8 | 21.2 |
| 20\% or more | 28.7 | 24.0 | 38.0 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 16.1 | 28.5 |
| U rban-outside central city | - | 10.0 | 17.5 |
| $N$ onurban area |  | 10.1 | 19.5 |
| Region by District Size |  |  |  |
| N ortheast | 9.4 | 7.8 | 13.5 |
| U nder 1,000 | 9.3 | 6.7 | 14.1 |
| 1,000 to 9,999 | 9.3 | 8.4 | 12.9 |
| 10,000 or more | 17.0 | 15.5 | 25.3 |
| M idwest | 7.2 | 4.7 | 13.1 |
| U nder 1,000 | 7.3 | 5.7 | 15.4 |
| 1,000 to 9,999 | 6.9 | 2.8 | 9.7 |
| 10,000 or more | 8.4 | 8.7 | 13.2 |
| South | 18.8 | 19.8 | 26.6 |
| U nder 1,000 | 10.1 | 13.0 | 21.9 |
| 1,000 to 9,999 | 23.9 | 23.5 | 28.5 |
| 10,000 or more | 32.2 | 33.2 | 37.1 |
| W est | 15.0 | 13.3 | 27.7 |
| U nder 1,000 | 15.6 | 8.9 | 20.6 |
| 1,000 to 9,999 | 12.9 | 18.2 | 36.6 |
| 10,000 or more | 19.1 | 34.5 | 44.4 |

Table A-25. Percentage of school districts in which free training is offered to prepare staff members to teach in fields of current or anticipated shortage by subject matter, by selected district characteristics: 1993-94

## Subject M atter

ESL or


| TOTA L | 12.2 | 11.3 | 9.5 | 9.1 | 9.1 | 10.1 | 6.1 | 6.6 | 0.9 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| District Size |  |  |  |  |  |  |  |  |  |
| Under 1,000 | 12.0 | 11.7 | 10.2 | 9.3 | 9.5 | 8.9 | 6.2 | 7.4 | -- |
| 1,000 to 9,999 | 11.6 | 10.7 | 8.6 | 8.8 | 8.6 | 10.2 | 5.7 | 5.6 | 0.6 |
| 10,000 or more | 18.6 | 12.2 | 11.0 | 10.0 | 10.0 | 23.1 | 9.2 | 7.6 | -- |

M inority Students ${ }^{\text {a }}$

| U nder 10\% | 10.5 | 10.1 | 9.0 | 8.1 | 8.0 | 6.1 | 5.8 | 6.5 | -- |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 10\% under 50\% | 13.6 | 11.0 | 9.6 | 9.0 | 9.1 | 12.6 | 6.4 | 6.4 | -- |
| 50\% or more | 17.4 | 18.7 | 12.4 | 15.5 | 16.1 | 26.4 | 7.4 | 8.2 | - |
|  |  |  |  |  |  |  |  |  |  |
| M inority T eachers |  |  |  |  |  |  |  |  |  |
| $\quad$ N one | 10.2 | 9.5 | 8.7 | 7.9 | 8.0 | 6.1 | 5.9 | 6.5 | -- |
| M ore than 0\% to under 20\% | 12.7 | 11.9 | 9.8 | 9.7 | 9.4 | 13.0 | 6.1 | 6.4 | -- |
| 20\% or more | 22.4 | 19.4 | 14.3 | 14.4 | 15.7 | 19.7 | 7.4 | 9.4 | -- |

M etro Status

| U rban-inside central city | 14.3 | 7.7 | 8.3 | 6.9 | 7.5 | 20.3 | 5.8 | 7.5 | -- |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| U rban-outside central city | 8.9 | 9.3 | 7.7 | 6.8 | 6.5 | 10.6 | 4.1 | 4.1 | -- |
| N onurban area | 14.4 | 12.9 | 11.0 | 10.9 | 11.1 | 9.1 | 7.6 | 8.4 | -- |


| Region by District Size |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N ortheast | 9.2 | 9.3 | 9.0 | 6.5 | 5.9 | 5.9 | 4.5 | 4.7 | -- |
| U nder 1,000 | 9.2 | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,000 to 9,999 | 9.1 | 8.7 | 8.5 | 7.2 | 6.4 | 6.2 | 5.0 | 4.8 | -- |
| 10,000 or more | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| M idwest | 8.5 | 8.7 | 7.8 | 7.6 | 7.6 | 5.4 | 6.0 | 6.5 | -- |
| U nder 1,000 | 9.6 | 9.9 | 9.4 | 8.7 | 8.9 | -- | 7.0 | 7.9 | -- |
| 1,000 to 9,999 | 6.8 | 6.9 | 5.6 | 6.0 | 5.9 | -- | -- | 4.5 | -- |
| 10,000 or more | 9.0 | -- | -- | -- | -- | -- | -- | -- | -- |
| South | 19.3 | 15.2 | 11.2 | 12.4 | 12.9 | 13.4 | 8.3 | 9.0 | -- |
| U inder 1,000 | 17.9 | 14.7 | 13.6 | 11.9 | 12.0 | 15.3 | -- | 10.9 | -- |
| 1,000 to 9,999 | 19.0 | 15.5 | 9.3 | 12.7 | 13.6 | 10.8 | 7.3 | 7.5 | -- |
| 10,000 or more | 27.4 | 15.3 | 11.1 | 13.0 | 13.0 | 19.4 | 10.4 | 9.0 | -- |
| W est | 14.2 | 13.9 | 11.6 | 11.1 | 11.2 | 20.1 | 5.7 | 6.1 | -- |
| U nder 1,000 | 14.0 | 13.9 | 9.8 | 11.3 | 12.0 | -- | -- | 5.9 | -- |
| 1,000 to 9,999 | 14.9 | 14.5 | 14.6 | 11.5 | 10.4 | 30.8 | 7.3 | 6.5 | -- |
| 10,000 or more | 13.4 | 11.4 | 12.5 | 8.4 | 7.9 | 39.1 | 10.6 | -- | -- |

a) Districts without students were excluded for this characteristic only.

SO U RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-26. A verage low and high salary for full time teachers in actual and in constant 1993-94 dollars, by selected district characteristics: 1990-91 to 1993-94 ${ }^{\text {a }}$

| District <br> Characteristic | A 19 |  | $\begin{aligned} & \frac{1990-91}{} \\ & \text { Constant 1993-94 Dollars } \end{aligned}$ |  | $\begin{gathered} \frac{1993-94}{\text { Actual Dollars }} \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | High | Low | High | Low | High |
| TOTAL | 19,770 | 35,415 | 21,586 | 38,669 | 21,817 | 39,847 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 18,814 | 31,581 | 20,542 | 34,482 | 20,689 | 35,448 |
| 1,000 to 9,999 | 20,809 | 39,673 | 22,721 | 43,318 | 22,960 | 44,278 |
| 10,000 or more | 21,837 | 42,876 | 23,843 | 46,815 | 23,223 | 45,599 |
| M inority Students ${ }^{\text {c }}$ |  |  |  |  |  |  |
| U nder 10\% | 19,272 | 34,325 | 21,043 | 37,478 | 21,324 | 38,601 |
| 10\% to under 50\% | 20,570 | 37,428 | 22,460 | 40,866 | 22,501 | 42,063 |
| 50\% or more | 20,943 | 37,441 | 22,867 | 40,880 | 22,777 | 40,930 |
| M inority T eachers |  |  |  |  |  |  |
| $N$ one | 18,879 | 32,331 | 20,614 | 35,301 | 20,749 | 36,335 |
| M ore than 0\% to under 20\% | 20,787 | 39,136 | 22,697 | 42,731 | 22,981 | 43,893 |
| 20\% or more | 20,281 | 36,113 | 22,144 | 39,430 | 21,855 | 38,598 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 21,869 | 40,602 | 23,878 | 44,331 | 23,491 | 44,584 |
| U rban-outside central city | 21,446 | 41,290 | 23,416 | 45,083 | 23,786 | 46,634 |
| $N$ onurban area | 18,524 | 31,214 | 20,225 | 34,082 | 20,302 | 34,695 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | 22,467 | 43,791 | 24,530 | 47,814 | 25,467 | 50,793 |
| U rban-inside central city | 23,115 | 45,089 | 25,238 | 49,230 | 26,578 | 52,318 |
| U rban-outside central city | 23,455 | 47,235 | 25,610 | 51,574 | 26,905 | 55,083 |
| $N$ onurban area | 20,664 | 37,602 | 22,562 | 41,056 | 22,697 | 42,672 |
| M idwest | 18,505 | 32,455 | 20,204 | 35,437 | 20,644 | 37,061 |
| U rban-inside central city | 20,705 | 41,907 | 22,607 | 45,757 | 23,260 | 47,165 |
| U rban-outside central city | 20,041 | 39,355 | 21,882 | 42,971 | 22,338 | 44,453 |
| $N$ onurban area | 17,678 | 28,760 | 19,302 | 31,402 | 19,605 | 32,585 |
| South | 18,896 | 31,342 | 20,631 | 34,221 | 20,416 | 33,870 |
| U rban-inside central city | 20,268 | 35,271 | 22,129 | 38,511 | 21,775 | 37,592 |
| U rban-outside central city | 19,300 | 32,842 | 21,073 | 35,859 | 20,884 | 35,641 |
| N onurban area | 18,640 | 30,481 | 20,352 | 33,281 | 20,114 | 32,845 |
| W est | 20,457 | 37,193 | 22,337 | 40,609 | 21,804 | 40,406 |
| U rban-inside central city | 23,237 | 41,821 | 25,371 | 45,663 | 24,178 | 46,334 |
| U rban-outside central city | 22,031 | 41,022 | 24,055 | 44,790 | 23,208 | 44,595 |
| N onurban area | 18,943 | 33,828 | 20,683 | 36,935 | 20,539 | 36,728 |

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.
b) A djusted using the C onsumer Price Index.
c) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-27. A verage scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by sel ected district characteristics: 1990-91 and 1993-94

| District Characteristic | 1990-91 (C onstant 1993-94 D ollars) ${ }^{\text {a }}$ |  |  | 1993-94 (A ctual Dollars) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience |
| TOTAL | 21,742 | 23,691 | 36,249 | 21,923 | 23,956 | 37,213 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 20,747 | 22,546 | 33,364 | 20,817 | 22,777 | 34,360 |
| 1,000 to 9,999 | 22,714 | 24,802 | 39,185 | 22,940 | 25,042 | 39,934 |
| 10,000 or more | 23,834 | 26,163 | 41,194 | 23,212 | 25,327 | 39,657 |
| M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| U nder 10\% | 21,231 | 23,177 | 35,461 | 21,498 | 23,597 | 36,655 |
| 10\% to under 50\% | 22,522 | 24,485 | 37,754 | 22,445 | 24,361 | 38,246 |
| 50\% or more | 22,935 | 24,877 | 37,419 | 22,784 | 24,784 | 37,378 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 20,829 | 22,662 | 34,226 | 20,875 | 22,882 | 35,043 |
| M ore than 0\% to under 20\% | 22,714 | 24,793 | 38,717 | 22,979 | 25,090 | 39,810 |
| 20\% or more | 22,139 | 24,097 | 35,412 | 21,827 | 23,533 | 34,394 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 23,867 | 25,521 | 40,827 | 23,476 | 25,328 | 39,857 |
| U rban-outside central city | 23,446 | 25,549 | 40,927 | 23,781 | 26,060 | 42,680 |
| $N$ onurban area | 20,384 | 22,250 | 32,624 | 20,389 | 22,247 | 32,839 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | 24,604 | 26,617 | 43,453 | 25,581 | 27,727 | 46,594 |
| U rban-inside central city | 25,195 | 27,170 | 43,749 | 26,580 | 28,660 | 47,666 |
| U rban-outside central city | 25,706 | 27,844 | 46,197 | 26,918 | 29,272 | 50,299 |
| $N$ onurban area | 22,516 | 24,302 | 38,366 | 22,693 | 24,406 | 38,739 |
| M idwest | 20,478 | 22,490 | 34,287 | 20,879 | 23,013 | 35,718 |
| U rban-inside central city | 22,607 | 24,844 | 41,070 | 23,262 | 25,633 | 42,471 |
| U rban-outside central city | 21,917 | 24,087 | 39,323 | 22,415 | 24,729 | 41,229 |
| N onurban area | 19,601 | 21,517 | 31,245 | 19,822 | 21,835 | 32,017 |
| South | 20,639 | 22,006 | 31,556 | 20,407 | 21,714 | 30,955 |
| U rban-inside central city | 22,109 | 23,320 | 35,634 | 21,718 | 22,901 | 33,999 |
| U rban-outside central city | 21,081 | 22,544 | 32,913 | 20,879 | 22,177 | 32,256 |
| $N$ onurban area | 20,359 | 21,701 | 30,729 | 20,108 | 21,427 | 30,175 |
| W est | 22,458 | 24,895 | 38,006 | 21,913 | 24,505 | 37,800 |
| U rban-inside central city | 25,371 | 26,854 | 43,224 | 24,263 | 26,299 | 40,139 |
| U rban-outside central city | 24,068 | 26,493 | 41,125 | 23,219 | 26,055 | 40,874 |
| $N$ onurban area | 20,767 | 23,371 | 34,800 | 20,616 | 23,057 | 35,039 |

a) A djusted using the C onsumer Price Index.
b) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-28. Number and percentage of school districts with collective bargaining units, by selected district characteristics: 1993-94

| District Characteristic | N umber | Percent |
| :---: | :---: | :---: |
| TOTAL | 9,586 | 64.0 |
| District Size |  |  |
| U nder 1,000 | 4,391 | 57.6 |
| 1,000 to 9,999 | 4,746 | 71.3 |
| 10,000 or more | 450 | 63.5 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 6,514 | 72.0 |
| 10\% to under 50\% | 2,356 | 55.0 |
| $50 \%$ or more | 679 | 42.1 |
| M inority Teachers |  |  |
| N one | 4,901 | 67.2 |
| M ore than 0\% to under 20\% | 4,366 | 65.6 |
| 20\% or more | 319 | 30.7 |
| M etro Status |  |  |
| U rban-inside central city | 392 | 69.9 |
| U rban-outside central city | 4,721 | 78.6 |
| $N$ onurban area | 4,473 | 53.1 |
| Region by M etro Status |  |  |
| $N$ ortheast | 3,037 | 98.1 |
| U rban-inside central city | 83 | 97.9 |
| U rban-outside central city | 1,939 | 99.0 |
| $N$ onurban area | 1,014 | 96.6 |
| M idwest | 4,168 | 73.7 |
| U rban-inside central city | 147 | 93.9 |
| U rban-outside central city | 1,670 | 86.1 |
| N onurban area | 2,351 | 66.1 |
| South | 392 | 11.9 |
| U rban-inside central city | 34 | 18.2 |
| U rban-outside central city | 160 | 17.9 |
| $N$ onurban area | 198 | 8.9 |
| W est | 1,990 | 67.8 |
| U rban-inside central city | 128 | 95.6 |
| U rban-outside central city | 952 | 78.8 |
| N onurban area | 910 | 57.2 |

Table A-29. A verage scheduled salary for teachers by education and teaching experience in school districts with and without collective bargaining units, by selected district characteristics: 1993-94

| DistrictCharacteristic | With Collective Bargaining U nits |  |  | W ithout Collective Bargaining Units |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor's without | M aster's without | M aster's with 20 yrs | Bachelor's without | M aster's without | M aster's with 20 yrs |
|  | Experience | Experience | Experience | Experience | Experience | Experience |
| TOTAL | 22,850 | 25,115 | 40,375 | 20,127 | 21,712 | 31,088 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 21,560 | 23,838 | 37,204 | 19,642 | 21,097 | 29,859 |
| 1,000 to 9,999 | 23,906 | 26,146 | 43,033 | 20,565 | 22,325 | 32,310 |
| 10,000 or more | 23,963 | 26,360 | 42,480 | 21,908 | 23,534 | 34,758 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 22,144 | 24,328 | 38,807 | 19,472 | 21,306 | 29,911 |
| 10\% to under 50\% | 24,157 | 26,603 | 43,873 | 20,335 | 21,598 | 31,311 |
| 50\% or more | 25,032 | 27,459 | 43,099 | 21,140 | 22,827 | 33,193 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 21,529 | 23,683 | 37,312 | 19,197 | 20,825 | 29,220 |
| M ore than 0\% to under 20\% | 24,200 | 26,600 | 43,648 | 20,657 | 22,219 | 32,514 |
| 20\% or more | 24,111 | 26,184 | 41,359 | 20,829 | 22,375 | 31,353 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 24,208 | 26,356 | 42,009 | 21,754 | 22,909 | 34,790 |
| U rban-outside central city | 24,486 | 26,904 | 45,034 | 21,192 | 22,958 | 34,033 |
| N onurban area | 20,969 | 23,079 | 35,221 | 19,652 | 21,190 | 29,811 |
| Region by M etro Status |  |  |  |  |  |  |
| $N$ ortheast | 25,623 | 27,765 | 46,715 | 22,996 | 25,386 | 39,105 |
| U rban-inside central city | 26,670 | 28,759 | 47,922 | -- | -- | -- |
| U rban-outside central city | 26,921 | 29,264 | 50,306 | -- | -- | -- |
| $N$ onurban area | 22,764 | 24,483 | 38,960 | -- | -- | -- |
| M idwest | 21,376 | 23,620 | 37,556 | 18,911 | 20,612 | 28,452 |
| Urban-inside central city | 23,331 | 25,743 | 42,557 | -- | -- | -- |
| U rban-outside central city | 22,688 | 25,045 | 42,340 | 20,636 | 22,674 | 34,005 |
| $N$ onurban area | 20,326 | 22,480 | 33,862 | 18,318 | 19,910 | 26,516 |
| South | 21,752 | 23,362 | 32,146 | 20,226 | 21,491 | 30,795 |
| U rban-inside central city | 21,762 | 23,223 | 32,151 | 21,708 | 22,829 | 34,415 |
| U rban-outside central city | 21,946 | 23,568 | 33,634 | 20,646 | 21,874 | 31,956 |
| N onurban area | 21,593 | 23,219 | 30,936 | 19,962 | 21,252 | 30,101 |
| W est | 22,210 | 24,824 | 38,899 | 21,185 | 23,725 | 35,110 |
| U rban-inside central city | 24,321 | 26,385 | 40,300 | -- | -- | -- |
| U rban-outside central city | 23,287 | 26,094 | 41,358 | 22,956 | 25,908 | 39,011 |
| $N$ onurban area | 20,759 | 23,246 | 36,076 | 20,386 | 22,753 | 33,371 |

-- Too few cases for a reliable estimate.
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-30. Number and percentage of school districts offering retirement plans to teachers, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent | Number | Percent |
| TOTAL | 15,035 | 98.6 | 15,315 | 98.7 | 14,826 | 98.9 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 7,776 | 97.8 | 8,274 | 98.2 | 7,491 | 98.2 |
| 1,000 to 9,999 | 6,624 | 99.5 | 6,365 | 99.4 | 6,627 | 99.6 |
| 10,000 or more | 636 | 99.8 | 676 | 99.8 | 708 | 100.0 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 9,686 | 98.2 | 9,926 | 99.2 | 8,906 | 98.4 |
| 10\% to under 50\% | 3,364 | 99.2 | 3,925 | 99.5 | 4,267 | 99.6 |
| 50\% or more | 1,904 | 99.7 | 1,436 | 93.9 | 1,608 | 99.8 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 7,694 | 97.9 | 7,812 | 98.1 | 7,177 | 98.4 |
| M ore than 0\% to under 20\% | 5,972 | 99.3 | 6,340 | 99.4 | 6,613 | 99.4 |
| 20\% or more | 1,370 | 99.7 | 1,163 | 99.6 | 1,036 | 99.7 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 604 | 88.3 | 561 | 100.0 |
| U rban-outside central city | - | - | 5,799 | 99.5 | 5,961 | 99.3 |
| $N$ onurban area | - | - | 8,912 | 99.0 | 8,305 | 98.6 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | - | - | 3,091 | 99.7 | 3,062 | 99.0 |
| U rban-inside central city | - | - | 101 | 100.0 | 85 | 100.0 |
| U rban-outside central city |  | - | 1,906 | 99.5 | 1,944 | 99.2 |
| $N$ onurban area | - | - | 1,084 | 99.8 | 1,033 | 98.4 |
| M idwest | - | - | 5,869 | 99.1 | 5,548 | 98.2 |
| U rban-inside central city | - | - | 152 | 99.0 | 157 | 100.0 |
| U rban-outside central city | - | - | 1,854 | 98.9 | 1,913 | 98.7 |
| $N$ onurban area | - | - | 3,863 | 99.2 | 3,478 | 97.8 |
| South | - | - | 3,387 | 99.2 | 3,302 | 99.9 |
| U rban-inside central city | - | - | 180 | 100.0 | 185 | 100.0 |
| U rban-outside central city |  | - | 881 | 100.0 | 896 | 100.0 |
| $N$ onurban area | - | - | 2,327 | 98.8 | 2,220 | 99.8 |
| W est | - | - | 2,968 | 96.6 | 2,914 | 99.3 |
| U rban-inside central city | - | - | 171 | 68.5 | 134 | 100.0 |
| U rban-outside central city | - | - | 1,159 | 99.9 | 1,208 | 99.9 |
| N onurban area | - | - | 1,638 | 98.5 | 1,573 | 98.8 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire). a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A-31. Percentage of school districts with retirement plans that permit teachers full or partial credit for teaching experience obtained in another school district within-state and outside-the-state, by selected district characteristics: 1993-94

| District Characteristic | W ithin-State |  | Outside-the-State |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Full C redit | Partial Credit | Full C redit | Partial Credit |
| TOTAL | 96.2 | 2.4 | 42.5 | 23.4 |
| District Size |  |  |  |  |
| U nder 1,000 | 96.2 | 2.2 | 43.5 | 24.8 |
| 1,000 to 9,999 | 96.0 | 2.7 | 42.1 | 22.1 |
| 10,000 or more | 96.7 | -- | 35.5 | 19.8 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 95.3 | 2.9 | 44.4 | 24.0 |
| 10\% to under 50\% | 97.1 | -- | 41.2 | 23.4 |
| 50\% or more | 98.0 | -- | 35.3 | 19.4 |
| M inority T eachers |  |  |  |  |
| N one | 95.5 | 3.0 | 43.5 | 24.7 |
| M ore than 0\% to under 20\% | 96.6 | 1.8 | 41.8 | 21.9 |
| 20\% or more | 98.0 | -- | 40.1 | 23.3 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 98.2 | -- | 41.1 | 21.0 |
| U rban-outside central city | 96.9 | 1.8 | 43.3 | 21.2 |
| N onurban area | 95.4 | 2.9 | 42.0 | 25.0 |
| Region by M etro Status |  |  |  |  |
| $N$ ortheast | 97.8 | -- | 53.8 | 20.4 |
| U rban-inside central city | 100.0 | 0.0 | 56.2 | 21.3 |
| U rban-outside central city | 97.5 | -- | 54.7 | 21.8 |
| N onurban area | 98.2 | -- | 51.7 | 17.6 |
| M idwest | 93.6 | 3.9 | 41.2 | 26.4 |
| U rban-inside central city | 96.6 | -- | 50.2 | 26.8 |
| U rban-outside central city | 94.9 | -- | 46.4 | 26.3 |
| N onurban area | 92.7 | 4.8 | 37.9 | 26.5 |
| South | 99.0 | -- | 52.6 | 24.3 |
| U rban-inside central city | 99.4 | -- | 51.1 | 25.7 |
| U rban-outside central city | 99.3 | -- | 48.6 | 24.4 |
| N onurban area | 98.8 | -- | 54.4 | 24.2 |
| W est | 96.1 | 2.5 | 21.6 | 19.5 |
| U rban-inside central city | 97.5 | -- | 7.1 | 7.6 |
| U rban-outside central city | 97.6 | -- | 15.8 | 9.8 |
| N onurban area | 94.9 | 3.0 | 27.4 | 28.0 |

-- T oo few cases for a reliable estimate.
a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-32. Number and percentage of school districts allowing teachers to purchase credit toward retirement plan for experience obtained in other school districts within-state and outside-the-state, by selected district characteristics: 1993-94

| District Characteristic | W ithin-State |  | O utside-the-State |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| TOTAL | 1,324 | 9.1 | 7,936 | 81.3 |
| District Size |  |  |  |  |
| U nder 1,000 | 757 | 10.3 | 4,016 | 78.5 |
| 1,000 to 9,999 | 510 | 7.8 | 3,576 | 84.1 |
| 10,000 or more | 58 | 8.3 | 344 | 87.6 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 749 | 8.6 | 4,906 | 80.6 |
| 10\% to under 50\% | 428 | 10.1 | 2,307 | 83.7 |
| 50\% or more | 141 | 8.8 | 698 | 79.3 |
| M inority Teachers |  |  |  |  |
| N one | 596 | 8.4 | 3,869 | 79.0 |
| M ore than 0\% to under 20\% | 593 | 9.1 | 3,525 | 83.7 |
| 20\% or more | 136 | 13.2 | 542 | 82.5 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 50 | 9.0 | 318 | 91.3 |
| U rban-outside central city | 519 | 8.8 | 3,205 | 83.4 |
| N onurban area | 755 | 9.2 | 4,412 | 79.2 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 305 | 10.1 | 1,961 | 86.4 |
| U rban-inside central city | 12 | 14.1 | 56 | 84.8 |
| U rban-outside central city | 194 | 10.0 | 1,293 | 86.9 |
| N onurban area | 99 | 9.7 | 612 | 85.4 |
| M idwest | 447 | 8.3 | 2,905 | 77.4 |
| U rban-inside central city | 12 | 8.0 | 114 | 94.8 |
| U rban-outside central city | 132 | 7.1 | 1,137 | 81.8 |
| $N$ onurban area | 302 | 8.9 | 1,653 | 73.8 |
| South | 347 | 10.5 | 2,163 | 85.2 |
| U rban-inside central city | 4 | 2.2 | 131 | 92.3 |
| U rban-outside central city | 96 | 10.7 | 554 | 84.6 |
| $N$ onurban area | 246 | 11.1 | 1,478 | 84.8 |
| W est | 226 | 7.9 | 907 | 75.6 |
| U rban-inside central city | 22 | 16.1 | 16 | 83.4 |
| U rban-outside central city | 97 | 8.1 | 221 | 71.4 |
| $N$ onurban area | 108 | 7.0 | 670 | 76.9 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-33. A verage number of years of credit required in English, mathematics, social science, physical/biological science, computer science, and foreign language for high school graduation in school districts with 4 -year programs, by selected district characteristics: 1990-91 to 1993-94

## School Year

| District Characteristic | 1990-91 <br> N umber of Y ears | $1993-94$ <br> N umber of Y ears |
| :---: | :---: | :---: |
| TOTAL | 11.8 | 12.1 |
| District Size |  |  |
| U nder 1,000 | 11.8 | 12.2 |
| 1,000 to 9,999 | 11.9 | 12.1 |
| 10,000 or more | 11.8 | 12.0 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 11.7 | 11.9 |
| 10\% to under 50\% | 12.0 | 12.4 |
| 50\% or more | 12.3 | 12.8 |
| M inority T eachers |  |  |
| N one | 11.7 | 11.9 |
| M ore than 0\% to under 20\% | 11.9 | 12.2 |
| 20\% or more | 12.2 | 12.8 |
| M etro Status |  |  |
| U rban-inside central city | 12.0 | 12.0 |
| U rban-outside central city | 11.9 | 12.1 |
| N onurban area | 11.8 | 12.1 |
| Region by M etro Status |  |  |
| N ortheast | 12.9 | 13.1 |
| U rban-inside central city | 12.2 | 12.1 |
| U rban-outside central city | 12.9 | 13.1 |
| $N$ onurban area | 12.9 | 13.2 |
| M idwest | 11.1 | 11.2 |
| U rban-inside central city | 11.0 | 11.0 |
| U rban-outside central city | 10.8 | 11.0 |
| $N$ onurban area | 11.2 | 11.3 |
| South | 12.2 | 12.7 |
| U rban-inside central city | 12.9 | 12.7 |
| U rban-outside central city | 12.2 | 12.6 |
| $N$ onurban area | 12.1 | 12.8 |
| W est | 11.8 | 12.0 |
| U rban-inside central city | 11.3 | 11.8 |
| U rban-outside central city | 11.6 | 11.8 |
| N onurban area | 12.0 | 12.1 |

[^24]SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-34. A verage number of years of English required for high school graduation in school districts with 4 -year programs, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Number of Years | Number of Years | $N$ umber of Y ears |
| TOTAL | 3.8 | 3.8 | 3.9 |
| District Size |  |  |  |
| U nder 1,000 | 3.7 | 3.8 | 3.8 |
| 1,000 to 9,999 | 3.8 | 3.8 | 3.9 |
| 10,000 or more | 3.8 | 3.8 | 3.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 3.7 | 3.8 | 3.8 |
| 10\% to under 50\% | 3.8 | 3.9 | 3.9 |
| 50\% or more | 3.9 | 3.9 | 3.9 |
| M inority T eachers |  |  |  |
| $N$ one | 3.7 | 3.7 | 3.8 |
| M ore than 0\% to under 20\% | 3.8 | 3.8 | 3.9 |
| 20\% or more | 3.9 | 3.9 | 3.9 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 3.8 | 3.9 |
| U rban-outside central city | - | 3.8 | 3.8 |
| $N$ onurban area | - | 3.8 | 3.9 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 3.9 | 4.0 |
| U rban-inside central city | - | 4.0 | 3.9 |
| U rban-outside central city | - | 3.9 | 4.0 |
| $N$ onurban area | - | 3.9 | 4.0 |
| M idwest | - | 3.6 | 3.7 |
| U rban-inside central city | - | 3.6 | 3.8 |
| U rban-outside central city | - | 3.6 | 3.7 |
| $N$ onurban area | - | 3.6 | 3.7 |
| South | - | 3.9 | 4.0 |
| U rban-inside central city | - | 4.0 | 4.0 |
| U rban-outside central city |  | 4.0 | 4.0 |
| $N$ onurban area | - | 3.9 | 4.0 |
| W est | - | 3.8 | 3.9 |
| U rban-inside central city | - | 3.5 | 3.7 |
| U rban-outside central city |  | 3.7 | 3.7 |
| N onurban area | - | 3.9 | 3.9 |

Table A-35. A verage number of years of mathematics required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| District | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Number of Years | N umber of Years | Number of Years |
| TOTAL | 2.4 | 2.4 | 2.5 |
| District Size |  |  |  |
| U nder 1,000 | 2.4 | 2.4 | 2.5 |
| 1,000 to 9,999 | 2.4 | 2.5 | 2.5 |
| 10,000 or more | 2.4 | 2.5 | 2.5 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 2.3 | 2.4 | 2.4 |
| 10\% to under 50\% | 2.5 | 2.5 | 2.6 |
| 50\% or more | 2.6 | 2.6 | 2.7 |
| M inority T eachers |  |  |  |
| N one | 2.3 | 2.4 | 2.4 |
| M ore than 0\% to under 20\% | 2.4 | 2.5 | 2.5 |
| 20\% or more | 2.6 | 2.6 | 2.7 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 2.5 | 2.5 |
| U rban-outside central city | - | 2.4 | 2.5 |
| N onurban area | - | 2.4 | 2.5 |
| Region by M etro Status |  |  |  |
| $N$ ortheast | - | 2.6 | 2.7 |
| U rban-inside central city | - | 2.5 | 2.7 |
| U rban-outside central city | - | 2.6 | 2.7 |
| $N$ onurban area | - | 2.5 | 2.6 |
| M idwest | - | 2.2 | 2.3 |
| U rban-inside central city | - | 2.2 | 2.1 |
| U rban-outside central city | - | 2.2 | 2.2 |
| $N$ onurban area | - | 2.2 | 2.3 |
| South | - | 2.7 | 2.8 |
| U rban-inside central city | - | 2.9 | 2.9 |
| U rban-outside central city | - | 2.7 | 2.8 |
| $N$ onurban area | - | 2.6 | 2.8 |
| W est | - | 2.4 | 2.3 |
| U rban-inside central city | - | 2.4 | 2.2 |
| U rban-outside central city | - | 2.3 | 2.3 |
| N onurban area | - | 2.4 | 2.4 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A -36. A verage number of years of social science required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| District | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Number of Y ears | Number of Y ears | Number of Y ears |
| TOTAL | 2.8 | 2.9 | 3.0 |
| District Size |  |  |  |
| U nder 1,000 | 2.8 | 2.8 | 2.9 |
| 1,000 to 9,999 | 2.8 | 2.9 | 3.0 |
| 10,000 or more | 2.8 | 2.9 | 3.0 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 2.8 | 2.9 | 3.0 |
| 10\% to under 50\% | 2.8 | 2.9 | 2.9 |
| 50\% or more | 2.9 | 2.9 | 3.1 |
| M inority T eachers |  |  |  |
| N one | 2.8 | 2.9 | 3.0 |
| M ore than 0\% to under 20\% | 2.8 | 2.9 | 3.0 |
| 20\% or more | 2.8 | 2.8 | 3.0 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 2.9 | 2.9 |
| U rban-outside central city | - | 2.9 | 3.1 |
| N onurban area | - | 2.8 | 2.9 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 3.3 | 3.3 |
| U rban-inside central city | - | 2.9 | 2.9 |
| U rban-outside central city |  | 3.3 | 3.4 |
| $N$ onurban area | - | 3.3 | 3.3 |
| M idwest |  | 2.8 | 2.8 |
| U rban-inside central city | - | 2.8 | 2.8 |
| U rban-outside central city | - | 2.7 | 2.8 |
| $N$ onurban area | - | 2.8 | 2.9 |
| South |  | 2.7 | 2.8 |
| U rban-inside central city | - | 3.0 | 3.0 |
| U rban-outside central city | - | 2.7 | 2.9 |
| $N$ onurban area | - | 2.7 | 2.8 |
| W est | - | 3.0 | 3.1 |
| Urban-inside central city | - | 3.0 | 3.2 |
| U rban-outside central city | - | 3.0 | 3.2 |
| N onurban area | - | 2.9 | 3.0 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-37. A verage number of years of physical and biol ogical sciences required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| DistrictCharacteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Number of Years | $N$ umber of Y ears | Number of Y ears |
| TOTAL | 2.0 | 2.1 | 2.2 |
| District Size |  |  |  |
| U nder 1,000 | 2.1 | 2.1 | 2.2 |
| 1,000 to 9,999 | 2.0 | 2.1 | 2.2 |
| 10,000 or more | 2.1 | 2.1 | 2.2 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 2.0 | 2.1 | 2.2 |
| 10\% to under 50\% | 2.1 | 2.2 | 2.2 |
| 50\% or more | 2.2 | 2.2 | 2.3 |
| M inority T eachers |  |  |  |
| N one | 2.0 | 2.1 | 2.2 |
| M ore than 0\% to under 20\% | 2.0 | 2.1 | 2.2 |
| 20\% or more | 2.2 | 2.2 | 2.4 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 2.1 | 2.1 |
| U rban-outside central city | - | 2.1 | 2.2 |
| N onurban area | - | 2.2 | 2.2 |
| Region by M etro Status |  |  |  |
| $N$ ortheast | - | 2.3 | 2.3 |
| Urban-inside central city | - | 2.2 | 2.1 |
| U rban-outside central city | - | 2.3 | 2.3 |
| $N$ onurban area | - | 2.3 | 2.3 |
| M idwest | - | 2.0 | 2.0 |
| U rban-inside central city | - | 1.9 | 2.0 |
| U rban-outside central city | - | 1.9 | 1.9 |
| N onurban area | - | 2.0 | 2.1 |
| South | - | 2.2 | 2.4 |
| U rban-inside central city | - | 2.3 | 2.3 |
| U rban-outside central city | - | 2.2 | 2.3 |
| $N$ onurban area | - | 2.3 | 2.4 |
| W est | - | 2.1 | 2.1 |
| U rban-inside central city | - | 2.0 | 2.1 |
| U rban-outside central city | - | 1.9 | 2.1 |
| N onurban area | - | 2.2 | 2.2 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-38. Percentage of school districts with high school graduation requirements in computer science, by selected district characteristics: 1990-91 to 1993-94

| School Year |  |  |
| :---: | :---: | :---: |
| District | 1990-91 | 1993-94 |
| Characteristic | Percent of Districts | Percent of Districts |
| TOTAL | 33.0 | 36.5 |
| District Size |  |  |
| U nder 1,000 | 40.3 | 45.9 |
| 1,000 to 9,999 | 27.4 | 31.3 |
| 10,000 or more | 25.9 | 20.3 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 32.9 | 37.2 |
| 10\% to under 50\% | 31.8 | 35.5 |
| 50\% or more | 36.9 | 35.5 |
| M inority T eachers |  |  |
| $N$ one | 35.9 | 39.8 |
| M ore than 0\% to under 20\% | 29.3 | 34.0 |
| 20\% or more | 37.3 | 33.8 |
| M etro Status |  |  |
| U rban-inside central city | 30.5 | 28.1 |
| U rban-outside central city | 27.5 | 30.2 |
| $N$ onurban area | 36.4 | 41.3 |
| Region by M etro Status |  |  |
| N ortheast | 28.4 | 32.1 |
| U rban-inside central city | 20.5 | 21.6 |
| U rban-outside central city | 25.3 | 24.8 |
| $N$ onurban area | 35.5 | 48.6 |
| M idwest | 35.5 | 37.1 |
| U rban-inside central city | 32.0 | 44.3 |
| U rban-outside central city | 28.6 | 33.3 |
| $N$ onurban area | 39.1 | 38.8 |
| South | 33.7 | 39.0 |
| U rban-inside central city | 39.7 | 21.0 |
| U rban-outside central city | 29.5 | 37.3 |
| $N$ onurban area | 34.7 | 41.1 |
| W est | 30.8 | 36.3 |
| U rban-inside central city | 19.7 | 22.5 |
| U rban-outside central city | 27.3 | 24.6 |
| N onurban area | 33.1 | 43.6 |

Table A-39. Percentage of school districts with graduation requirements in foreign language in school districts with 4 -year programs, by selected district characteristics: 1987-88 to 1993-94

| District | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Percent of Districts | Percent of Districts | Percent of Districts |
| TOTAL | 14.2 | 18.8 | 17.6 |
| District Size |  |  |  |
| U nder 1,000 | 13.1 | 19.4 | 16.6 |
| 1,000 to 9,999 | 14.3 | 17.7 | 17.9 |
| 10,000 or more | 22.3 | 23.6 | 21.4 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 12.2 | 16.8 | 13.3 |
| 10\% to under 50\% | 16.7 | 20.8 | 22.2 |
| 50\% or more | 20.1 | 26.0 | 28.7 |
| M inority T eachers |  |  |  |
| $N$ one | 12.1 | 16.4 | 13.4 |
| M ore than 0\% to under 20\% | 15.2 | 20.1 | 19.7 |
| 20\% or more | 19.6 | 24.7 | 28.7 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 22.9 | 19.2 |
| U rban-outside central city | - | 20.3 | 19.2 |
| $N$ onurban area | - | 17.5 | 16.4 |
| Region by M etro Status |  |  |  |
| N ortheast |  | 29.9 | 29.1 |
| U rban-inside central city | - | 17.8 | 19.5 |
| U rban-outside central city | - | 28.7 | 27.8 |
| $N$ onurban area | - | 33.9 | 33.1 |
| M idwest | - | 9.7 | 6.4 |
| U rban-inside central city | - | 17.6 | 8.4 |
| U rban-outside central city | - | 8.6 | 7.4 |
| $N$ onurban area | - | 9.8 | 5.8 |
| South | - | 21.1 | 21.6 |
| U rban-inside central city | - | 26.9 | 16.2 |
| U rban-outside central city | - | 16.6 | 18.1 |
| $N$ onurban area | - | 22.2 | 23.4 |
| W est | - | 24.6 | 24.4 |
| U rban-inside central city | - | 29.7 | 45.3 |
| U rban-outside central city | - | 38.3 | 31.6 |
| $N$ onurban area | - | 18.2 | 19.0 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher
Demand and Shortage Questionnaire).

Table A-40. Number and percentage of school districts with community service requirements for high school graduation in school districts with 4-year programs, by selected district characteristics: 1993-94

| District Characteristic | N umber of Districts | Percent of Districts |
| :---: | :---: | :---: |
| TOTAL | 364 | 3.3 |
| District Size |  |  |
| U nder 1,000 | 102 | 2.3 |
| 1,000 to 9,999 | 236 | 3.9 |
| 10,000 or more | 26 | 3.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 218 | 3.3 |
| 10\% to under 50\% | 124 | 3.7 |
| 50\% or more | 22 | 1.9 |
| M inority T eachers |  |  |
| $N$ one | 151 | 3.1 |
| M ore than 0\% to under 20\% | 199 | 3.7 |
| 20\% or more | 13 | 1.6 |
| M etro Status |  |  |
| U rban-inside central city | 18 | 4.0 |
| U rban-outside central city | 206 | 4.8 |
| N onurban area | 139 | 2.2 |
| Region by M etro Status |  |  |
| N ortheast | 138 | 6.3 |
| U rban-inside central city | 4 | 4.5 |
| U rban-outside central city | 110 | 7.8 |
| N onurban area | 24 | 3.6 |
| M idwest | 117 | 2.7 |
| U rban-inside central city | 11 | 8.1 |
| U rban-outside central city | 49 | 3.3 |
| N onurban area | 57 | 2.1 |
| South | 53 | 1.7 |
| U rban-inside central city | 4 | 2.3 |
| U rban-outside central city | 21 | 2.5 |
| $N$ onurban area | 28 | 1.3 |
| W est | 57 | 3.7 |
| U rban-inside central city | 0 | 0.0 |
| U rban-outside central city | 26 | 5.1 |
| N onurban area | 31 | 3.2 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-41. Percentage of school districts and number of students in grades K - 12 participating in C hapter 1 programs, by selected district characteristics: 1993-94

| District Characteristic | Percent of Districts | Number of Students |
| :---: | :---: | :---: |
| TOTAL | 91.6 | 5,954,190 |
| District Size |  |  |
| Under 1,000 | 85.7 | 415,656 |
| 1,000 to 9,999 | 97.6 | 2,531,834 |
| 10,000 or more | 98.8 | 3,006,700 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 89.9 | 1,169,190 |
| 10\% to under 50\% | 94.1 | 1,676,181 |
| 50\% or more | 96.7 | 3,108,819 |
| M inority T eachers |  |  |
| N one | 86.9 | 600,777 |
| M ore than 0\% to under 20\% | 96.1 | 2,681,980 |
| 20\% or more | 95.0 | 2,671,433 |
| M etro Status |  |  |
| U rban-inside central city | 92.5 | 2,218,016 |
| U rban-outside central city | 94.8 | 2,098,261 |
| $N$ onurban area | 89.2 | 1,637,913 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |
| $N$ ortheast | 94.5 | 1,064,420 |
| U nder 10\% | 95.7 | 319,267 |
| 10\% to under 50\% | 91.4 | 174,332 |
| 50\% or more | 98.2 | 570,821 |
| M idwest | 88.4 | 853,974 |
| U nder 10\% | 87.8 | 449,395 |
| 10\% to under 50\% | 95.0 | 195,581 |
| $50 \%$ or more | 90.2 | 208,998 |
| South | 97.1 | 2,212,521 |
| U nder 10\% | 98.6 | 303,523 |
| 10\% to under 50\% | 96.6 | 864,842 |
| 50\% or more | 96.6 | 1,044,157 |
| W est | 88.1 | 1,823,275 |
| U nder 10\% | 81.0 | 97,006 |
| 10\% to under 50\% | 91.0 | 441,426 |
| 50\% or more | 97.9 | 1,284,843 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-42. Percentage of school districts with various types of programs for prekindergarten-age children, by selected district characteristics: 1993-94

| District <br> Characteristic | Type of Prekindergarten Programs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Head Start | Day Care | Chapter 1 | Special Education | G eneral | NoPK Programs |
| totala | 24.3 | 14.5 | 8.4 | 44.9 | 25.1 | 35.9 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 15.9 | 8.4 | 4.4 | 31.3 | 20.8 | 48.6 |
| 1,000 to 9,999 | 31.8 | 18.9 | 10.8 | 57.3 | 28.0 | 24.2 |
| 10,000 or more | 44.8 | 39.3 | 29.7 | 74.2 | 43.8 | 9.1 |
| M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| U nder 10\% | 22.3 | 11.7 | 6.2 | 42.4 | 22.1 | 40.7 |
| 10\% to under 50\% | 24.3 | 19.0 | 10.8 | 48.4 | 28.7 | 30.5 |
| $50 \%$ or more | 35.7 | 18.5 | 14.6 | 48.9 | 32.5 | 23.2 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 19.9 | 8.6 | 5.7 | 38.6 | 22.1 | 44.1 |
| M ore than 0\% to under 20\% | 26.4 | 19.9 | 9.9 | 50.7 | 26.6 | 29.6 |
| 20\% or more | 41.9 | 22.3 | 18.6 | 52.2 | 36.4 | 18.9 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 35.9 | 33.2 | 26.3 | 63.7 | 38.1 | 16.0 |
| U rban-outside central city | 20.3 | 17.5 | 6.4 | 45.5 | 25.1 | 36.5 |
| $N$ onurban area | 26.4 | 11.2 | 8.7 | 43.2 | 24.2 | 36.8 |
| Region by Percent M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| $N$ ortheast | 16.3 | 12.5 | 8.1 | 36.5 | 19.5 | 45.9 |
| U nder 10\% | 16.7 | 11.9 | 8.1 | 33.3 | 18.6 | 47.8 |
| 10\% to under 50\% | 10.9 | 13.9 | 7.0 | 44.2 | 20.7 | 42.9 |
| $50 \%$ or more | 36.9 | 14.7 | 11.6 | 49.7 | 29.5 | 26.8 |
| M idwest | 25.7 | 13.5 | 7.7 | 51.9 | 28.3 | 31.6 |
| U nder 10\% | 25.1 | 12.1 | 6.7 | 50.1 | 26.3 | 33.3 |
| 10\% to under 50\% | 28.2 | 21.0 | 13.7 | 60.1 | 38.0 | 24.0 |
| 50\% or more | 34.6 | 17.5 | 9.9 | 63.8 | 45.0 | 15.7 |
| South | 33.1 | 14.6 | 14.3 | 46.4 | 35.2 | 24.8 |
| U nder 10\% | 35.9 | 14.3 | 5.7 | 42.8 | 26.1 | 31.9 |
| 10\% to under 50\% | 29.6 | 13.8 | 15.1 | 48.1 | 36.9 | 24.1 |
| 50\% or more | 38.1 | 16.7 | 22.5 | 46.5 | 42.0 | 17.9 |
| W est | 20.1 | 18.7 | 3.7 | 38.5 | 13.4 | 46.2 |
| U nd der 10\% | 12.4 | 8.2 | 1.4 | 29.0 | 9.5 | 62.5 |
| 10\% to under 50\% | 21.3 | 28.9 | 4.3 | 42.8 | 14.3 | 37.7 |
| 50\% or more | 32.9 | 21.6 | 7.0 | 48.6 | 19.5 | 30.3 |

a) T otals sum to more than $100 \%$ since districts could provide more than one program.
b) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-43. Percentage of school districts with students eligible for participation and numbers of students in grades K-12 approved for participation in and receiving free or reduced-price lunches through the N ational School Lunch Program, by selected district characteristics: 1993-94

| District Characteristic | Percent of Districts | Students A pproved for Participation | Students Receiving Free or Reduced-price Lunch |
| :---: | :---: | :---: | :---: |
| TOTAL | 92.6 | 17,224,542 | 13,073,607 |
| District Size |  |  |  |
| U nder 1,000 | 87.7 | 1,260,477 | 847,756 |
| 1,000 to 9,999 | 97.5 | 7,416,952 | 5,454,592 |
| 10,000 or more | 98.6 | 8,547,113 | 6,771,258 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 90.6 | 4,497,651 | 2,726,250 |
| 10\% to under 50\% | 96.4 | 6,027,891 | 4,551,890 |
| $50 \%$ or more | 96.3 | 6,699,000 | 5,795,467 |
| M inority T eachers |  |  |  |
| N one | 88.8 | 2,107,404 | 1,360,128 |
| M ore than 0\% to under 20\% | 96.2 | 9,027,303 | 6,446,063 |
| 20\% or more | 95.2 | 6,089,835 | 5,267,416 |
| M etro Status |  |  |  |
| U rban-inside central city | 96.2 | 5,443,823 | 4,598,542 |
| U rban-outside central city | 95.3 | 6,792,835 | 4,777,120 |
| $N$ onurban area | 90.3 | 4,987,884 | 3,697,946 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |
| $N$ ortheast | 91.3 | 2,807,602 | 2,033,010 |
| U nder 10\% | 91.7 | 928,032 | 586,908 |
| 10\% to under 50\% | 90.6 | 525,696 | 339,388 |
| 50\% or more | 96.1 | 1,353,873 | 1,106,714 |
| M idwest | 90.4 | 3,328,488 | 2,211,641 |
| U nder 10\% | 89.4 | 1,945,330 | 1,086,304 |
| 10\% to under 50\% | 98.1 | 811,479 | 622,241 |
| $50 \%$ or more | 96.5 | 571,679 | 503,097 |
| South | 98.2 | 7,137,168 | 5,752,211 |
| U nder 10\% | 99.6 | 1,082,290 | 767,679 |
| 10\% to under 50\% | 98.3 | 3,297,023 | 2,594,003 |
| 50\% or more | 96.4 | 2,757,855 | 2,390,529 |
| W est | 91.6 | 3,951,285 | 3,076,744 |
| U nder 10\% | 86.1 | 541,999 | 285,359 |
| 10\% to under 50\% | 95.5 | 1,393,693 | 996,257 |
| 50\% or more | 96.3 | 2,015,593 | 1,795,128 |

a) Districts without students were excluded for this characteristic only.

Details may not add to totals due to rounding.
SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-44. Number and percentage of school districts with a student test performance reporting policy, by selected district characteristics: 1993-94

| District Characteristic | Number of Districts | Percent of <br> Districts |
| :---: | :---: | :---: |
| TOTAL | 12,642 | 84.4 |
| District Size |  |  |
| U nder 1,000 | 5,876 | 77.0 |
| 1,000 to 9,999 | 6,094 | 91.6 |
| 10,000 or more | 672 | 94.9 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 7,333 | 81.1 |
| 10\% to under 50\% | 3,895 | 90.9 |
| $50 \%$ or more | 1,405 | 87.2 |
| M inority T eachers |  |  |
| N one | 5,686 | 77.9 |
| M ore than 0\% to under 20\% | 6,043 | 90.8 |
| 20\% or more | 913 | 87.9 |
| Region |  |  |
| $N$ ortheast | 2,632 | 85.1 |
| Midwest | 4,579 | 81.0 |
| South | 3,033 | 91.7 |
| W est | 2,398 | 81.7 |
| M etro Status by District Size |  |  |
| U rban-inside central city | 469 | 83.7 |
| U nder 1,000 |  |  |
| 1,000 to 9,999 | 217 | 85.2 |
| 10,000 or more | 231 | 93.5 |
| U rban-outside central city | 5,417 | 90.2 |
| U nder 1,000 | 1,838 | 87.2 |
| 1,000 to 9,999 | 3,201 | 91.5 |
| 10,000 or more | 379 | 95.6 |
| N onurban area | 6,756 | 80.2 |
| U nder 1,000 | 4,017 | 73.6 |
| 1,000 to 9,999 | 2,676 | 92.3 |
| 10,000 or more | 62 | 95.4 |
| -- Too few cases for a reliable estimate. a) Districts without students were exclud SOURCE:U.S. Department of Education, Questionnaire). | istic only. sion. for Education Sta | and Staffing Surv |

Table A-45. Percentage of school districts with choice by type of choice program, by selected district characteristics: 1993-94

| District <br> Characteristics | A ny Choice Program | M agnet School | Dist. O pen Enrollment | Interdistrict Choice |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Transfers O utside of Transfers into District District |  |
|  |  |  |  |  |  |
| TOTAL | 34.1 | 7.8 | 13.8 | 28.5 | 25.6 |
| District Size |  |  |  |  |  |
| U nder 1,000 | 35.5 | 5.9 | 8.7 | 32.0 | 26.3 |
| 1,000 to 9,999 | 31.2 | 7.3 | 17.3 | 24.1 | 23.8 |
| 10,000 or more | 47.4 | 33.0 | 36.1 | 32.7 | 34.6 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |
| U nder 10\% | 36.3 | 6.7 | 12.6 | 30.9 | 27.3 |
| 10\% to under 50\% | 32.7 | 8.3 | 16.2 | 26.7 | 24.2 |
| 50\% or more | 27.1 | 12.8 | 14.3 | 20.7 | 20.6 |
| M inority T eachers |  |  |  |  |  |
| N one | 36.0 | 6.3 | 10.0 | 31.4 | 26.6 |
| M ore than 0\% to under 20\% | \% 32.6 | 8.6 | 17.6 | 26.2 | 24.8 |
| 20\% or more | 30.8 | 13.6 | 16.4 | 22.8 | 23.5 |
| Region |  |  |  |  |  |
| N ortheast | 13.3 | 4.2 | 5.5 | 9.6 | 8.5 |
| M idwest | 41.6 | 7.7 | 15.0 | 34.6 | 29.7 |
| South | 29.5 | 7.7 | 10.4 | 24.0 | 23.8 |
| W est | 47.1 | 12.1 | 24.0 | 41.7 | 37.6 |
| M etro Status by District Size |  |  |  |  |  |
| U rban-inside central city | 42.6 | 24.3 | 29.3 | 26.2 | 28.2 |
| U $\mathrm{nder} 1,000$ | -- | -- | -- | -- | -- |
| 1,000 to 9,999 | 36.9 | 11.3 | 26.7 | 22.3 | 23.2 |
| 10,000 or more | 54.8 | 43.1 | 38.5 | 36.5 | 38.6 |
| U rban-outside central city | 27.8 | 7.6 | 15.4 | 22.1 | 19.6 |
| U nder 1,000 | 21.2 | -- | -- | 19.7 | 12.8 |
| 1,000 to 9,999 | 29.9 | 8.2 | 17.8 | 22.6 | 22.3 |
| 10,000 or more | 43.9 | 28.4 | 34.5 | 30.3 | 32.1 |
| N onurban area | 38.1 | 6.9 | 11.7 | 33.2 | 29.7 |
| U nder 1,000 | 41.2 | 7.2 | 9.1 | 37.1 | 31.7 |
| 1,000 to 9,999 | 32.2 | 5.9 | 15.8 | 26.0 | 25.7 |
| 10,000 or more | 40.1 | 23.1 | 36.6 | 33.1 | 34.6 |

Table A -46. Percentage of school districts with written policies about student discipline, al cohol use, drug use, and tobacco use, by selected district characteristics: 1993-94

| District Characteristic | Student Discipline | Alcohol Use | $\begin{aligned} & \text { Drug } \\ & \text { Use } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Tobacco } \\ \text { Use } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| TOTAL | 99.3 | 98.9 | 98.9 | 97.9 |
| District Size |  |  |  |  |
| U nder 1,000 | 98.8 | 98.1 | 98.0 | 97.4 |
| 1,000 to 9,999 | 99.9 | 99.7 | 99.7 | 98.6 |
| 10,000 or more | 99.6 | 99.3 | 99.3 | 98.1 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 99.6 | 99.0 | 99.0 | 98.0 |
| 10\% to under 50\% | 99.8 | 99.6 | 99.5 | 98.6 |
| $50 \%$ or more | 99.5 | 98.9 | 99.0 | 98.4 |
| M inority T eachers |  |  |  |  |
| N one | 99.1 | 98.3 | 98.3 | 97.3 |
| M ore than 0\% to under 20\% | 99.7 | 99.5 | 99.5 | 98.7 |
| 20\% or more | 98.6 | 98.6 | 98.8 | 97.5 |
| Region |  |  |  |  |
| N ortheast | 99.0 | 97.6 | 97.7 | 95.6 |
| M idwest | 99.3 | 98.9 | 98.8 | 98.1 |
| South | 99.9 | 99.9 | 99.8 | 99.2 |
| W est | 99.2 | 99.0 | 99.0 | 98.7 |
| M etro Status by District Size |  |  |  |  |
| U rban-inside central city | 99.4 | 99.2 | 99.2 | 98.3 |
| U nder 1,000 | 96.1 | 98.3 | 98.3 | 98.3 |
| 1,000 to 9,999 | 100.0 | 100.0 | 100.0 | 98.3 |
| 10,000 or more | 99.6 | 98.6 | 98.6 | 98.2 |
| U rban-outside central city | 99.5 | 98.7 | 98.8 | 98.0 |
| U nder 1,000 | 98.8 | 97.4 | 97.4 | 97.0 |
| 1,000 to 9,999 | 99.9 | 99.3 | 99.5 | 98.5 |
| 10,000 or more | 99.6 | 99.5 | 99.5 | 98.2 |
| N onurban area | 99.2 | 99.0 | 98.9 | 97.9 |
| U nder 1,000 | 98.8 | 98.4 | 98.3 | 97.5 |
| 1,000 to 9,999 | 99.9 | 100.0 | 100.0 | 98.6 |
| 10,000 or more | 100.0 | 100.0 | 100.0 | 96.9 |

## Section 2

## State T ables

Table A -47. Number of full and part time teachers and percentage by race and ethnicity, by state: 1993-94

| State | Total | Percent by R ace and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T eachers | A merican Indian | A sian | Hispanic | Black | W hite |
| 50 States and D.C. | 2,599,569 | 0.3 | 1.0 | 3.4 | 8.2 | 87.0 |
| A labama | 46,175 | 0.1 | 0.1 | 0.1 | 20.0 | 79.6 |
| A laska | 8,303 | 5.4 | 1.5 | 1.3 | 2.0 | 89.7 |
| A rizona | 40,910 | 2.0 | 0.5 | 8.0 | 1.7 | 87.7 |
| A rkansas | 28,934 | 0.3 | 0.1 | 0.1 | 13.6 | 85.9 |
| California | 225,098 | 0.6 | 4.2 | 8.7 | 5.0 | 81.5 |
| Colorado | 30,087 | 0.4 | 0.8 | 4.8 | 1.5 | 92.5 |
| Connecticut | 36,533 | 0.1 | 0.2 | 2.5 | 2.7 | 94.5 |
| Delaware | 6,606 | 0.1 | 0.4 | 0.8 | 13.6 | 85.2 |
| District of C olumbia | 6,708 | 0.1 | 0.8 | 0.3 | 62.9 | 35.9 |
| Florida | 121,319 | 0.2 | 0.3 | 6.7 | 14.1 | 78.7 |
| G eorgia | 75,986 | 0.1 | 0.2 | 0.3 | 20.5 | 78.9 |
| Hawaii | 10,300 | 0.0 | 72.7 | 1.1 | 0.6 | 25.6 |
| Idaho | 12,351 | 0.2 | 0.6 | 1.1 | 0.1 | 98.0 |
| Illinois | 93,291 | 0.1 | 0.4 | 0.9 | 3.6 | 95.1 |
| Indiana | 57,845 | 0.0 | 0.2 | 0.5 | 4.6 | 94.8 |
| Iowa | 33,983 | 0.1 | 0.2 | 0.4 | 0.8 | 98.5 |
| Kansas | 31,127 | 0.5 | 0.3 | 1.0 | 1.9 | 96.3 |
| Kentucky | 40,864 | 0.1 | 0.1 | 0.1 | 3.8 | 95.9 |
| Louisiana | 47,430 | 0.0 | 0.2 | 0.3 | 26.5 | 73.0 |
| $M$ aine | 16,769 | 0.1 | 0.1 | 0.2 | 0.1 | 99.6 |
| M aryland | 46,822 | 0.1 | 0.5 | 0.5 | 20.9 | 78.0 |
| M assachusetts | 63,342 | 0.1 | 0.7 | 2.1 | 3.1 | 94.1 |
| M ichigan | 84,040 | 0.1 | 0.2 | 0.9 | 7.8 | 91.0 |
| M innesota | 43,970 | 0.4 | 0.2 | 0.2 | 0.2 | 99.0 |
| M ississippi | 29,864 | 0.0 | 0.1 | 0.1 | 28.8 | 70.9 |
| M issouri | 57,468 | 0.1 | 0.2 | 0.4 | 7.7 | 91.5 |
| M ontana | 11,643 | 2.3 | 0.2 | 0.3 | 0.1 | 97.1 |
| N ebraska | 17,334 | 0.1 | 0.1 | 0.5 | 0.4 | 98.9 |
| N evada | 13,119 | 1.2 | 1.3 | 3.3 | 5.3 | 88.8 |
| N ew H ampshire | 12,383 | 0.0 | 0.1 | 0.2 | 0.1 | 99.5 |
| N ew Jersey | 87,504 | 0.0 | 0.7 | 2.0 | 6.7 | 90.6 |
| N ew M exico | 19,049 | 1.4 | 0.6 | 23.2 | 1.1 | 73.6 |
| N ew York | 194,008 | 0.1 | 0.9 | 4.9 | 8.6 | 85.5 |
| $N$ orth Carolina | 68,718 | 0.2 | 0.2 | 0.5 | 14.1 | 85.0 |
| N orth Dakota | 8,578 | 1.4 | 0.1 | 0.1 | 0.0 | 98.4 |
| Ohio | 109,168 | 0.0 | 0.2 | 0.3 | 7.3 | 92.2 |
| Oklahoma | 39,870 | 5.4 | 0.2 | 0.7 | 3.7 | 90.0 |
| Oregon | 25,356 | 0.5 | 1.5 | 1.6 | 1.1 | 95.4 |
| Pennsylvania | 114,322 | 0.0 | 0.2 | 0.3 | 5.7 | 93.8 |
| Rhode Island | 10,662 | 0.1 | 0.2 | 0.8 | 2.2 | 96.8 |
| South Carolina | 40,069 | 0.1 | 0.1 | 0.2 | 19.0 | 80.7 |
| South Dakota | 9,785 | 1.0 | 0.0 | 0.1 | 0.2 | 98.7 |
| Tennessee | 49,043 | 0.0 | 0.1 | 0.1 | 13.4 | 86.3 |
| Texas | 234,674 | 0.2 | 0.4 | 12.9 | 8.1 | 78.4 |
| $U$ tah | 20,907 | 0.4 | 0.7 | 0.9 | 0.1 | 97.8 |
| V ermont | 8,220 | 0.0 | 0.1 | 0.3 | 0.1 | 99.5 |
| Virginia | 69,314 | 0.1 | 0.5 | 0.6 | 16.1 | 82.7 |
| W ashington | 51,815 | 0.8 | 2.2 | 1.5 | 1.7 | 93.8 |
| W est V irginia | 21,328 | 0.0 | 0.1 | 0.1 | 2.1 | 97.6 |
| W isconsin | 59,749 | 0.2 | 0.3 | 0.6 | 2.7 | 96.1 |
| W yoming | 6,828 | 0.8 | 0.5 | 1.5 | 0.6 | 96.6 |

Details may not add to totals and percentages may not sum to 100 due to rounding.
SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A -48. N umber of students and percentage by race and ethnicity, by state: 1993-94

| State | Total | Percent by R ace and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Students | A merican Indian | A sian | Hispanic | Black | W hite |
| 50 States and D.C. | 42,302,143 | 1.1 | 3.6 | 12.3 | 16.2 | 66.8 |
| A labama | 740,467 | 0.9 | 0.6 | 0.4 | 35.3 | 62.8 |
| A laska | 126,675 | 22.9 | 3.8 | 2.4 | 5.1 | 65.8 |
| A rizona | 749,470 | 7.4 | 1.6 | 27.3 | 3.9 | 59.8 |
| A rkansas | 436,752 | 0.2 | 0.6 | 0.9 | 25.1 | 73.2 |
| California | 5,165,520 | 0.8 | 11.5 | 36.9 | 8.2 | 42.7 |
| Colorado | 505,857 | 1.0 | 2.1 | 14.6 | 4.1 | 78.3 |
| Connecticut | 475,008 | 0.2 | 2.4 | 10.7 | 11.7 | 74.9 |
| Delaware | 101,310 | 0.2 | 1.8 | 3.5 | 27.4 | 67.1 |
| District of C olumbia | 75,462 | 0.0 | 1.3 | 6.1 | 88.6 | 4.0 |
| Florida | 2,043,110 | 0.2 | 1.6 | 14.4 | 24.8 | 59.1 |
| Georgia | 1,216,641 | 0.1 | 1.4 | 1.5 | 36.1 | 60.9 |
| Hawaii | 179,877 | 0.3 | 72.8 | 5.2 | 2.7 | 19.0 |
| Idaho | 233,041 | 1.1 | 1.0 | 6.8 | 0.4 | 90.7 |
| Illinois | 1,478,038 | 0.3 | 3.1 | 5.6 | 12.0 | 79.1 |
| Indiana | 980,702 | 0.2 | 1.2 | 2.2 | 11.1 | 85.3 |
| Iowa | 481,273 | 0.4 | 1.6 | 1.7 | 3.2 | 93.2 |
| Kansas | 438,466 | 1.0 | 1.8 | 4.8 | 6.4 | 86.0 |
| Kentucky | 653,786 | 0.1 | 0.5 | 0.3 | 9.8 | 89.4 |
| Louisiana | 795,160 | 0.2 | 0.9 | 1.0 | 39.4 | 58.6 |
| $M$ aine | 217,335 | 0.6 | 0.5 | 0.3 | 0.7 | 97.9 |
| $M$ aryland | 744,266 | 0.3 | 2.4 | 1.6 | 35.7 | 60.0 |
| M assachusetts | 875,461 | 0.2 | 3.7 | 8.4 | 8.0 | 79.7 |
| M ichigan | 1,526,649 | 1.1 | 1.4 | 2.3 | 19.9 | 75.1 |
| M innesota | 710,619 | 2.7 | 1.7 | 1.2 | 1.5 | 93.0 |
| M ississippi | 511,698 | 0.1 | 0.5 | 0.2 | 49.5 | 49.7 |
| M issouri | 845,038 | 0.2 | 0.8 | 0.8 | 17.0 | 81.2 |
| M ontana | 161,503 | 9.5 | 0.7 | 1.3 | 0.4 | 88.1 |
| N ebraska | 227,683 | 1.3 | 1.1 | 3.5 | 1.5 | 92.5 |
| N evada | 235,514 | 2.0 | 4.0 | 14.3 | 9.2 | 70.5 |
| N ew H ampshire | 176,919 | 0.2 | 1.0 | 1.0 | 0.9 | 96.8 |
| N ew Jersey | 1,106,736 | 0.4 | 5.6 | 10.3 | 17.3 | 66.4 |
| New M exico | 314,597 | 11.0 | 1.0 | 42.6 | 2.6 | 42.8 |
| N ew York | 2,763,694 | 0.4 | 5.1 | 17.1 | 19.8 | 57.5 |
| $N$ orth Carolina | 1,078,941 | 1.5 | 1.0 | 1.2 | 28.9 | 67.4 |
| N orth Dakota | 120,971 | 7.1 | 0.6 | 0.8 | 0.7 | 90.9 |
| Ohio | 1,842,541 | 0.4 | 1.1 | 1.7 | 14.6 | 82.2 |
| O klahoma | 573,178 | 13.9 | 1.2 | 3.6 | 10.0 | 71.3 |
| Oregon | 441,629 | 1.8 | 3.6 | 6.3 | 3.4 | 84.9 |
| Pennsylvania | 1,827,346 | 0.1 | 1.5 | 2.6 | 14.6 | 81.1 |
| Rhode Island | 145,179 | 0.3 | 3.2 | 8.7 | 7.2 | 80.6 |
| South Carolina | 650,041 | 0.2 | 0.6 | 0.5 | 42.4 | 56.3 |
| South Dakota | 133,601 | 8.8 | 0.7 | 0.6 | 0.7 | 89.1 |
| Tennessee | 840,236 | 0.1 | 0.8 | 0.4 | 24.0 | 74.8 |
| Texas | 3,573,243 | 0.2 | 1.9 | 35.2 | 15.2 | 47.4 |
| U tah | 467,120 | 1.5 | 2.0 | 4.6 | 0.6 | 91.3 |
| $V$ ermont | 98,348 | 0.2 | 0.8 | 0.3 | 0.7 | 98.0 |
| Virginia | 1,019,518 | 0.1 | 3.5 | 2.3 | 27.0 | 67.1 |
| W ashington | 935,569 | 2.9 | 6.4 | 7.1 | 4.6 | 79.0 |
| W est Virginia | 312,221 | 0.1 | 0.4 | 0.2 | 3.7 | 95.6 |
| W isconsin | 848,906 | 1.3 | 2.4 | 3.1 | 10.2 | 83.1 |
| W yoming | 99,230 | 2.9 | 0.7 | 6.0 | 0.8 | 89.6 |

Details may not add to totals and percentages may not sum to 100 due to rounding.
SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A-49. Total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by state: 1993-94

| State | Total FTE Teachers | Percent N ew Hires |
| :---: | :---: | :---: |
| 50 States and D.C. | 2,501,112 | 7.9 |
| A labama | 44,468 | 8.1 |
| A laska | 7,886 | 9.3 |
| A rizona | 39,334 | 11.1 |
| A rkansas | 27,771 | 8.1 |
| California | 215,044 | 8.0 |
| Colorado | 29,004 | 9.4 |
| Connecticut | 35,142 | 5.2 |
| Delaware | 6,555 | 6.5 |
| District of Columbia | 6,056 | 6.1 |
| Florida | 116,299 | 9.7 |
| G eorgia | 74,405 | 10.0 |
| Hawaii | 10,300 | 11.5 |
| Idaho | 12,130 | 8.7 |
| Illinois | 89,862 | 8.6 |
| Indiana | 56,469 | 5.4 |
| Iowa | 32,120 | 6.4 |
| Kansas | 29,345 | 8.8 |
| Kentucky | 40,285 | 6.8 |
| Louisiana | 46,398 | 7.9 |
| Maine | 16,384 | 6.4 |
| M aryland | 43,627 | 8.4 |
| M assachusetts | 59,665 | 6.5 |
| Michigan | 80,674 | 3.6 |
| M innesota | 42,271 | 9.0 |
| M ississippi | 29,321 | 10.2 |
| M issouri | 55,093 | 8.8 |
| M ontana | 10,866 | 8.9 |
| N ebraska | 16,721 | 7.1 |
| $N$ evada | 12,177 | 10.4 |
| N ew Hampshire | 11,821 | 7.8 |
| N ew Jersey | 84,436 | 5.5 |
| New Mexico | 18,013 | 12.5 |
| New York | 181,499 | 4.5 |
| N orth C arolina | 66,259 | 10.8 |
| North Dakota | 8,100 | 6.7 |
| Ohio | 107,609 | 5.4 |
| Oklahoma | 39,269 | 9.1 |
| Oregon | 23,209 | 5.2 |
| Pennsylvania | 111,711 | 7.2 |
| Rhode Island | 10,329 | 2.9 |
| South C arolina | 39,363 | 9.1 |
| South Dakota | 9,343 | 7.9 |
| Tennessee | 48,148 | 8.3 |
| Texas | 231,393 | 12.0 |
| Utah | 20,320 | 8.0 |
| V ermont | 7,641 | 6.2 |
| Virginia | 65,637 | 8.9 |
| W ashington | 47,036 | 8.4 |
| W est Virginia | 20,718 | 2.5 |
| W isconsin | 56,887 | 4.9 |
| W yoming | 6,701 | 8.4 |

Details may not add to totals due to rounding.
SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-50. N umber of newly hired FTE teachers, and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by state: 1993-94

| State | N umber of N ewly Hired Teachers | Percent N ewly H ired with Regular State C ertification in Field of A ssignment | ```Percent N ewly Hired with Emergency C ertification``` | Percent N ewly H ired lacking <br> Regular State or Emergency Certification in Field of A ssignment |
| :---: | :---: | :---: | :---: | :---: |
| 50 States and D.C. | 197,323 | 86.5 | 7.6 | 5.9 |
| A labama | 3,618 | 94.0 | 1.4 | 4.6 |
| A laska | 731 | 99.6 | 0.4 | 0.0 |
| A rizona | 4,351 | 89.2 | 4.4 | 6.4 |
| A rkansas | 2,261 | 92.0 | 2.8 | 5.2 |
| California | 17,307 | 71.1 | 20.6 | 8.3 |
| Colorado | 2,718 | 90.9 | 5.2 | 3.9 |
| Connecticut | 1,828 | 96.8 | 0.3 | 2.9 |
| Delaware | 424 | 91.8 | 3.4 | 4.8 |
| District of C olumbia | 372 | 13.8 | 32.6 | 53.6 |
| Florida | 11,271 | 78.0 | 10.0 | 12.0 |
| G eorgia | 7,476 | 83.7 | 2.7 | 13.7 |
| Hawaii | 1,181 | 83.2 | 16.8 | 0.0 |
| Idaho | 1,050 | 95.8 | 2.5 | 1.8 |
| Illinois | 7,684 | 96.1 | 0.8 | 3.2 |
| Indiana | 3,029 | 95.3 | 3.9 | 0.9 |
| Iowa | 2,070 | 93.2 | 4.6 | 2.3 |
| Kansas | 2,570 | 97.0 | 0.6 | 2.4 |
| Kentucky | 2,736 | 94.8 | 2.3 | 3.0 |
| Louisiana | 3,661 | 69.5 | 21.5 | 9.0 |
| M aine | 1,045 | 90.9 | 8.8 | 0.3 |
| M aryland | 3,668 | 73.4 | 17.3 | 9.3 |
| M assachusetts | 3,876 | 85.2 | 4.3 | 10.5 |
| M ichigan | 2,886 | 96.1 | 3.4 | 0.5 |
| M innesota | 3,802 | 97.9 | 1.5 | 0.6 |
| M ississippi | 2,986 | 85.4 | 11.4 | 3.3 |
| M issouri | 4,863 | 91.6 | 5.0 | 3.4 |
| M ontana | 971 | 98.0 | 1.4 | 0.6 |
| N ebraska | 1,181 | 92.3 | 5.8 | 1.9 |
| N evada | 1,270 | 99.3 | 0.6 | 0.2 |
| N ew Hampshire | 927 | 91.4 | 4.4 | 4.2 |
| N ew Jersey | 4,647 | 91.1 | 4.5 | 4.4 |
| N ew M exico | 2,255 | 73.5 | 10.8 | 15.8 |
| N ew York | 8,168 | 98.4 | 0.6 | 1.1 |
| $N$ orth Carolina | 7,181 | 88.0 | 8.6 | 3.3 |
| N orth Dakota | 545 | 99.0 | 0.6 | 0.5 |
| Ohio | 5,788 | 97.0 | 2.2 | 0.8 |
| Oklahoma | 3,558 | 92.8 | 3.8 | 3.5 |
| Oregon | 1,204 | 93.9 | 4.2 | 1.9 |
| Pennsylvania | 8,032 | 96.5 | 0.9 | 2.7 |
| Rhode Island | 303 | 98.0 | 2.0 | 0.0 |
| South Carolina | 3,597 | 95.1 | 2.4 | 2.5 |
| South Dakota | 737 | 96.4 | 2.7 | 1.0 |
| Tennessee | 4,012 | 89.7 | 7.4 | 3.0 |
| Texas | 27,686 | 76.2 | 13.1 | 10.7 |
| U tah | 1,623 | 67.9 | 8.4 | 23.6 |
| V ermont | 476 | 98.0 | 1.3 | 0.7 |
| Virginia | 5,873 | 90.8 | 7.5 | 1.7 |
| W ashington | 3,973 | 98.1 | 0.3 | 1.6 |
| W est V irginia | 528 | 88.0 | 10.4 | 1.6 |
| W isconsin | 2,762 | 95.0 | 4.5 | 0.5 |
| W yoming | 566 | 96.8 | 2.6 | 0.7 |

Table A-51. Percentage of school districts with different criteria for considering applicants for teaching positions, by state: 1993-94

|  | Certification Type (in Field) |  |  | Special K nowledge T est |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Full <br> Standard | Emergency/ <br> Temporary | College <br> M ajor/M inor in Teaching Field | G raduate of Teacher Ed. Program | District or State | $N$ ational T eacher Exam |
| 50 States and D.C. | 83.3 | 67.4 | 71.9 | 66.9 | 51.2 | 30.7 |
| A labama | 86.9 | 63.3 | 89.8 | 88.2 | 12.7 | 4.6 |
| A laska | 66.4 | 45.4 | 71.0 | 22.1 | 0.0 | 0.0 |
| A rizona | 85.3 | 69.6 | 59.3 | 64.9 | 78.6 | 6.3 |
| A rkansas | 63.5 | 64.1 | 84.7 | 62.8 | 65.5 | 93.8 |
| California | 78.0 | 82.2 | 63.0 | 44.7 | 89.4 | 19.5 |
| Colorado | 77.2 | 68.2 | 55.7 | 69.7 | 86.7 | 1.5 |
| Connecticut | 95.2 | 58.7 | 72.0 | 56.8 | 84.5 | 11.9 |
| Delaware | 52.9 | 82.4 | 52.9 | 70.6 | 70.6 | 0.0 |
| District of Columbia ${ }^{\text {a }}$ | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 100.0 |
| Florida | 58.0 | 75.8 | 36.3 | 27.1 | 72.5 | 1.5 |
| G eorgia | 46.0 | 85.9 | 42.3 | 46.8 | 89.0 | 0.8 |
| Hawaii ${ }^{\text {a }}$ | 100.0 | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 |
| Idaho | 88.7 | 66.4 | 75.1 | 62.4 | 28.3 | 85.5 |
| Illinois | 88.3 | 59.2 | 72.4 | 69.2 | 87.8 | 7.8 |
| Indiana | 88.2 | 68.9 | 80.5 | 80.6 | 68.0 | 72.8 |
| Iowa | 77.5 | 80.9 | 75.5 | 64.6 | 0.0 | 0.3 |
| Kansas | 89.7 | 55.2 | 80.6 | 75.4 | 76.7 | 53.5 |
| Kentucky | 93.5 | 54.8 | 95.2 | 92.6 | 39.7 | 79.1 |
| Louisiana | 78.7 | 84.3 | 78.2 | 60.0 | 17.0 | 91.6 |
| $M$ aine | 87.6 | 69.3 | 59.2 | 67.2 | 40.6 | 65.2 |
| M aryland | 64.5 | 62.3 | 37.7 | 57.6 | 0.0 | 89.8 |
| M assachusetts | 89.9 | 68.0 | 41.5 | 59.7 | 6.1 | 1.3 |
| M ichigan | 94.6 | 66.8 | 89.8 | 90.0 | 49.7 | 14.2 |
| M innesota | 92.3 | 65.6 | 80.8 | 90.4 | 46.9 | 4.7 |
| M ississippi | 91.2 | 86.2 | 76.3 | 70.3 | 28.4 | 100.0 |
| M issouri | 64.6 | 82.6 | 86.9 | 68.7 | 20.2 | 14.1 |
| Montana | 85.7 | 56.6 | 73.8 | 77.7 | 33.2 | 72.9 |
| N ebraska | 89.3 | 55.7 | 83.7 | 69.0 | 51.6 | 11.9 |
| N evada | 72.2 | 66.7 | 66.7 | 72.2 | 61.1 | 77.8 |
| N ew H ampshire | 85.0 | 78.9 | 55.4 | 70.7 | 7.1 | 0.0 |
| N ew Jersey | 88.4 | 52.9 | 37.4 | 44.0 | 33.8 | 77.6 |
| N ew M exico | 74.8 | 76.1 | 85.4 | 70.9 | 48.3 | 84.6 |
| N ew York | 95.4 | 60.3 | 61.8 | 66.1 | 50.6 | 81.7 |
| $N$ orth Carolina | 64.3 | 74.2 | 58.1 | 67.4 | 21.4 | 96.8 |
| N orth Dakota | 95.7 | 33.3 | 81.7 | 96.3 | 3.3 | 2.4 |
| Ohio | 97.0 | 57.3 | 84.9 | 78.1 | 29.1 | 35.6 |
| O klahoma | 69.8 | 80.3 | 76.9 | 73.6 | 90.5 | 11.6 |
| Oregon | 72.7 | 50.2 | 74.1 | 39.3 | 38.9 | 14.4 |
| Pennsylvania | 97.6 | 58.7 | 73.6 | 81.7 | 69.1 | 50.1 |
| Rhode Island | 100.0 | 54.1 | 67.6 | 70.3 | 21.6 | 70.3 |
| South Carolina | 84.4 | 82.4 | 80.6 | 51.3 | 61.4 | 96.6 |
| South Dakota | 89.2 | 61.1 | 80.5 | 70.2 | 0.0 | 0.8 |
| Tennessee | 93.2 | 70.4 | 77.2 | 47.6 | 41.8 | 77.3 |
| Texas | 63.4 | 85.1 | 75.9 | 54.3 | 91.9 | 6.3 |
| U tah | 74.2 | 76.3 | 72.6 | 58.8 | 0.0 | 0.0 |
| $\checkmark$ ermont | 98.3 | 64.8 | 55.3 | 63.7 | 4.1 | 0.9 |
| Virginia | 71.3 | 84.1 | 40.3 | 52.1 | 25.7 | 86.8 |
| W ashington | 80.9 | 63.2 | 75.4 | 51.4 | 17.6 | 0.7 |
| W est V irginia | 81.3 | 77.3 | 87.1 | 68.2 | 79.5 | 13.1 |
| W isconsin | 84.6 | 72.6 | 80.0 | 90.0 | 10.6 | 0.0 |
| W yoming | 85.7 | 60.7 | 57.8 | 69.0 | 6.0 | 0.0 |

a) The District of Columbia and H awaii each have only one school district.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table A-52. Percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by state: 1987-88 to 1993-94


Table A -53. Percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by state: 1987-88 to 1993-94


Table A-54. A verage low and high salary for full time teachers in actual and in constant 1993-94 dollars, by state: 1990-91 to 1993-94 ${ }^{\text {a }}$

| State | School Y ear |  |  |  |  | 1993-94 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A ctual Dollars |  | Constant 1993-94 Dollars ${ }^{\text {b }}$ |  | A ctual Dollars |  |
|  | Low | H igh | Low | High | Low | High |
| 50 States and D.C. | 19,770 | 35,415 | 21,586 | 38,669 | 21,817 | 39,847 |
| A labama | 21,491 | 30,956 | 23,466 | 33,799 | 22,263 | 32,840 |
| A laska | 29,808 | 54,337 | 32,546 | 59,328 | 31,430 | 58,056 |
| A rizona | 20,992 | 35,341 | 22,920 | 38,588 | 23,782 | 40,258 |
| A rkansas | 17,410 | 24,392 | 19,010 | 26,633 | 19,603 | 29,685 |
| California | 23,385 | 42,750 | 25,534 | 46,677 | 24,404 | 46,272 |
| Colorado | 19,267 | 34,463 | 21,037 | 37,629 | 19,937 | 37,316 |
| Connecticut | 25,244 | 50,428 | 27,563 | 55,061 | 28,200 | 56,198 |
| Delaware | 21,131 | 44,258 | 23,072 | 48,323 | 22,914 | 47,743 |
| District of Columbia | 23,305 | 48,175 | 25,446 | 52,600 | 22,000 | 54,000 |
| Florida | 21,271 | 37,912 | 23,225 | 41,395 | 21,838 | 39,599 |
| G eorgia | 19,463 | 39,243 | 21,251 | 42,848 | 20,093 | 42,201 |
| Hawaii | 23,969 | 46,641 | 26,171 | 50,925 | 25,436 | 49,199 |
| Idaho | 17,023 | 30,231 | 18,586 | 33,008 | 18,102 | 33,128 |
| Illinois | 18,608 | 35,605 | 20,318 | 38,876 | 21,413 | 42,006 |
| Indiana | 20,602 | 38,088 | 22,494 | 41,587 | 22,557 | 42,057 |
| Iowa | 17,668 | 29,880 | 19,291 | 32,625 | 18,789 | 33,209 |
| Kansas | 20,293 | 32,452 | 22,157 | 35,433 | 22,714 | 36,671 |
| Kentucky | 20,298 | 33,756 | 22,163 | 36,856 | 21,135 | 36,743 |
| Louisiana | 17,610 | 29,896 | 19,228 | 32,642 | 18,570 | 31,342 |
| $M$ aine | 18,387 | 33,292 | 20,076 | 36,350 | 19,505 | 36,489 |
| M aryland | 23,282 | 44,926 | 25,421 | 49,053 | 24,833 | 48,158 |
| M assachusetts | 21,209 | 40,017 | 23,157 | 43,693 | 23,120 | 44,832 |
| M ichigan | 21,290 | 41,543 | 23,246 | 45,359 | 24,355 | 46,333 |
| M innesota | 20,840 | 35,858 | 22,755 | 39,152 | 21,965 | 38,638 |
| M ississippi | 18,386 | 31,549 | 20,075 | 34,447 | 19,008 | 32,693 |
| M issouri | 17,412 | 25,996 | 19,012 | 28,384 | 18,158 | 28,222 |
| M ontana | 16,247 | 29,132 | 17,740 | 31,808 | 17,217 | 30,421 |
| N ebraska | 15,563 | 22,390 | 16,992 | 24,447 | 17,528 | 25,627 |
| N evada | 22,227 | 41,799 | 24,269 | 45,638 | 24,220 | 44,958 |
| N ew Hampshire | 20,312 | 35,804 | 22,178 | 39,093 | 21,272 | 38,889 |
| N ew Jersey | 24,261 | 48,385 | 26,490 | 52,830 | 28,437 | 57,383 |
| N ew M exico | 19,276 | 33,939 | 21,047 | 37,057 | 22,029 | 35,828 |
| N ew York | 23,507 | 49,388 | 25,666 | 53,925 | 27,158 | 58,288 |
| N orth Carolina | 19,961 | 38,080 | 21,795 | 41,578 | 20,077 | 38,733 |
| N orth Dakota | 15,527 | 25,197 | 16,953 | 27,511 | 16,343 | 26,126 |
| Ohio | 18,602 | 37,138 | 20,311 | 40,549 | 20,575 | 42,210 |
| Oklahoma | 17,691 | 26,583 | 19,316 | 29,025 | 22,158 | 30,452 |
| Oregon | 18,385 | 31,444 | 20,074 | 34,332 | 20,700 | 35,968 |
| Pennsylvania | 22,824 | 41,888 | 24,921 | 45,736 | 26,311 | 50,377 |
| Rhode Island | 20,815 | 41,466 | 22,727 | 45,275 | 23,308 | 46,078 |
| South Carolina | 19,524 | 39,711 | 21,317 | 43,358 | 20,362 | 41,656 |
| South Dakota | 16,355 | 25,844 | 17,857 | 28,219 | 17,920 | 27,490 |
| Tennessee | 19,783 | 31,314 | 21,600 | 34,190 | 21,348 | 34,650 |
| Texas | 18,350 | 30,783 | 20,036 | 33,611 | 19,009 | 32,357 |
| $U$ tah | 17,217 | 31,813 | 18,799 | 34,735 | 18,740 | 34,900 |
| $\checkmark$ ermont | 19,495 | 36,320 | 21,286 | 39,656 | 21,425 | 40,435 |
| $V$ irginia | 22,130 | 36,554 | 24,163 | 39,912 | 23,112 | 38,387 |
| W ashington | 19,992 | 41,622 | 21,828 | 45,445 | 21,441 | 44,892 |
| W est V irginia | 18,380 | 32,409 | 20,068 | 35,386 | 21,466 | 36,678 |
| W isconsin | 20,595 | 37,430 | 22,487 | 40,868 | 23,091 | 43,078 |
| W yoming | 19,667 | 35,148 | 21,473 | 38,377 | 20,137 | 38,701 |

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts
without salary schedule reported their lowest and highest base salaries for the year.
b) A djusted using the C onsumer Price Index.

SO URCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-55. A verage scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by state: 1990-91 and 1993-94

|  | 1990-91 (Constant 1993-94 Dollars) ${ }^{\text {a }}$ |  |  | 1993-94 (A ctual Dollars) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience |
| 50 States and D.C. | 21,742 | 23,691 | 36,249 | 21,923 | 23,956 | 37,213 |
| A labama | 23,466 | 26,814 | 31,264 | 22,263 | 25,572 | 30,070 |
| A laska | 32,546 | 37,086 | 53,975 | 31,374 | 35,950 | 52,421 |
| A rizona | 22,686 | 25,044 | 36,119 | 21,890 | 24,117 | 34,926 |
| A rkansas | 19,011 | 20,362 | 25,506 | 19,603 | 21,343 | 28,130 |
| California | 25,538 | 27,727 | 43,569 | 24,404 | 26,970 | 42,431 |
| Colorado | 21,037 | 23,361 | 33,153 | 19,937 | 22,158 | 32,318 |
| Connecticut | 27,563 | 29,651 | 49,944 | 28,195 | 30,482 | 51,283 |
| Delaware | 23,072 | 26,444 | 41,498 | 22,914 | 26,267 | 41,312 |
| District of Columbia | 25,446 | 27,991 | 50,940 | 22,000 | 28,000 | 40,000 |
| Florida | 23,225 | 25,295 | 37,753 | 21,838 | 23,580 | 35,826 |
| G eorgia | 21,233 | 24,437 | 34,623 | 20,065 | 23,041 | 33,650 |
| Hawaii | 26,171 | 27,514 | 40,882 | 25,436 | 27,352 | 41,193 |
| Idaho | 18,603 | 21,124 | 30,892 | 18,102 | 20,733 | 31,092 |
| Illinois | 20,334 | 22,236 | 34,811 | 21,415 | 23,446 | 38,176 |
| Indiana | 22,507 | 23,833 | 40,313 | 22,560 | 23,899 | 40,535 |
| Iowa | 19,280 | 20,939 | 30,875 | 18,796 | 20,806 | 31,364 |
| Kansas | 22,155 | 23,981 | 31,768 | 22,714 | 24,733 | 32,522 |
| Kentucky | 22,163 | 24,876 | 32,523 | 21,135 | 23,899 | 33,419 |
| Louisiana | 19,137 | 19,563 | 28,869 | 18,045 | 18,432 | 27,133 |
| $M$ aine | 20,076 | 21,782 | 34,953 | 19,566 | 21,121 | 34,832 |
| M aryland | 25,421 | 27,383 | 44,008 | 24,833 | 26,360 | 43,239 |
| M assachusetts | 23,168 | 25,058 | 39,880 | 23,108 | 25,101 | 41,105 |
| Michigan | 23,251 | 25,270 | 42,706 | 24,705 | 26,971 | 45,186 |
| M innesota | 22,755 | 25,392 | 36,913 | 21,965 | 24,584 | 36,119 |
| M ississippi | 20,076 | 21,043 | 30,539 | 19,008 | 19,880 | 28,995 |
| M issouri | 18,982 | 20,406 | 26,875 | 18,158 | 19,671 | 26,171 |
| M ontana | 18,041 | 20,025 | 31,594 | 17,801 | 19,870 | 32,316 |
| N ebraska | 16,964 | 19,720 | 27,385 | 17,781 | 20,735 | 30,326 |
| N evada | 24,269 | 27,799 | 41,368 | 24,220 | 27,440 | 41,403 |
| New Hampshire | 22,121 | 24,254 | 37,839 | 21,317 | 23,245 | 37,164 |
| N ew Jersey | 26,852 | 28,768 | 46,690 | 28,424 | 30,677 | 53,874 |
| N ew M exico | 21,047 | 22,949 | 33,032 | 22,114 | 23,159 | 31,785 |
| N ew York | 25,917 | 28,561 | 48,543 | 27,441 | 30,084 | 51,523 |
| N orth Carolina | 21,795 | 23,152 | 34,944 | 20,077 | 21,355 | 31,864 |
| N orth Dakota | 16,929 | 18,816 | 26,772 | 16,624 | 18,640 | 26,357 |
| Ohio | 20,311 | 22,462 | 38,059 | 20,550 | 22,822 | 39,096 |
| Oklahoma | 19,323 | 20,626 | 27,746 | 22,157 | 23,272 | 29,067 |
| Oregon | 20,100 | 22,124 | 32,524 | 20,708 | 22,964 | 34,216 |
| Pennsylvania | 24,918 | 26,175 | 41,842 | 26,341 | 28,012 | 45,741 |
| Rhode Island | 22,727 | 24,430 | 43,589 | 23,423 | 25,038 | 44,402 |
| South Carolina | 21,317 | 24,331 | 35,532 | 20,354 | 23,271 | 33,993 |
| South Dakota | 18,091 | 19,536 | 28,238 | 17,895 | 19,158 | 26,456 |
| Tennessee | 21,600 | 23,501 | 30,279 | 21,348 | 23,305 | 29,891 |
| Texas | 20,036 | 20,262 | 32,852 | 19,011 | 19,209 | 30,966 |
| U tah | 18,799 | 20,743 | 32,666 | 18,740 | 20,725 | 32,346 |
| V ermont | 20,987 | 23,673 | 37,282 | 20,918 | 23,584 | 37,003 |
| $V$ irginia | 24,163 | 25,849 | 36,512 | 23,098 | 24,702 | 34,195 |
| W ashington | 21,828 | 26,147 | 39,787 | 21,441 | 25,698 | 40,189 |
| W est V irginia | 20,068 | 22,015 | 31,191 | 21,466 | 24,168 | 33,099 |
| W isconsin | 22,487 | 25,124 | 38,236 | 23,080 | 25,853 | 40,316 |
| W yoming | 21,473 | 24,183 | 34,766 | 20,137 | 23,058 | 34,048 |

a) A djusted using the C onsumer Price Index.

SO URCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table A -56. Percentage of school districts with collective bargaining units, by state: 1993-94


Table A -57. Percentage of school districts offering retirement plans to teachers, by state: 1987-88 to 1993-94

|  |  | School Ye |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| State | Percent | Percent | Percent |
| 50 States and D.C. | 98.6 | 98.7 | 98.9 |
| A labama | 100.0 | 99.3 | 99.0 |
| A laska | 100.0 | 100.0 | 100.0 |
| A rizona | 98.5 | 93.7 | 100.0 |
| A rkansas | 100.0 | 100.0 | 100.0 |
| California | 100.0 | 92.8 | 99.7 |
| Colorado | 100.0 | 100.0 | 99.3 |
| Connecticut | 100.0 | 98.0 | 99.0 |
| Delaware | 100.0 | 100.0 | 100.0 |
| District of Columbia | 100.0 | 100.0 | 100.0 |
| Florida | 100.0 | 100.0 | 100.0 |
| G eorgia | 100.0 | 98.2 | 100.0 |
| Hawaii | 100.0 | 100.0 | 100.0 |
| Idaho | 100.0 | 100.0 | 99.1 |
| Illinois | 98.3 | 99.0 | 99.2 |
| Indiana | 96.1 | 100.0 | 98.8 |
| Iowa | 88.0 | 95.4 | 97.5 |
| Kansas | 94.8 | 98.1 | 91.2 |
| Kentucky | 100.0 | 100.0 | 100.0 |
| Louisiana | 100.0 | 100.0 | 100.0 |
| $M$ aine | 100.0 | 99.2 | 95.9 |
| M aryland | 100.0 | 100.0 | 100.0 |
| M assachusetts | 100.0 | 100.0 | 99.5 |
| M ichigan | 98.0 | 99.0 | 100.0 |
| M innesota | 95.7 | 98.8 | 98.0 |
| M ississippi | 100.0 | 100.0 | 100.0 |
| M issouri | 100.0 | 100.0 | 100.0 |
| M ontana | 97.9 | 98.4 | 97.4 |
| N ebraska | 95.6 | 99.8 | 94.9 |
| N evada | 100.0 | 100.0 | 100.0 |
| N ew Hampshire | 100.0 | 100.0 |  |
| N ew Jersey | 99.7 | 99.4 | 98.2 |
| N ew M exico | 100.0 | 100.0 | 100.0 |
| N ew York | 99.7 | 100.0 | 100.0 |
| N orth Carolina | 100.0 | 100.0 | 100.0 |
| N orth Dakota | 96.7 | 98.0 | 95.0 |
| Ohio | 99.4 | 100.0 | 100.0 |
| O klahoma | 100.0 | 100.0 | 100.0 |
| Oregon | 100.0 | 100.0 | 100.0 |
| Pennsylvania | 100.0 | 100.0 | 100.0 |
| Rhode Island | 100.0 | 100.0 | 100.0 |
| South Carolina | 100.0 | 100.0 | 100.0 |
| South Dakota | 100.0 | 100.0 | 100.0 |
| Tennessee | 98.6 | 99.2 | 100.0 |
| Texas | 99.4 | 98.2 | 99.7 |
| $U$ tah | 100.0 | 100.0 | 100.0 |
| $V$ ermont | 96.6 | 99.2 | 96.4 |
| Virginia | 100.0 | 98.2 | 100.0 |
| W ashington | 100.0 | 100.0 | 100.0 |
| W est Virginia | 100.0 | 100.0 | 100.0 |
| W isconsin | 98.2 | 100.0 | 99.3 |
| W yoming | 100.0 | 97.6 | 97.2 |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table A-58. A verage number of years of English required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

|  |  | School Y ear |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| State | N umber of $Y$ ears | N umber of $Y$ ears | N umber of $Y$ ears |
| 50 States and D.C. | 3.8 | 3.8 | 3.9 |
| A labama | 4.0 | 3.9 | 4.0 |
| A laska | 4.0 | 4.0 | 4.0 |
| A rizona | 3.8 | 4.0 | 4.0 |
| A rkansas | 4.0 | 4.0 | 4.0 |
| California | 3.6 | 3.7 | 3.7 |
| Colorado | 3.9 | 3.9 | 3.8 |
| Connecticut | 3.9 | 4.0 | 4.0 |
| Delaware | 4.0 | 3.8 | 4.0 |
| District of Columbia | 4.0 | 4.0 | 4.0 |
| Florida | 4.0 | 4.0 | 4.0 |
| Georgia | 4.0 | 3.9 | 4.0 |
| Hawaii | 3.0 | 4.0 | 4.0 |
| Idaho | 3.9 | 3.9 | 4.0 |
| Illinois | 3.3 | 3.4 | 3.3 |
| Indiana | 3.9 | 3.9 | 4.0 |
| Iowa | 3.4 | 3.5 | 3.6 |
| Kansas | 4.0 | 4.0 | 4.0 |
| Kentucky | 4.0 | 4.0 | 4.0 |
| Louisiana | 3.8 | 3.7 | 4.0 |
| $M$ aine | 3.8 | 4.0 | 4.0 |
| M aryland | 4.0 | 4.0 | 4.0 |
| M assachusetts | 3.9 | 4.0 | 3.9 |
| M ichigan | 3.4 | 3.4 | 3.5 |
| M innesota | 3.9 | 3.8 | 4.0 |
| M ississippi | 3.9 | 4.0 | 4.0 |
| M issouri | 3.2 | 3.2 | 3.2 |
| Montana | 3.9 | 4.0 | 4.0 |
| N ebraska | 3.1 | 3.9 | 3.9 |
| N evada | 3.7 | 3.8 | 4.0 |
| N ew Hampshire | 3.9 | 3.9 | 4.0 |
| N ew Jersey | 4.0 | 4.0 | 4.0 |
| N ew M exico | 4.0 | 4.0 | 4.0 |
| N ew York | 4.0 | 3.9 | 4.0 |
| $N$ orth Carolina | 4.0 | 4.0 | 3.9 |
| N orth Dakota | 4.0 | 4.0 | 4.0 |
| Ohio | 3.6 | 3.6 | 3.7 |
| Oklahoma | 3.9 | 3.8 | 4.0 |
| Oregon | 3.9 | 3.8 | 3.9 |
| Pennsylvania | 3.9 | 4.0 | 4.0 |
| Rhode Island | 4.0 | 4.0 | 4.0 |
| South C arolina | 4.0 | 4.0 | 4.0 |
| South Dakota | 4.0 | 4.0 | 4.0 |
| Tennessee | 4.0 | 3.9 | 4.0 |
| Texas | 4.0 | 4.0 | 4.0 |
| $U$ tah | 3.7 | 3.7 | 3.7 |
| V ermont | 4.0 | 3.9 | 4.0 |
| $V$ irginia | 4.0 | 3.9 | 4.0 |
| W ashington | 3.7 | 3.9 | 3.8 |
| W est V irginia | 4.0 | 4.0 | 3.9 |
| W isconsin | 3.8 | 4.0 | 4.0 |
| W yoming | 3.8 | 3.7 | 3.9 |

Table A-59. A verage number of years of mathematics required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

| State | $\frac{1987-88}{}$ N umber of Y ears | School Year 1990-91 Number of $Y$ ears | $\frac{\text { 1993-94 }}{}$ N umber of Y ears |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 2.4 | 2.4 | 2.5 |
| A labama <br> A laska <br> A rizona <br> A rkansas <br> C alifornia | $\begin{aligned} & 2.3 \\ & 2.3 \\ & 2.2 \\ & 2.9 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.2 \\ & 2.3 \\ & 2.7 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 2.5 \\ & 2.6 \\ & 2.3 \\ & 2.9 \\ & 2.3 \end{aligned}$ |
| Colorado <br> Connecticut <br> Delaware <br> District of Columbia <br> Florida | $\begin{aligned} & 2.5 \\ & 3.2 \\ & 2.4 \\ & 2.0 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 2.6 \\ & 3.0 \\ & 2.3 \\ & 2.0 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 2.5 \\ & 3.0 \\ & 2.4 \\ & 2.0 \\ & 3.0 \end{aligned}$ |
| Georgia Hawaii Idaho Illinois Indiana | $\begin{aligned} & 2.5 \\ & 2.0 \\ & 2.3 \\ & 2.1 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 2.3 \\ & 2.0 \\ & 2.3 \\ & 2.2 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 2.6 \\ & 3.0 \\ & 2.4 \\ & 2.2 \\ & 2.2 \end{aligned}$ |
| Iowa <br> Kansas <br> Kentucky <br> Louisiana <br> M aine | $\begin{aligned} & 2.1 \\ & 2.2 \\ & 3.0 \\ & 3.0 \\ & 2.6 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.2 \\ & 3.0 \\ & 2.9 \\ & 2.6 \end{aligned}$ | $\begin{aligned} & 2.3 \\ & 2.4 \\ & 2.9 \\ & 3.0 \\ & 2.5 \end{aligned}$ |
| M aryland <br> M assachusetts <br> Michigan <br> Minnesota <br> Mississippi | $\begin{aligned} & 2.7 \\ & 2.6 \\ & 2.1 \\ & 1.7 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.7 \\ & 2.2 \\ & 2.1 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.5 \\ & 2.2 \\ & 2.3 \\ & 2.5 \end{aligned}$ |
| Missouri <br> Montana <br> N ebraska <br> Nevada <br> New Hampshire | $\begin{aligned} & 2.1 \\ & 2.3 \\ & 2.0 \\ & 2.5 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.3 \\ & 2.2 \\ & 2.4 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.2 \\ & 2.5 \\ & 2.3 \\ & 2.2 \end{aligned}$ |
| N ew Jersey <br> New M exico <br> New York <br> N orth C arolina <br> N orth Dakota | $\begin{aligned} & 2.3 \\ & 2.6 \\ & 2.1 \\ & 2.4 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 2.9 \\ & 2.1 \\ & 2.4 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 3.0 \\ & 2.1 \\ & 2.7 \\ & 2.4 \end{aligned}$ |
| Ohio <br> Oklahoma <br> O regon <br> Pennsylvania <br> Rhode Island | $\begin{aligned} & 2.1 \\ & 2.3 \\ & 2.3 \\ & 2.9 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.2 \\ & 2.2 \\ & 3.0 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 2.4 \\ & 2.1 \\ & 3.2 \\ & 2.3 \end{aligned}$ |
| South C arolina <br> South Dakota <br> Tennessee <br> Texas <br> Utah | $\begin{aligned} & 3.0 \\ & 2.4 \\ & 2.1 \\ & 3.1 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.4 \\ & 2.1 \\ & 3.0 \\ & 2.2 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.4 \\ & 2.4 \\ & 3.0 \\ & 2.4 \end{aligned}$ |
| V ermont <br> Virginia <br> W ashington <br> W est Virginia <br> W isconsin <br> W yoming | $\begin{aligned} & 2.7 \\ & 2.5 \\ & 2.2 \\ & 2.3 \\ & 2.0 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 2.4 \\ & 2.2 \\ & 2.4 \\ & 2.1 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.5 \\ & 2.3 \\ & 2.4 \\ & 2.2 \\ & 2.5 \end{aligned}$ |

[^25]Demand and Shortage Questionnaire).

Table A-60. A verage number of years of social science required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

| State | $\frac{1987-88}{}$ N umber of $Y$ ears | School Year 1990-91 Number of $Y$ ears | $\frac{\text { 1993-94 }}{}$ N umber of $Y$ ears |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 2.8 | 2.9 | 3.0 |
| A labama <br> A laska <br> A rizona <br> A rkansas <br> C alifornia | $\begin{aligned} & 3.1 \\ & 3.1 \\ & 3.0 \\ & 2.8 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 2.9 \\ & 3.3 \\ & 2.8 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 3.2 \\ & 3.0 \\ & 3.0 \\ & 2.8 \\ & 3.3 \end{aligned}$ |
| Colorado <br> Connecticut <br> Delaware <br> District of Columbia <br> Florida | $\begin{aligned} & 2.9 \\ & 3.1 \\ & 3.2 \\ & 2.0 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 3.0 \\ & 2.8 \\ & 2.0 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 3.0 \\ & 3.2 \\ & 2.0 \\ & 3.1 \end{aligned}$ |
| Georgia Hawaii Idaho Illinois Indiana | $\begin{aligned} & 3.1 \\ & 3.0 \\ & 2.9 \\ & 2.1 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 4.0 \\ & 2.9 \\ & 2.3 \\ & 2.6 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 4.0 \\ & 2.9 \\ & 2.3 \\ & 2.4 \end{aligned}$ |
| Iowa <br> Kansas <br> Kentucky <br> Louisiana <br> M aine | $\begin{aligned} & 3.0 \\ & 2.9 \\ & 2.2 \\ & 2.8 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 2.9 \\ & 2.3 \\ & 2.9 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 3.1 \\ & 3.0 \\ & 2.3 \\ & 3.0 \\ & 2.4 \end{aligned}$ |
| M aryland <br> M assachusetts <br> Michigan <br> Minnesota <br> Mississippi | $\begin{aligned} & 2.9 \\ & 2.5 \\ & 2.7 \\ & 3.6 \\ & 2.7 \end{aligned}$ | $\begin{aligned} & 3.0 \\ & 2.6 \\ & 2.8 \\ & 3.4 \\ & 2.7 \end{aligned}$ | $\begin{aligned} & 3.2 \\ & 2.5 \\ & 2.9 \\ & 3.5 \\ & 2.8 \end{aligned}$ |
| Missouri <br> Montana <br> N ebraska <br> Nevada <br> New Hampshire | $\begin{aligned} & 2.7 \\ & 2.6 \\ & 2.5 \\ & 2.7 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 2.5 \\ & 3.1 \\ & 2.7 \\ & 2.6 \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 2.7 \\ & 3.2 \\ & 2.5 \\ & 2.6 \end{aligned}$ |
| N ew Jersey <br> New M exico <br> New York <br> N orth C arolina <br> N orth Dakota | $\begin{aligned} & 2.5 \\ & 2.6 \\ & 3.6 \\ & 2.3 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 3.0 \\ & 4.0 \\ & 2.1 \\ & 3.1 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 3.0 \\ & 4.0 \\ & 2.6 \\ & 3.0 \end{aligned}$ |
| Ohio <br> Oklahoma <br> O regon <br> Pennsylvania <br> Rhode Island | $\begin{aligned} & 2.6 \\ & 2.3 \\ & 3.1 \\ & 3.5 \\ & 2.4 \end{aligned}$ | $\begin{aligned} & 2.6 \\ & 2.3 \\ & 3.1 \\ & 3.3 \\ & 2.3 \end{aligned}$ | $\begin{aligned} & 2.7 \\ & 2.6 \\ & 3.2 \\ & 3.6 \\ & 2.3 \end{aligned}$ |
| South C arolina <br> South Dakota <br> Tennessee <br> Texas <br> U tah | $\begin{aligned} & 2.9 \\ & 2.9 \\ & 1.8 \\ & 2.9 \\ & 3.0 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 2.9 \\ & 1.8 \\ & 2.9 \\ & 2.9 \end{aligned}$ | $\begin{aligned} & 2.8 \\ & 3.0 \\ & 2.1 \\ & 3.0 \\ & 2.5 \end{aligned}$ |
| V ermont <br> Virginia <br> W ashington <br> W est Virginia <br> W isconsin <br> W yoming | $\begin{aligned} & 2.9 \\ & 2.9 \\ & 3.1 \\ & 3.3 \\ & 3.2 \\ & 2.8 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 2.9 \\ & 3.0 \\ & 3.2 \\ & 3.1 \\ & 2.7 \end{aligned}$ | $\begin{aligned} & 2.9 \\ & 3.1 \\ & 3.1 \\ & 3.2 \\ & 3.1 \\ & 2.8 \end{aligned}$ |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher
Demand and Shortage Questionnaire).

Table A-61. Percentage of school districts with a student test performance reporting policy, by state: 1993-94

| State | Percent of Districts |
| :---: | :---: |
| 50 States and D.C. | 84.4 |
| A labama | 91.6 |
| A laska | 96.2 |
| A rizona | 92.1 |
| A rkansas | 85.6 |
| California | 91.8 |
| Colorado | 98.3 |
| Connecticut | 94.4 |
| Delaware | 88.2 |
| District of Columbia | 100.0 |
| Florida | 100.0 |
| Georgia | 98.7 |
| Hawaii | 100.0 |
| Idaho | 82.4 |
| Illinois | 91.6 |
| Indiana | 90.6 |
| Iowa | 68.3 |
| Kansas | 73.1 |
| Kentucky | 98.6 |
| Louisiana | 91.3 |
| $M$ aine | 88.7 |
| M aryland | 89.8 |
| M assachusetts | 80.3 |
| M ichigan | 92.7 |
| M innesota | 84.9 |
| M ississippi | 90.6 |
| M issouri | 68.1 |
| M ontana | 38.6 |
| N ebraska | 64.8 |
| $N$ evada | 94.4 |
| N ew H ampshire | 63.8 |
| N ew Jersey | 97.7 |
| New M exico | 97.9 |
| N ew York | 92.3 |
| N orth C arolina | 97.9 |
| N orth Dakota | 37.9 |
| Ohio | 90.6 |
| O klahoma | 79.5 |
| Oregon | 90.2 |
| Pennsylvania | 75.6 |
| Rhode Island | 80.7 |
| South Carolina | 97.0 |
| South Dakota | 93.1 |
| Tennessee | 93.7 |
| Texas | 96.9 |
| $U$ tah | 97.5 |
| $V$ ermont | 66.3 |
| Virginia | 85.4 |
| W ashington | 84.4 |
| W est Virginia | 92.4 |
| W isconsin | 95.5 |
| W yoming | 88.3 |

Table A -62. Percentage of school districts with choice by type of choice program, by state: 1993-94

|  |  |  |  | Interdistrict Choice |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| District | A ny Choice | M agnet | Dist. O pen | T ransfers O utside of | T ransfers into |
| Characteristic | Program | School | Enrollment | District | District |
| 50 States and D.C. | 34.1 | 7.8 | 13.8 | 28.5 | 25.6 |
| A labama | 16.8 | 5.2 | 8.5 | 12.8 | 9.0 |
| A laska | 31.8 | 12.2 | 23.5 | 24.3 | 19.7 |
| A rizona | 66.7 | 32.6 | 39.0 | 59.7 | 60.1 |
| A rkansas | 46.8 | 5.2 | 6.6 | 41.7 | 37.7 |
| California | 40.4 | 7.5 | 23.9 | 37.1 | 27.2 |
| Colorado | 58.3 | 16.2 | 28.5 | 46.8 | 50.6 |
| Connecticut | 21.3 | 11.3 | 8.0 | 10.9 | 8.8 |
| Delaware | 11.7 | 5.8 | 5.8 | 5.8 | 11.7 |
| District of Columbia ${ }^{\text {a }}$ | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Florida | 39.8 | 24.2 | 28.2 | 22.0 | 22.0 |
| Georgia | 34.6 | 4.1 | 13.6 | 24.2 | 24.6 |
| Hawaii ${ }^{\text {a }}$ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho | 74.8 | 15.6 | 38.0 | 67.6 | 68.5 |
| Illinois | 8.8 | 2.2 | 3.8 | 4.1 | 1.9 |
| Indiana | 9.7 | 1.6 | 8.7 | 1.8 | 2.3 |
| Iowa | 83.8 | 7.5 | 13.7 | 83.0 | 74.3 |
| Kansas | 32.8 | 7.1 | 11.6 | 27.8 | 27.3 |
| Kentucky | 39.4 | 7.7 | 16.2 | 38.8 | 35.2 |
| Louisiana | 27.1 | 19.1 | 13.2 | 4.7 | 8.3 |
| $M$ aine | 6.3 | -- | 2.1 | 3.1 | 2.8 |
| M aryland | 15.3 | 10.2 | -- | 5.0 | 5.0 |
| M assachusetts | 29.4 | 1.5 | 7.9 | 23.3 | 16.5 |
| M ichigan | 38.7 | 5.5 | 23.0 | 25.5 | 11.8 |
| M innesota | 93.0 | 19.8 | 27.5 | 93.0 | 89.2 |
| M ississippi | 12.8 | 5.1 | 6.6 | 8.2 | 9.5 |
| M issouri | 9.7 | 2.6 | 6.0 | 5.4 | 5.1 |
| Montana | 39.7 | 8.5 | 10.8 | 35.6 | 32.8 |
| N ebraska | 88.2 | 15.4 | 17.4 | 73.6 | 65.7 |
| N evada | 16.6 | 11.1 | -- | -- | 5.5 |
| N ew H ampshire | 4.6 | -- | 1.7 | 3.0 | -- |
| N ew Jersey | 7.6 | 6.5 | 6.4 | 4.0 | 6.8 |
| N ew M exico | 46.3 | 4.0 | 17.3 | 31.6 | 35.0 |
| N ew York | 16.0 | 4.9 | 7.3 | 11.2 | 13.5 |
| N orth Carolina | 23.7 | 8.7 | 15.2 | 20.6 | 21.5 |
| N orth Dakota | 31.8 | -- | 1.6 | 26.3 | 17.6 |
| Ohio | 69.4 | 17.3 | 42.6 | 58.5 | 50.1 |
| O klahoma | 34.1 | 9.8 | 10.1 | 33.0 | 33.0 |
| Oregon | 21.6 | 3.1 | 8.9 | 19.5 | 14.1 |
| Pennsylvania | 7.1 | 4.3 | 3.9 | 6.0 | 4.1 |
| Rhode Island | 13.4 | 2.7 | 5.3 | 10.7 | 2.7 |
| South C arolina | 6.3 | 4.8 | 1.0 | 2.6 | 3.6 |
| South Dakota | 10.4 | 3.2 | 5.2 | 4.3 | 7.6 |
| Tennessee | 56.4 | 9.9 | 34.0 | 41.6 | 45.3 |
| Texas | 22.7 | 5.1 | 5.3 | 18.5 | 17.9 |
| $U$ tah | 76.1 | 20.0 | 62.1 | 64.2 | 69.2 |
| $\checkmark$ ermont | 16.9 | -- | 1.7 | 16.5 | 6.2 |
| Virginia | 21.8 | 15.2 | 11.6 | 8.8 | 15.0 |
| W ashington | 78.6 | 24.7 | 41.8 | 71.1 | 72.8 |
| Virginia | 45.0 | 12.7 | 35.5 | 39.2 | 37.4 |
| W isconsin | 5.3 | 1.5 | 1.9 | 2.9 | 3.0 |
| W yoming | 35.8 | 14.9 | 18.7 | 27.1 | 25.4 |

-- T Too few cases for a reliable estimate.
a) The District of C olumbia and H awaii each have only one school district.
SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

## A ppendix B <br> T ables of Standard E rrors

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## Section 1

Selected D istrict C haracteristics' T ables

Table B-1. Standard errors for number and percentage of school districts, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent | Number | Percent |
| TOTAL | 195 | 1.28 | 112 | 0.72 | 72 | 0.48 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 208 | 1.37 | 191 | 1.23 | 128 | 0.85 |
| 1,000 to 9,999 | 76 | 0.50 | 165 | 1.06 | 116 | 0.77 |
| 10,000 or more | 9 | 0.06 | 37 | 0.24 | 8 | 0.05 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 181 | 1.18 | 164 | 1.06 | 119 | 0.79 |
| 10\% to under 50\% | 93 | 0.61 | 145 | 0.94 | 127 | 0.85 |
| 50\% or more | 124 | 0.81 | 100 | 0.65 | 117 | 0.78 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 225 | 1.48 | 182 | 1.17 | 186 | 1.24 |
| M ore than 0\% to under 20\% | 114 | 0.75 | 163 | 1.05 | 179 | 1.20 |
| 20\% or more | 71 | 0.46 | 56 | 0.36 | 45 | 0.30 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 78 | 0.50 | 23 | 0.15 |
| U rban-outside central city | - | - | 128 | 0.82 | 85 | 0.57 |
| $N$ onurban area | - | - | 108 | 0.70 | 114 | 0.76 |
| Region |  |  |  |  |  |  |
| N ortheast | 97 | 0.63 | 20 | 0.13 | 20 | 0.13 |
| M idwest | 123 | 0.81 | 100 | 0.65 | 62 | 0.42 |
| South | 81 | 0.53 | 52 | 0.34 | 14 | 0.09 |
| W est | 123 | 0.80 | 44 | 0.28 | 15 | 0.10 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-2. Standard errors for number and percentage of school districts by metropolitan status, by region: 199091 to 1993-94

| District Characteristic | School Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | N umber | Percent |
| TOTAL | 112 | 0.72 | 72 | 0.48 |
| Region by M etropolitan Status |  |  |  |  |
| N ortheast |  |  |  |  |
| U rban-inside central city | 16 | 0.10 | 7 | 0.04 |
| U rban-outside central city | 43 | 0.27 | 43 | 0.28 |
| $N$ onurban area | 33 | 0.22 | 38 | 0.26 |
| M idwest |  |  |  |  |
| U rban-inside central city | 13 | 0.08 | 13 | 0.09 |
| U rban-outside central city | 72 | 0.46 | 57 | 0.38 |
| $N$ onurban area | 72 | 0.47 | 84 | 0.56 |
| South |  |  |  |  |
| U rban-inside central city | 12 | 0.08 | 10 | 0.07 |
| U rban-outside central city | 33 | 0.21 | 11 | 0.07 |
| $N$ onurban area | 53 | 0.34 | 16 | 0.11 |
| W est |  |  |  |  |
| U rban-inside central city | 72 | 0.46 | 15 | 0.10 |
| U rban-outside central city | 87 | 0.56 | 59 | 0.40 |
| N onurban area | 76 | 0.49 | 62 | 0.41 |

Table B-3. Standard errors for number and percentage of school districts by percent minority students, by region: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | N umber | Percent | Number | Percent | Number | Percent |
| TOTAL | 195 | 1.28 | 112 | 0.72 | 72 | 0.48 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast |  |  |  |  |  |  |
| U nder 10\% | 96 | 0.63 | 51 | 0.33 | 51 | 0.34 |
| 10\% to under 50\% | 31 | 0.20 | 44 | 0.28 | 51 | 0.34 |
| $50 \%$ or more | 22 | 0.15 | 18 | 0.11 | 20 | 0.13 |
| M idwest |  |  |  |  |  |  |
| U nder 10\% | 123 | 0.81 | 131 | 0.84 | 90 | 0.60 |
| 10\% to under 50\% | 43 | 0.28 | 81 | 0.52 | 56 | 0.37 |
| 50\% or more | 65 | 0.43 | 27 | 0.18 | 14 | 0.09 |
| South |  |  |  |  |  |  |
| U nder 10\% | 72 | 0.47 | 48 | 0.31 | 37 | 0.25 |
| 10\% to under 50\% | 58 | 0.38 | 63 | 0.41 | 42 | 0.28 |
| $50 \%$ or more | 51 | 0.33 | 47 | 0.30 | 35 | 0.23 |
| W est |  |  |  |  |  |  |
| U nd er 10\% | 88 | 0.58 | 101 | 0.65 | 80 | 0.53 |
| 10\% to under 50\% | 71 | 0.47 | 99 | 0.64 | 105 | 0.70 |
| 50\% or more | 80 | 0.53 | 86 | 0.56 | 101 | 0.68 |

Table B-4. Standard errors for number and percentage of school districts by district size, by region: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | N umber | Percent | Number | Percent | Number | Percent |
| TOTAL | 195 | 1.28 | 112 | 0.72 | 72 | 0.48 |
| Region by District Size |  |  |  |  |  |  |
| N ortheast |  |  |  |  |  |  |
| U nder 1,000 | 98 | 0.64 | 85 | 0.55 | 56 | 0.37 |
| 1,000 to 9,999 | 36 | 0.23 | 91 | 0.59 | 59 | 0.39 |
| 10,000 or more | 2 | 0.01 | 5 | 0.03 | 3 | 0.02 |
| M idwest |  |  |  |  |  |  |
| U nder 1,000 | 134 | 0.88 | 81 | 0.52 | 107 | 0.71 |
| 1,000 to 9,999 | 51 | 0.34 | 92 | 0.59 | 75 | 0.50 |
| 10,000 or more | 3 | 0.02 | 7 | 0.04 | 5 | 0.03 |
| South |  |  |  |  |  |  |
| U nder 1,000 | 82 | 0.54 | 59 | 0.38 | 35 | 0.23 |
| 1,000 to 9,999 | 40 | 0.26 | 40 | 0.26 | 32 | 0.21 |
| 10,000 or more | 4 | 0.03 | 8 | 0.05 | 5 | 0.03 |
| W est |  |  |  |  |  |  |
| U nder 1,000 | 133 | 0.87 | 104 | 0.67 | 93 | 0.62 |
| 1,000 to 9,999 | 46 | 0.30 | 80 | 0.51 | 92 | 0.61 |
| 10,000 or more | 6 | 0.04 | 33 | 0.21 | 3 | 0.02 |

Table B-5. Standard errors for number and percentage of school districts by district size, by metropolitan status: 1990-91 to 1993-94

| District Characteristic | School Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent |
| TOTAL | 112 | 0.72 | 72 | 0.48 |
| M etro Status by District Size |  |  |  |  |
| U rban-inside central city |  |  |  |  |
| U nder 1,000 | -- | -- | -- | -- |
| 1,000 to 9,999 | 27 | 0.18 | 19 | 0.13 |
| 10,000 or more | 9 | 0.06 | 5 | 0.04 |
| U rban-outside central city |  |  |  |  |
| U nder 1,000 | 132 | 0.85 | 114 | 0.76 |
| 1,000 to 9,999 | 133 | 0.86 | 85 | 0.57 |
| 10,000 or more | 30 | 0.19 | 7 | 0.04 |
| N onurban area |  |  |  |  |
| U nder 1,000 | 95 | 0.61 | 111 | 0.74 |
| 1,000 to 9,999 | 95 | 0.62 | 65 | 0.43 |
| 10,000 or more | 5 | 0.03 | 3 | 0.02 |

Table B-6. Standard errors for number and percentage of school districts by percent minority teachers, by region: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | N umber | Percent | N umber | Percent |
| TOTAL | 195 | 1.28 | 112 | 0.72 | 72 | 0.48 |
| Region by Percent M inority T eachers |  |  |  |  |  |  |
| $N$ ortheast |  |  |  |  |  |  |
| N one | 91 | 0.60 | 69 | 0.45 | 77 | 0.52 |
| M ore than 0\% to under 20\% | 51 | 0.33 | 74 | 0.47 | 80 | 0.53 |
| 20\% or more | 12 | 0.08 | -- | -- | 5 | 0.04 |
| M idwest |  |  |  |  |  |  |
| N one | 135 | 0.88 | 99 | 0.64 | 98 | 0.65 |
| M ore than 0\% to under 20\% | 54 | 0.36 | 98 | 0.63 | 71 | 0.47 |
| 20\% or more | 24 | 0.16 | 21 | 0.13 | 13 | 0.09 |
| South |  |  |  |  |  |  |
| N one | 65 | 0.43 | 56 | 0.36 | 40 | 0.26 |
| M ore than 0\% to under 20\% | 69 | 0.45 | 63 | 0.41 | 44 | 0.29 |
| 20\% or more | 49 | 0.32 | 39 | 0.25 | 32 | 0.21 |
| W est |  |  |  |  |  |  |
| N one | 142 | 0.93 | 111 | 0.72 | 101 | 0.67 |
| M ore than 0\% to under 20\% | 62 | 0.41 | 93 | 0.60 | 95 | 0.63 |
| 20\% or more | 43 | 0.28 | 50 | 0.32 | 22 | 0.14 |

Table B-7. Standard errors for number of full and part time teachers and percentage minority, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | 1987-88 |  | $\begin{aligned} & \text { School Year } \\ & \underline{1990-91} \end{aligned}$ |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Teachers | Percent <br> Minority | N umber of Teachers | Percent <br> M inority | N umber of Teachers | Percent <br> Minority |
| TOTAL | 20,349 | 0.16 | 56,390 | 0.18 | 20,454 | 0.12 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 7,149 | 0.38 | 14,065 | 0.45 | 5,802 | 0.19 |
| 1,000 to 9,999 | 18,815 | 0.34 | 41,616 | 0.26 | 17,496 | 0.21 |
| 10,000 or more | 8,031 | 0.18 | 29,245 | 0.28 | 8,089 | 0.10 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 16,343 | 0.31 | 23,331 | 0.10 | 13,041 | 0.02 |
| 10\% to under 50\% | 10,545 | 0.18 | 30,664 | 0.18 | 13,640 | 0.11 |
| 50\% or more | 9,097 | 0.45 | 18,707 | 0.39 | 9,175 | 0.32 |
| M inority T eachers |  |  |  |  |  |  |
| $N$ one | 11,953 | 0.00 | 16,597 | 0.00 | 8,825 | 0.00 |
| M ore than 0\% to under 20\% | 16,418 | 0.07 | 40,579 | 0.11 | 20,548 | 0.06 |
| 20\% or more | 8,476 | 0.37 | 15,489 | 0.32 | 7,228 | 0.24 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 19,303 | 0.54 | 6,918 | 0.15 |
| U rban-outside central city | - | - | 39,288 | 0.33 | 14,236 | 0.20 |
| $N$ onurban area | - | - | 16,551 | 0.25 | 11,277 | 0.17 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 12,643 | 0.24 | 21,971 | 0.31 | 10,404 | 0.23 |
| U nder 10\% | 11,565 | 0.29 | 18,900 | 0.24 | 8,071 | 0.05 |
| 10\% to under 50\% | 7,829 | 0.37 | 9,467 | 0.31 | 5,851 | 0.20 |
| $50 \%$ or more | 4,868 | 0.86 | 4,659 | 0.68 | 5,103 | 0.39 |
| M idwest | 15,151 | 0.53 | 16,465 | 0.27 | 10,784 | 0.23 |
| U nder 10\% | 13,179 | 0.69 | 12,264 | 0.16 | 9,784 | 0.04 |
| 10\% to under 50\% | 4,702 | 0.44 | 9,632 | 0.52 | 6,472 | 0.56 |
| $50 \%$ or more | 2,683 | 1.37 | 5,747 | 1.74 | 2,316 | 0.75 |
| South | 8,060 | 0.22 | 17,585 | 0.29 | 6,650 | 0.22 |
| U nder 10\% | 4,369 | 0.12 | 4,739 | 0.15 | 3,908 | 0.04 |
| 10\% to under 50\% | 5,515 | 0.15 | 13,668 | 0.27 | 5,951 | 0.12 |
| $50 \%$ or more | 7,403 | 0.96 | 7,748 | 0.59 | 5,143 | 0.54 |
| W est | 7,503 | 0.23 | 34,806 | 0.43 | 12,709 | 0.26 |
| U nder 10\% | 4,205 | 0.32 | 3,675 | 0.16 | 3,514 | 0.07 |
| 10\% to under 50\% | 5,814 | 0.30 | 21,918 | 0.23 | 8,729 | 0.15 |
| 50\% or more | 2,622 | 0.39 | 13,880 | 1.01 | 5,972 | 0.65 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Q uestionnaire).

Table B-8. Standard errors for number of students and percentage minority, by selected district characteristics: 1987-88 to 1993-94

School Year

| District Characteristic | School Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | N umber of Students | Percent Minority | Number of Students | Percent Minority | Number of Students | Percent <br> M inority |
| TOTAL | 192,212 | 0.18 | 947,263 | 0.37 | 353,831 | 0.26 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 67,164 | 0.55 | 83,353 | 0.81 | 83,721 | 0.77 |
| 1,000 to 9,999 | 204,990 | 0.31 | 569,585 | 0.66 | 318,051 | 0.53 |
| 10,000 or more | 95,895 | 0.20 | 643,113 | 0.30 | 134,848 | 0.20 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 185,706 | 0.06 | 293,781 | 0.07 | 221,948 | 0.06 |
| 10\% to under 50\% | 137,970 | 0.14 | 551,549 | 0.24 | 236,626 | 0.15 |
| $50 \%$ or more | 94,793 | 0.21 | 363,071 | 0.25 | 173,081 | 0.25 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 144,940 | 0.24 | 178,165 | 0.36 | 144,992 | 0.24 |
| M ore than 0\% to under 20\% | 213,697 | 0.22 | 709,438 | 0.52 | 364,654 | 0.28 |
| 20\% or more | 116,063 | 0.24 | 282,227 | 0.31 | 126,482 | 0.26 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 205,575 | 0.49 | 115,135 | 0.30 |
| U rban-outside central city | - | - | 719,168 | 0.88 | 261,796 | 0.49 |
| N onurban area | - | - | 281,886 | 0.47 | 182,588 | 0.41 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 98,533 | 0.40 | 190,069 | 0.61 | 153,286 | 0.64 |
| U nder 10\% | 98,042 | 0.10 | 156,793 | 0.13 | 121,287 | 0.11 |
| 10\% to under 50\% | 69,909 | 0.67 | 98,443 | 0.80 | 82,937 | 0.45 |
| $50 \%$ or more | 40,057 | 0.35 | 60,500 | 0.61 | 70,777 | 0.38 |
| M idwest | 132,083 | 0.31 | 234,363 | 0.47 | 189,193 | 0.41 |
| U nder 10\% | 126,356 | 0.09 | 208,553 | 0.10 | 170,850 | 0.08 |
| 10\% to under 50\% | 74,445 | 0.30 | 111,407 | 0.72 | 110,213 | 0.50 |
| $50 \%$ or more | 30,903 | 0.59 | 51,924 | 0.72 | 37,209 | 0.63 |
| South | 96,180 | 0.32 | 220,997 | 0.44 | 105,703 | 0.31 |
| U nder 10\% | 97,218 | 0.13 | 78,271 | 0.09 | 63,706 | 0.09 |
| 10\% to under 50\% | 81,757 | 0.15 | 142,303 | 0.20 | 91,679 | 0.17 |
| $50 \%$ or more | 74,346 | 0.31 | 147,417 | 0.35 | 79,538 | 0.33 |
| W est | 99,332 | 0.33 | 784,962 | 0.78 | 273,472 | 0.64 |
| U nder 10\% | 60,475 | 0.09 | 74,348 | 0.14 | 70,084 | 0.17 |
| 10\% to under 50\% | 88,126 | 0.32 | 510,155 | 0.79 | 188,111 | 0.47 |
| 50\% or more | 51,114 | 0.44 | 305,633 | 0.62 | 142,946 | 0.62 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table B-9. Standard errors for number of full and part time teachers and percentage by race and ethnicity, by selected district characteristics: 1993-94

| District Characteristic | Total T eachers | Percent by Race and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A merican Indian | A sian | Hispanic | Black | W hite |
| TOTAL | 20,454 | 0.006 | 0.017 | 0.087 | 0.100 | 0.118 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 5,802 | 0.062 | 0.061 | 0.097 | 0.119 | 0.194 |
| 1,000 to 9,999 | 17,496 | 0.009 | 0.024 | 0.146 | 0.161 | 0.214 |
| 10,000 or more | 8,089 | 0.003 | 0.031 | 0.085 | 0.090 | 0.097 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 13,041 | 0.008 | 0.009 | 0.010 | 0.009 | 0.023 |
| 10\% to under 50\% | 13,640 | 0.009 | 0.020 | 0.040 | 0.115 | 0.111 |
| 50\% or more | 9,175 | 0.019 | 0.061 | 0.314 | 0.258 | 0.323 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 8,825 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| M ore than 0\% to under 20\% | 20,548 | 0.007 | 0.016 | 0.031 | 0.061 | 0.061 |
| 20\% or more | 7,228 | 0.022 | 0.062 | 0.317 | 0.283 | 0.238 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 6,918 | 0.005 | 0.034 | 0.115 | 0.162 | 0.152 |
| U rban-outside central city | 14,236 | 0.007 | 0.031 | 0.150 | 0.143 | 0.200 |
| N onurban area | 11,277 | 0.019 | 0.009 | 0.124 | 0.131 | 0.166 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 10,404 | 0.006 | 0.015 | 0.074 | 0.162 | 0.225 |
| U nder 10\% | 8,071 | 0.013 | 0.017 | 0.022 | 0.024 | 0.047 |
| 10\% to under 50\% | 5,851 | 0.005 | 0.029 | 0.073 | 0.177 | 0.202 |
| 50\% or more | 5,103 | 0.009 | 0.032 | 0.142 | 0.323 | 0.387 |
| M idwest | 10,784 | 0.009 | 0.009 | 0.019 | 0.213 | 0.227 |
| U nder 10\% | 9,784 | 0.012 | 0.011 | 0.014 | 0.020 | 0.039 |
| 10\% to under 50\% | 6,472 | 0.012 | 0.018 | 0.033 | 0.543 | 0.561 |
| 50\% or more | 2,316 | 0.026 | 0.018 | 0.119 | 0.743 | 0.750 |
| South | 6,650 | 0.013 | 0.004 | 0.213 | 0.120 | 0.215 |
| U nder 10\% | 3,908 | 0.020 | 0.004 | 0.017 | 0.035 | 0.037 |
| 10\% to under 50\% | 5,951 | 0.020 | 0.006 | 0.051 | 0.108 | 0.119 |
| 50\% or more | 5,143 | 0.027 | 0.008 | 0.636 | 0.443 | 0.537 |
| W est | 12,709 | 0.021 | 0.092 | 0.172 | 0.082 | 0.261 |
| U nder 10\% | 3,514 | 0.037 | 0.051 | 0.046 | 0.011 | 0.071 |
| 10\% to under 50\% | 8,729 | 0.026 | 0.067 | 0.107 | 0.045 | 0.145 |
| 50\% or more | 5,972 | 0.054 | 0.256 | 0.407 | 0.204 | 0.646 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-10. Standard errors for number of students and percentage by race and ethnicity, by selected district characteristics: 1993-94

| District Characteristic | Total <br> Students | Percent by Race and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A merican Indian | A sian | Hispanic | Black | W hite |
| TOTAL | 353,831 | 0.023 | 0.064 | 0.233 | 0.173 | 0.259 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 83,721 | 0.157 | 0.122 | 0.652 | 0.312 | 0.769 |
| 1,000 to 9,999 | 318,051 | 0.044 | 0.097 | 0.503 | 0.289 | 0.530 |
| 10,000 or more | 134,848 | 0.006 | 0.092 | 0.180 | 0.123 | 0.202 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 221,948 | 0.013 | 0.021 | 0.029 | 0.027 | 0.057 |
| 10\% to under 50\% | 236,626 | 0.040 | 0.085 | 0.206 | 0.207 | 0.153 |
| 50\% or more | 173,081 | 0.057 | 0.208 | 0.604 | 0.488 | 0.254 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 144,992 | 0.107 | 0.037 | 0.096 | 0.137 | 0.242 |
| M ore than 0\% to under 20\% | 364,654 | 0.022 | 0.085 | 0.269 | 0.163 | 0.278 |
| 20\% or more | 126,482 | 0.035 | 0.181 | 0.546 | 0.463 | 0.258 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 115,135 | 0.011 | 0.110 | 0.249 | 0.250 | 0.301 |
| U rban-outside central city | 261,796 | 0.019 | 0.116 | 0.458 | 0.233 | 0.489 |
| N onurban area | 182,588 | 0.083 | 0.022 | 0.340 | 0.269 | 0.415 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 153,286 | 0.030 | 0.093 | 0.282 | 0.368 | 0.642 |
| U nder 10\% | 121,287 | 0.018 | 0.048 | 0.047 | 0.054 | 0.112 |
| 10\% to under 50\% | 82,937 | 0.115 | 0.239 | 0.277 | 0.392 | 0.454 |
| 50\% or more | 70,777 | 0.022 | 0.226 | 0.465 | 0.505 | 0.378 |
| M idwest | 189,193 | 0.069 | 0.083 | 0.089 | 0.372 | 0.415 |
| U nder 10\% | 170,850 | 0.016 | 0.028 | 0.038 | 0.048 | 0.083 |
| 10\% to under 50\% | 110,213 | 0.218 | 0.206 | 0.215 | 0.568 | 0.498 |
| 50\% or more | 37,209 | 0.131 | 0.492 | 0.587 | 1.017 | 0.628 |
| South | 105,703 | 0.023 | 0.019 | 0.316 | 0.199 | 0.312 |
| U nder 10\% | 63,706 | 0.017 | 0.019 | 0.067 | 0.060 | 0.089 |
| 10\% to under 50\% | 91,679 | 0.035 | 0.029 | 0.181 | 0.173 | 0.170 |
| 50\% or more | 79,538 | 0.045 | 0.042 | 0.861 | 0.683 | 0.326 |
| W est | 273,472 | 0.070 | 0.251 | 0.660 | 0.142 | 0.641 |
| U nder 10\% | 70,084 | 0.052 | 0.056 | 0.114 | 0.017 | 0.167 |
| 10\% to under 50\% | 188,111 | 0.079 | 0.211 | 0.375 | 0.131 | 0.469 |
| 50\% or more | 142,946 | 0.169 | 0.630 | 1.017 | 0.304 | 0.620 |

a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-11. Standard errors for total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by selected district characteristics: 1993-94

| District <br> Characteristic | Total FTE Teachers | Percent <br> New H ires |
| :---: | :---: | :---: |
| TOTAL | 19,389 | 0.04 |
| District Size |  |  |
| U nder 1,000 | 5,625 | 0.21 |
| 1,000 to 9,999 | 16,684 | 0.08 |
| 10,000 or more | 7,519 | 0.03 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 12,560 | 0.09 |
| 10\% to under 50\% | 13,086 | 0.07 |
| 50\% or more | 8,840 | 0.07 |
| M inority T eachers |  |  |
| N one | 8,575 | 0.15 |
| M ore than 0\% to under 20\% | 19,625 | 0.05 |
| 20\% or more | 7,056 | 0.07 |
| M etro Status |  |  |
| U rban-inside central city | 6,496 | 0.05 |
| U rban-outside central city | 13,551 | 0.08 |
| $N$ onurban area | 10,802 | 0.09 |
| Region by M etro Status |  |  |
| N ortheast | 10,000 | 0.11 |
| U rban-inside central city | 4,356 | 0.07 |
| U rban-outside central city | 9,263 | 0.17 |
| $N$ onurban area | 3,662 | 0.33 |
| M idwest | 10,398 | 0.11 |
| U rban-inside central city | 3,451 | 0.08 |
| U rban-outside central city | 9,432 | 0.18 |
| $N$ onurban area | 5,732 | 0.15 |
| South | 6,427 | 0.05 |
| U rban-inside central city | 2,617 | 0.07 |
| U rban-outside central city | 4,581 | 0.08 |
| N onurban area | 3,698 | 0.10 |
| W est | 12,019 | 0.09 |
| U rban-inside central city | 3,136 | 0.07 |
| U rban-outside central city | 9,167 | 0.15 |
| N onurban area | 4,182 | 0.18 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-12. Standard errors for number of newly hired FTE teachers and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by selected district characteristics: 1993-94

| District Characteristic | N umber of N ewly H ired Teachers | Percent N ewly H ired with Regular State Certification in Field of A ssignment | Percent $N$ ewly <br> Hired with Emergency Certification | Percent N ewly Hired lacking Regular State or Emergency Certification in Field of A ssignment |
| :---: | :---: | :---: | :---: | :---: |
| TOTAL | 1815 | 0.21 | 0.14 | 0.14 |
| District Size |  |  |  |  |
| U nder 1,000 | 658 | 1.00 | 0.72 | 0.58 |
| 1,000 to 9,999 | 1520 | 0.45 | 0.28 | 0.32 |
| 10,000 or more | 706 | 0.19 | 0.11 | 0.11 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 845 | 0.28 | 0.17 | 0.21 |
| 10\% to under 50\% | 1315 | 0.33 | 0.24 | 0.21 |
| 50\% or more | 973 | 0.53 | 0.34 | 0.38 |
| M inority Teachers |  |  |  |  |
| N one | 718 | 0.60 | 0.27 | 0.51 |
| M ore than 0\% to under 20\% | 1729 | 0.28 | 0.19 | 0.17 |
| 20\% or more | 800 | 0.45 | 0.32 | 0.34 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 542 | 0.34 | 0.31 | 0.17 |
| U rban-outside central city | 1368 | 0.30 | 0.24 | 0.23 |
| N onurban area | 920 | 0.41 | 0.29 | 0.27 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 815 | 0.40 | 0.16 | 0.39 |
| U rban-inside central city | 218 | 0.40 | 0.30 | 0.19 |
| U rban-outside central city | 783 | 0.60 | 0.20 | 0.62 |
| N onurban area | 321 | 0.41 | 0.33 | 0.22 |
| M idwest | 757 | 0.31 | 0.15 | 0.30 |
| U rban-inside central city | 251 | 0.23 | 0.18 | 0.07 |
| U rban-outside central city | 572 | 0.46 | 0.27 | 0.37 |
| N onurban area | 442 | 0.79 | 0.34 | 0.69 |
| South | 837 | 0.32 | 0.26 | 0.19 |
| U rban-inside central city | 332 | 0.57 | 0.58 | 0.30 |
| U rban-outside central city | 653 | 0.48 | 0.31 | 0.37 |
| N onurban area | 466 | 0.57 | 0.46 | 0.32 |
| W est | 1246 | 0.53 | 0.43 | 0.32 |
| U rban-inside central city | 258 | 0.72 | 0.47 | 0.32 |
| U rban-outside central city | 1010 | 0.90 | 0.83 | 0.51 |
| N onurban area | 400 | 0.86 | 0.37 | 0.68 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-13. Standard errors for percentage of school districts with different criteria for considering applicants for teaching positions, by selected district characteristics: 1993-94

| District Characteristic | Certification Type |  |  | G raduate of <br> Teacher Ed. Program | Special K nowledge Test |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full Standard | Emergencyl <br> Temporary | College <br> Major/Minor in Teaching Field |  | District <br> or State | $N$ ational Teacher Exam |
| TOTAL | 0.88 | 0.89 | 0.86 | 1.13 | 0.90 | 0.86 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 1.39 | 1.56 | 1.68 | 2.01 | 1.61 | 1.61 |
| 1,000 to 9,999 | 0.84 | 1.02 | 1.00 | 0.85 | 1.15 | 1.01 |
| 10,000 or more | 0.69 | 0.65 | 0.73 | 0.76 | 0.51 | 0.71 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 0.90 | 1.21 | 1.01 | 1.42 | 1.22 | 1.25 |
| 10\% to under 50\% | 1.47 | 1.75 | 1.99 | 2.13 | 2.22 | 1.62 |
| 50\% or more | 3.45 | 3.18 | 4.76 | 4.35 | 2.07 | 2.87 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 1.21 | 1.38 | 1.23 | 1.79 | 1.48 | 1.57 |
| M ore than 0\% to under 20\% | 1.00 | 1.35 | 1.88 | 1.89 | 1.53 | 1.24 |
| 20\% or more | 1.82 | 1.37 | 1.83 | 2.26 | 1.96 | 2.36 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 1.84 | 1.45 | 2.14 | 2.54 | 1.98 | 2.60 |
| U rban-outside central city | 1.55 | 1.65 | 2.00 | 1.97 | 1.88 | 1.58 |
| $N$ onurban area | 1.01 | 1.12 | 1.04 | 1.31 | 1.15 | 1.24 |
| Region by M etro Status |  |  |  |  |  |  |
| $N$ ortheast | 1.19 | 1.97 | 1.83 | 1.96 | 1.52 | 1.96 |
| U rban-inside central city | 1.13 | 3.22 | 2.96 | 3.21 | 2.94 | 3.66 |
| U rban-outside central city | 1.83 | 2.40 | 2.50 | 2.68 | 2.29 | 2.66 |
| $N$ onurban area | 1.17 | 3.07 | 2.82 | 2.69 | 2.44 | 2.59 |
| M idwest | 1.19 | 1.36 | 1.29 | 1.88 | 1.55 | 1.87 |
| U rban-inside central city | 2.09 | 3.49 | 1.13 | 4.52 | 4.04 | 3.31 |
| U rban-outside central city | 2.19 | 2.60 | 2.43 | 2.51 | 1.72 | 1.25 |
| N onurban area | 1.39 | 1.98 | 1.54 | 2.27 | 2.25 | 2.67 |
| South | 1.32 | 1.00 | 1.25 | 1.43 | 1.09 | 0.80 |
| U rban-inside central city | 3.14 | 2.01 | 4.40 | 3.77 | 1.76 | 2.30 |
| U rban-outside central city | 2.50 | 1.64 | 2.32 | 2.71 | 1.52 | 1.84 |
| $N$ onurban area | 1.57 | 1.43 | 1.62 | 1.84 | 1.46 | 1.10 |
| W est | 2.70 | 2.89 | 4.06 | 3.46 | 3.48 | 2.67 |
| U rban-inside central city | 6.47 | 1.25 | 6.35 | 7.54 | 1.85 | 8.24 |
| U rban-outside central city | 4.58 | 4.81 | 8.09 | 7.88 | 7.29 | 5.26 |
| N onurban area | 3.17 | 3.44 | 3.22 | 2.86 | 3.45 | 2.31 |

a) Districts without students were excluded for this characteristic only.

SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-14. Standard errors for number and percentage of full time equivalent (FTE) teachers with standard state certification in their field of assignment, by selected district characteristics: 1993-94

| District <br> Characteristic | Total FTE <br> Teachers | Percent |
| :---: | :---: | :---: |
| TOTAL | 19,389 | 0.04 |
| District Size |  |  |
| U nder 1,000 | 5,625 | 0.12 |
| 1,000 to 9,999 | 16,684 | 0.08 |
| 10,000 or more | 7,519 | 0.03 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 12,560 | 0.06 |
| 10\% to under 50\% | 13,086 | 0.05 |
| $50 \%$ or more | 8,840 | 0.09 |
| M inority T eachers |  |  |
| N one | 8,575 | 0.13 |
| M ore than 0\% to under 20\% | 19,625 | 0.05 |
| 20\% or more | 7,056 | 0.08 |
| M etro Status |  |  |
| U rban-inside central city | 6,496 | 0.04 |
| U rban-outside central city | 13,551 | 0.07 |
| $N$ onurban area | 10,802 | 0.07 |
| Region by M etro Status |  |  |
| N ortheast | 10,000 | 0.05 |
| U rban-inside central city | 4,356 | 0.07 |
| U rban-outside central city | 9,263 | 0.10 |
| N onurban area | 3,662 | 0.13 |
| M idwest | 10,398 | 0.07 |
| U rban-inside central city | 3,451 | 0.04 |
| U rban-outside central city | 9,432 | 0.16 |
| N onurban area | 5,732 | 0.07 |
| South | 6,427 | 0.05 |
| U rban-inside central city | 2,617 | 0.08 |
| U rban-outside central city | 4,581 | 0.09 |
| $N$ onurban area | 3,698 | 0.11 |
| W est | 12,019 | 0.13 |
| U rban-inside central city | 3,136 | 0.10 |
| U rban-outside central city | 9,167 | 0.24 |
| N onurban area | 4,182 | 0.12 |

Table B-15. Standard errors for number and percentage of full time equival ent (FTE) itinerant teachers and the number and percentage of school districts employing itinerant teachers, by selected district characteristics: 1993-94

| District | FTE Itinerant T eachers |  | Districts Employing Itinerant T eachers |  |
| :---: | :---: | :---: | :---: | :---: |
| Characteristic | Number | Percent | N umber | Percent |
| TOTAL | 1,673 | 0.05 | 185 | 1.24 |
| District Size |  |  |  |  |
| U nder 1,000 | 657 | 0.26 | 114 | 1.64 |
| 1,000 to 9,999 | 1,468 | 0.09 | 118 | 0.99 |
| 10,000 or more | 506 | 0.03 | 8 | 0.74 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 942 | 0.09 | 109 | 1.43 |
| 10\% to under 50\% | 874 | 0.07 | 95 | 2.00 |
| 50\% or more | 811 | 0.11 | 86 | 4.30 |
| M inority T eachers |  |  |  |  |
| N one | 751 | 0.17 | 124 | 1.67 |
| M ore than 0\% to under 20\% | 1,112 | 0.05 | 157 | 1.47 |
| 20\% or more | 616 | 0.10 | 34 | 2.30 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 392 | 0.05 | 14 | 2.93 |
| U rban-outside central city | 1,376 | 0.09 | 124 | 2.18 |
| N onurban area | 696 | 0.08 | 112 | 1.32 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 1,225 | 0.18 | 55 | 1.67 |
| U rban-inside central city | 354 | 0.07 | 6 | 1.81 |
| U rban-outside central city | 1,198 | 0.30 | 63 | 2.58 |
| $N$ onurban area | 294 | 0.25 | 39 | 2.29 |
| M idwest | 679 | 0.09 | 102 | 1.87 |
| U rban-inside central city | 262 | 0.15 | 10 | 5.24 |
| U rban-outside central city | 557 | 0.13 | 69 | 2.99 |
| $N$ onurban area | 424 | 0.19 | 74 | 2.16 |
| South | 455 | 0.04 | 49 | 1.50 |
| Urban-inside central city | 92 | 0.04 | 6 | 5.15 |
| U rban-outside central city | 211 | 0.04 | 22 | 2.60 |
| $N$ onurban area | 327 | 0.10 | 43 | 1.89 |
| W est | 388 | 0.07 | 94 | 3.16 |
| U rban-inside central city | 104 | 0.08 | 9 | 8.47 |
| U rban-outside central city | 330 | 0.10 | 81 | 7.90 |
| N onurban area | 184 | 0.17 | 41 | 2.97 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-16. Standard errors for percentage of school districts with at least one approved teaching position not filled by a permanent teacher, by selected district characteristics: 1987-88 to 1993-94

|  | School Year |  |  |
| :---: | :---: | :---: | :---: |
| District | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Percent | Percent | Percent |
| TOTAL | 0.72 | 0.63 | 0.55 |
| District Size |  |  |  |
| U nder 1,000 | 1.08 | 0.91 | 0.69 |
| 1,000 to 9,999 | 0.89 | 0.73 | 0.91 |
| 10,000 or more | 0.81 | 1.52 | 0.82 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.89 | 0.67 | 0.58 |
| 10\% to under 50\% | 1.12 | 1.07 | 1.13 |
| 50\% or more | 2.77 | 3.27 | 3.08 |
| M inority T eachers |  |  |  |
| N one | 0.96 | 0.69 | 0.71 |
| M ore than 0\% to under 20\% | 1.00 | 0.99 | 0.90 |
| 20\% or more | 2.62 | 3.10 | 1.61 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 5.51 | 2.76 |
| U rban-outside central city | - | 1.50 | 1.10 |
| $N$ onurban area |  | 0.56 | 0.64 |
| Region by M etro Status |  |  |  |
| N ortheast |  | 1.81 | 1.66 |
| U rban-inside central city | - | 5.33 | 3.16 |
| U rban-outside central city | - | 2.52 | 2.32 |
| $N$ onurban area | - | 2.92 | 1.70 |
| M idwest | - | 0.95 | 0.59 |
| U rban-inside central city | - | 5.17 | 4.38 |
| U rban-outside central city | - | 2.03 | 1.00 |
| $N$ onurban area | - | 1.14 | 0.97 |
| South | - | 1.20 | 0.85 |
| U rban-inside central city | - | 5.41 | 3.37 |
| U rban-outside central city |  | 2.03 | 1.70 |
| $N$ onurban area | - | 1.34 | 1.12 |
| W est | - | 2.19 | 2.01 |
| U rban-inside central city | - | 13.43 | 6.56 |
| U rban-outside central city |  | 5.66 | 4.72 |
| N onurban area | - | 1.29 | 1.20 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-17. Standard errors for number and percentage of approved full time equivalent (FTE) teaching positions not filled by permanent teachers, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | 1987-88 |  | $\begin{gathered} \text { School Year } \\ \underline{1990-91} \end{gathered}$ |  | 1993-94 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Positions | Percent of <br> Total FTE | N umber of Positions | Percent of <br> Total FTE | N umber of Positions | Percent of <br> Total FTE |
| TOTAL | 1,495 | 0.07 | 611 | 0.02 | 190 | 0.01 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 530 | 0.24 | 224 | 0.10 | 63 | 0.03 |
| 1,000 to 9,999 | 1,345 | 0.12 | 549 | 0.04 | 166 | 0.01 |
| 10,000 or more | 66 | 0.01 | 198 | 0.01 | 87 | 0.01 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 1,077 | 0.12 | 490 | 0.05 | 83 | 0.01 |
| 10\% to under 50\% | 730 | 0.09 | 204 | 0.02 | 121 | 0.01 |
| 50\% or more | 177 | 0.03 | 277 | 0.04 | 116 | 0.02 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 576 | 0.15 | 232 | 0.06 | 87 | 0.02 |
| M ore than 0\% to under 20\% | 1,262 | 0.09 | 502 | 0.03 | 160 | 0.01 |
| 20\% or more | 461 | 0.07 | 214 | 0.03 | 86 | 0.01 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | - | - | 128 | 0.02 | 62 | 0.01 |
| U rban-outside central city | - | - | 590 | 0.05 | 144 | 0.01 |
| $N$ onurban area | - | - | 219 | 0.03 | 78 | 0.01 |
| Region by M etro Status |  |  |  |  |  |  |
| $N$ ortheast | - | - | 180 | 0.03 | 117 | 0.02 |
| U rban-inside central city | - | - | 48 | 0.04 | 21 | 0.02 |
| U rban-outside central city | - |  | 178 | 0.06 | 97 | 0.03 |
| $N$ onurban area | - | - | 102 | 0.13 | 39 | 0.05 |
| M idwest | - | - | 221 | 0.04 | 58 | 0.01 |
| U rban-inside central city | - | - | 42 | 0.03 | 21 | 0.01 |
| U rban-outside central city | - | - | 136 | 0.05 | 33 | 0.01 |
| $N$ onurban area | - | - | 187 | 0.10 | 49 | 0.03 |
| South | - | - | 482 | 0.05 | 68 | 0.01 |
| U rban-inside central city | - | - | 69 | 0.03 | 25 | 0.01 |
| U rban-outside central city | - | - | 454 | 0.12 | 42 | 0.01 |
| $N$ onurban area | - | - | 120 | 0.04 | 46 | 0.02 |
| W est | - | - | 331 | 0.04 | 132 | 0.02 |
| U rban-inside central city | - | - | 77 | 0.06 | 48 | 0.03 |
| U rban-outside central city | - | - | 313 | 0.09 | 106 | 0.04 |
| N onurban area | - | - | 100 | 0.10 | 24 | 0.02 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire). a) Districts without students were excluded for this characteristic only. SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table B-18. Standard errors for number and percentage of approved full time equivalent (FTE) teaching positions abolished, withdrawn, or filled by substitute teachers because of budget cutbacks, and the number and percentage of school districts affected, by selected district characteristics: 1993-94

| District Characteristic | FTE Positions |  | DistrictsA ffected |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | N umber | Percent |
| TOTAL | 231 | 0.009 | 102 | 0.681 |
| District Size |  |  |  |  |
| U nder 1,000 | 109 | 0.049 | 95 | 1.242 |
| 1,000 to 9,999 | 191 | 0.015 | 42 | 0.617 |
| 10,000 or more | 84 | 0.008 | 2 | 0.348 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 167 | 0.019 | 44 | 0.520 |
| 10\% to under 50\% | 135 | 0.013 | 40 | 0.911 |
| 50\% or more | 135 | 0.021 | 93 | 5.093 |
| M inority T eachers |  |  |  |  |
| None | 106 | 0.028 | 42 | 0.592 |
| M ore than 0\% to under 20\% | 205 | 0.013 | 103 | 1.479 |
| 20\% or more | 40 | 0.006 | 9 | 0.852 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 53 | 0.008 | 7 | 1.260 |
| U rban-outside central city | 227 | 0.018 | 91 | 1.519 |
| N onurban area | 92 | 0.013 | 41 | 0.457 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 74 | 0.014 | 27 | 0.862 |
| U rban-inside central city | 44 | 0.030 | 3 | 3.008 |
| U rban-outside central city | 60 | 0.020 | 23 | 1.148 |
| $N$ onurban area | 25 | 0.033 | 13 | 1.346 |
| M idwest | 191 | 0.032 | 43 | 0.758 |
| U rban-inside central city | 33 | 0.027 | 6 | 3.584 |
| U rban-outside central city | 175 | 0.058 | 26 | 1.262 |
| N onurban area | 66 | 0.033 | 31 | 0.837 |
| South | 57 | 0.006 | 20 | 0.593 |
| U rban-inside central city | 5 | 0.002 | 1 | 0.673 |
| U rban-outside central city | 32 | 0.008 |  | 0.780 |
| $N$ onurban area | 47 | 0.016 | 19 | 0.856 |
| W est | 143 | 0.032 | 91 | 3.098 |
| Urban-inside central city | 9 | 0.006 | 1 | 0.923 |
| U rban-outside central city | 140 | 0.061 | 89 | 7.348 |
| N onurban area | 42 | 0.045 | 18 | 1.178 |

a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-19. Standard errors for number and percentage of school districts that laid off teachers and the number and percentage of full time equivalent ( $F T E$ ) teachers laid off, by selected district characteristics: 1993-94

| District Characteristic | Districts with T eachers Laid Off |  | Teachers |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number of Districts | Percent of All Districts | Number of FTEs Laid Off | Percent of All FTE T eachers |
| TOTAL | 74 | 0.476 | 431 | 0.017 |
| District Size |  |  |  |  |
| U nder 1,000 | 65 | 0.853 | 136 | 0.059 |
| 1,000 to 9,999 | 45 | 0.664 | 358 | 0.031 |
| 10,000 or more | 3 | 0.441 | 199 | 0.018 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 62 | 0.652 | 244 | 0.028 |
| 10\% to under 50\% | 47 | 0.968 | 307 | 0.029 |
| $50 \%$ or more | 26 | 1.468 | 142 | 0.021 |
| M inority T eachers |  |  |  |  |
| N one | 75 | 0.968 | 165 | 0.045 |
| M ore than 0\% to under 20\% | 40 | 0.591 | 406 | 0.026 |
| 20\% or more | 15 | 1.187 | 108 | 0.017 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 8 | 1.473 | 117 | 0.019 |
| U rban-outside central city | 45 | 0.777 | 490 | 0.039 |
| N onurban area | 61 | 0.696 | 159 | 0.022 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 37 | 1.195 | 110 | 0.020 |
| U rban-inside central city | 3 | 2.794 | 11 | 0.012 |
| U rban-outside central city | 30 | 1.492 | 101 | 0.032 |
| $N$ onurban area | 19 | 1.861 | 23 | 0.032 |
| M idwest | 63 | 1.098 | 438 | 0.069 |
| U rban-inside central city | 6 | 3.469 | 100 | 0.077 |
| U rban-outside central city | 44 | 2.231 | 514 | 0.162 |
| $N$ onurban area | 53 | 1.389 | 132 | 0.063 |
| South | 24 | 0.724 | 60 | 0.006 |
| U rban-inside central city | 3 | 1.641 | 6 | 0.002 |
| U rban-outside central city | 7 | 0.846 | 28 | 0.007 |
| N onurban area | 23 | 1.026 | 49 | 0.017 |
| W est | 27 | 0.924 | 119 | 0.023 |
| Urban-inside central city | 1 | 1.614 | 53 | 0.042 |
| U rban-outside central city | 14 | 1.290 | 89 | 0.035 |
| $N$ onurban area | 22 | 1.478 | 50 | 0.051 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-20. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by selected district characteristics: 1987-88 to 1993-94

| School Y ear |  |  |  |
| :---: | :---: | :---: | :---: |
| District | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Percent | Percent | Percent |
| TOTAL | 0.46 | 0.69 | 0.68 |
| District Size |  |  |  |
| U nder 1,000 | 0.83 | 1.04 | 0.99 |
| 1,000 to 9,999 | 0.37 | 0.74 | 0.75 |
| 10,000 or more | 0.50 | 1.06 | 0.80 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.61 | 1.02 | 0.79 |
| 10\% to under 50\% | 0.85 | 1.37 | 1.39 |
| 50\% or more | 1.76 | 3.19 | 3.33 |
| M inority T eachers |  |  |  |
| N one | 0.74 | 1.13 | 1.11 |
| M ore than 0\% to under 20\% | 0.57 | 0.85 | 1.08 |
| 20\% or more | 1.42 | 3.43 | 1.79 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 1.99 | 1.97 |
| U rban-outside central city | - | 1.32 | 1.37 |
| N onurban area | - | 0.94 | 0.76 |
| Region by District Size |  |  |  |
| N ortheast | 0.98 | 1.37 | 1.12 |
| U nder 1,000 | 2.16 | 2.35 | 2.11 |
| 1,000 to 9,999 | 0.77 | 1.66 | 1.23 |
| 10,000 or more | 1.53 | 2.20 | 2.88 |
| M idwest | 0.78 | 1.09 | 1.08 |
| U nder 1,000 | 1.17 | 1.65 | 1.66 |
| 1,000 to 9,999 | 0.82 | 0.98 | 0.99 |
| 10,000 or more | 0.18 | 1.22 | 0.62 |
| South | 1.02 | 1.48 | 1.46 |
| U nder 1,000 | 2.06 | 3.09 | 3.08 |
| 1,000 to 9,999 | 1.02 | 1.51 | 1.05 |
| 10,000 or more | 0.70 | 1.19 | 0.64 |
| W est | 1.35 | 1.63 | 1.99 |
| U nder 1,000 | 2.24 | 2.56 | 1.99 |
| 1,000 to 9,999 | 1.03 | 2.19 | 3.42 |
| 10,000 or more | 1.14 | 2.34 | 1.84 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-21. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations by type of pay incentive, by selected district characteristics: 1993-94

| District Characteristic | Type of Pay Incentive |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Any Incentive | Cash Bonus | Salary Step Increase | Other Salary Increase |
| TOTAL | 0.64 | 0.36 | 0.46 | 0.34 |
| District Size |  |  |  |  |
| U nder 1,000 | 0.97 | 0.46 | 0.83 | 0.62 |
| 1,000 to 9,999 | 0.70 | 0.60 | 0.43 | 0.29 |
| 10,000 or more | 0.39 | 0.18 | 0.15 | 0.33 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 0.76 | 0.19 | 0.76 | 0.27 |
| 10\% to under 50\% | 1.25 | 0.76 | 0.69 | 0.97 |
| 50\% or more | 3.25 | 2.57 | 1.23 | 1.29 |
| M inority T eachers |  |  |  |  |
| $N$ one | 1.04 | 0.34 | 0.87 | 0.49 |
| M ore than 0\% to under 20\% | 0.97 | 0.68 | 0.57 | 0.61 |
| 20\% or more | 1.42 | 0.99 | 1.20 | 0.73 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 1.81 | 0.18 | 1.76 | 0.89 |
| U rban-outside central city | 1.21 | 0.75 | 0.87 | 0.28 |
| N onurban area | 0.71 | 0.34 | 0.64 | 0.56 |
| Region by District Size |  |  |  |  |
| N ortheast | 1.09 | 0.23 | 1.01 | 0.22 |
| U nder 1,000 | 2.00 | 0.28 | 2.06 | 0.30 |
| 1,000 to 9,999 | 1.21 | 0.31 | 0.98 | 0.31 |
| 10,000 or more | 0.00 | 0.00 | 0.00 | 0.00 |
| M idwest | 0.99 | 0.20 | 0.95 | 0.28 |
| U nder 1,000 | 1.59 | 0.31 | 1.56 | 0.46 |
| 1,000 to 9,999 | 0.65 | 0.21 | 0.63 | 0.23 |
| 10,000 or more | 0.13 | 0.00 | 0.13 | 0.03 |
| South | 1.48 | 0.99 | 0.75 | 1.16 |
| U nder 1,000 | 3.17 | 2.36 | 1.47 | 2.72 |
| 1,000 to 9,999 | 1.17 | 0.69 | 0.91 | 0.92 |
| 10,000 or more | 0.49 | 0.42 | 0.29 | 0.33 |
| W est | 1.77 | 1.38 | 0.86 | 1.02 |
| U $\mathrm{nder} \mathrm{l}, 000$ | 1.98 | 0.39 | 1.30 | 1.66 |
| 1,000 to 9,999 | 3.49 | 3.62 | 0.95 | 0.63 |
| 10,000 or more | 0.98 | 0.20 | 0.25 | 0.87 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage
Questionnaire). Questionnaire).

Table B-22. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in fields of shortage by type of pay incentive, by selected district characteristics: 1993-94

a) Districts without students were excluded for this characteristic only.

SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-23. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to fields of shortage by subject matter, by selected district characteristics: 1993-94

| District <br> Characteristic | Special Education | M ath | Subject M atter |  |  | ESL or Bilingual Education | Foreign Language | Vocational Education | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Comp. Physical |  | Biological Sciences |  |  |  |  |
|  |  |  | Sci. | Science |  |  |  |  |  |
| TOTAL | 0.45 | 0.39 | 0.25 | 0.34 | 0.33 | 0.39 | 0.28 | 0.31 | 0.12 |
| District Size |  |  |  |  |  |  |  |  |  |
| U nder 1,000 | 0.64 | 0.67 | 0.43 | 0.55 | 0.57 | 0.39 | 0.42 | 0.55 | 0.20 |
| 1,000 to 9,999 | 0.68 | 0.34 | 0.25 | 0.34 | 0.32 | 0.70 | 0.33 | 0.29 | 0.19 |
| 10,000 or more | 0.40 | 0.17 | 0.13 | 0.17 | 0.14 | 0.77 | 0.10 | 0.13 | 0.11 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| U nder 10\% | 0.55 | 0.53 | 0.31 | 0.38 | 0.45 | 0.26 | 0.33 | 0.48 | 0.17 |
| 10\% to under 50\% | 0.73 | 0.78 | 0.57 | 0.70 | 0.70 | 0.74 | 0.63 | 0.57 | 0.24 |
| 50\% or more | 2.89 | 1.49 | 0.51 | 1.30 | 0.93 | 2.99 | 0.79 | 0.63 | 0.20 |
| M inority T eachers |  |  |  |  |  |  |  |  |  |
| N one | 0.72 | 0.70 | 0.38 | 0.44 | 0.59 | 0.32 | 0.42 | 0.59 | 0.20 |
| M ore than 0\% to under 20\% | \% 0.83 | 0.53 | 0.39 | 0.49 | 0.42 | 0.73 | 0.38 | 0.37 | 0.18 |
| 20\% or more | 1.06 | 0.66 | 0.52 | 0.62 | 0.66 | 1.19 | 1.01 | 0.73 | 0.25 |
| M etro Status |  |  |  |  |  |  |  |  |  |
| U rban-inside central city | 1.68 | 0.41 | 0.33 | 0.41 | 0.38 | 1.29 | 0.28 | 0.37 | 0.20 |
| U rban-outside central city | 0.90 | 0.59 | 0.25 | 0.37 | 0.34 | 0.84 | 0.36 | 0.55 | 0.16 |
| $N$ onurban area | 0.57 | 0.50 | 0.39 | 0.47 | 0.52 | 0.36 | 0.37 | 0.40 | 0.18 |
| Region by District Size |  |  |  |  |  |  |  |  |  |
| $N$ ortheast | 0.81 | 0.80 | 0.24 | 0.43 | 0.29 | 0.28 | 0.24 | 0.29 | 0.25 |
| U nder 1,000 | 1.95 | 1.94 | 0.26 | 0.60 | 0.26 | 0.51 | 0.00 | 0.34 | 0.40 |
| 1,000 to 9,999 | 0.60 | 0.25 | 0.33 | 0.51 | 0.47 | 0.33 | 0.39 | 0.45 | 0.36 |
| 10,000 or more | 2.64 | 0.28 | 0.00 | 0.28 | 0.28 | 0.27 | 0.00 | 0.35 | 1.44 |
| M idwest | 0.62 | 0.60 | 0.40 | 0.47 | 0.57 | 0.33 | 0.46 | 0.67 | 0.26 |
| U nder 1,000 | 0.96 | 0.84 | 0.62 | 0.71 | 0.80 | 0.53 | 0.65 | 1.05 | 0.37 |
| 1,000 to 9,999 | 0.73 | 0.62 | 0.42 | 0.51 | 0.50 | 0.42 | 0.58 | 0.46 | 0.50 |
| 10,000 or more | 0.37 | 0.32 | 0.00 | 0.32 | 0.32 | 0.00 | 0.00 | 0.21 | 0.03 |
| South | 0.99 | 0.93 | 0.62 | 1.07 | 0.94 | 0.73 | 0.64 | 0.69 | 0.18 |
| U nder 1,000 | 1.87 | 2.05 | 1.36 | 2.38 | 2.25 | 1.51 | 1.39 | 1.40 | 0.28 |
| 1,000 to 9,999 | 0.73 | 0.71 | 0.55 | 0.63 | 0.64 | 0.84 | 0.57 | 0.63 | 0.27 |
| 10,000 or more | 0.62 | 0.36 | 0.30 | 0.36 | 0.29 | 0.66 | 0.09 | 0.30 | 0.10 |
| W est | 1.53 | 0.44 | 0.42 | 0.42 | 0.49 | 1.66 | 0.57 | 0.42 | 0.26 |
| U nder 1,000 | 1.14 | 0.67 | 0.63 | 0.64 | 0.71 | 0.55 | 0.55 | 0.62 | 0.43 |
| 1,000 to 9,999 | 3.44 | 0.74 | 0.72 | 0.76 | 0.76 | 3.78 | 1.19 | 0.72 | 0.30 |
| 10,000 or more | 0.70 | 0.01 | 0.01 | 0.01 | 0.01 | 1.92 | 0.28 | 0.02 | 0.01 |

a) Districts without students were excluded for this characteristic only.

SO U RC E: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-24. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by selected district characteristics: 1987-88 to 1993-94

| School Year |  |  |  |
| :---: | :---: | :---: | :---: |
| District | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Percent | Percent | Percent |
| TOTAL | 0.59 | 0.52 | 0.84 |
| District Size |  |  |  |
| U nder 1,000 | 0.91 | 0.78 | 1.38 |
| 1,000 to 9,999 | 0.54 | 0.55 | 1.00 |
| 10,000 or more | 0.46 | 1.56 | 0.74 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.56 | 0.47 | 1.12 |
| 10\% to under 50\% | 1.19 | 1.44 | 1.21 |
| 50\% or more | 2.75 | 2.61 | 3.91 |
| M inority T eachers |  |  |  |
| N one | 0.77 | 0.72 | 1.28 |
| M ore than 0\% to under 20\% | 0.68 | 0.74 | 1.51 |
| 20\% or more | 2.92 | 2.79 | 2.10 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 3.43 | 2.42 |
| U rban-outside central city | - | 1.06 | 1.59 |
| $N$ onurban area | - | 0.69 | 1.14 |
| Region by District Size |  |  |  |
| N ortheast | 1.06 | 0.92 | 1.36 |
| U nder 1,000 | 2.07 | 1.83 | 2.80 |
| 1,000 to 9,999 | 1.16 | 1.08 | 1.51 |
| 10,000 or more | 2.21 | 4.23 | 2.44 |
| M idwest | 0.83 | 0.84 | 1.73 |
| U nder 1,000 | 1.17 | 1.27 | 2.71 |
| 1,000 to 9,999 | 0.78 | 0.64 | 0.97 |
| 10,000 or more | 0.55 | 1.03 | 0.92 |
| South | 1.30 | 1.10 | 1.28 |
| U nder 1,000 | 2.14 | 1.99 | 2.88 |
| 1,000 to 9,999 | 1.52 | 1.43 | 1.54 |
| 10,000 or more | 0.71 | 1.03 | 0.83 |
| W est | 1.97 | 1.96 | 3.22 |
| U nder 1,000 | 3.30 | 2.34 | 4.02 |
| 1,000 to 9,999 | 1.35 | 2.18 | 3.99 |
| 10,000 or more | 0.92 | 3.40 | 1.74 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-25. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields of current or anticipated shortage by subject matter, by selected district characteristics: 1993-94

| District <br> Characteristic | Subject M atter |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Special <br> Education | M ath | Comp. Physical |  | Biological Sciences | ESL or Bilingual Education | Foreign <br> Language | Vocational Education | Other |
|  |  |  | Sci. | Science |  |  |  |  |  |
| TOTAL | 0.69 | 0.72 | 0.77 | 0.66 | 0.68 | 0.73 | 0.52 | 0.53 | 0.22 |
| District Size |  |  |  |  |  |  |  |  |  |
| U nder 1,000 | 1.16 | 1.20 | 1.26 | 1.11 | 1.12 | 1.18 | 0.89 | 0.95 | -- |
| 1,000 to 9,999 | 0.71 | 0.67 | 0.64 | 0.60 | 0.56 | 0.91 | 0.49 | 0.46 | 0.11 |
| 10,000 or more | 0.51 | 0.52 | 0.74 | 0.47 | 0.47 | 0.75 | 0.63 | 0.50 | -- |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| U nder 10\% | 0.96 | 1.10 | 1.05 | 1.00 | 1.00 | 0.94 | 0.79 | 0.79 | -- |
| 10\% to under 50\% | 1.00 | 0.99 | 1.01 | 1.05 | 1.05 | 1.11 | 0.89 | 0.92 | -- |
| $50 \%$ or more | 1.76 | 3.05 | 1.46 | 3.24 | 3.26 | 3.85 | 1.19 | 1.19 | -- |
| M inority T eachers |  |  |  |  |  |  |  |  |  |
| N one | 1.18 | 1.22 | 1.22 | 1.17 | 1.19 | 1.17 | 0.94 | 0.92 | -- |
| M ore than 0\% to under 20\% | \% 0.85 | 1.20 | 0.90 | 1.13 | 1.15 | 1.30 | 0.68 | 0.63 | -- |
| 20\% or more | 1.82 | 1.54 | 1.79 | 1.28 | 1.36 | 1.59 | 1.05 | 1.28 | -- |
| M etro Status |  |  |  |  |  |  |  |  |  |
| U rban-inside central city | 1.04 | 0.74 | 1.06 | 0.76 | 0.94 | 2.32 | 0.64 | 1.08 | -- |
| U rban-outside central city | 0.86 | 1.24 | 0.91 | 1.11 | 1.12 | 1.31 | 0.57 | 0.50 | -- |
| $N$ onurban area | 1.08 | 1.07 | 1.12 | 1.09 | 1.08 | 1.10 | 0.94 | 0.97 | -- |
| Region by District Size |  |  |  |  |  |  |  |  |  |
| $N$ ortheast | 1.15 | 1.26 | 1.16 | 0.91 | 0.80 | 0.94 | 0.74 | 0.76 | -- |
| U nder 1,000 | 2.05 | -- | -- | -- | -- | -- | -- | -- | -- |
| 1,000 to 9,999 | 1.31 | 1.36 | 1.25 | 1.36 | 1.23 | 1.14 |  | 1.13 | -- |
| 10,000 or more | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Midwest | 1.50 | 1.53 | 1.63 | 1.46 | 1.48 | 1.59 | 1.26 | 1.19 | -- |
| U nder 1,000 | 2.39 | 2.37 | 2.49 | 2.34 | 2.37 | -- | 1.95 | 1.90 | -- |
| 1,000 to 9,999 | 0.94 | 1.00 | 0.89 | 0.90 | 0.89 | -- | -- | 0.90 | -- |
| 10,000 or more | 0.82 | -- | -- | -- |  | -- | -- | -. | -- |
| South | 1.27 | 1.17 | 1.11 | 1.10 | 1.09 | 1.29 | 1.00 | 1.01 | -- |
| U nder 1,000 | 2.74 | 2.44 | 2.47 | 2.29 | 2.24 | 2.78 | -- | 2.16 | -- |
| 1,000 to 9,999 | 1.15 | 1.06 | 0.74 | 0.92 | 1.01 | 1.28 | 0.85 | 0.62 | -- |
| 10,000 or more | 0.72 | 0.67 | 0.67 | 0.67 | 0.67 | 0.76 | 0.63 | 0.64 | -- |
| W est | 2.03 | 2.22 | 2.00 | 2.25 | 2.35 | 2.94 | 1.34 | 1.23 | -- |
| U nder 1,000 | 3.05 | 3.74 | 2.98 | 3.78 | 3.85 | -- | -- | 2.02 | -- |
| 1,000 to 9,999 | 2.47 | 2.15 | 2.28 | 2.16 | 1.80 | 4.07 | 1.86 | 1.27 | -- |
| 10,000 or more | 1.54 | 1.35 | 2.02 | 0.93 | 0.93 | 1.76 | 1.76 | -- | -- |

-- Too few cases for a reliable estimate.
a) Districts without students were excluded for this characteristic only.

SOU RC E: U .S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-26. Standard errors for average low and high salary for full time teachers in actual and in constant 1993-94 dollars, by selected district characteristics: 1990-91 to 1993-94a

| District Characteristic | $\frac{1990-91}{\text { Actual Dollars }}$ |  | School Year$\frac{1990-91}{}$Constant 1993-94 Dollars ${ }^{\text {b }}$ |  | $\begin{gathered} \underline{1993-94} \\ \text { Actual Dollars } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Low | High | Low | High | Low | High |
| TOTAL | 42 | 133 | 46 | 145 | 63 | 148 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 89 | 214 | 97 | 234 | 111 | 275 |
| 1,000 to 9,999 | 72 | 186 | 79 | 203 | 67 | 158 |
| 10,000 or more | 154 | 349 | 169 | 381 | 46 | 142 |
| M inority Students ${ }^{\text {c }}$ |  |  |  |  |  |  |
| U nder 10\% | 56 | 199 | 61 | 217 | 77 | 210 |
| 10\% to under 50\% | 111 | 355 | 121 | 388 | 149 | 313 |
| $50 \%$ or more | 175 | 433 | 191 | 472 | 221 | 444 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 85 | 246 | 92 | 269 | 114 | 241 |
| M ore than 0\% to under 20\% | 102 | 248 | 111 | 270 | 126 | 264 |
| 20\% or more | 168 | 453 | 184 | 495 | 110 | 358 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 193 | 651 | 211 | 711 | 140 | 355 |
| U rban-outside central city | 89 | 250 | 97 | 273 | 116 | 250 |
| $N$ onurban area | 63 | 158 | 69 | 173 | 65 | 196 |
| Region by M etro Status |  |  |  |  |  |  |
| $N$ ortheast | 102 | 257 | 112 | 281 | 119 | 342 |
| U rban-inside central city | 335 | 702 | 366 | 767 | 221 | 691 |
| U rban-outside central city | 168 | 381 | 183 | 416 | 159 | 484 |
| $N$ onurban area | 105 | 256 | 114 | 280 | 142 | 307 |
| M idwest | 80 | 209 | 88 | 228 | 78 | 321 |
| U rban-inside central city | 182 | 391 | 198 | 427 | 178 | 412 |
| U rban-outside central city | 136 | 401 | 149 | 438 | 164 | 459 |
| $N$ onurban area | 96 | 259 | 105 | 283 | 87 | 344 |
| South | 65 | 77 | 71 | 84 | 38 | 83 |
| U rban-inside central city | 144 | 314 | 157 | 343 | 143 | 584 |
| U rban-outside central city | 116 | 215 | 127 | 235 | 96 | 158 |
| $N$ onurban area | 98 | 104 | 107 | 114 | 40 | 91 |
| W est | 112 | 347 | 123 | 379 | 200 | 353 |
| U rban-inside central city | 402 | 2,235 | 438 | 2,440 | 385 | 310 |
| U rban-outside central city | 305 | 667 | 333 | 728 | 434 | 710 |
| N onurban area | 179 | 431 | 195 | 471 | 224 | 513 |

a) In districts with salary schedules, the low salary corresponds to bachelor's degree with no teaching experience and high is equivalent to maximum scheduled salary. Districts without salary schedule reported their lowest and highest base salaries for the year.
b) A djusted using the C onsumer Price Index.
c) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-27. Standard errors for average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by selected district characteristics: 1990-91 and 1993-94

| District C haracteristic | 1990-91 (Constant 1993-94 Dollars) ${ }^{\text {a }}$ |  |  | 1993-94 (A ctual Dollars) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience |
| TOTAL | 65 | 81 | 137 | 60 | 63 | 110 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 115 | 128 | 204 | 118 | 136 | 268 |
| 1,000 to 9,999 | 82 | 91 | 178 | 68 | 81 | 147 |
| 10,000 or more | 170 | 217 | 330 | 47 | 53 | 126 |
| M inority Students ${ }^{\text {b }}$ |  |  |  |  |  |  |
| U nder 10\% | 85 | 99 | 180 | 86 | 96 | 217 |
| 10\% to under 50\% | 108 | 137 | 265 | 141 | 122 | 267 |
| 50\% or more | 191 | 206 | 348 | 226 | 356 | 608 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 110 | 127 | 224 | 108 | 118 | 256 |
| M ore than 0\% to under 20\% | 109 | 135 | 241 | 128 | 146 | 270 |
| 20\% or more | 186 | 236 | 422 | 113 | 130 | 293 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 211 | 283 | 602 | 144 | 134 | 364 |
| U rban-outside central city | 95 | 118 | 209 | 122 | 127 | 223 |
| N onurban area | 86 | 99 | 167 | 56 | 61 | 127 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | 84 | 109 | 252 | 128 | 159 | 317 |
| U rban-inside central city | 371 | 405 | 586 | 231 | 279 | 608 |
| U rban-outside central city | 133 | 172 | 409 | 169 | 213 | 401 |
| N onurban area | 121 | 110 | 225 | 159 | 176 | 351 |
| M idwest | 110 | 128 | 266 | 85 | 92 | 192 |
| U rban-inside central city | 198 | 190 | 548 | 181 | 159 | 532 |
| U rban-outside central city | 153 | 176 | 454 | 156 | 174 | 398 |
| N onurban area | 126 | 147 | 261 | 85 | 94 | 200 |
| South | 74 | 86 | 89 | 39 | 42 | 70 |
| U rban-inside central city | 157 | 201 | 279 | 145 | 160 | 427 |
| U rban-outside central city | 127 | 171 | 176 | 96 | 108 | 196 |
| N onurban area | 109 | 123 | 120 | 42 | 42 | 68 |
| W est | 147 | 221 | 287 | 191 | 201 | 330 |
| U rban-inside central city | 438 | 1,050 | 1,851 | 389 | 270 | 538 |
| U rban-outside central city | 335 | 438 | 527 | 438 | 456 | 704 |
| N onurban area | 175 | 219 | 348 | 130 | 123 | 250 |

a) A djusted using the C onsumer Price Index.
b) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-28. Standard errors for number and percentage of school districts with collective bargaining units, by selected district characteristics: 1993-94

| District Characteristic | N umber | Percent |
| :---: | :---: | :---: |
| TOTAL | 150 | 0.87 |
| District Size |  |  |
| U nder 1,000 | 156 | 1.66 |
| 1,000 to 9,999 | 109 | 0.69 |
| 10,000 or more | 7 | 0.59 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 123 | 1.08 |
| 10\% to under 50\% | 113 | 1.40 |
| 50\% or more | 79 | 4.12 |
| M inority T eachers |  |  |
| N one | 163 | 1.38 |
| M ore than 0\% to under 20\% | 166 | 1.44 |
| 20\% or more | 27 | 1.95 |
| M etro Status |  |  |
| U rban-inside central city | 22 | 1.26 |
| U rban-outside central city | 115 | 1.53 |
| N onurban area | 129 | 1.18 |
| Region by M etro Status |  |  |
| N ortheast | 25 | 0.41 |
| U rban-inside central city | 6 | 1.47 |
| U rban-outside central city | 45 | 0.44 |
| $N$ onurban area | 38 | 1.04 |
| M idwest | 106 | 1.61 |
| U rban-inside central city | 13 | 0.74 |
| U rban-outside central city | 58 | 1.62 |
| $N$ onurban area | 102 | 2.47 |
| South | 18 | 0.55 |
| U rban-inside central city | 10 | 4.52 |
| U rban-outside central city | 8 | 1.02 |
| $N$ onurban area | 11 | 0.50 |
| W est | 108 | 3.65 |
| U rban-inside central city | 15 | 0.73 |
| U rban-outside central city | 92 | 7.49 |
| N onurban area | 70 | 3.40 |

Table B-29. Standard errors for average scheduled salary for teachers by education and teaching experience in school districts with and without collective bargaining units, by selected district characteristics: 1993-94

| District Characteristic | W ith Collective Bargaining Units |  |  | W ithout Collective Bargaining Units |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience | Bachelor's without Experience | M aster's without Experienc | M aster's with 20 yrs Experience |
| TOTAL | 94 | 93 | 173 | 104 | 155 | 296 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 169 | 180 | 341 | 202 | 298 | 584 |
| 1,000 to 9,999 | 82 | 91 | 191 | 76 | 91 | 174 |
| 10,000 or more | 69 | 81 | 167 | 31 | 32 | 62 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 109 | 122 | 279 | 114 | 149 | 289 |
| 10\% to under 50\% | 223 | 174 | 383 | 109 | 128 | 205 |
| 50\% or more | 232 | 298 | 465 | 385 | 649 | 1,215 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 132 | 146 | 329 | 143 | 188 | 356 |
| M ore than 0\% to under 20\% | 162 | 160 | 334 | 186 | 291 | 537 |
| 20\% or more | 260 | 289 | 626 | 91 | 98 | 199 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 181 | 164 | 517 | 170 | 191 | 256 |
| U rban-outside central city | 150 | 141 | 255 | 295 | 478 | 894 |
| $N$ onurban area | 84 | 88 | 197 | 69 | 87 | 174 |
| Region by M etro Status |  |  |  |  |  |  |
| N ortheast | 132 | 162 | 321 | 1,313 | 1,803 | 3,829 |
| U rban-inside central city | 225 | 274 | 623 | -- | -- | -- |
| U rban-outside central city | 170 | 214 | 400 | -- | -- | -- |
| $N$ onurban area | 169 | 184 | 353 | -- | -- | -- |
| M idwest | 107 | 120 | 253 | 174 | 181 | 361 |
| U rban-inside central city | 192 | 170 | 548 | -- | -- | - |
| U rban-outside central city | 175 | 197 | 425 | 430 | 424 | 897 |
| $N$ onurban area | 111 | 121 | 259 | 175 | 183 | 308 |
| South | 47 | 49 | 186 | 49 | 52 | 78 |
| U rban-inside central city | 181 | 127 | 1,716 | 180 | 203 | 241 |
| U rban-outside central city | 84 | 89 | 273 | 118 | 132 | 237 |
| $N$ onurban area | 72 | 86 | 212 | 47 | 49 | 72 |
| W est | 248 | 214 | 360 | 416 | 604 | 1,179 |
| U rban-inside central city | 397 | 274 | 560 | -- | -- | -- |
| U rban-outside central city | 494 | 431 | 679 | 839 | 1,419 | 3,017 |
| N onurban area | 182 | 150 | 353 | 157 | 260 | 590 |

-- Too few cases for a reliable estimate.
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-30. Standard errors for number and percentage of school districts offering retirement plans to teachers, by selected district characteristics: 1987-88 to 1993-94

School Year

| District <br> Characteristic | School Y ear |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 |  | 1990-91 |  | 1993-94 |  |
|  | Number | Percent | Number | Percent | Number | Percent |
| TOTAL | 202 | 0.27 | 134 | 0.48 | 80 | 0.27 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 216 | 0.52 | 178 | 0.87 | 135 | 0.52 |
| 1,000 to 9,999 | 75 | 0.09 | 166 | 0.15 | 117 | 0.12 |
| 10,000 or more | 9 | 0.00 | 37 | 0.10 | 8 | 0.00 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 185 | 0.38 | 168 | 0.22 | 128 | 0.44 |
| 10\% to under 50\% | 99 | 0.48 | 143 | 0.23 | 128 | 0.15 |
| $50 \%$ or more | 124 | 0.25 | 84 | 4.48 | 117 | 0.05 |
| M inority T eachers |  |  |  |  |  |  |
| N one | 233 | 0.50 | 183 | 0.92 | 196 | 0.57 |
| M ore than 0\% to under 20\% | 113 | 0.21 | 160 | 0.23 | 181 | 0.22 |
| 20\% or more | 71 | 0.16 | 57 | 0.32 | 45 | 0.07 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | -- | -- | 50 | 9.82 | 23 | 0.00 |
| U rban-outside central city | -- | -- | 130 | 0.15 | 89 | 0.26 |
| N onurban area | -- | -- | 110 | 0.29 | 111 | 0.45 |
| Region by M etro Status |  |  |  |  |  |  |
| $N$ ortheast | -- | -- | 20 | 0.16 | 22 | 0.44 |
| U rban-inside central city | -- | -- | 16 | 0.00 | 7 | 0.00 |
| U rban-outside central city | -- | -- | 44 | 0.24 | 45 | 0.53 |
| $N$ onurban area | -- | -- | 33 | 0.16 | 39 | 0.80 |
| M idwest | -- | -- | 105 | 0.25 | 66 | 0.58 |
| U rban-inside central city | -- | -- | 13 | 0.46 | 13 | 0.00 |
| U rban-outside central city | -- | -- | 76 | 0.45 | 59 | 0.49 |
| $N$ onurban area | -- | -- | 75 | 0.33 | 82 | 0.89 |
| South | -- | -- | 54 | 0.45 | 14 | 0.07 |
| U rban-inside central city | -- | -- | 12 | 0.00 | 10 | 0.00 |
| U rban-outside central city | -- | -- | 33 | 0.00 | 11 | 0.00 |
| $N$ onurban area | -- | -- | 55 | 0.65 | 17 | 0.11 |
| W est | -- | -- | 76 | 2.33 | 20 | 0.51 |
| U rban-inside central city | -- | -- | 44 | 25.92 | 15 | 0.00 |
| U rban-outside central city | -- | -- | 87 | 0.10 | 59 | 0.01 |
| N onurban area | -- | -- | 75 | 0.94 | 61 | 0.92 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (Teacher Demand and Shortage Q uestionnaire).

Table B-31. Standard errors for percentage of school districts with retirement plans that permit teachers full or partial credit for teaching experience obtained in another school district within-state and outside-thestate, by selected district characteristics: 1993-94

| District Characteristic | W ithin-State |  | Outside-the-State |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Full Credit | Partial Credit | Full C redit | Partial Credit |
| TOTAL | 0.32 | 0.24 | 1.15 | 0.83 |
| District Size |  |  |  |  |
| U nder 1,000 | 0.52 | 0.42 | 1.99 | 1.54 |
| 1,000 to 9,999 | 0.40 | 0.31 | 1.12 | 0.83 |
| 10,000 or more | 0.20 | -- | 0.48 | 0.70 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 0.52 | 0.40 | 1.56 | 1.25 |
| 10\% to under 50\% | 0.44 | -- | 1.38 | 1.36 |
| 50\% or more | 0.49 | -- | 2.77 | 1.79 |
| M inority T eachers |  |  |  |  |
| $N$ one | 0.57 | 0.49 | 1.68 | 1.40 |
| M ore than 0\% to under 20\% | 0.37 | 0.28 | 1.31 | 0.95 |
| 20\% or more | 0.45 | -- | 1.69 | 1.73 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 0.22 | -- | 1.96 | 1.95 |
| U rban-outside central city | 0.40 | 0.30 | 1.95 | 1.23 |
| N onurban area | 0.46 | 0.41 | 1.32 | 1.17 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 0.58 | -- | 2.02 | 1.54 |
| U rban-inside central city | 0.00 | 0.00 | 3.05 | 2.68 |
| U rban-outside central city | 0.75 | -- | 2.72 | 2.21 |
| $N$ onurban area | 0.75 | -- | 3.26 | 2.25 |
| M idwest | 0.74 | 0.60 | 1.71 | 1.79 |
| U rban-inside central city | 0.62 | -- | 4.23 | 3.66 |
| U rban-outside central city | 0.84 | -- | 2.32 | 2.58 |
| $N$ onurban area | 1.03 | 0.94 | 2.29 | 2.41 |
| South | 0.20 | -- | 1.13 | 1.00 |
| U rban-inside central city | 0.03 | -- | 3.10 | 3.84 |
| U rban-outside central city | 0.12 | -- | 2.18 | 2.10 |
| $N$ onurban area | 0.29 | -- | 1.54 | 1.29 |
| W est | 0.53 | 0.43 | 3.20 | 1.75 |
| U rban-inside central city | 0.54 | -- | -- | 0.77 |
| U rban-outside central city | 0.79 | -- | 6.81 | 1.41 |
| N onurban area | 0.72 | 0.51 | 2.76 | 2.61 |

-- T 00 few cases for a reliable estimate.
a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-32. Standard errors for number and percentage of school districts all owing teachers to purchase credit toward retirement plan for experience obtained in other school districts within-state and outside-thestate, by selected district characteristics: 1993-94

| District Characteristic | W ithin-State |  | Outside-the-State |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |
| TOTAL | 69.0 | 0.46 | 136.4 | 0.93 |
| District Size |  |  |  |  |
| U nder 1,000 | 66.8 | 0.89 | 151.8 | 1.62 |
| 1,000 to 9,999 | 41.5 | 0.59 | 76.7 | 0.92 |
| 10,000 or more | 3.7 | 0.52 | 5.4 | 0.86 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 57.4 | 0.65 | 142.5 | 1.25 |
| 10\% to under 50\% | 56.3 | 1.19 | 81.5 | 1.88 |
| 50\% or more | 23.4 | 1.62 | 38.6 | 2.67 |
| M inority T eachers |  |  |  |  |
| $N$ one | 55.7 | 0.76 | 174.7 | 1.58 |
| M ore than 0\% to under 20\% | 55.5 | 0.82 | 117.8 | 1.31 |
| 20\% or more | 17.3 | 1.50 | 30.9 | 2.06 |
| M etro Status |  |  |  |  |
| U rban-inside central city | 14.5 | 2.38 | 17.1 | 0.60 |
| U rban-outside central city | 50.6 | 0.88 | 113.5 | 1.45 |
| Nonurban area | 46.9 | 0.56 | 125.3 | 1.35 |
| Region by M etro Status |  |  |  |  |
| N ortheast | 29.4 | 0.98 | 50.6 | 1.60 |
| U rban-inside central city | 0.3 | 1.15 | 4.8 | 2.37 |
| U rban-outside central city | 26.6 | 1.39 | 49.5 | 1.76 |
| $N$ onurban area | 19.5 | 1.77 | 43.3 | 2.47 |
| M idwest | 40.6 | 0.75 | 98.6 | 1.88 |
| U rban-inside central city | 1.8 | 1.32 | 13.1 | 0.75 |
| U rban-outside central city | 18.7 | 0.97 | 57.9 | 2.61 |
| N onurban area | 34.6 | 0.98 | 102.3 | 2.85 |
| South | 34.6 | 1.05 | 38.2 | 1.36 |
| U rban-inside central city | 0.0 | 0.13 | 10.7 | 1.23 |
| U rban-outside central city | 13.7 | 1.54 | 18.4 | 2.48 |
| N onurban area | 30.8 | 1.39 | 35.3 | 1.67 |
| W est | 49.7 | 1.70 | 94.2 | 3.30 |
| U rban-inside central city | 13.7 | 8.25 | 0.2 | 2.53 |
| U rban-outside central city | 47.8 | 4.07 | 79.8 | 8.37 |
| N onurban area | 24.3 | 1.62 | 56.5 | 3.15 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-33. Standard errors for average number of years of credit required in English, mathematics, social science, physical/biological science, computer science, and foreign language for high school graduation in school districts with 4-year programs, by selected district characteristics: 1990-91 to 1993-94

## School Year

| District Characteristic | 1990-91 <br> N umber of $Y$ ears | $\frac{1993-94}{}$ N umber of $Y$ ears |
| :---: | :---: | :---: |
| TOTAL | 0.04 | 0.03 |
| District Size |  |  |
| U nder 1,000 | 0.09 | 0.07 |
| 1,000 to 9,999 | 0.05 | 0.04 |
| 10,000 or more | 0.07 | 0.03 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 0.05 | 0.04 |
| 10\% to under 50\% | 0.09 | 0.06 |
| 50\% or more | 0.11 | 0.10 |
| M inority T eachers |  |  |
| N one | 0.09 | 0.06 |
| M ore than 0\% to under 20\% | 0.05 | 0.05 |
| 20\% or more | 0.15 | 0.07 |
| M etro Status |  |  |
| U rban-inside central city | 0.14 | 0.06 |
| U rban-outside central city | 0.07 | 0.05 |
| N onurban area | 0.06 | 0.04 |
| Region by M etro Status |  |  |
| N ortheast | 0.11 | 0.07 |
| U rban-inside central city | 0.39 | 0.14 |
| U rban-outside central city | 0.14 | 0.08 |
| N onurban area | 0.16 | 0.14 |
| M idwest | 0.06 | 0.06 |
| U rban-inside central city | 0.13 | 0.11 |
| U rban-outside central city | 0.12 | 0.08 |
| N onurban area | 0.07 | 0.08 |
| South | 0.10 | 0.05 |
| U rban-inside central city | 0.22 | 0.11 |
| U rban-outside central city | 0.11 | 0.10 |
| N onurban area | 0.13 | 0.06 |
| W est | 0.09 | 0.07 |
| U rban-inside central city | 0.33 | 0.06 |
| U rban-outside central city | 0.12 | 0.13 |
| N onurban area | 0.11 | 0.07 |

[^26]SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-34. Standard errors for average number of years of English required for high school graduation in school districts with 4 -year programs, by selected district characteristics: 1987-88 to 1993-94

| District | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Number of Y ears | Number of Y ears | N umber of Y ears |
| TOTAL | 0.009 | 0.011 | 0.008 |
| District Size |  |  |  |
| U nder 1,000 | 0.019 | 0.023 | 0.014 |
| 1,000 to 9,999 | 0.007 | 0.011 | 0.010 |
| 10,000 or more | 0.009 | 0.024 | 0.005 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.012 | 0.012 | 0.010 |
| 10\% to under 50\% | 0.014 | 0.026 | 0.008 |
| 50\% or more | 0.019 | 0.028 | 0.029 |
| M inority T eachers |  |  |  |
| N one | 0.016 | 0.022 | 0.014 |
| M ore than 0\% to under 20\% | 0.013 | 0.010 | 0.011 |
| 20\% or more | 0.013 | 0.035 | 0.013 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 0.031 | 0.014 |
| U rban-outside central city | - | 0.014 | 0.015 |
| N onurban area | - | 0.015 | 0.010 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 0.018 | 0.009 |
| U rban-inside central city |  | 0.001 | 0.005 |
| U rban-outside central city | - | 0.022 | 0.012 |
| $N$ onurban area | - | 0.041 | 0.008 |
| M idwest | - | 0.017 | 0.015 |
| U rban-inside central city |  | 0.065 | 0.034 |
| U rban-outside central city | - | 0.030 | 0.024 |
| $N$ onurban area | - | 0.022 | 0.021 |
| South | - | 0.028 | 0.003 |
| U rban-inside central city | - | 0.008 | 0.000 |
| U rban-outside central city | - | 0.009 | 0.002 |
| $N$ onurban area | - | 0.039 | 0.004 |
| W est | - | 0.017 | 0.024 |
| U rban-inside central city |  | 0.120 | 0.036 |
| U rban-outside central city | - | 0.031 | 0.055 |
| N onurban area | - | 0.016 | 0.011 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-35. Standard errors for average number of years of mathematics required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Number of Y ears | Number of Years | $N$ umber of Y ears |
| TOTAL | 0.011 | 0.012 | 0.009 |
| District Size |  |  |  |
| U nder 1,000 | 0.019 | 0.024 | 0.018 |
| 1,000 to 9,999 | 0.014 | 0.013 | 0.012 |
| 10,000 or more | 0.008 | 0.024 | 0.008 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.015 | 0.015 | 0.013 |
| 10\% to under 50\% | 0.022 | 0.024 | 0.017 |
| 50\% or more | 0.032 | 0.029 | 0.033 |
| M inority T eachers |  |  |  |
| N one | 0.019 | 0.021 | 0.019 |
| M ore than 0\% to under 20\% | 0.017 | 0.015 | 0.014 |
| 20\% or more | 0.039 | 0.035 | 0.025 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 0.050 | 0.015 |
| U rban-outside central city | - | 0.019 | 0.014 |
| $N$ onurban area | - | 0.016 | 0.012 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 0.026 | 0.021 |
| U rban-inside central city | - | 0.137 | 0.052 |
| U rban-outside central city | - | 0.031 | 0.027 |
| $N$ onurban area | - | 0.035 | 0.038 |
| M idwest | - | 0.020 | 0.017 |
| U rban-inside central city | - | 0.024 | 0.028 |
| U rban-outside central city |  | 0.032 | 0.021 |
| Nonurban area | - | 0.024 | 0.021 |
| South | - | 0.018 | 0.012 |
| U rban-inside central city | - | 0.022 | 0.011 |
| U rban-outside central city | - | 0.032 | 0.022 |
| $N$ onurban area | - | 0.025 | 0.015 |
| W est | - | 0.029 | 0.025 |
| U rban-inside central city |  | 0.227 | 0.020 |
| U rban-outside central city | - | 0.042 | 0.037 |
| N onurban area | - | 0.034 | 0.033 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-36. Standard errors for average number of years of social science required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| District Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Number of Y ears | $N$ umber of Y ears | Number of Y ears |
| TOTAL | 0.013 | 0.014 | 0.010 |
| District Size |  |  |  |
| U nder 1,000 | 0.023 | 0.029 | 0.022 |
| 1,000 to 9,999 | 0.014 | 0.018 | 0.012 |
| 10,000 or more | 0.009 | 0.024 | 0.007 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.016 | 0.018 | 0.014 |
| 10\% to under 50\% | 0.025 | 0.025 | 0.021 |
| 50\% or more | 0.036 | 0.030 | 0.033 |
| M inority T eachers |  |  |  |
| None | 0.023 | 0.027 | 0.021 |
| M ore than 0\% to under 20\% | 0.014 | 0.016 | 0.014 |
| 20\% or more | 0.025 | 0.037 | 0.018 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 0.043 | 0.021 |
| U rban-outside central city |  | 0.020 | 0.018 |
| N onurban area | - | 0.019 | 0.015 |
| Region by M etro Status |  |  |  |
| $N$ ortheast | - | 0.032 | 0.020 |
| U rban-inside central city |  | 0.172 | 0.061 |
| U rban-outside central city | - | 0.041 | 0.026 |
| $N$ onurban area | - | 0.055 | 0.039 |
| M idwest | - | 0.023 | 0.023 |
| U rban-inside central city |  | 0.060 | 0.042 |
| U rban-outside central city |  | 0.036 | 0.031 |
| $N$ onurban area | - | 0.029 | 0.031 |
| South |  | 0.024 | 0.015 |
| U rban-inside central city |  | 0.067 | 0.035 |
| U rban-outside central city | - | 0.036 | 0.023 |
| $N$ onurban area | - | 0.030 | 0.020 |
| W est | - | 0.037 | 0.038 |
| U rban-inside central city |  | 0.072 | 0.027 |
| U rban-outside central city |  | 0.058 | 0.066 |
| N onurban area | - | 0.045 | 0.037 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).
a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-37. Standard errors for average number of years of physical and biological sciences required for high school graduation in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

## School Year

| School Year |  |  |  |
| :---: | :---: | :---: | :---: |
| District | 1987-88 | 1990-91 | 1993-94 |
| Characteristic | Number of Years | N umber of Years | Number of Y ears |
| TOTAL | 0.012 | 0.012 | 0.011 |
| District Size |  |  |  |
| U nder 1,000 | 0.023 | 0.021 | 0.023 |
| 1,000 to 9,999 | 0.014 | 0.013 | 0.012 |
| 10,000 or more | 0.006 | 0.021 | 0.008 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nd der 10\% | 0.015 | 0.012 | 0.015 |
| 10\% to under 50\% | 0.019 | 0.025 | 0.016 |
| 50\% or more | 0.026 | 0.028 | 0.031 |
| M inority T eachers |  |  |  |
| N one | 0.019 | 0.022 | 0.022 |
| M ore than 0\% to under 20\% | 0.015 | 0.014 | 0.013 |
| 20\% or more | 0.025 | 0.038 | 0.025 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 0.038 | 0.016 |
| U rban-outside central city | - | 0.020 | 0.019 |
| N onurban area | - | 0.016 | 0.017 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 0.026 | 0.023 |
| U rban-inside central city | - | 0.118 | 0.051 |
| U rban-outside central city | - | 0.038 | 0.035 |
| $N$ onurban area | - | 0.035 | 0.037 |
| M idwest | - | 0.015 | 0.022 |
| U rban-inside central city | - | 0.046 | 0.039 |
| U rban-outside central city | - | 0.032 | 0.032 |
| $N$ onurban area | - | 0.021 | 0.031 |
| South | - | 0.023 | 0.015 |
| U rban-inside central city | - | 0.062 | 0.031 |
| U rban-outside central city | - | 0.034 | 0.033 |
| $N$ onurban area | - | 0.029 | 0.021 |
| W est | - | 0.022 | 0.018 |
| U rban-inside central city | - | 0.054 | 0.005 |
| U rban-outside central city | - | 0.031 | 0.031 |
| $N$ onurban area | - | 0.027 | 0.024 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-38. Standard errors for percentage of school districts with high school graduation requirements in computer science, by selected district characteristics: 1990-91 to 1993-94

| District Characteristic | School Year |  |
| :---: | :---: | :---: |
|  | 1990-91 | 1993-94 |
|  | Percent of Districts | Percent of Districts |
| TOTAL | 1.04 | 0.71 |
| District Size |  |  |
| U nder 1,000 | 1.87 | 1.52 |
| 1,000 to 9,999 | 1.08 | 1.05 |
| 10,000 or more | 1.08 | 0.57 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 1.57 | 0.96 |
| 10\% to under 50\% | 1.43 | 1.59 |
| 50\% or more | 2.81 | 2.29 |
| M inority T eachers |  |  |
| $N$ one | 1.93 | 1.23 |
| M ore than 0\% to under 20\% | 1.11 | 0.94 |
| 20\% or more | 2.80 | 1.68 |
| M etro Status |  |  |
| U rban-inside central city | 3.20 | 2.05 |
| U rban-outside central city | 1.43 | 1.51 |
| $N$ onurban area | 1.32 | 1.11 |
| Region by M etro Status |  |  |
| N ortheast | 1.93 | 1.92 |
| Urban-inside central city | 3.30 | 2.16 |
| U rban-outside central city | 2.46 | 2.57 |
| $N$ onurban area | 3.55 | 3.66 |
| M idwest | 2.04 | 1.29 |
| U rban-inside central city | 5.97 | 5.22 |
| U rban-outside central city | 2.61 | 3.04 |
| $N$ onurban area | 2.49 | 1.70 |
| South | 1.59 | 1.22 |
| Urban-inside central city | 5.97 | 2.45 |
| U rban-outside central city | 2.84 | 2.58 |
| $N$ onurban area | 1.99 | 1.70 |
| W est | 2.37 | 1.95 |
| U rban-inside central city | 3.61 | 1.84 |
| U rban-outside central city | 3.46 | 3.63 |
| N onurban area | 2.89 | 2.33 |

Table B-39. Standard errors for percentage of school districts with graduation requirements in foreign language in school districts with 4-year programs, by selected district characteristics: 1987-88 to 1993-94

| District <br> Characteristic | School Year |  |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
|  | Percent of Districts | Percent of Districts | Percent of Districts |
| TOTAL | 0.56 | 0.67 | 0.75 |
| District Size |  |  |  |
| U nder 1,000 | 1.22 | 1.41 | 1.46 |
| 1,000 to 9,999 | 0.63 | 0.96 | 0.79 |
| 10,000 or more | 0.62 | 2.27 | 0.66 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 0.76 | 0.82 | 0.69 |
| 10\% to under 50\% | 1.21 | 1.40 | 1.74 |
| 50\% or more | 1.76 | 2.88 | 2.00 |
| M inority T eachers |  |  |  |
| N one | 0.99 | 1.09 | 0.94 |
| M ore than 0\% to under 20\% | 0.92 | 1.17 | 1.25 |
| 20\% or more | 1.53 | 2.94 | 1.65 |
| M etro Status |  |  |  |
| U rban-inside central city | - | 2.65 | 1.28 |
| U rban-outside central city | - | 1.41 | 0.85 |
| $N$ onurban area | - | 0.87 | 0.99 |
| Region by M etro Status |  |  |  |
| N ortheast | - | 2.10 | 1.73 |
| Urban-inside central city | - | 2.56 | 2.10 |
| U rban-outside central city |  | 2.65 | 1.81 |
| $N$ onurban area | - | 2.81 | 3.25 |
| M idwest | - | 1.12 | 0.71 |
| Urban-inside central city | - | 5.70 | 2.88 |
| U rban-outside central city | - | 1.73 | 1.27 |
| N onurban area | - | 1.40 | 0.85 |
| South |  | 1.42 | 1.35 |
| U rban-inside central city | - | 5.62 | 2.18 |
| U rban-outside central city | - | 2.21 | 2.33 |
| $N$ onurban area | - | 1.96 | 1.89 |
| W est | - | 2.47 | 2.45 |
| Urban-inside central city | - | 5.96 | 3.19 |
| U rban-outside central city | - | 4.49 | 4.06 |
| N onurban area | - | 2.91 | 2.79 |

- M etro status data not available from the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire).
a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-40. Standard errors for number and percentage of school districts with community service requirements for high school graduation in school districts with 4 -year programs, by selected district characteristics: 1993-94

| District <br> Characteristic | N umber of Districts | Percent of Districts |
| :---: | :---: | :---: |
| TOTAL | 37 | 0.32 |
| District Size |  |  |
| U nder 1,000 | 20 | 0.44 |
| 1,000 to 9,999 | 25 | 0.42 |
| 10,000 or more | 2 | 0.27 |
| M inority Students ${ }^{\text {a }}$ |  |  |
| U nder 10\% | 27 | 0.42 |
| 10\% to under 50\% | 18 | 0.51 |
| 50\% or more | 8 | 0.64 |
| M inority T eachers |  |  |
| N one | 24 | 0.48 |
| M ore than 0\% to under 20\% | 22 | 0.41 |
| 20\% or more | 3 | 0.39 |
| M etro Status |  |  |
| U rban-inside central city | 6 | 1.24 |
| U rban-outside central city | 22 | 0.51 |
| $N$ onurban area | 22 | 0.34 |
| Region by M etro Status |  |  |
| $N$ ortheast | 19 | 0.83 |
| U rban-inside central city | 1 | 1.73 |
| U rban-outside central city | 18 | 1.17 |
| N onurban area | 8 | 1.20 |
| M idwest | 21 | 0.48 |
| U rban-inside central city | 5 | 3.58 |
| U rban-outside central city | 12 | 0.77 |
| $N$ onurban area | 13 | 0.50 |
| South | 13 | 0.41 |
| U rban-inside central city | 1 | 0.89 |
| U rban-outside central city | 9 | 1.02 |
| $N$ onurban area | 9 | 0.40 |
| W est | 11 | 0.70 |
| U rban-inside central city | 0 | 0.00 |
| U rban-outside central city |  | 0.92 |
| N onurban area | 10 | 0.97 |

a) Districts without students were excluded for this characteristic only.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

Table B-41. Standard errors for percentage of school districts and number of students in grades K-12 participating in C hapter 1 programs, by selected district characteristics: 1993-94

| District Characteristic | Percent of Districts | Number of Students |
| :---: | :---: | :---: |
| total | 0.8 | 93,666 |
| District Size <br> Under 1,000 <br> 1,000 to 9,999 <br> 10,000 or more | $\begin{aligned} & 1.4 \\ & 0.2 \\ & 0.2 \end{aligned}$ | $\begin{aligned} & 23,645 \\ & 78,452 \\ & 33,674 \end{aligned}$ |
| M inority Students ${ }^{\text {a }}$ Under 10\% $10 \%$ to under $50 \%$ $50 \%$ or more | $\begin{aligned} & 1.2 \\ & 0.8 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 22,761 \\ & 33,426 \\ & 87,977 \end{aligned}$ |
| M inority Teachers <br> N one <br> M ore than 0\% to under 20\% <br> $20 \%$ or more | $\begin{aligned} & 1.4 \\ & 0.5 \\ & 1.4 \end{aligned}$ | $\begin{aligned} & 19,058 \\ & 78,471 \\ & 56,451 \end{aligned}$ |
| M etro Status <br> U rban-inside central city <br> U rban-outside central city <br> N onurban area | $\begin{aligned} & 1.7 \\ & 0.6 \\ & 1.3 \end{aligned}$ | $\begin{aligned} & 30,310 \\ & 82,497 \\ & 33,125 \end{aligned}$ |
| Region by Percent M inority Students ${ }^{\text {a }}$ N ortheast U nder 10\% $10 \%$ to under 50\% $50 \%$ or more | $\begin{aligned} & 0.7 \\ & 0.8 \\ & 1.5 \\ & 0.3 \end{aligned}$ | $\begin{aligned} & 29,994 \\ & 14,467 \\ & 13,029 \\ & 19,447 \end{aligned}$ |
| Midwest <br> Under 10\% <br> $10 \%$ to under $50 \%$ <br> $50 \%$ or more | $\begin{aligned} & 1.8 \\ & 2.2 \\ & 1.3 \\ & 4.0 \end{aligned}$ | $\begin{array}{r} 19,682 \\ 13,862 \\ 9,941 \\ 7,636 \end{array}$ |
| South Under 10\% 10\% to under 50\% $50 \%$ or more | $\begin{aligned} & 0.8 \\ & 0.6 \\ & 1.0 \\ & 1.6 \end{aligned}$ | $\begin{array}{r} 35,480 \\ 9,185 \\ 13,414 \\ 36,637 \end{array}$ |
| W est <br> Under 10\% <br> $10 \%$ to under $50 \%$ <br> $50 \%$ or more | $\begin{aligned} & 2.0 \\ & 4.2 \\ & 2.9 \\ & 0.7 \\ & \hline \end{aligned}$ | $\begin{array}{r} 86,748 \\ 6,304 \\ 28,693 \\ 79,899 \\ \hline \end{array}$ |

a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-42. Standard errors for percentage of school districts with various types of programs for prekindergartenage children, by selected district characteristics: 1993-94

| District Characteristic | Type of Prekindergarten Programs |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Head Start | Day Care | Chapter 1 | Special Education | G eneral | NoPK Programs |
| TOTAL | 0.72 | 0.72 | 0.36 | 0.90 | 0.87 | 1.00 |
| District Size |  |  |  |  |  |  |
| U nder 1,000 | 1.06 | 1.14 | 0.57 | 1.49 | 1.53 | 1.85 |
| 1,000 to 9,999 | 1.02 | 0.79 | 0.62 | 1.14 | 0.79 | 0.89 |
| 10,000 or more | 0.79 | 0.90 | 0.54 | 0.73 | 0.74 | 0.60 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| U nder 10\% | 0.87 | 0.80 | 0.47 | 0.99 | 1.32 | 1.28 |
| 10\% to under 50\% | 1.20 | 1.97 | 0.78 | 1.72 | 1.63 | 1.94 |
| 50\% or more | 3.74 | 1.68 | 1.22 | 3.55 | 2.67 | 4.54 |
| M inority T eachers |  |  |  |  |  |  |
| $N$ one | 1.08 | 0.69 | 0.54 | 1.17 | 1.42 | 1.38 |
| M ore than 0\% to under 20\% | 1.12 | 1.40 | 0.59 | 1.61 | 1.18 | 1.83 |
| 20\% or more | 1.97 | 1.53 | 1.12 | 1.83 | 1.84 | 1.65 |
| M etro Status |  |  |  |  |  |  |
| U rban-inside central city | 2.22 | 2.69 | 1.33 | 2.73 | 1.81 | 2.04 |
| U rban-outside central city | 1.09 | 1.39 | 0.45 | 1.68 | 1.19 | 1.97 |
| N onurban area | 1.02 | 0.71 | 0.52 | 1.13 | 1.26 | 1.35 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |  |
| N ortheast | 1.28 | 1.25 | 0.86 | 1.60 | 1.53 | 1.93 |
| U nder 10\% | 1.54 | 1.49 | 1.09 | 1.95 | 1.68 | 2.45 |
| 10\% to under 50\% | 2.01 | 2.43 | 0.85 | 3.15 | 3.31 | 4.04 |
| 50\% or more | 7.03 | 2.77 | 2.35 | 6.63 | 5.00 | 5.41 |
| M idwest | 1.21 | 1.09 | 0.67 | 1.55 | 1.86 | 1.56 |
| U nder 10\% | 1.33 | 1.20 | 0.69 | 1.77 | 2.09 | 1.85 |
| 10\% to under 50\% | 2.72 | 2.25 | 2.52 | 3.39 | 3.29 | 3.47 |
| 50\% or more | 5.16 | 3.37 | 1.77 | 5.14 | 6.24 | 3.87 |
| South | 1.11 | 0.80 | 0.91 | 1.55 | 1.40 | 1.38 |
| U nder 10\% | 1.91 | 1.33 | 0.86 | 2.18 | 2.34 | 2.71 |
| 10\% to under 50\% | 1.51 | 1.01 | 1.24 | 2.06 | 2.50 | 1.87 |
| 50\% or more | 3.10 | 2.16 | 2.01 | 3.63 | 3.10 | 2.51 |
| W est | 1.83 | 2.99 | 0.29 | 2.57 | 1.06 | 3.27 |
| U nd er 10\% | 1.33 | 1.53 | 0.36 | 3.00 | 1.80 | 3.50 |
| 10\% to under 50\% | 2.63 | 6.46 | 0.72 | 4.65 | 1.97 | 5.97 |
| 50\% or more | 8.20 | 4.35 | 1.35 | 8.62 | 3.93 | 11.09 |

a) Districts without students were excluded for this characteristic only.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-43. Standard errors for percentage of school districts with students eligible for participation and numbers of students in grades K-12 approved for participation in and receiving free or reduced-price lunches through the N ational School Lunch Program, by selected district characteristics: 1993-94

| District Characteristic | Percent of Districts | Students A pproved for Participation | Students Receiving Free or Reduced-price Lunch |
| :---: | :---: | :---: | :---: |
| TOTAL | 0.80 | 174,707 | 139,061 |
| District Size |  |  |  |
| U nder 1,000 | 1.50 | 45,360 | 32,990 |
| 1,000 to 9,999 | 0.33 | 140,671 | 115,307 |
| 10,000 or more | 0.26 | 67,988 | 56,544 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |
| U nder 10\% | 1.22 | 77,415 | 48,989 |
| 10\% to under 50\% | 0.96 | 93,261 | 70,537 |
| $50 \%$ or more | 0.79 | 122,653 | 106,966 |
| M inority T eachers |  |  |  |
| N one | 1.40 | 63,328 | 31,283 |
| M ore than 0\% to under 20\% | 0.59 | 149,539 | 112,842 |
| 20\% or more | 1.30 | 88,070 | 81,693 |
| M etro Status |  |  |  |
| U rban-inside central city | 0.85 | 67,365 | 59,106 |
| U rban-outside central city | 0.66 | 131,927 | 102,871 |
| N onurban area | 1.26 | 86,648 | 64,271 |
| Region by Percent M inority Students ${ }^{\text {a }}$ |  |  |  |
| N ortheast | 1.25 | 77,903 | 49,870 |
| U nder 10\% | 1.54 | 48,765 | 24,434 |
| 10\% to under 50\% | 3.45 | 33,413 | 24,199 |
| 50\% or more | 1.81 | 46,481 | 36,582 |
| M idwest | 1.61 | 69,153 | 50,070 |
| U nder 10\% | 1.92 | 59,801 | 32,653 |
| 10\% to under 50\% | 0.48 | 38,225 | 30,508 |
| 50\% or more | 2.75 | 18,742 | 18,511 |
| South | 0.56 | 66,584 | 53,318 |
| U nder 10\% | 0.18 | 26,892 | 18,110 |
| 10\% to under 50\% | 0.83 | 42,643 | 32,248 |
| 50\% or more | 1.61 | 53,865 | 47,499 |
| W est | 1.54 | 127,435 | 105,252 |
| U nder 10\% | 3.73 | 32,202 | 16,792 |
| 10\% to under 50\% | 1.77 | 61,685 | 49,721 |
| 50\% or more | 0.98 | 101,482 | 88,460 |

a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-44. Standard errors for number and percentage of school districts with a student test performance reporting policy, by selected district characteristics: 1993-94


Table B-45. Standard errors for percentage of school districts with choice by type of choice program, by selected district characteristics: 1993-94

| District Characteristic | Any Choice Program | M agnet School | Dist. O pen Enrollment | Interdistrict Choice |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | T ransfers 0 utside of District | Transfers into District |
| TOTAL | 1.049 | 0.505 | 0.792 | 1.075 | 0.916 |
| District Size |  |  |  |  |  |
| U nder 1,000 | 2.029 | 0.885 | 1.445 | 1.976 | 1.625 |
| 1,000 to 9,999 | 0.941 | 0.533 | 0.742 | 0.940 | 0.932 |
| 10,000 or more | 0.591 | 0.617 | 0.541 | 0.633 | 0.596 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |  |
| U nder 10\% | 1.180 | 0.700 | 0.887 | 1.289 | 1.201 |
| 10\% to under 50\% | 1.967 | 0.690 | 1.960 | 2.046 | 1.880 |
| $50 \%$ or more | 2.343 | 1.552 | 1.762 | 2.053 | 2.095 |
| M inority T eachers |  |  |  |  |  |
| $N$ one | 1.444 | 0.920 | 1.003 | 1.534 | 1.396 |
| M ore than 0\% to under 20\% | 1.576 | 0.420 | 1.396 | 1.663 | 1.442 |
| 20\% or more | 1.869 | 0.957 | 1.317 | 1.684 | 1.714 |
| Region |  |  |  |  |  |
| N ortheast | 1.072 | 0.690 | 0.780 | 1.014 | 0.956 |
| M idwest | 1.536 | 0.990 | 1.135 | 1.771 | 1.471 |
| South | 1.332 | 0.633 | 0.704 | 1.223 | 1.270 |
| W est | 3.704 | 1.335 | 3.159 | 3.681 | 3.107 |
| M etro Status by District Size |  |  |  |  |  |
| U rban-inside central city | 2.293 | 1.431 | 2.108 | 1.916 | 1.878 |
| U nder 1,000 |  | -- |  |  |  |
| 1,000 to 9,999 | 4.228 | 2.127 | 3.993 | 3.696 | 3.630 |
| 10,000 or more | 1.032 | 0.963 | 0.907 | 0.944 | 1.014 |
| U rban-outside central city | 1.749 | 0.670 | 1.494 | 1.818 | 1.430 |
| U nder 1,000 | 4.797 | -- | -- | 4.869 | 3.212 |
| 1,000 to 9,999 | 1.486 | 0.882 | 1.198 | 1.312 | 1.368 |
| 10,000 or more | 0.980 | 0.855 | 0.881 | 1.018 | 0.935 |
| $N$ onurban area | 1.124 | 0.709 | 0.777 | 1.121 | 1.014 |
| U nder 1,000 | 1.703 | 1.127 | 1.192 | 1.693 | 1.528 |
| 1,000 to 9,999 | 1.222 | 0.528 | 1.028 | 1.186 | 1.247 |
| 10,000 or more | 2.482 | 2.642 | 2.501 | 2.435 | 2.424 |

Table B-46. Standard errors for percentage of school districts with written policies about student discipline, al cohol use, drug use, and tobacco use, by selected district characteristics: 1993-94

| District Characteristic | Student <br> Discipline | Alcohol Use | $\begin{aligned} & \text { Drug } \\ & \text { Use } \end{aligned}$ | Tobacco Use |
| :---: | :---: | :---: | :---: | :---: |
| TOTAL | 0.11 | 0.21 | 0.22 | 0.30 |
| District Size |  |  |  |  |
| U nder 1,000 | 0.21 | 0.39 | 0.41 | 0.55 |
| 1,000 to 9,999 | 0.03 | 0.10 | 0.10 | 0.30 |
| 10,000 or more | 0.09 | 0.23 | 0.23 | 0.24 |
| M inority Students ${ }^{\text {a }}$ |  |  |  |  |
| U nder 10\% | 0.16 | 0.33 | 0.33 | 0.42 |
| 10\% to under 50\% | 0.16 | 0.10 | 0.14 | 0.29 |
| 50\% or more | 0.11 | 0.39 | 0.39 | 0.37 |
| M inority T eachers |  |  |  |  |
| $N$ one | 0.21 | 0.44 | 0.44 | 0.58 |
| M ore than 0\% to under 20\% | 0.12 | 0.11 | 0.12 | 0.24 |
| 20\% or more | 0.83 | 0.84 | 0.81 | 0.87 |
| Region |  |  |  |  |
| N ortheast | 0.30 | 0.66 | 0.65 | 0.83 |
| M idwest | 0.17 | 0.46 | 0.46 | 0.67 |
| South | 0.02 | 0.06 | 0.15 | 0.14 |
| W est | 0.28 | 0.21 | 0.20 | 0.29 |
| M etro Status by District Size |  |  |  |  |
| U rban-inside central city | 0.13 | 0.28 | 0.28 | 0.39 |
| U nder 1,000 | 1.92 | 0.61 | 0.61 | 0.61 |
| 1,000 to 9,999 | 0.00 | 0.00 | 0.00 | 0.58 |
| 10,000 or more | 0.01 | 0.63 | 0.63 | 0.63 |
| U rban-outside central city | 0.15 | 0.32 | 0.31 | 0.42 |
| U $\mathrm{nder} 1,000$ | 0.44 | 0.87 | 0.87 | 0.87 |
| 1,000 to 9,999 | 0.05 | 0.18 | 0.19 | 0.47 |
| 10,000 or more | 0.17 | 0.21 | 0.21 | 0.32 |
| N onurban area | 0.20 | 0.31 | 0.34 | 0.47 |
| U nder 1,000 | 0.30 | 0.49 | 0.53 | 0.72 |
| 1,000 to 9,999 | 0.03 | 0.00 | 0.00 | 0.38 |
| 10,000 or more | 0.00 | 0.00 | 0.00 | 0.16 |

a) Districts without students were excluded for this characteristic only.

SOU RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage
Questionnaire).

## Section 2

## State T ables

Table B-47. Standard errors for number of full and part time teachers and percentage by race and ethnicity, by state: 1993-94

| State | T otal | Percent by R ace and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | T eachers | A merican Indian | A sian | Hispanic | Black | W hite |
| 50 States and D.C. | 20,454 | 0.006 | 0.017 | 0.087 | 0.100 | 0.118 |
| A labama | 971 | 0.007 | 0.004 | 0.008 | 0.591 | 0.593 |
| A laska | 77 | 0.211 | 0.034 | 0.014 | 0.018 | 0.200 |
| A rizona | 2,742 | 0.088 | 0.026 | 0.311 | 0.078 | 0.362 |
| A rkansas | 870 | 0.069 | 0.009 | 0.010 | 0.856 | 0.819 |
| C alifornia | 11,526 | 0.023 | 0.170 | 0.373 | 0.223 | 0.601 |
| Colorado | 2,073 | 0.016 | 0.052 | 0.293 | 0.071 | 0.286 |
| Connecticut | 2,781 | 0.035 | 0.013 | 0.174 | 0.135 | 0.317 |
| Delaware | 71 | 0.002 | 0.005 | 0.008 | 0.065 | 0.072 |
| District of Columbia | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Florida | 1,378 | 0.002 | 0.006 | 0.061 | 0.137 | 0.167 |
| G eorgia | 1,898 | 0.007 | 0.014 | 0.015 | 0.595 | 0.600 |
| Hawaii | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Idaho | 105 | 0.022 | 0.025 | 0.080 | 0.001 | 0.085 |
| Illinois | 3,944 | 0.031 | 0.037 | 0.095 | 0.455 | 0.521 |
| Indiana | 1,358 | 0.006 | 0.013 | 0.076 | 0.140 | 0.201 |
| Iowa | 1,172 | 0.011 | 0.021 | 0.033 | 0.031 | 0.064 |
| Kansas | 961 | 0.107 | 0.028 | 0.050 | 0.095 | 0.183 |
| Kentucky | 736 | 0.004 | 0.014 | 0.011 | 0.109 | 0.113 |
| Louisiana | 608 | 0.002 | 0.026 | 0.005 | 0.476 | 0.465 |
| $M$ aine | 1,478 | 0.014 | 0.011 | 0.020 | 0.014 | 0.034 |
| M aryland | 1,109 | 0.000 | 0.014 | 0.003 | 0.177 | 0.174 |
| M assachusetts | 4,783 | 0.009 | 0.042 | 0.127 | 0.115 | 0.256 |
| M ichigan | 8,690 | 0.022 | 0.021 | 0.073 | 0.772 | 0.829 |
| M innesota | 1,951 | 0.041 | 0.033 | 0.022 | 0.016 | 0.069 |
| M ississippi | 586 | 0.017 | 0.010 | 0.014 | 0.674 | 0.681 |
| M issouri | 3,003 | 0.022 | 0.017 | 0.028 | 0.322 | 0.352 |
| M ontana | 459 | 0.305 | 0.035 | 0.058 | 0.033 | 0.324 |
| N ebraska | 1,021 | 0.014 | 0.020 | 0.048 | 0.023 | 0.065 |
| $N$ evada | 56 | 0.003 | 0.004 | 0.010 | 0.023 | 0.034 |
| N ew Hampshire | 1,128 | 0.006 | 0.015 | 0.032 | 0.016 | 0.039 |
| N ew Jersey | 3,886 | 0.015 | 0.056 | 0.182 | 0.450 | 0.565 |
| $N$ ew M exico | 348 | 0.035 | 0.019 | 0.615 | 0.026 | 0.618 |
| N ew York | 5,453 | 0.011 | 0.024 | 0.146 | 0.242 | 0.401 |
| $N$ orth Carolina | 2,449 | 0.021 | 0.010 | 0.015 | 0.594 | 0.598 |
| N orth Dakota | 241 | 0.102 | 0.012 | 0.023 | 0.001 | 0.105 |
| Ohio | 3,850 | 0.005 | 0.017 | 0.029 | 0.801 | 0.816 |
| O klahoma | 936 | 0.284 | 0.020 | 0.047 | 0.321 | 0.389 |
| Oregon | 1,749 | 0.043 | 0.083 | 0.363 | 0.060 | 0.347 |
| Pennsylvania | 4,301 | 0.010 | 0.016 | 0.036 | 0.382 | 0.403 |
| R hode Island | 208 | 0.001 | 0.003 | 0.032 | 0.036 | 0.072 |
| South Carolina | 852 | 0.007 | 0.005 | 0.003 | 0.458 | 0.458 |
| South Dakota | 114 | 0.082 | 0.000 | 0.019 | 0.017 | 0.080 |
| Tennessee | 1,855 | 0.003 | 0.004 | 0.008 | 0.486 | 0.488 |
| Texas | 4,354 | 0.016 | 0.009 | 0.811 | 0.248 | 0.764 |
| $U$ tah | 106 | 0.009 | 0.003 | 0.004 | 0.001 | 0.010 |
| V ermont | 300 | 0.003 | 0.021 | 0.065 | 0.007 | 0.064 |
| Virginia | 3,270 | 0.010 | 0.018 | 0.019 | 0.609 | 0.616 |
| W ashington | 5,710 | 0.036 | 0.162 | 0.085 | 0.169 | 0.368 |
| W est Virginia | 66 | 0.000 | 0.001 | 0.001 | 0.007 | 0.006 |
| W isconsin | 1,433 | 0.029 | 0.023 | 0.032 | 0.071 | 0.092 |
| W yoming | 80 | 0.084 | 0.006 | 0.021 | 0.008 | 0.078 |

SOURCE: U.S. Department of Education, National C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-48. Standard errors for number of students and percentage by race and ethnicity, by state: 1993-94

|  | Total | Percent by R ace and Ethnicity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Students | A merican Indian | A sian | Hispanic | Black | W hite |
| 50 States and D.C. | 353,831 | 0.023 | 0.064 | 0.233 | 0.173 | 0.259 |
| A labama | 14,768 | 0.106 | 0.018 | 0.010 | 0.866 | 0.843 |
| A laska | 1,243 | 0.491 | 0.043 | 0.019 | 0.039 | 0.470 |
| A rizona | 48,187 | 0.348 | 0.044 | 1.016 | 0.137 | 1.074 |
| A rkansas | 13,949 | 0.022 | 0.018 | 0.066 | 1.326 | 1.287 |
| California | 260,554 | 0.040 | 0.466 | 1.103 | 0.308 | 1.138 |
| Colorado | 36,082 | 0.021 | 0.067 | 0.742 | 0.186 | 0.692 |
| Connecticut | 37,066 | 0.015 | 0.051 | 0.696 | 0.574 | 1.265 |
| Delaware | 1,012 | 0.002 | 0.017 | 0.019 | 0.096 | 0.120 |
| District of Columbia | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Florida | 20,904 | 0.002 | 0.010 | 0.158 | 0.188 | 0.299 |
| Georgia | 28,407 | 0.004 | 0.026 | 0.075 | 0.970 | 1.012 |
| Hawaii | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Idaho | 2,037 | 0.051 | 0.035 | 0.372 | 0.004 | 0.362 |
| Illinois | 62,186 | 0.063 | 0.456 | 0.485 | 1.555 | 1.874 |
| Indiana | 20,660 | 0.027 | 0.159 | 0.248 | 0.469 | 0.645 |
| Iowa | 17,406 | 0.012 | 0.111 | 0.193 | 0.102 | 0.297 |
| Kansas | 14,799 | 0.069 | 0.052 | 0.242 | 0.301 | 0.495 |
| Kentucky | 12,145 | 0.003 | 0.015 | 0.009 | 0.333 | 0.344 |
| Louisiana | 10,203 | 0.005 | 0.017 | 0.012 | 0.417 | 0.405 |
| $M$ aine | 20,103 | 0.034 | 0.018 | 0.025 | 0.041 | 0.086 |
| M aryland | 17,604 | 0.001 | 0.015 | 0.011 | 0.209 | 0.190 |
| M assachusetts | 68,835 | 0.016 | 0.133 | 0.407 | 0.306 | 0.713 |
| M ichigan | 158,461 | 0.239 | 0.110 | 0.216 | 1.591 | 1.648 |
| M innesota | 31,987 | 0.534 | 0.056 | 0.176 | 0.267 | 0.604 |
| M ississippi | 10,599 | 0.053 | 0.024 | 0.010 | 1.001 | 0.981 |
| M issouri | 48,610 | 0.016 | 0.081 | 0.043 | 1.000 | 1.021 |
| M ontana | 6,714 | 0.708 | 0.032 | 0.060 | 0.018 | 0.695 |
| N ebraska | 12,276 | 0.232 | 0.049 | 0.417 | 0.064 | 0.506 |
| N evada | 1,100 | 0.025 | 0.003 | 0.038 | 0.036 | 0.046 |
| N ew H ampshire | 16,191 | 0.009 | 0.049 | 0.048 | 0.047 | 0.129 |
| N ew Jersey | 47,885 | 0.031 | 0.399 | 0.996 | 1.015 | 1.550 |
| N ew M exico | 5,927 | 0.186 | 0.012 | 0.587 | 0.107 | 0.577 |
| N ew York | 78,241 | 0.080 | 0.179 | 0.458 | 0.566 | 1.075 |
| $N$ orth Carolina | 36,776 | 0.068 | 0.035 | 0.056 | 0.974 | 0.964 |
| N orth Dakota | 2,935 | 0.479 | 0.018 | 0.053 | 0.017 | 0.471 |
| Ohio | 66,025 | 0.185 | 0.073 | 0.114 | 0.831 | 0.868 |
| Oklahoma | 15,054 | 0.448 | 0.041 | 0.182 | 0.739 | 0.711 |
| Oregon | 32,517 | 0.117 | 0.122 | 0.302 | 0.160 | 0.327 |
| Pennsylvania | 72,724 | 0.009 | 0.080 | 0.215 | 0.838 | 0.926 |
| R hode Island | 2,916 | 0.006 | 0.060 | 0.175 | 0.130 | 0.367 |
| South Carolina | 14,117 | 0.018 | 0.011 | 0.012 | 0.568 | 0.565 |
| South Dakota | 1,667 | 0.559 | 0.012 | 0.025 | 0.011 | 0.554 |
| Tennessee | 30,485 | 0.003 | 0.015 | 0.017 | 0.931 | 0.947 |
| Texas | 70,229 | 0.022 | 0.063 | 1.161 | 0.393 | 1.051 |
| U tah | 2,461 | 0.018 | 0.007 | 0.009 | 0.003 | 0.020 |
| $V$ ermont | 3,530 | 0.044 | 0.030 | 0.018 | 0.032 | 0.064 |
| Virginia | 46,831 | 0.005 | 0.128 | 0.079 | 0.906 | 0.941 |
| W ashington | 105,124 | 0.221 | 0.462 | 0.610 | 0.420 | 0.941 |
| W est Virginia | 863 | 0.000 | 0.001 | 0.000 | 0.010 | 0.011 |
| W isconsin | 22,347 | 0.119 | 0.105 | 0.126 | 0.276 | 0.356 |
| W yoming | 917 | 0.263 | 0.007 | 0.040 | 0.008 | 0.238 |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-49. Standard errors for total number of full time equivalent (FTE) teachers and percentage that consists of new hires, by state: 1993-94

| State | T otal FTE T eachers | Percent N ew Hires |
| :---: | :---: | :---: |
| 50 States and D.C. | 19,389 | 0.04 |
| A labama | 952 | 0.10 |
| A laska | 74 | 0.13 |
| A rizona | 2,643 | 0.30 |
| A rkansas | 812 | 0.20 |
| California | 10,926 | 0.19 |
| Colorado | 2,022 | 0.24 |
| Connecticut | 2,672 | 0.15 |
| Delaware | 70 | 0.03 |
| District of C olumbia | 0 | 0.00 |
| Florida | 1,185 | 0.03 |
| Georgia | 1,820 | 0.13 |
| Hawaii | 0 | 0.00 |
| Idaho | 102 | 0.13 |
| Illinois | 3,786 | 0.35 |
| Indiana | 1,299 | 0.16 |
| Iowa | 1,120 | 0.21 |
| Kansas | 878 | 0.27 |
| Kentucky | 721 | 0.13 |
| Louisiana | 600 | 0.07 |
| $M$ aine | 1,451 | 0.28 |
| M aryland | 1,036 | 0.03 |
| M assachusetts | 4,515 | 0.18 |
| M ichigan | 8,299 | 0.21 |
| M innesota | 1,840 | 0.37 |
| M ississippi | 572 | 0.20 |
| M issouri | 2,875 | 0.32 |
| M ontana | 427 | 0.48 |
| N ebraska | 978 | 0.50 |
| N evada | 56 | 0.01 |
| N ew H ampshire | 1,094 | 0.31 |
| N ew Jersey | 3,790 | 0.23 |
| New M exico | 346 | 0.09 |
| N ew York | 5,134 | 0.14 |
| N orth Carolina | 2,228 | 0.15 |
| N orth Dakota | 230 | 0.34 |
| Ohio | 3,777 | 0.21 |
| Oklahoma | 948 | 0.26 |
| Oregon | 1,679 | 0.19 |
| Pennsylvania | 4,219 | 0.31 |
| Rhode Island | 215 | 0.04 |
| South Carolina | 834 | 0.13 |
| South Dakota | 115 | 0.16 |
| T ennessee | 1,789 | 0.11 |
| Texas | 4,223 | 0.19 |
| U tah | 107 | 0.03 |
| $V$ ermont | 276 | 0.42 |
| Virginia | 3,163 | 0.13 |
| W ashington | 5,277 | 0.17 |
| W est Virginia | 64 | 0.00 |
| W isconsin | 1,392 | 0.15 |
| W yoming | 78 | 0.09 |

Table B-50. Standard errors for number of newly hired FTE teachers, and percentage of newly hired FTE teachers with regular state certification, newly hired FTE teachers with emergency certification, and newly hired FTE teachers lacking regular state or emergency certification in their field of assignment, by state: 1993-94

| State | N umber of N ewly H ired T eachers | Percent N ewly H ired with Regular State C ertification in Field of A ssignment | ```Percent N ewly Hired with Emergency C ertification``` | Percent N ewly H ired lacking <br> Regular State or Emergency Certification in Field of A ssignment |
| :---: | :---: | :---: | :---: | :---: |
| 50 States and D.C. | 1,815 | 0.21 | 0.14 | 0.14 |
| A labama | 104 | 0.62 | 0.11 | 0.61 |
| A laska | 14 | 0.10 | 0.10 | 0.00 |
| A rizona | 387 | 1.34 | 0.22 | 1.40 |
| A rkansas | 86 | 0.91 | 0.33 | 0.76 |
| California | 1,155 | 1.11 | 0.83 | 0.65 |
| Colorado | 213 | 2.09 | 0.86 | 1.73 |
| Connecticut | 145 | 1.02 | 0.07 | 1.03 |
| Delaware | 6 | 0.11 | 0.11 | 0.08 |
| District of Columbia | 0 | 0.00 | 0.00 | 0.00 |
| Florida | 114 | 0.37 | 0.37 | 0.27 |
| Georgia | 214 | 0.58 | 0.29 | 0.62 |
| Hawaii | 0 | 0.00 | 0.00 | 0.00 |
| Idaho | 17 | 0.35 | 0.35 | 0.03 |
| Illinois | 472 | 1.26 | 0.16 | 1.20 |
| Indiana | 103 | 0.79 | 0.45 | 0.57 |
| Iowa | 102 | 0.68 | 0.71 | 0.53 |
| Kansas | 121 | 0.48 | 0.09 | 0.48 |
| Kentucky | 62 | 0.19 | 0.16 | 0.09 |
| Louisiana | 63 | 0.71 | 0.57 | 0.56 |
| M aine | 85 | 0.97 | 0.92 | 0.17 |
| M aryland | 89 | 0.15 | 0.06 | 0.12 |
| M assachusetts | 331 | 0.95 | 0.60 | 0.64 |
| Michigan | 250 | 0.50 | 0.48 | 0.05 |
| M innesota | 227 | 0.34 | 0.30 | 0.14 |
| M ississippi | 81 | 1.02 | 0.62 | 0.74 |
| Missouri | 335 | 1.23 | 0.81 | 0.97 |
| M ontana | 67 | 0.78 | 0.63 | 0.32 |
| N ebraska | 100 | 2.38 | 2.00 | 1.15 |
| N evada | 6 | 0.04 | 0.04 | 0.00 |
| N ew H ampshire | 106 | 0.85 | 0.61 | 0.52 |
| N ew Jersey | 276 | 1.05 | 0.65 | 1.02 |
| New M exico | 45 | 0.45 | 0.20 | 0.34 |
| New York | 326 | 0.38 | 0.13 | 0.36 |
| $N$ orth C arolina | 254 | 0.69 | 0.51 | 0.38 |
| N orth Dakota | 24 | 0.38 | 0.21 | 0.32 |
| Ohio | 331 | 0.64 | 0.38 | 0.35 |
| Oklahoma | 113 | 0.57 | 0.58 | 0.14 |
| Oregon | 105 | 1.23 | 0.81 | 0.78 |
| Pennsylvania | 437 | 1.27 | 0.26 | 1.19 |
| Rhode Island | 5 | 0.03 | 0.03 | 0.00 |
| South Carolina | 75 | 0.23 | 0.06 | 0.26 |
| South Dakota | 18 | 0.83 | 0.57 | 0.66 |
| Tennessee | 170 | 0.46 | 0.45 | 0.26 |
| Texas | 723 | 0.98 | 0.77 | 0.57 |
| $U$ tah | 10 | 0.48 | 0.19 | 0.35 |
| V ermont | 35 | 0.81 | 0.67 | 0.58 |
| Virginia | 275 | 0.43 | 0.39 | 0.18 |
| W ashington | 489 | 0.40 | 0.07 | 0.38 |
| W est Virginia | 1 | 0.03 | 0.03 | 0.00 |
| W isconsin | 120 | 0.65 | 0.61 | 0.23 |
| W yoming | 8 | 0.38 | 0.31 | 0.29 |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993 -94 (Teacher Demand and Shortage Questionnaire).

Table B-51. Standard errors for percentage of school districts with different criteria for considering applicants for teaching positions, by state: 1993-94

|  | Certification Type (in Field) |  |  | Special K nowledge T est |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Full <br> Standard | Emergency/ <br> Temporary | College <br> M ajor/M inor in Teaching Field | G raduate of Teacher Ed. Program | District or State | $N$ ational T eacher Exam |
| 50 States and D.C. | 0.88 | 0.89 | 0.86 | 1.13 | 0.90 | 0.86 |
| A labama | 2.37 | 3.65 | 2.40 | 1.51 | 2.01 | 1.65 |
| A laska | 3.55 | 4.87 | 3.40 | 3.89 | 0.00 | 0.00 |
| A rizona | 2.93 | 9.07 | 10.67 | 7.89 | 4.18 | 2.88 |
| A rkansas | 3.90 | 4.25 | 3.66 | 4.70 | 4.42 | 2.85 |
| California | 4.58 | 5.67 | 9.67 | 8.81 | 7.92 | 6.35 |
| Colorado | 5.11 | 7.84 | 7.09 | 5.38 | 4.40 | 0.71 |
| Connecticut | 1.37 | 7.72 | 5.62 | 6.86 | 4.90 | 2.37 |
| Delaware | 1.01 | 1.11 | 1.01 | 0.89 | 0.63 | 0.00 |
| District of Columbia ${ }^{\text {a }}$ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Florida | 3.62 | 2.98 | 3.48 | 3.94 | 3.06 | 0.01 |
| Georgia | 4.55 | 3.72 | 3.78 | 4.81 | 2.84 | 0.30 |
| Hawaii ${ }^{\text {a }}$ | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Idaho | 1.94 | 4.42 | 3.05 | 4.01 | 3.52 | 3.16 |
| Illinois | 3.86 | 4.80 | 4.82 | 5.26 | 3.63 | 2.93 |
| Indiana | 3.19 | 4.04 | 3.72 | 3.61 | 3.98 | 3.85 |
| Iowa | 3.36 | 3.45 | 3.91 | 4.81 | 0.00 | 0.13 |
| Kansas | 2.57 | 4.21 | 3.26 | 4.06 | 3.31 | 4.13 |
| Kentucky | 1.90 | 3.57 | 1.30 | 2.00 | 4.48 | 3.72 |
| Louisiana | 3.11 | 2.94 | 2.66 | 2.93 | 1.32 | 2.54 |
| $M$ aine | 2.75 | 6.00 | 5.78 | 5.16 | 7.07 | 5.84 |
| M aryland | 3.54 | 4.42 | 4.42 | 3.44 | 0.00 | 2.18 |
| M assachusetts | 4.50 | 4.16 | 5.35 | 5.02 | 1.70 | 0.61 |
| M ichigan | 2.07 | 5.69 | 3.19 | 3.18 | 7.44 | 10.56 |
| M innesota | 2.97 | 3.79 | 3.65 | 3.73 | 4.98 | 1.72 |
| M ississippi | 1.67 | 2.28 | 2.19 | 2.90 | 3.63 | 0.00 |
| M issouri | 5.82 | 4.89 | 3.02 | 6.12 | 4.62 | 3.39 |
| M ontana | 4.93 | 5.45 | 4.79 | 4.93 | 4.74 | 5.47 |
| N ebraska | 2.30 | 8.28 | 5.29 | 6.79 | 8.13 | 6.03 |
| N evada | 1.13 | 0.52 | 0.52 | 0.44 | 0.61 | 0.35 |
| N ew H ampshire | 4.46 | 5.04 | 6.25 | 5.45 | 2.23 | 0.00 |
| N ew Jersey | 4.05 | 6.28 | 6.04 | 6.48 | 5.91 | 6.87 |
| N ew M exico | 4.87 | 4.96 | 3.47 | 4.88 | 5.80 | 6.90 |
| N ew York | 1.65 | 3.73 | 3.48 | 3.73 | 4.17 | 2.80 |
| N orth Carolina | 3.70 | 3.31 | 3.34 | 3.40 | 3.44 | 1.58 |
| N orth Dakota | 1.20 | 3.96 | 4.33 | 1.31 | 0.83 | 0.71 |
| Ohio | 1.79 | 4.60 | 3.06 | 3.62 | 4.89 | 5.39 |
| Oklahoma | 2.76 | 2.58 | 2.66 | 3.03 | 1.88 | 2.05 |
| Oregon | 6.21 | 6.09 | 5.61 | 6.13 | 6.40 | 2.78 |
| Pennsylvania | 1.47 | 5.14 | 4.34 | 3.53 | 3.28 | 4.16 |
| Rhode Island | 0.00 | 2.50 | 0.51 | 0.39 | 2.24 | 0.49 |
| South C arolina | 2.23 | 2.86 | 2.69 | 4.62 | 3.56 | 2.01 |
| South Dakota | 2.03 | 3.65 | 3.03 | 2.82 | 0.00 | 0.39 |
| Tennessee | 1.38 | 5.43 | 4.30 | 4.53 | 4.94 | 6.42 |
| Texas | 3.79 | 2.50 | 2.86 | 3.82 | 2.43 | 2.12 |
| U tah | 3.20 | 2.06 | 4.03 | 3.29 | 0.00 | 0.00 |
| $\checkmark$ ermont | 1.16 | 4.26 | 5.25 | 4.52 | 1.85 | 0.70 |
| Virginia | 5.56 | 4.33 | 5.43 | 7.18 | 4.80 | 7.46 |
| W ashington | 11.67 | 10.09 | 10.64 | 9.82 | 10.23 | 0.00 |
| W est Virginia | 0.10 | 0.14 | 0.07 | 0.17 | 0.11 | 0.07 |
| W isconsin | 3.65 | 3.81 | 4.62 | 2.03 | 2.92 | 0.00 |
| W yoming | 1.06 | 2.57 | 2.93 | 2.44 | 0.99 | 0.00 |

a) The District of C olumbia and H awaii each have only one school district.

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

Table B-52. Standard errors for percentage of school districts using pay incentives to recruit or retain teachers to teach in less desirable locations or in fields of shortage, by state: 1987-88 to 1993-94

a) The District of C olumbia and H awaii each have only one school district.
SO U RC E: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher Demand and Shortage

Questionnaire).

Table B-53. Standard errors for percentage of school districts in which free training is offered to prepare staff members to teach in fields with current or anticipated shortages, by state: 1987-88 to 1993-94


Table B-54. Standard errors for average low and high sal ary for full time teachers in actual and in constant 1993-94 dollars, by state: 1990-91 to 1993-94 ${ }^{\text {a }}$


Table B-55. Standard errors for average scheduled salary for teachers (in constant 1993-94 dollars) by education and teaching experience for school districts with salary schedules, by state: 1990-91 and 1993-94

|  | 1990-91 (Constant 1993-94 Dollars) ${ }^{\text {a }}$ |  |  | 1993-94 (A ctual Dollars) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience | Bachelor's without Experience | M aster's without Experience | M aster's with 20 yrs Experience |
| 50 States and D.C. | 65 | 81 | 137 | 60 | 63 | 110 |
| A labama | 308 | 297 | 528 | 50 | 62 | 90 |
| A laska | 381 | 376 | 350 | 184 | 194 | 523 |
| A rizona | 225 | 211 | 405 | 295 | 282 | 517 |
| A rkansas | 163 | 168 | 272 | 140 | 137 | 148 |
| California | 334 | 530 | 677 | 492 | 486 | 771 |
| Colorado | 223 | 193 | 381 | 157 | 244 | 645 |
| Connecticut | 264 | 304 | 275 | 284 | 302 | 639 |
| Delaware | 0 | 0 | 0 | 11 | 15 | 82 |
| District of Columbia | 0 | 0 | 0 | 0 | 0 | 0 |
| Florida | 142 | 174 | 296 | 59 | 91 | 94 |
| G eorgia | 101 | 101 | 166 | 51 | 55 | 109 |
| Hawaii | 0 | 0 | 0 | 0 | 0 | 0 |
| Idaho | 84 | 126 | 246 | 67 | 138 | 191 |
| Illinois | 239 | 299 | 792 | 294 | 323 | 752 |
| Indiana | 147 | 159 | 377 | 124 | 135 | 269 |
| Iowa | 140 | 169 | 339 | 95 | 100 | 276 |
| Kansas | 164 | 213 | 306 | 145 | 138 | 267 |
| Kentucky | 669 | 701 | 674 | 72 | 73 | 119 |
| Louisiana | 190 | 192 | 225 | 121 | 122 | 149 |
| M aine | 107 | 132 | 442 | 156 | 180 | 287 |
| M aryland | 165 | 291 | 366 | 45 | 72 | 76 |
| M assachusetts | 182 | 195 | 565 | 160 | 160 | 290 |
| M ichigan | 237 | 269 | 561 | 235 | 306 | 717 |
| M innesota | 163 | 179 | 263 | 116 | 156 | 345 |
| M ississippi | 52 | 48 | 74 | 27 | 29 | 43 |
| M issouri | 256 | 281 | 529 | 133 | 166 | 390 |
| Montana | 147 | 228 | 403 | 65 | 118 | 261 |
| N ebraska | 241 | 295 | 534 | 122 | 243 | 242 |
| N evada | 0 | 0 | 0 | 16 | 19 | 61 |
| N ew Hampshire | 182 | 214 | 474 | 176 | 279 | 511 |
| N ew Jersey | 246 | 301 | 1,071 | 241 | 374 | 860 |
| N ew M exico | 181 | 264 | 315 | 31 | 123 | 353 |
| N ew York | 198 | 289 | 535 | 257 | 346 | 682 |
| N orth Carolina | 31 | 35 | 93 | 13 | 30 | 65 |
| N orth Dakota | 155 | 280 | 545 | 89 | 88 | 229 |
| Ohio | 153 | 170 | 453 | 129 | 153 | 420 |
| O klahoma | 300 | 295 | 367 | 45 | 45 | 96 |
| Oregon | 322 | 503 | 1,076 | 135 | 170 | 591 |
| Pennsylvania | 186 | 212 | 390 | 346 | 389 | 990 |
| Rhode Island | 188 | 172 | 222 | 32 | 59 | 83 |
| South Carolina | 82 | 94 | 146 | 108 | 120 | 182 |
| South Dakota | 451 | 607 | 1,521 | 48 | 69 | 209 |
| Tennessee | 102 | 124 | 242 | 130 | 162 | 326 |
| Texas | 92 | 101 | 137 | 107 | 114 | 194 |
| $U$ tah | 69 | 101 | 273 | 37 | 56 | 202 |
| $\checkmark$ ermont | 146 | 177 | 484 | 144 | 212 | 606 |
| $V$ irginia | 155 | 175 | 492 | 174 | 205 | 410 |
| W ashington | 31 | 149 | 586 | 10 | 88 | 96 |
| W est Virginia | 0 | 0 | 0 | 1 | 1 | 4 |
| W isconsin | 126 | 190 | 271 | 80 | 109 | 390 |
| W yoming | 61 | 398 | 904 | 59 | 75 | 127 |

a) A djusted using the C onsumer Price Index.

SOURCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Surveys: 1990-91 and 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-56. Standard errors for percentage of school districts with collective bargaining units, by state: 1993-94


Table B-57. Standard errors for number and percentage of school districts offering retirement plans to teachers, by state: 1987-88 to 1993-94


Table B-58. Standard errors for average number of years of English required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

| State | $\frac{1987-88}{}$ N umber of Y ears |  | $\frac{1993-94}{}$ N umber of Years |
| :---: | :---: | :---: | :---: |
| 50 States and D.C. | 0.009 | 0.011 | 0.008 |
| A labama | 0.007 | 0.011 | 0.000 |
| A laska | 0.000 | 0.000 | 0.000 |
| A rizona | 0.143 | 0.000 | 0.000 |
| A rkansas | 0.000 | 0.032 | 0.004 |
| California | 0.056 | 0.053 | 0.062 |
| Colorado | 0.042 | 0.043 | 0.055 |
| Connecticut | 0.054 | 0.016 | 0.006 |
| Delaware | 0.000 | 0.000 | 0.000 |
| District of Columbia | 0.000 | 0.000 | 0.000 |
| Florida | 0.000 | 0.000 | 0.000 |
| G eorgia | 0.000 | 0.031 | 0.022 |
| Hawaii | 0.000 | 0.000 | 0.000 |
| Idaho | 0.045 | 0.074 | 0.004 |
| Illinois | 0.049 | 0.061 | 0.052 |
| Indiana | 0.026 | 0.067 | 0.010 |
| Iowa | 0.051 | 0.069 | 0.039 |
| Kansas | 0.015 | 0.020 | 0.001 |
| Kentucky | 0.021 | 0.000 | 0.000 |
| Louisiana | 0.075 | 0.117 | 0.000 |
| $M$ aine | 0.076 | 0.000 | 0.000 |
| M aryland | 0.000 | 0.000 | 0.000 |
| M assachusetts | 0.057 | 0.033 | 0.051 |
| M ichigan | 0.045 | 0.073 | 0.080 |
| M innesota | 0.064 | 0.066 | 0.000 |
| M ississippi | 0.040 | 0.000 | 0.013 |
| M issouri | 0.051 | 0.055 | 0.036 |
| M ontana | 0.048 | 0.000 | 0.000 |
| N ebraska | 0.216 | 0.051 | 0.023 |
| N evada | 0.000 | 0.000 | 0.000 |
| $N$ ew Hampshire | 0.063 | 0.089 | 0.016 |
| N ew Jersey | 0.012 | 0.026 | 0.014 |
| N ew M exico | 0.000 | 0.000 | 0.000 |
| N ew York | 0.020 | 0.028 | 0.000 |
| $N$ orth Carolina | 0.001 | 0.000 | 0.062 |
| N orth Dakota | 0.020 | 0.015 | 0.014 |
| O hio | 0.034 | 0.051 | 0.041 |
| O klahoma | 0.048 | 0.160 | 0.000 |
| Oregon | 0.046 | 0.054 | 0.018 |
| Pennsylvania | 0.018 | 0.061 | 0.020 |
| Rhode Island | 0.000 | 0.000 | 0.000 |
| South Carolina | 0.000 | 0.001 | 0.000 |
| South Dakota | 0.000 | 0.034 | 0.000 |
| Tennessee | 0.000 | 0.065 | 0.032 |
| Texas | 0.021 | 0.019 | 0.003 |
| $U$ tah | 0.090 | 0.058 | 0.037 |
| V ermont | 0.000 | 0.015 | 0.000 |
| $V$ irginia | 0.015 | 0.061 | 0.000 |
| W ashington | 0.065 | 0.027 | 0.035 |
| W est V irginia | 0.000 | 0.000 | 0.000 |
| W isconsin | 0.040 | 0.036 | 0.016 |
| W yoming | 0.031 | 0.120 | 0.019 |

Table B-59. Standard errors for average number of years of mathematics required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

|  |  | School Y ear |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| State | N umber of $Y$ ears | N umber of $Y$ ears | N umber of Y ears |
| 50 States and D.C. | 0.011 | 0.012 | 0.009 |
| A labama | 0.055 | 0.048 | 0.038 |
| A laska | 0.047 | 0.069 | 0.042 |
| A rizona | 0.084 | 0.070 | 0.052 |
| A rkansas | 0.051 | 0.076 | 0.043 |
| California | 0.055 | 0.099 | 0.067 |
| Colorado | 0.110 | 0.080 | 0.092 |
| Connecticut | 0.060 | 0.026 | 0.033 |
| Delaware | 0.000 | 0.000 | 0.010 |
| District of Columbia | 0.000 | 0.000 | 0.000 |
| Florida | 0.020 | 0.039 | 0.029 |
| Georgia | 0.080 | 0.049 | 0.050 |
| Hawaii | 0.000 | 0.000 | 0.000 |
| Idaho | 0.071 | 0.077 | 0.060 |
| Illinois | 0.032 | 0.047 | 0.053 |
| Indiana | 0.062 | 0.080 | 0.042 |
| Iowa | 0.056 | 0.066 | 0.054 |
| Kansas | 0.050 | 0.044 | 0.059 |
| Kentucky | 0.021 | 0.024 | 0.036 |
| Louisiana | 0.063 | 0.063 | 0.001 |
| $M$ aine | 0.093 | 0.114 | 0.050 |
| M aryland | 0.141 | 0.000 | 0.000 |
| M assachusetts | 0.089 | 0.092 | 0.049 |
| M ichigan | 0.058 | 0.063 | 0.045 |
| M innesota | 0.173 | 0.078 | 0.097 |
| M ississippi | 0.052 | 0.064 | 0.036 |
| M issouri | 0.046 | 0.058 | 0.052 |
| Montana | 0.090 | 0.070 | 0.059 |
| N ebraska | 0.137 | 0.069 | 0.045 |
| N evada | 0.000 | 0.000 | 0.005 |
| N ew Hampshire | 0.113 | 0.075 | 0.052 |
| N ew Jersey | 0.060 | 0.060 | 0.028 |
| N ew M exico | 0.113 | 0.058 | 0.035 |
| N ew York | 0.030 | 0.034 | 0.026 |
| $N$ orth Carolina | 0.050 | 0.061 | 0.040 |
| N orth Dakota | 0.049 | 0.064 | 0.035 |
| Ohio | 0.031 | 0.036 | 0.033 |
| O klahoma | 0.066 | 0.100 | 0.054 |
| Oregon | 0.063 | 0.061 | 0.031 |
| Pennsylvania | 0.049 | 0.054 | 0.049 |
| Rhode Island | 0.043 | 0.023 | 0.027 |
| South C arolina | 0.020 | 0.061 | 0.010 |
| South Dakota | 0.058 | 0.105 | 0.043 |
| Tennessee | 0.039 | 0.019 | 0.044 |
| Texas | 0.026 | 0.029 | 0.017 |
| $U$ tah | 0.084 | 0.069 | 0.025 |
| V ermont | 0.134 | 0.067 | 0.076 |
| $V$ irginia | 0.070 | 0.075 | 0.085 |
| W ashington | 0.110 | 0.061 | 0.058 |
| W est Virginia | 0.000 | 0.000 | 0.002 |
| W isconsin | 0.048 | 0.035 | 0.033 |
| W yoming | 0.076 | 0.099 | 0.037 |

Table B-60. Standard errors for average number of years of social science required for high school graduation in school districts with 4-year programs, by state: 1987-88 to 1993-94

|  |  | School Y ear |  |
| :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 |
| State | N umber of $Y$ ears | N umber of $Y$ ears | $N$ umber of $Y$ ears |
| 50 States and D.C. | 0.013 | 0.014 | 0.010 |
| A labama | 0.050 | 0.034 | 0.025 |
| A laska | 0.050 | 0.163 | 0.029 |
| A rizona | 0.121 | 0.067 | 0.097 |
| A rkansas | 0.047 | 0.082 | 0.032 |
| California | 0.061 | 0.101 | 0.100 |
| Colorado | 0.077 | 0.048 | 0.071 |
| Connecticut | 0.066 | 0.028 | 0.036 |
| Delaware | 0.000 | 0.000 | 0.003 |
| District of Columbia | 0.000 | 0.000 | 0.000 |
| Florida | 0.027 | 0.041 | 0.038 |
| G eorgia | 0.052 | 0.077 | 0.062 |
| Hawaii | 0.000 | 0.000 | 0.000 |
| Idaho | 0.063 | 0.105 | 0.060 |
| Illinois | 0.041 | 0.059 | 0.081 |
| Indiana | 0.056 | 0.073 | 0.047 |
| Iowa | 0.069 | 0.072 | 0.039 |
| Kansas | 0.049 | 0.040 | 0.053 |
| Kentucky | 0.049 | 0.063 | 0.043 |
| Louisiana | 0.079 | 0.063 | 0.000 |
| $M$ aine | 0.094 | 0.117 | 0.050 |
| $M$ aryland | 0.055 | 0.000 | 0.005 |
| M assachusetts | 0.085 | 0.099 | 0.059 |
| M ichigan | 0.055 | 0.095 | 0.055 |
| M innesota | 0.092 | 0.117 | 0.084 |
| M ississippi | 0.057 | 0.055 | 0.036 |
| M issouri | 0.063 | 0.046 | 0.056 |
| M ontana | 0.059 | 0.096 | 0.063 |
| N ebraska | 0.154 | 0.078 | 0.042 |
| $N$ evada | 0.000 | 0.000 | 0.008 |
| N ew Hampshire | 0.094 | 0.082 | 0.048 |
| N ew Jersey | 0.055 | 0.071 | 0.066 |
| N ew M exico | 0.115 | 0.092 | 0.023 |
| N ew York | 0.032 | 0.012 | 0.014 |
| N orth Carolina | 0.054 | 0.066 | 0.038 |
| N orth Dakota | 0.065 | 0.036 | 0.031 |
| Ohio | 0.037 | 0.059 | 0.060 |
| O klahoma | 0.071 | 0.112 | 0.057 |
| Oregon | 0.064 | 0.066 | 0.051 |
| Pennsylvania | 0.040 | 0.067 | 0.039 |
| R hode Island | 0.040 | 0.047 | 0.026 |
| South Carolina | 0.050 | 0.066 | 0.040 |
| South Dakota | 0.054 | 0.064 | 0.035 |
| Tennessee | 0.079 | 0.046 | 0.046 |
| Texas | 0.036 | 0.039 | 0.034 |
| U tah | 0.002 | 0.058 | 0.048 |
| $\checkmark$ ermont | 0.148 | 0.071 | 0.103 |
| Virginia | 0.076 | 0.095 | 0.039 |
| W ashington | 0.084 | 0.101 | 0.069 |
| W est Virginia | 0.000 | 0.000 | 0.001 |
| W isconsin | 0.084 | 0.052 | 0.044 |
| W yoming | 0.076 | 0.116 | 0.062 |

Table B-61. Standard errors for percentage of school districts with a student test performance reporting policy, by state: 1993-94

| State | Percent of Districts |
| :---: | :---: |
| 50 States and D.C. | 0.69 |
| A labama <br> A laska <br> A rizona <br> A rkansas <br> California | $\begin{aligned} & 1.74 \\ & 0.04 \\ & 2.12 \\ & 3.42 \\ & 1.69 \end{aligned}$ |
| Colorado <br> Connecticut <br> Delaware <br> District of Columbia <br> Florida | $\begin{aligned} & 1.29 \\ & 2.56 \\ & 0.25 \\ & 0.00 \\ & 0.00 \end{aligned}$ |
| Georgia <br> Hawaii <br> Idaho <br> Illinois <br> Indiana | $\begin{aligned} & 1.07 \\ & 0.00 \\ & 2.61 \\ & 2.60 \\ & 2.33 \end{aligned}$ |
| Iowa <br> Kansas <br> Kentucky <br> Louisiana <br> Maine | $\begin{aligned} & 3.85 \\ & 4.70 \\ & 0.63 \\ & 2.63 \\ & 3.16 \end{aligned}$ |
| M aryland M assachusetts Michigan Minnesota M ississippi | $\begin{aligned} & 2.18 \\ & 3.44 \\ & 1.67 \\ & 3.55 \\ & 1.66 \end{aligned}$ |
| Missouri <br> Montana <br> Nebraska <br> Nevada <br> New Hampshire | $\begin{aligned} & 6.46 \\ & 4.99 \\ & 9.37 \\ & 0.09 \\ & 5.03 \end{aligned}$ |
| N ew Jersey <br> New M exico <br> New York <br> N orth C arolina <br> N orth Dakota | $\begin{aligned} & 0.69 \\ & 1.18 \\ & 1.95 \\ & 0.78 \\ & 3.66 \end{aligned}$ |
| Ohio <br> Oklahoma <br> O regon <br> Pennsylvania <br> Rhode Island | $\begin{aligned} & 2.73 \\ & 2.53 \\ & 5.43 \\ & 4.02 \\ & 6.53 \end{aligned}$ |
| South C arolina <br> South Dakota <br> Tennessee <br> Texas <br> Utah | $\begin{aligned} & 1.97 \\ & 2.30 \\ & 2.31 \\ & 0.70 \\ & 0.01 \end{aligned}$ |
| V ermont <br> Virginia <br> W ashington <br> W est Virginia <br> W isconsin <br> W yoming | $\begin{array}{r} 4.54 \\ 7.14 \\ 11.92 \\ 0.05 \\ 1.98 \\ 1.95 \\ \hline \end{array}$ |

SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Questionnaire).

Table B-62. Standard errors for percentage of school districts with choice by type of choice program, by state: 1993-94

|  |  |  |  | Interdistrict C hoice |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| District | A ny Choice | M agnet | Dist. O pen | T ransfers O utside of | Transfers into |
| C haracteristic | Program | School | Enrollment | District | District |
| 50 States and D.C. | 1.049 | 0.505 | 0.792 | 1.075 | 0.916 |
| A labama | 2.744 | 0.957 | 0.980 | 2.819 | 1.945 |
| A laska | 4.326 | 3.990 | 4.031 | 4.341 | 4.038 |
| A rizona | 4.971 | 11.045 | 10.153 | 5.642 | 5.522 |
| A rkansas | 4.076 | 1.526 | 1.689 | 4.081 | 3.208 |
| California | 8.337 | 1.478 | 7.683 | 8.565 | 6.931 |
| Colorado | 7.160 | 3.120 | 5.165 | 6.507 | 6.591 |
| Connecticut | 3.337 | 3.086 | 1.835 | 2.689 | 1.894 |
| Delaware | 0.252 | 0.126 | 0.126 | 0.126 | 0.252 |
| District of C olumbia ${ }^{\text {a }}$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Florida | 2.739 | 1.747 | 2.759 | 2.671 | 2.671 |
| G eorgia | 3.952 | 0.577 | 2.625 | 4.092 | 3.607 |
| H awaii ${ }^{\text {a }}$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Idaho | 2.690 | 3.114 | 3.519 | 3.531 | 2.857 |
| Illinois | 2.173 | 0.878 | 1.212 | 1.522 | 0.842 |
| Indiana | 1.220 | 0.072 | 1.225 | 0.692 | 0.734 |
| Iowa | 3.284 | 1.632 | 2.529 | 3.365 | 3.461 |
| Kansas | 4.668 | 2.614 | 2.961 | 4.609 | 4.690 |
| Kentucky | 4.183 | 1.998 | 2.222 | 4.184 | 4.094 |
| Louisiana | 1.497 | 1.131 | 1.156 | 0.119 | 0.198 |
| $M$ aine | 1.608 | -- | 0.946 | 1.025 | 0.623 |
| M aryland | 1.271 | 0.331 | -- | 1.100 | 1.100 |
| M assachusetts | 4.965 | 0.614 | 2.118 | 4.996 | 3.072 |
| M ichigan | 8.458 | 1.456 | 3.822 | 9.503 | 2.648 |
| M innesota | 2.409 | 3.788 | 3.767 | 2.409 | 3.396 |
| M ississippi | 1.513 | 0.709 | 0.837 | 1.376 | 1.457 |
| M issouri | 2.907 | 1.744 | 2.023 | 2.706 | 2.010 |
| M ontana | 4.834 | 3.433 | 3.667 | 5.000 | 4.603 |
| N ebraska | 6.560 | 5.699 | 5.539 | 8.163 | 9.394 |
| N evada | 0.261 | 0.174 | -- | -- | 0.087 |
| N ew Hampshire | 1.650 | -- | 0.884 | 1.454 | -- |
| N ew Jersey | 2.869 | 2.855 | 2.825 | 2.277 | 2.855 |
| N ew M exico | 5.465 | 1.411 | 4.227 | 3.753 | 4.731 |
| N ew York | 3.114 | 1.318 | 1.836 | 2.591 | 3.045 |
| N orth Carolina | 3.536 | 1.793 | 3.172 | 3.391 | 3.543 |
| N orth Dakota | 3.988 | -- | 0.609 | 3.538 | 3.197 |
| Ohio | 3.974 | 3.015 | 4.175 | 4.063 | 4.330 |
| O klahoma | 3.858 | 1.695 | 1.675 | 3.744 | 3.778 |
| Oregon | 5.927 | 1.168 | 2.820 | 5.802 | 3.685 |
| Pennsylvania | 2.873 | 1.845 | 2.597 | 2.800 | 2.598 |
| Rhode Island | 1.150 | 0.035 | 1.083 | 1.127 | 0.035 |
| South Carolina | 1.426 | 1.150 | 0.004 | 0.896 | 0.895 |
| South Dakota | 1.863 | 1.152 | 1.272 | 1.153 | 1.279 |
| Tennessee | 4.959 | 2.829 | 4.466 | 5.403 | 5.173 |
| Texas | 3.374 | 1.601 | 1.532 | 3.183 | 3.233 |
| U tah | 3.665 | 0.086 | 2.559 | 3.997 | 3.994 |
| $V$ ermont | 4.732 | -- | 0.590 | 4.731 | 2.051 |
| Virginia | 3.273 | 2.667 | 2.267 | 2.287 | 2.888 |
| W ashington | 11.643 | 9.928 | 9.261 | 10.151 | 11.047 |
| W est Virginia | 0.296 | 0.067 | 0.279 | 0.284 | 0.282 |
| W isconsin | 0.998 | 0.578 | 0.472 | 0.711 | 0.677 |
| W yoming | 2.669 | 2.444 | 2.571 | 2.704 | 2.662 |

-- T oo few cases for a reliable estimate.
a) The District of Columbia and H awaii each have only one school district.

SO U RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Survey: 1993-94 (Teacher Demand and Shortage Questionnaire).

## Appendix C Technical $N$ otes

The Schools and Staffing Survey (SA SS), an integrated survey of A merican schools, school districts, principals, teachers, and student records, is funded by the N ational C enter for Education Statistics (N CES) of the U.S. Department of Education. First conducted during the 1987-88 school year, SA SS is designed to provide periodic data on public and private schools in the U nited States. Since the 1990-91 school year, SA SS has al so included Indian schools supported by the Bureau of Indian A ffairs, U.S. Department of the Interior. M ajor categories of data collected in SA SS include the characteristics of schools and principals, school programs and policies, and the opinions and attitudes of principals about policies and working conditions.

The analytical power of the data is enhanced by the ability to link survey data for individual local education agencies (LEA s), schools, principals, and teachers. The use of comparable questions in each round of SA SS makes it possible to monitor changes in the nation's educational system. The first SA SS was administered during the 1987-88 school year, with a teacher follow-up survey conducted during 1988-89. The two subsequent SA SS administrations were at three-year intervals (1990-91 and 1993-94). The next SA SS round is scheduled for 1999-2000. Subsequent administrations are planned for five-year intervals.

The 1993-94 SA SS consisted of separate surveys administered simultaneously to linked samples of respondents. ${ }^{1}$ These instruments included:

- T eacher Demand and Shortage Q uestionnaire for Public School Districts (LEA s), which collected information on student enrollment and district programs and policies from public school districts;
- Public, Private, and Indian School Principal Q uestionnaires, which collected information on principals' demographic characteristics, education, experiences, compensation, and perceptions of school problems;
- Public, Private, and Indian School Q uestionnaires, which collected information on school programs and policies, enrollment by grade, student demographic characteristics, and measures of school type; ${ }^{2}$
${ }^{1}$ Since 1987, N C ES has published several reports that include these instruments (e.g., N C ES Report 94674, SA SS and PSS Q uestionnaires, 1993-94). C opies of the questionnaires may be obtained by writing to NC ES Education Surveys Program at the address given on the backside of the title page.
${ }^{2}$ For instrument development purposes, Indian schools were treated anal ogously to private schools, which do not typically operate under a district-like administrative structure. So, these instruments al so contained several items on personnel policies and administrative practices that were included in the
- Public, Private, and Indian School T eacher Q uestionnaires, which collected information on teachers' education and training, teaching assignments, experience, certification, perceptions and attitudes about teaching, and workplace conditions;
- Student Records Q uestionnaire, which collected student records data from a subsample of students from surveyed schools on demographic information, current enrollment status, educational activities, support services received, and student performance measures (e.g., GPA ); and
- T eacher Follow-up Survey, which surveyed a sample of teachers one year after the SA SS administration, oversampling those who have left the profession, and collected data on activities and plans, attitudes about teaching, and job satisfaction.

The analyses for this report uses only the T eacher Demand and Shortage Q uestionnaire for Public School Districts. ${ }^{3}$

## Overview of the Design of SASS

SA SS continues to be the largest and most thorough national integrated survey of districts, schools, principals, and teachers ever undertaken in this country. The target populations for the SA SS surveys include elementary and secondary schools, principals and classroom teachers in these schools, former teachers, and the LEA s that are responsible for administering the public schools. The 1993-94 sample consisted of 9,956 public schools and 3,315 private schools.

## Evolution of the SASS Design

The first administration of SA SS in 1987-88 integrated three existing N CES survey programs: the Teacher Demand and Shortage Survey, the Public and Private School Surveys, and the T eacher Surveys. The 1987-88 SA SS included a public school sample of 9,317 schools selected from the Q uality Education Data (QED) file of public schools. The private school sample included 3,513 schools selected primarily from the Q ED file of private schools supplemented with private school association lists and targeted area samples from telephone directories.

Since that first administration, N CES has implemented a number of changes in the survey design and context to improve study estimates and to better reflect changes in the educational environment. Some of the most important changes that relate to this report are highlighted below: ${ }^{4}$

T eacher Demand and Shortage Q uestionnaire for Public School Districts.
${ }^{3} \mathrm{~A}$ Iso referred to as the T eacher Demand and Shortage Surveys or TDS Surveys.
${ }^{4}$ A dditional information on changes in SA SS design can be found in A bramson, R., C ole, C., Jackson, B., Parmer, R., and Kaufman, S. (1996). 1993-94 Schools and Staffing Survey: Sample D esign and Estimation (Technical Report N CES 96-089). W ashington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement, or Jabine,

- Beginning with the 1990-91 SA SS, the sampling frame for public schools was N CES C ommon C ore of Data (CCD), an annual census of LEA sand schools. For the 199091 SA SS, for public schools, the sampling frame was the 1988-89 C C ; for private schools, the sampling frame was N C ES 1989-90 Private School U niverse Survey, augmented with state lists and private school association lists. The frame for the 1993-94 SA SS for public schools was the 1991-92 CCD; for private schools, the frame was the augmented 1990-91 Private School U niverse Survey.

N otably for public schools, the QED and CCD data sources apply slightly different definitions of the school unit. The QED file defined schools in terms of their physical location; the CCD file used for subsequent SA SS surveys described schools as "administrative units with principals." Thus, in instances where multiple schools share a single campus, the estimated number of schools increases using the CCD definition.

- Since 1987-88, a number of revisions to the T eacher Demand and Shortage Surveys have been implemented. Q uestion formats and item wordings have changed since 1987-88. W e do not attempt to describe these changes here.


## Sample Selection

The initial sampling units for SA SS were schools. ${ }^{5}$ The sampling structure was designed to provide separate data for public and private schools, with detail by state for the public sector and by private school association for the private sector. A fter schools were selected, each public and private school in the sample was sent a letter requesting that school personnel provide a list of all teachers in the school. The returned lists, supplemented by telephone follow-up, served as the sampling frame for the teacher survey. The same school sample was used for the public and private school principal survey. Each LEA that administered one or more of the sample schools in the public sector became part of the sample for the $T$ eacher D emand and Shortage Q uestionnaire.

Selection of schools. Since the 1990-91 SA SS, the public school sampling frame has been the C ommon C ore of Data (CCD) file. The CCD is based on census data collected annually by NCES from state education agencies and is believed to be the most complete list of public schools available. The frame includes regular public schools, military base schools operated by the Department of Defense, Bureau of Indian A ffairs (BIA ) schools, and nonregular schools such as special education, vocational, and alternative schools. The public school sampling frame for the 1987-88 SA SS was the school file developed by QED.

Selection of local education agencies. A II LEA s that had at least one school selected for the school sample were included in the LEA sample for the T DS Surveys. Each Bureau of Indian A ffairs and Department of D efense school was defined to be an LEA. Since some LEA s do not operate schools, but hire teachers who teach in schools for other LEA s, samples of LEA s without eligible schools were also selected. LEA sin this sample were checked to determine if
T.B. (1994). Q uality Profile for SA SS: A spects of the Q uality of D ata in the Schools and Staffing Surveys (SA SS) (N CES 94-340). W ashington, DC: U.S. Department of Education, N ational C enter for Education Statistics, O ffice of Educational Research and Improvement.
${ }^{5}$ For a detailed description of the sample design for the 1993-94 sample design for the 1993-94 SA SS, see A bramson et al., (1996). 1993-94 Schools and Staffing Survey: Sample D esign and Estimation.
they were actually in scope (i.e., were an operating public school agency that reported hiring teachers). A II LEA s in Delaware, N evada, and W est V irginia were included to reduce high standard errors in these states.

In 1987-88, a sample of 70 LEA sthat did not contain eligible schools was selected directly. Only 8 of these 70 were actually in-scope (i.e., reported hiring teachers). The total LEA sample for the 1987-88 school year was 5,592 .

For the 1990-91 SA SS, a sample of 135 LEA s without eligible schools was selected. Only 14 of the 135 were actually in scope (i.e., were an operating public school agency that reported hiring teachers). The total LEA sample was 5,515.

In 1993-94, a sample of 109 LEA s without eligible schools was selected. O nly 5 of the 109 were actually in scope (i.e., were an operating public school agency that reported hiring teachers). The total LEA sample was 5,464 .

## Survey Operations Procedures

Survey operations for the 1987-88, 1990-91, and 1993-94 SA SS, including sample selection, data collection, and data processing, were carried out under an interagency agreement by the U.S. Bureau of the Census, according to specifications provided by NCES. At the start of each school year, introductory letters containing a T eacher Listing Sheet were mailed to sample schools. These T eacher Listing Sheets, designed to enumerate the instructional staff at each school, served as the sampling frame for the teacher sample. Shortly after the listing sheets were distributed, School Principal Questionnaires were sent to the principals of the selected public and private schools. A t this time, T eacher D emand and Shortage Q uestionnaires were mailed to the local education agencies. School T eacher Q uestionnaires for teachers selected from lists provided by the sample public and private schools were al so mailed at this time. Completed questionnaires were returned by mail to the C ensus Bureau. Telephone follow-up interviews of nonrespondents to the questionnaires were conducted by Census Bureau field representatives.

## Weighting

For the T eacher Demand and Shortage Questionnaires, weights were developed to produce national and state estimates for local education agencies. ${ }^{6}$ The basic weights were the inverse of the probability of selection. The weights were also adjusted for nonresponse and to ensure that sample totals (based on responding, nonresponding, and out-of-scope cases) were comparable to the frame totals.

[^27]
## Standard Errors

The estimates presented in the text and tables of this report are based on samples and are subject to sampling variability. In the 1987-88 and 1990-91 SA SS, standard errors were estimated using a bal anced repeated replications procedure that incorporated the design features of this complex sample survey. ${ }^{7}$ In the 1993-94 SA SS, a bootstrap procedure was employed to estimate standard errors. The standard errors indicate the accuracy of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard error units below to 1.96 standard error units above a particular statistic would include the true population value in approximately 95 percent of the cases. $N$ ote, however, that the standard errors do not take into account the effects of biases due to item nonresponse, measurement error, data processing error, or other possible systematic errors. Standard errors for the estimates presented in the text and tables of this report are included in appendix $B$.

## Accuracy of Estimates

Some districts did not return questionnaires, which resulted in missing data. These missing data, however, should have relatively little impact on the estimates of percentages, means, and counts that this report presents because of nonresponse adjustment strategies employed by SASS. ${ }^{8}$

The accuracy of any statistic is determined by the joint effects of sampling and nonsampling errors. Both types of error affect the estimates presented in this report. ${ }^{9}$

## Nonsampling Error

Both universe and sample surveys are subject to nonsampling errors. T wo types of nonsampling errors occur - nonobservation error and measurement error-and both are extremely difficult to estimate.

N onobservation error may be due to noncoverage, which occurs when members of the population of interest are excluded from the sampling frame and, therefore, are not included in the survey sample. N onobservation error also occurs when sampled units refuse to answer some or all of the survey questions. These types of error are referred to as questionnaire nonresponse (where the entire questionnaire is missing) and item nonresponse (where only some items of the questionnaire are missing). Sample weight adjustment techniques were used to

[^28]compensate for questionnaire nonresponse; imputation procedures were used to compensate for item nonresponse in SA SS ${ }^{10}$.

M easurement error occurs when mistakes are made when data are edited, coded, or entered into computers (processing errors), when the responses that subjects provide differ from the "true" responses (response errors), and when measurement instruments fail to measure the characteristics they are intended to measure. Sources of response errors include differences in the ways that respondents interpret questions, faulty respondent memory, and mistakes respondents make when recording their answers. Because estimating the magnitude of these various types of nonsampling errors would require special experiments or access to independent data, information on the scope of these errors is seldom available.

## Sampling Error

Sampling error occurs when members of a population are selected (sampled), and only sample members respond to survey questions. Estimates that are based on sample responses will differ somewhat from the data that would have been obtained if a complete census of the relevant population had been taken using the same survey instruments, instructions, and procedures. The estimated standard error of a statistic is a measure of the variation due to sampling and can be used to examine the precision obtained in a particular sample. In the 1987-88 and 1990-91 SA SS, all estimates and standard errors were calculated using a balanced repeated replications variance estimation program developed to calculate standard errors based upon complex survey designs. In the 1993-94 SA SS, a bootstrap variance estimation program was used to calculate standard errors based upon complex survey designs.

## Comparability of Estimates

A sa result of both nonsampling and sampling error, estimates presented in this report will differ from those prepared using other data files. For example, estimates of the numbers of school districts differ from those provided in summaries of the C ommon C ore of Data (CCD) Survey, a census of the universe of school districts. O verall, estimates of the numbers of school districts $(14,987)$ produced from the Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire) differ from the CCD estimate $(15,173)$ for 1991-92 by about 1 percent. H owever, estimates of the numbers of districts in a specific state can differ by up to 17 percent. There are many possible reasons for these discrepancies. For example, the Schools and Staffing Surveys and the CC D define "school districts" slightly differently. Districts that do not employ any teachers are considered to be districts and included in the CCD but are excluded from the Schools and Staffing Surveys' sampling frame. Furthermore, the sampling

[^29]frames for the Schools and Staffing Surveys were developed from listings of schools that would be approximately two years old at the time of data collection. ${ }^{11}$

A s a result of nonsampling error, the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Questionnaire) cannot be used to produce estimates of the number of school districts that existed in 1987-88 that are comparable with those produced in subsequent years. The 1987-88 public school sampling frame was the QED (Quality Education Data) data file; for subsequent SA SS, the public school sampling frame was the C ommon C ore of D ata (CCD) Survey. There were slight differences in the definition of schools in these sampling frames. M ore importantly, 275 N ebraska school districts, each of which was comprised of a single elementary school, were excluded from the 1987-88 frame. A ccordingly, estimates of the numbers of school districts employing teachers in N ebraska produced from Schools and Staffing Surveys: 1987-88 and 1990-91 (Teacher Demand and Shortage Questionnaires) were 585 in 1987-88 and 811 in 1990-91. A ccording to the CCD, there were 867 regular school districts in N ebraska in 1987-88 and 798 in 1990-91.

Due to sampling error, estimates may appear to differ from those produced from other SA SS surveys. The estimated number of students in grades K-12 produced from the Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire) is 42,302,143. The same estimate produced from the Schools and Staffing Survey: 1993-94 (Public School $Q$ uestionnaire) is $41,621,660$. However, these estimates are not statistically significantly different from each other.

Sampling error must be considered when comparing numbers within report tables. In other words, apparent differences may not be statistically significant, particularly when estimates are based on small samples. In order to determine whether apparent differences are statistically significant, statistical procedures (discussed subsequently) must be employed.

## Choice Programs

C hoice programs, with respect to the data summarized in this report, refer to programs which "allow public school students to enroll in another school or district outside their attendance area without justification based on individual special needs." The types of programs listed in the Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire) as choice programs included magnet schools, enrollment in any school in the district, enrollment in schools in other districts, and enrollment of students from other districts in the state. These types of programs were not defined and could have been interpreted by respondents in different ways. These categories also are not mutually exclusive. For example, there are different types of magnet schools which can be included within any of these choice programs.

[^30]
## Response Rates and Imputation

The final weighted questionnaire response rates are reported in table C. 1 for the various SA SS years. T able C. 2 provides the item-response rates for the SA SS instruments by year. V alues were imputed for items with missing data by (1) using data from other items on the questionnaire or a related component of the SA SS (e.g., a school record to impute district data); (2) extracting data from the sample frame such as the CCD; or (3) extracting data from a respondent with similar characteristics. ${ }^{12}$

Table C.1- Weighted and unweighted percent response rates by SASS instrument: 1987-88, 1990-91, and 1993-94

|  | U nweighted |  |  |  | W eighted |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Questionnaire | $1987-88$ | $1990-91$ | $1993-94$ |  | $1987-88$ | $1990-91$ | $1993-94$ |
| Teacher demand and <br> shortage for public <br> school districts | 89.4 | 93.7 | 93.1 |  | 90.8 | 93.5 | 93.9 |
| Public school principal | 94.2 | 96.9 | 96.6 |  | 94.4 | 96.7 | 96.6 |
| Private school principal | 81.2 | 91.1 | 90.3 |  | 79.3 | 90.0 | 87.6 |
| Public school | 91.9 | 95.0 | 92.0 |  | 91.9 | 95.3 | 92.3 |
| Private school | 79.6 | 85.1 | 84.1 |  | 78.6 | 83.9 | 83.2 |
| Public school teacher* | 86.5 | 91.5 | 88.9 |  | 86.4 | 90.3 | 88.2 |
| Private school teacher* | 77.0 | 83.1 | 80.6 |  | 79.1 | 84.3 | 80.2 |

*T he response rates for public and private school teachers exclude the schools that did not provide teacher lists. The overall or effective response rates for public school teachers, including th ose that could not be sampled from nonresponding schools, were 83 percent, 86 percent, and 85 percent, respectively, for the 1987-88 through 1993-94 SA SS. O verall response rates for private school teachers were 70 percent, 75 percent, and 73 percent for the SA SS administrations.

## Statistical Procedures

The comparisons in the text were tested for statistical significance to ensure that the differences are larger than might be expected from sampling variation. These statistical tests were based on Student'st statistic. Generally, whether a difference is considered significant is determined by calculating a t value for the difference between a pair of means or percentages, and comparing this value to published tables of values at certain critical levels, called al pha levels. The alpha level is an a priori statement of the probability of inferring that a difference exists when, in fact, it does not (i.e., the observed difference results from sample variation rather than a "true" difference between two means).

[^31]In order to make proper inferences and interpretations from the statistics, several points must be kept in mind. First, comparisons resulting in large t statistics may appear to merit special note. H owever, this is not al ways the case because the size of the tatistic depends not only on the observed difference in means or percentages being compared, but also on the standard error of the difference. Thus, a small difference between two groups with a much smaller standard error could result in a large t statistic, but this small difference is not necessarily noteworthy. Second, when multiple statistical comparisons are made on the same data, it becomes increasingly likely that an indication of a population difference is erroneous. Even when there is no difference in the population, at an alphalevel of .05 , there is still a 5 percent chance of concluding that an observed $t$ value representing one comparison in the sample is large enough to be statistically significant. A sthe number of comparisons increases, so does the risk of making such an error in inference.
Table C.2—Unweighted item-response rates for SASS questionnaires, by year

| Questionnaire | Range of item-response rates |  |  | Percent of items with response rate $\geq 90$ percent |  |  | Percent of items with a response rate $<75$ percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1987-88 | 1990-91 | 1993-94 | 1987-88 | 1990-91 | 1993-94 | 1987-88 | 1990-91 | 1993-94 |
| Teacher demand and shortage | 40-100\% | 85-100\% | 67-100\% | 74\% | 90\% | 91\% | 12\% | 0\% | 1\% |
| Public school principal | 70-100 | 90-100 | 65-100 | 86 | 100 | 92 | 2 | 0 | 4 |
| Private school principal | 71-100 | 80-100 | 55-100 | 89 | 98 | 90 | 2 | 0 | 6 |
| Public school | 43-100 | 56-100 | 83-100 | 64 | 77 | 83 | 11 | 1 | 0 |
| Private school | 11-100 | 67-100 | 61-100 | 56 | 77 | 77 | 8 | 5 | 3 |
| Public school teacher | 64-100 | 76-100 | 71-100 | 90 | 84 | 91 | 1 | 0 | 0 |
| Private school teacher | 60-100 | 71-100 | 69-100 | 89 | 79 | 89 | 1 | 1 | 1 |

To guard against errors of inference based upon multiple comparisons, the Bonferroni procedure to correct significance tests for multiple contrasts was used. This method corrects the significance (or al pha) level for the total number of contrasts made with a particular classification variable. For each classification variable, there are ( $\mathrm{K} *(\mathrm{~K}-1) / 2$ ) possible contrasts ( or nonredundant pairwise comparisons), where K is the number of categories. For example, region has four categories (i.e., N ortheast, M idwest, W est, and South). W ith K=4, there are $4 *(4-1) / 2$ or 6 possible comparisons among the region categories. The Bonferroni procedure divides the alpha level for a single t test by the number of possible pairwise comparisons in order to provide a new al pha that is corrected for the fact that multiple contrasts are being made.

The formula used to compute the t statistic was as follows:

$$
t=\frac{P_{1}-P_{2}}{\sqrt{s e_{1}^{2}+s e_{2}^{2}}}
$$

where $\mathrm{P}_{1}$ and $\mathrm{P}_{2}$ are the estimates to be compared and $\mathrm{se}_{1}$ and $\mathrm{se}_{2}$ are their corresponding standard errors. This formula is valid only for independent estimates. W hen the estimates were not independent (for example, when comparing the percentages of districts of different sizes), a covariance term was added to the denominator of the t-test formula. Because the actual covariance terms were not known, it was assumed that the estimates were perfectly negatively correlated. C onsequently, $2^{*}\left(\mathrm{se}_{1}{ }^{*} \mathrm{se}_{2}\right)$ was added to $\mathrm{Se}_{1}{ }^{2}+\mathrm{se}_{2}{ }^{2}$ in the t -test formula.

The standard errors were calculated using the replicate weights provided on the SA SS T eacher Demand and Shortage data files.

## Decision Rules for Suppression of Estimates

Estimates based on small samples generally have large standard errors. Estimates based on fewer than 10 districts were always suppressed. This suppression is indicated by a "--" in the tabular presentation of results. Estimates based on between 10 and 29 districts were suppressed if the coefficient of variation ${ }^{13}$ for the estimate was 20 percent or greater. This suppression is al so indicated by a "--" in tables.

H owever, in tables presenting results by state, results for the District of C olumbia and H awaii are each based on a single district, since both the District of C olumbia and H awaii are comprised of a single LEA. A s a single district represents the universe for the District of C olumbia and H awaii, results were not suppressed unless the data item was imputed. This suppression is indicated by a "--".

[^32]
## Variable Definitions

## Public School District

A public school district (or LEA) was defined as a government agency administratively responsible for providing public elementary and/or secondary instruction and educational support services. The agency or administrative unit was required to operate under a public board of education. Districts that did not operate schools but hired teachers for other districts were included. A district was considered out of scope if it did not employ elementary or secondary teachers of any kind.

## Newly Hired Teachers

N ewly hired teachers are teachers employed by the school district in the current (survey) school year, but not the previous year. Besides new graduates, newly hired teachers include teachers returning from unpaid leaves of absence of one or more school year and exclude substitute teachers. A Iso included are teachers employed by the school district in the current school year who were employed as teachers in other districts or in private schools during the previous year.

## Metropolitan (Metro) Status Type

In this report, the variable, M etropolitan (M etro) Status Type, is a categorical variable assigned to every district relative to its metropolitan status. The three categories of M etro Status Type are labeled as follows:
(1) U rban area, primarily inside central city;
(2) U rban area, primarily outside central city; and
(3) N onurban area.

These categories correspond to the three categories of the M etropolitan Status C ode (M SC) on the School District (T eacher Demand and Shortage) file of NCES's Schools and Staffing Survey (SA SS), which, in turn correspond to the three categories of the M etropolitan Status C ode on the School District U niverse file of N C ES's C ommon C ore of Data (CCD). CCD files were used as the sampling frames for the 1990-91 and 1993-94 SA SSs. The 1991-92 CCD was used as the sampling frame for the 1993-94 SA SS and the 1988-89 C CD was used as the sampling frame for the 1990-91 SA SS. Therefore, metro status reflects the district's metro status at the time the CCD used for creating the sampling frame was administered.

Since the CCD was not used as the sampling frame for the Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire), there are no metro status codes included in the Schools and Staffing Survey" 1987-88 (Teacher Demand and Shortage Q uestionnaire) data files. A ttempts were made to link Schools and Staffing Survey: 1987-88 (Teacher Demand and Shortage Q uestionnaire) districts with the CCD data file (1985-86 CCD) that could have been used for sample frame construction. For a variety of technical reasons, only 91 percent of the districts could be linked with the CCD. A fter imputing missing metro status data, it was discovered that CCD data quality efforts in the 1985-86 to 1988-89 period resulted in the reclassification of metro status for hundreds of districts. This resulted in
improved data, but compromised the longitudinal comparability of subsequent metro status data with earlier data. A ccordingly, Schools and Staffing Survey: 1987-88 (T eacher Demand and Shortage Q uestionnaire) data are not summarized by metro status.

The CCD definition of M etropolitan Status C ode is as follows: M etropolitan Status C ode (M SC) is the classification of an education agency's service area relative to a $M$ etropolitan Statistical A rea (M SA ). The agency's classifications are:
(1) Primarily serves a central city of an $M S A$;
(2) Serves an M SA, but not primarily its central city; or
(3) D oes not serve an M SA.

A ssignment of a code number to an agency is made by state agency personnel in each state, subject to consultation by CCD survey staff at NCES and the C ensus Bureau. There are two questions to be answered in making the assignment. The first question is, "Is the agency in an M SA county (or smaller area in N ew England)?" This is determined by the location of the administrative office given as the address of the education agency. If the agency is not in an M SA county, it is given a code of "3." The second question is, "If the agency is in an M SA, does it primarily serve a central city of the M SA or does it not?" If it primarily serves a central city of the M SA, it is given a code of "1." If it does not, it is given a code of " 2. ."

W hile it is relatively easy for CCD staff to determine whether or not an agency is in an M SA county or locality by checking with periodic publications produced by $O M B$, it is not easy to make a judgment about whether or not an agency "primarily serves" a central city of an M SA. This judgment is left to the respondent.

## Region

Four geographic regions corresponding to areas defined by the U.S. Bureau of the C ensus were employed in the report. The areas and states are defined below.

- N ortheast: C onnecticut, M aine, M assachusetts, N ew H ampshire, N ew Y ork, N ew Jersey, Pennsylvania, Rhode Island, and V ermont;
- South: A labama, A rkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, M aryland, M ississippi, N orth C arolina, O klahoma, South C arolina, T ennessee, Texas, V irginia, W est V irginia, and the District of C olumbia;
- M idwest: Illinois, Indiana, Iowa, K ansas, M ichigan, M innesota, M issouri, N ebraska, N orth Dakota, O hio, South Dakota, and W isconsin;
- W est: A laska, A rizona, C alifornia, C olorado, H awaii, Idaho, M ontana, N evada, N ew M exico, O regon, U tah, W ashington, and W yoming.


## District Size

U nder 1,000, 1,000 to 9,999, and 10,000 and more. This three category measure of district size is based on the district head count estimates reported in the T eacher Demand and Shortage Questionnaire for Public School Districts.

## Minority Students

U nder 10 percent, 10 percent to under 50 percent, 50 percent and more. Based on the student demographic information contained in the T eacher Demand and Shortage Questionnaires, the variable is the sum of all racial-ethnic groups other than white non-H ispanic calculated as a percentage of students of all race-ethnic groups.

## Minority Teachers

$N$ one, more than 0 percent to under 20 percent, 20 percent and more. Based on the teacher demographic information contained in the T eacher Demand and Shortage Q uestionnaires, the variable is the sum of all racial-ethnic groups other than white non-H ispanic calculated as a percentage of teachers of all race-ethnic groups.

## Special Procedures

## Inflation adjustments

In order to compare teachers' salaries in 1990-91 with teachers' salaries in 1993-94, adjustments were made to compensate for inflation. These adjustments converted 1990-91 salary dollars into their equivalent purchasing power in 1993-94. The N ational C enter for Education Statistics has adjusted C onsumer Price Indices (CPI) on a school-year (July through June) basis. ${ }^{14}$ For 1990-91, the adjusted CPI was 133.9; for 1993-94, 146.2. To convert 199091 salaries to their equivalent 1993-94 salaries, the 1990-91 salaries were multiplied by (146.2/133.9 = 1.092).

## Proportions of Districts

Since the unit of response of the T eacher Demand and Shortage Q uestionnaires is the school district, many results are presented in terms of the proportions of districts with specific characteristics. The denominator used in calculating these proportions was the total number of districts, whether or not the district served any K-12 children. It should be noted that several LEA s did not serve any K-12 students. ${ }^{15}$ The numbers of districts (weighted and unweighted) that did not serve any K-12 students are presented in the following table:

[^33]Table C.3-Number of districts with zero K-12 students

| TDS Survey | N umber of districts (unweighted) | N umber of districts (weighted) |
| :--- | :---: | :---: |
| $1987-88$ | 8 | 82 |
| $1990-91$ | 4 | 29 |
| $1993-94$ | 17 | 45 |

The numbers of FTE teachers in these districts ranged from 1-73.7 in 1987-88; 4-240.2 in 1990-91; and 5-325 in 1993-94.

For certain tables and figures, such as the proportion of districts with a student test reporting policy (appendix A , table 44 and figure 6.7), the inclusion of districts without students in the proportion's denominator implicitly suggests that it is possible for such districts to have a student test reporting policy. This is clearly not the case. H owever, to preserve comparability of tables within this report, a common denominator for the calculation of proportions- all districts- was used in this report. A nalytic reports might chose to exclude certain types of districts from their analyses. A ccordingly, their reports of findings from the SA SS T eacher Demand and Shortage Q uestionnaires might differ from those presented in figures and tables in this report. ${ }^{16}$

## Choice of second order relationships presented in appendix tables

A ppendix tables present all first order relationships (that is, means or percentages for districts according to enrollment, proportions of minority students, proportions of minority teachers, region, and metropolitan status). These tables also present one second order relationship, showing how means or percentages vary as a function of two of these characteristics (for example, for different sized districts in the different regions).

Decisions about which second order relationship to present were made on a chapter-by-chapter basis, with the same second order relationships presented for all tables in a chapter. A nalyses were performed to determine the pairs of characteristics for which there were the most significant interactions.

[^34]
## Schools and Staffing Survey (SA SS) D ata Products

## Reports

The Effects of Professionalization on T eachers: A M ulti-Level A nalysis, 1990-91 (N CES 97-069)

The State of Teaching as a Profession, 1990-91 (N C ES 97-104)
Time Spent Teaching C ore A cademic Subjects in Elementary Schools: C omparisons A cross C ommunity School, T eacher, and Student C haracteristics (NCES 97-293)

Student Records Q uestionnaire: School Y ear 1993-94, W ith Special Emphasis on A merican Indians and A laska N ative Students (E.D. Tab, N CES 97-449)

C haracteristics of Stayers, M overs, and Leavers: Results from the T eacher Follow-up Survey, 1994-95 (E.D. Tab, N CES 97-450)

C haracteristics of A merican Indian and A laska N ative Education, Results from the 1993-94 DSDD (NCES 97-451)

Public and Private School Principals In The U nited States: A Statistical Profile, 1987-88 to 1993-94 (N C ES 97-455)

A Profile of A dministration Policies and Practices for Limited English Proficiency Students: Screening M ethods, Teacher T raining, and Program Support, 1993-94 (NCES 97-472)

The Schools and Staffing Survey Recommendation for the Future (NCES 97-596)
Out-of-Field Teaching and Educational Equality (N CES 96-040)
Schools and Staffing in the U nited States: A Statistical Profile: 1993-94 (N CES 96-124)
Private School U niverse Survey, 1993-94 (NCES 96-143)
SA SS by State, 1993-94 Schools and Staffing Survey: Selected State Results (N C ES 96-312)
Comparing K ey Organizational Qualities of A merican Public and Private Secondary Schools (NCES 96-322)

Schools and Staffing in the U nited States: Selected Data for Public and Private Schools, 1993-94 (E.D. Tab, N C ES 95-191)

## Reports (continued)

Private Schools in the U nited States: A Statistical Profile, 1990-91 (N C ES 95-330)
Teacher Supply in the U .S.: Sources of N ewly H ired Teachers in Public and Private Schools, 1988-1991 (N CES 95-348)

C haracteristics of A merican Indian and A laska N ative Education, Results from the 1990-91 SA SS (NCES 95-735)

T eacher Supply, Teacher Q ualifications and Teacher T urnover, A spects of T eacher Supply and Demand in the U.S., 1990-91 (N C ES 95-744)

The Patterns of T eacher C ompensation (N CES 95-829)
C haracteristics of Stayers, M overs, and Leavers: Results from the T eacher Follow-up Survey, 1991-92 (E.D. Tab, N CES 94-337)

SA SS by State (N CES 94-343)
Private School U niverse Survey, 1991-92 (N CES 94-350)
Qualifications of the Public School T eacher W orkforce: 1988 and 1991 (N C ES 94-665)
A merica sT eachers: Profile of a Profession (N C ES 93-025)
Private School U niverse Survey, 1989-90 (N C ES 93-122)
Selected Tables on T eacher Supply and Demand (E.D. Tab, N C ES 93-141)
Schools and Staffing in the U nited States: A Statistical Profile, 1990-91 (N CES 93-146)
Schools and Staffing in the U nited States: Selected Data for Public and Private Schools, 1990-91 (E.D. Tab, N C ES 93-453)

Schools and Staffing in the U nited States: A Statistical Profile, 1987-88 (N C ES 92-120)
C haracteristics of Stayers, M overs, and Leavers: Results from the T eacher Follow-up Survey, 1988-89 (E.D. Tab, N CES 91-128)

## Forthcoming Reports

A merica's Teachers: Profile of a Profession, 1993-94
Job Satisfaction A mong A merica's T eachers: Effects of W orkplace, C onditions, Background C haracteristics, and T eacher C ompensation, 1993-94

## Forthcoming Reports (continued)

Private Schools in the U .S.: A Statistical Profile, 1993-94
Sources of N ewly H ired T eachers in Public and Private Schools, 1988-94

## Issue Briefs

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Programs for A spiring Principals: W ho Participates? (Issue Brief, N CES 97-591)
C redentials and Tests in Teacher Hiring: W hat Do Districts Require? (Issue Brief, N CES 97-592)

A re Limited English Proficient (LEP) Students Being T aught by Teachers with LEP T raining? (Issue Brief, N CES 97-907)

H ow W idespread is Site-Based Decisionmaking in Public Schools? (Issue Brief, NCES 97-908)

Public School Choice Programs, 1993-94: A vailability and Student Participation (Issue Brief, NCES 97-909)

Teachers' Sense of Community: H ow Do Public and Private Schools C ompare? (Issue Brief, NCES 97-910)

A re High School Teachers T eaching C ore Subjects W ithout C ollege M ajors or M inors in Those Subjects? (Issue Brief, N CES 96-839)

Where Do M inority Principals W ork? (Issue Brief, N CES 96-840)
What A cademic Programs are 0 ffered $M$ ost Frequently in Schools Serving A merican Indian and A laska N ative Students? (Issue Brief, N C ES 96-841)

H ow Safe are the Public Schools: W hat Do Teachers Say? (Issue Brief, NCES 96-842)
Extended Day Programs in Elementary and C ombined Schools (Issue Brief, N C ES 96-843)
W hat C riteria are U sed in C onsidering Teacher A pplicants? (Issue Brief, N CES 96-844)
Private School G raduation Requirements (Issue Brief, NC ES 95-145)
H ow M uch Time Do Public and Private School Teachers Spend in Their W ork? (Issue Brief, NCES 95-709)

M igration and A trition of Public and Private School Teachers: 1991-92 (Issue Brief, N CES 95-770)

## Issue Briefs (continued)

Which Types of Schools $H$ ave the $H$ ighest T eacher T urnover? (Issue Brief, N CES 95-778)
Libraries/M edia Centers in Schools: A re There Sufficient Resources? (Issue Brief, N CES 95-779)

W ho Influences Decisionmaking A bout School Curriculum: W hat Do Principals Say? (Issue Brief, N C ES 95-780)

Public and Private School Principals: A re There Too Few W omen? (Issue Brief, NCES 94-192)

Sources of N ewly H ired Teachers in Public and Private Schools, 1988-91 (Issue Brief, N CES 94-481)

W hat are the M ost Serious Problems in Schools? (Issue Brief, N C ES 93-149)
Teacher Salaries-A re They C ompetitive? (Issue Brief, N C ES 93-450)
Teaching and A dministrative W ork Experience of Public School Principals (Issue Brief, NCES 93-452)

Teacher A ttrition and M igration (Issue Brief, N C ES 92-148)

## Video

A mericas T eachers: Profile of a Profession

## Methods

1993-94 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 96-089)

A n Exploratory A nalysis of N onrespondents in the 1990-91 Schools and Staffing Survey (NCES 96-338)

Design Effects and Generalized V ariance Functions for the 1990-91 Schools and Staffing Surveys (SA SS) V olume I--U ser's M anual (N C ES 95-342I)

Design Effects and Generalized V ariance Functions for the 1990-91 Schools and Staffing Surveys (SA SS) V olume II--T echnical Report (NCES 95-340II)

Quality Profile for SA SS: A spects of the Quality of Data in the Schools and Staffing Surveys (Technical Report, NCES 94-340)

1990-91 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 93-449)

## Methods (continued)

M odeling Teacher Supply and Demand, with C ommentary (Research and Development Report, N CES 93-461)

1987-88 Schools and Staffing Survey: Sample Design and Estimation (Technical Report, NCES 91-127)

## CD-ROMs

Schools and Staffing Survey: 1993-94 Electronic C odebook and Public U se Data
Schools and Staffing Survey: 1990-91 Electronic C odebook and Public U se D ata
Schools and Staffing Survey, 1987-88 M icrodata and Documentation

## Questionnaires

SA SS and PSS Q uestionnaires 1993-1994 (N CES 94-674)
SA SS and TFS Q uestionnaires 1990-1991
SA SS and TFS Q uestionnaires 1987-1988

## User's Manuals

1993-94 Schools and Staffing Survey, D ata File U ser's M anual V olume I: Survey Documentation (NCES 96-142)

1993-94 Schools and Staffing Survey, Data File U ser's M anual V olume II: Restricted-U se Codebook (NCES 96-142-II)

1990-91 Schools and Staffing Survey: Data File U ser s M anual V olume I: Survey Documentation (N CES 93-144-I)

1990-91 Schools and Staffing Survey: Data File U ser s M anual V olume II: Restricted-U se codebook (N CES 93-144-II)

1990-91 Schools and Staffing Survey: D ata File U ser sM anual V olume III: Public-U se codebook (N CES 93-144-III)

1990-91 Schools and Staffing Survey: Data File U ser sM anual V olume IV : Bureau of Indian A ffairs (BIA ) Restricted-U se C odebooks: A dministrator, Schools, and T eachers (N CES 93-144-IV)

1991-92 T eacher Follow-up Survey Data File U ser sM anual - Public-U se V ersion (N CES 94-331)

## User's Manuals (continued)

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1993-94 Schools and Staffing Survey, Data File U ser's M anual V olume V: Restricted-U se C odebook Students' Records

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H eaven or Hell? The Teaching Environment of Beginning T eachers
U sing O pportunity to Learn Items in Elementary and Secondary N ational Surveys
C haracteristics of Public and Private School Teachers
C haracteristics of $M$ athematics and Science $T$ eachers
Teacher Training, Certification and A ssignment
Teacher Turnover: Patterns of Entry To and Exit from Teaching
M oonlighting A mong Public and Private School Teachers
Characteristics of Bilingual Education and English as a Second Language Teachers
Highlights of M inority Data from the Schools and Staffing Survey
T eacher Incentive Research with SA SS
Teacher Salaries: C omparing States A fter A djusting for T eacher Experience and Education
W hat are the C haracteristics of Principals Identified as Effective by Teachers
Schools at Risk: Results of the 1987-88 Schools and Staffing Survey

## Conference Papers (continued)

Destinations of M overs and Leavers: Where Do They Go?
Teacher Salaries: C omparing States A fter A djusting for T eacher Experience and Education
C lassroom Environment and Support of Beginning Teachers: A Test of the "C rucible versus C radle" Theory of T eacher Induction

W hy do T eachers Leave T eaching? Reasons for T eacher A ttrition from the T eacher Followup Survey

## NCES Working Papers Related to SASS

W P 94-01 Schools and Staffing Survey (SA SS). Papers Presented at the M eetings of the A merican Statistical A ssociation

## Section on Survey R esearch M ethods, August 1992

a. "The Schools and Staffing Survey: Research Issues"
b. "The Schools and Staffing Survey: H ow Re-interview M easures D ata Quality"
c. "M ail V ersus T elephone Response in the 1991 Schools and Staffing Surveys"
d. "Questionnaire Research in the Schools and Staffing Survey: A Cognitive A pproach"
e. "Balance H alf-Sample Replication with A ggregation U nits"
f. "C haracteristics of N onrespondents in the Schools and Staffing Surveys' School Sample"
g. "Improving Reliability and C omparability on NCES Data on T eachers and Other Education Staff"

## E stablishment Surveys C onference, J une 1993

a. "Sampling Frames at the U nited States National Center for Education Statistics"
b. "M onitoring Data Q uality in Education Surveys"

## Section on Survey R esearch M ethods, August 1993

a. "G eneralization V ariance Functions for the Schools and Staffing Surveys"
b. "A Bootstrap V ariance Estimator for the Schools and Staffing Survey"
c. "A djusting for N onresponse Bias of C orrelated Items U sing Logistic Regression"
d. "C omparisons of School Locale Setting: Self-Reported V ersus A ssigned"
e. "C haracteristics of N onrespondents to the 1990-91 Schools and Staffing Survey"

## Social Statistics Section, August 1993

a. "Implicit M arkets for Teacher Q uality and School A tributes"
b. "W ho Decides? Principals' and Teachers' V iews on Decision-M aking"
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| :--- | :--- |
| W P 94-03 | 1991 Schools and Staffing Survey (SA SS) Reinterview Response <br> Variance Report |
| W P 94-04 | The A ccuracy of Teachers' Self-report on Their Postsecondary <br> Education: Teacher T ranscript Study, Schools and Staffing Survey |
| W P 94-06 | Six Papers on T eachers from the 1990-91 Schools and Staffing Survey |
| O ther Related Surveys |  |

a. "The Results of the 1993 Teacher List V alidation Study (TLVS)"
b. "Designing the T eacher Follow-up Survey (TFS): Issues and Content)"
c. "U nderstanding the Supply of Elementary and Secondary T eachers: The R ole of the School and Staffing Survey and the T eacher Followup Survey"
d. "T eacher Retention/A ttrition: Issues for Research"
e. "Reflections on a SA SS Longitudinal Study"
f. "W hither Didst Thou Go? Retention, Reassignment, M igration, and A ttrition of Special and G eneral Education Teachers in $N$ ational Perspective"

W P 95-01 Schools and Staffing Survey: 1994. Papers Presented at the 1994
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## E stimation Issues in School Surveys

a. "Intersurvey Consistency in School Surveys"
b. "Estimation Issues Related to the Student C omponent of the SA SS"
c. "Properties of the Schools and Staffing Survey's Bootstrap V ariance Estimator
d. "O ptimal Periodicity of a Survey: Sampling Error, Data Deterioration, and C ost

## Response and Coverage Issues in School Surveys

a. "Some Data Issues in School-Based Surveys"
b. "The 1991-92 T eacher Follow-up Survey Reinterview and Extensive Reconciliation"
c. "Improving C overage in a N ational Survey of T eachers"
d. "Improving the C overage of Private Elementary-Secondary Schools"

## E ducation Research U sing the Schools and Staffing Surveys and the $\mathbf{N}$ ational Education Longitudinal Study

a. "A dding V alue to the V alue-A dded Educational Production Function Specification"
b. "T eacher Q ual ity in Public and Private Schools"
c. "T eacher Shortages and T eacher Q uality"
d. "W ork Experience, Local Labor M arkets, and Dropping out of High School"

## NCES Working Papers Related to SASS (continued)

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| :---: | :---: |
| W P 95-03 | Schools and Staffing Survey: 1990-91 SA SS C ross-Q uestionnaire A nalysis |
| W P 95-08 | CCD A djustment to the 1990-91 SA SS: A C omparison of Estimates |
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| W P 95-10 | The Results of the 1991-92 T eacher Follow-up Survey (TFS) Reinterview and Extensive Reconciliation |
| W P 95-11 | M easuring Instruction, C urriculum C ontent, and Instructional Resources: The Status of Recent W ork |
| W P 95-15 | C lassroom Instructional Processes: A Review of Existing M easurement A pproaches and Their A pplicability for the T eacher Followup Survey |
| W P 95-16 | Intersurvey C onsistency in N CES Private School Surveys |
| W P 95-17 | Estimates of Expenditures for Private K-12 Schools |
| W P 95-18 | An A genda for Research on Teachers and Schools: Revisiting NCES" Schools and Staffing Survey |
| W P 96-01 | M ethodological Issues in the Study of Teachers' C areers: Critical Features of a T ruly Longitudinal Study |
| W P 96-02 | Selected papers presented at the meeting of the 1995 A merican Statistical A ssociation (96-02) |
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a. "1995 R oger H erriot A ward Presentation"
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## D esign and Estimation Issues for School B ased Surveys

a. "Improving the C overage of Private Elementary-Secondary Schools"
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## NCES Working Papers Related to SASS (continued)

D ata Quality and N onresponse in E ducation Surveys
a. "A ssessing Q uality of CCD Data U sing a School-Based Sample Survey"
b. "Documentation of N onresponse and C onsistency of Data C ategorization A cross NCES Surveys"
c. "M ultivariate M odeling of U nit N onresponse for 1990-91 Schools and Staffing Surveys"
d. "Evaluation of Imputation M ethods for State Education Finance D ata"
e. "V ariance Estimates C omparison by Statistical Software"
f. "T eacher Supply and Demand in the U .S."

W P 96-05 Cognitive Research on the Teacher Listing Form for the Schools and Staffing Survey

W P 96-06 The Schools and Staffing Survey (SA SS) for 1998-99; Design Recommendations to Inform Broad Education Policy

W P 96-07 Should SA SS M easure Instructional Processes and T eacher Effectiveness?
W P 96-09 M aking Data Relevant for Policy Discussions: Redesigning the School A dministrator Q uestionnaire for the 1998-99 SA SS

W P 96-10 1998-99 Schools and Staffing Survey: Issues Related to Survey Depth
W P 96-11 Towards an Organizational Data Base on A merica's Schools: A Proposal for the Future of SA SS, with C omments on School Reform, Governments, and Finance

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N ested Structures: District Level Data in the SA SS
Strategies for C ollecting Finance Data from Private Schools
W P 96-23 Linking Student Data to SA SS: W hy, W hen, How
W P 96-24 $\quad N$ ational A ssessments of Teacher Q uality
W P 96-25 M easures of Inservice Professional Development: Suggested Items for the 1998-99 SA SS

W P 96-26
Improving the coverage of Private Elementary-Secondary Schools
W P 96-27
Intersurvey C onsistency in N CES Private School Surveys for 1993-94

## NCES Working Papers Related to SASS (continued)

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a. "T eacher Qual ity and Educational Inequality"
b. "U sing Q ual itative M ethods to V alidate Q uantitative Survey Instruments"
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## D ata Q uality in E ducation Surveys

a. "A n A nalysis of Response R ates of SA SS 1993-94"
b. "A $n$ O verview of NCES Surveys Reinterview Programs"
c. "Estimating Response Bias in an A dult Education Survey"

## D esign and Estimation in School-B ased Surveys

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b. "Estimating the $V$ ariance in the Presence of Imputation $U$ sing a Residual"
c. "W here W ill It A II End? Some A Iternative SA SS Estimation Research 0 pportunities"
d. "Estimating State T otals from the Private School U niverse Survey"

Policy A nalysis with E ducation and D efense M anpower Survey D ata
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[^0]:    U.S. Department of Education

    Office of Educational Research and Improvement NCES 98-203

[^1]:    ${ }^{1}$ The term "district" will be used in place of "Local Education A gency (LEA )" in this report.

[^2]:    ${ }^{2} \mathrm{~A}$ description of the statistical procedures is included in appendix $C$.

[^3]:    ${ }^{3}$ Four geographic regions, corresponding to areas defined by the U.S. Bureau of the C ensus, were employed in this report. The states comprising each region are listed in the Technical A ppendix, page C-13.

[^4]:    ${ }^{4}$ Percent of districts in each metro status category within regions were calculated from data in table 2 in appendix A, by dividing within each region the number of districts in a metro status category by the total number of districts in that region.

[^5]:    ${ }^{5}$ Levine, R., M cLaughlin, D., and Sietsema, J. (1996); U.S. Department of Education (1994).

[^6]:    ${ }^{7}$ In 1990-91, about one-third ( 34 percent) of the newly hired teachers were newly prepared; 31 percent were re-entrants; 19 percent were delayed entrants; and 16 percent were transfers. (Rollefson 1995).

[^7]:    ${ }^{8}$ On the Schools and Staffing Survey 1993-94 School Year T eacher Demand and Shortage Questionnaire for Public School Districts (LEA s), respondents were instructed that teachers "who have completed all necessary course work and practice teaching, and are eligible for full certification upon completion of a probationary period" should be counted as teachers possessing regular or standard state certification in their assigned field. The terms "assigned field" and "fields of assignment" are used in the questionnaire but are not defined.

[^8]:    ${ }^{9}$ The numbers of teachers with alternate certifications and the numbers of teachers with certifications outside of their fields of assignment could not be estimated from Schools and Staffing Survey 1993-94 T eacher Demand and Shortage Q uestionnaire for Public School Districts (LEA s) since this instrument did not include any items asking about the numbers of these kinds of newly hired teachers.

[^9]:    ${ }^{10} \mathrm{~N}$ ational Commission on Excellence in Education (1983); Darling-Hammond (1984).
    ${ }^{11}$ Ingersoll (1996b).

[^10]:    ${ }^{12}$ Ingersoll (1996a).

[^11]:    (a) Districts without students were excluded for this characteristic only.

    SOURCE: U.S. Department of Education, N ational Center for Education Statistics, Schools and Staffing Survey: 1993-94 (T eacher Demand and Shortage Q uestionnaire).

[^12]:    ${ }^{13}$ Choy et al. (1993).
    ${ }^{14}$ C hambers (1996).
    ${ }^{15}$ The summaries of teacher salary data, as presented in this chapter, do not attempt to control for all of the wide range of factors that education economists have shown are associated with teacher compensation. These factors, such as gender, teacher qualifications, and competition in the local job market for teachers, are discussed in Chambers (1996) and C hambers and Fowler (1995).
    ${ }^{16}$ C onsumer Price Indices (CPI) were adjusted to a school-year (July through June) basis. The adjusted CPI for 1990-91 was 133.9; for 1993-94, 146.2. A ccordingly, to make 1990-91 salaries comparable with 1993-94 salaries, the 1990-91 salaries were multiplied by (146.2/133.9 $=1.092$ ). N ational Center for Education Statistics (1995).

[^13]:    ${ }^{17}$ A lthough adjusted scheduled salaries for new teachers with a bachelor's degree in schools in the W est appeared to be lower in 1993-94 ( $\$ 21,913$ ) than in 1990-91 ( $\$ 22,458$ ), these apparent differences were not statistically significant. This is because of the greater range of scheduled salary variations among schools districts in the W est than among districts in other regions.

[^14]:    ${ }^{18}$ These comparisons did not control for factors that are associated with teacher compensation patterns, such as sex, ethnicity, school type, undergraduate measures, or the social and physical environments in which teachers work; findings of differences should therefore be treated as suggestive rather than probative (Chambers 1996).

[^15]:    ${ }^{19}$ These associations also characterized districts in the South and Midwest but not in the N ortheast and $W$ est. However, possible real differences in the $N$ ortheast and $W$ est could have been obscured by the large standard errors associated with the sal ary estimates for these regions.

[^16]:    ${ }^{20}$ In 1993, 48 state education agencies specified high school graduation requirements. For certain subject areas, nearly all states specified graduation requirements. A teast 45 states specified mathematics, social science, and physical/biological science graduation requirements; at least 44, English graduation requirements (Levine and Huberman 1995). The phrase "at least" is used because two states did not provide information about their graduation requirements.

[^17]:    ${ }^{21}$ In 1993, only four states specified computer education graduation requirements, and only three states specified foreign language requirements (Levine and Huberman 1995).

[^18]:    ${ }^{22}$ Percentages were calculated by dividing the numbers of eligible students $(17,224,542)$ and students receiving free and reduced price lunches ( $13,073,607$ ) in 1993-94 by the total number of students $(42,302,143)$ (appendix A , table 10).

[^19]:    ${ }^{23}$ U .S. Department of Education (1994)

[^20]:    ${ }^{24}$ Steel and Levine (1994).

[^21]:    ${ }^{25}$ The types of choice programs enumerated in the 1993-94 TDS were not mutually exclusive, preventing estimates of the numbers of students enrolled in each kind of program. For example, magnet schools may be an option in districts that offer open enrollment. Students enrolled in these magnet schools may be counted as participating in an open enrollment program, participating in a magnet school program, or in both categories.

    It should al so be noted that some educators consider any innovative or distinctive educational program to be a magnet program, whether or not it operates within the context of "choice," or tries to reduce racial imbalance.

[^22]:    ${ }^{26}$ Steel and Levine (1994).
    ${ }^{27}$ Smaller districts may only have one school offering programs at a certain grade level. A ccordingly, within-district open enrollment programs may not be possible in many small districts. This may explain why the prevalence and participation rates in within-district open enrollment programs are lowest in the smallest districts.

[^23]:    ${ }^{28}$ Smaller districts may only have one school serving students at each grade level. The concept of magnet schools as a within-district choice program in this kind of district is not meaningful. This may explain why the prevalence of magnet programs is lowest in the smallest districts.

[^24]:    a) Districts without students were excluded for this characteristic only.

[^25]:    SOU RCE: U.S. Department of Education, N ational C enter for Education Statistics, Schools and Staffing Surveys: 1987-88, 1990-91, and 1993-94 (T eacher

[^26]:    a) Districts without students were excluded for this characteristic only.

[^27]:    ${ }^{6}$ For a detailed description of the weighting process for 1993-94, see A bramson et al., (1996). 1993-94 Schools and Staffing Survey: Sample D esign and Estimation.

[^28]:    ${ }^{7}$ See, e.g., W olter, K.M. (1985). Introduction to V ariance E stimation. N ew York: Springer-V erlag.
    ${ }^{8}$ Sampling weights are adjusted for instrument nonresponse.
    ${ }^{9}$ A summary of the data qual ity for SA SS is presented by Jabine, T.B. (1994). Q uality Profile for SA SS: A spects of the $Q$ uality of $D$ ata in Schools and Staffing Surveys (SA SS) (N C ES 94-340).

[^29]:    ${ }^{10} \mathrm{~A}$ discussion of these nonresponse adjustment procedures is presented in the following references: Gruber, K.J., Rohr, C.L., and Fondelier, S.E. (1994). 1990-91 Schools and Staffing Survey: D ata File U ser's M anual. (V ol. 1: Survey Documentation). W ashington, DC: U.S. Department of Education, National Center for Education Statistics, Office of Educational Research and Improvement.
    G ruber, K.J., R ohr, C .L., and Fondelier, S.E. (1996). 1993-94 Schools and Staffing Survey: D ata File U ser's M anual (V ol. 1: Survey D ocumentation). W ashington, DC: U.S. Department of Education, National C enter for Education Statistics, O ffice of Education Research and Improvement.

[^30]:    ${ }^{11}$ For a discussion of other possible reasons for these discrepancies, see G ruber, K.J., R ohr, C.L., \& Fondelier, S.E. (1996) 1993-94 Schools and Staffing Survey: D ata File U ser's M anual, V olume I: Survey D ocumentation (NCES 96-142) W ashington, D.C.: U.S. Department of Education, O ffice of Educational Research and Improvement, N ational Center for Education Statistics.

[^31]:    ${ }^{12}$ For a description of the imputation procedures, see A bramson et al., (1996) 1993-94 Schools and Staffing Survey: Sample D esign and Estimation, pp. 90-108, and G ruber et al., (1994). 1990-91 Schools and Staffing Survey: D ata File U ser's M anual. (V ol. 1: Survey D ocumentation), pp 71-78.

[^32]:    ${ }^{13} \mathrm{~T}$ he coefficient of the variation is the standard error divided by the value of the statistic calculated.

[^33]:    ${ }^{14}$ U.S. Department of Education, $N$ ational Center for Education Statistics, O ffice of Education Research and Improvement (1995). Digest of Education Statistics 1995. W ashington, DC: G overnment Printing O ffice, page 41.
    ${ }^{15}$ Some of these districts enrolled or served prekindergarten students in 1993-94. At least 9 of the 17 districts without K-12 students enrolled prekindergarten students.

[^34]:    ${ }^{16}$ For example, the $N$ ational C enter for Education Statistics Issues Brief, Public School C hoice Programs, 1993-94: A vailability and Student Participation (W ashington, DC: Government Printing Office, 1996) IB-9-96, excludes districts without students in their calculations of the proportions of districts with different choice programs.

