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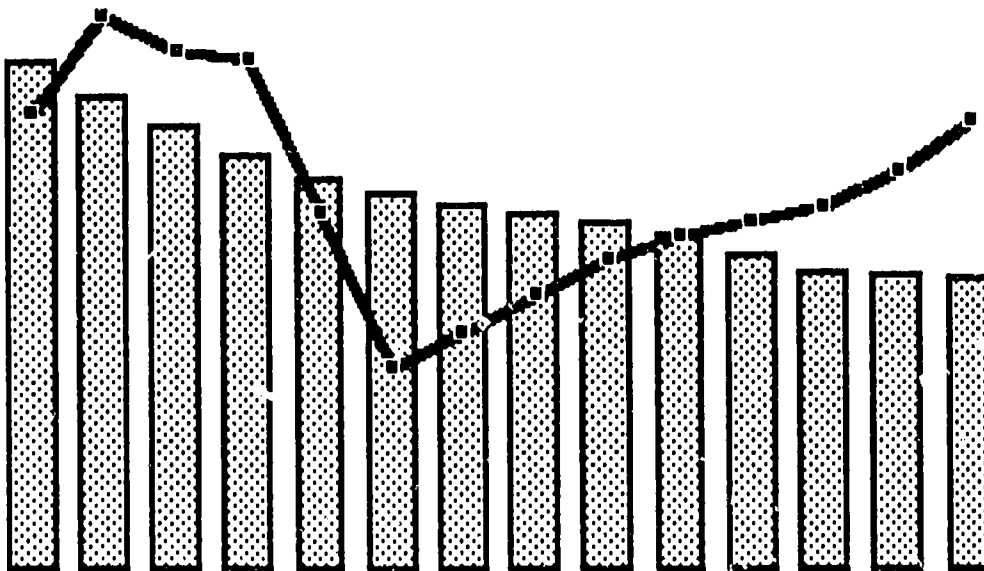IDENTIFIERS   *Ohio

ABSTRACT
                Teacher supply and demand in the public schools of
Ohio depend on such factors as enrollment trends, subject-election
patterns, staffing ratios, employment practices, turnover rates, and
the number of graduates from teachers' colleges. Data contained in
this report have been collected and maintained by the Ohio State
Department of Education since 1976. Following an introduction,
information is included on: (1) enrollment; (2) staffing and staffing
ratios; (3) staff age and experience; (4) number of newly certified
personnel; (5) status of Ohio teacher supply and demand; and (6)
methodology. Appendixes include figures and tables showing: live
births in Ohio; births and child-bearing cohort; public and nonpublic
school enrollment in 13-year cohort; distribution of certified
personnel; average age and experience of certified personnel; age and
experience of certified personnel; number and percent of newly
certified personnel and percent of entry-year teachers; and
projections by teaching field. Although predictions suggest an
impending teacher shortage, this document indicates that Ohio data do
not confirm these predictions and that a teacher shortage in Ohio
need not occur. (LL)

Ohio Teacher Supply and Demand

1991

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FOREWORD

One of the most important responsibilities of a state is to assure an adequate supply of highly qualified individuals to staff its elementary and secondary schools.

Data contained in *Ohio Teacher Supply and Demand, 1991* have been collected and maintained by the Ohio Department of Education for the past fourteen years. It represents one of the most comprehensive data bases in the United States for projecting teacher supply and demand.

Ohio Teacher Supply and Demand, 1991 has been prepared under contract with The Ohio State University Research Foundation through sponsorship of the Ohio Department of Education, Division of Special Education.

Appreciation is extended to the Division of Teacher Education and Certification and the Division of Computer Services and Statistical Reports for providing the data in this report.

Hopefully, policy makers, colleges of education, and counselors will utilize the information contained in this document to help make key policy decisions and give appropriate advice to prospective teacher education students.

Any student who demonstrates the capacity to become an effective teacher should be encouraged to pursue a career in education. No occupation means more to the future of our country. Although positions in a specific teaching field may not be open in a particular geographic area, it is believed that if one is willing to be mobile, a teaching position may be found.

Readers are encouraged to submit any questions comments, or concerns about this report to the author.

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OHIO TEACHER SUPPLY AND DEMAND

Introduction

Teacher supply and demand in the public schools of Ohio are dependent on numerous factors, such as enrollment trends, subject-election patterns, staffing ratios, employment practices, turnover rates, and the number of graduates from the teacher preparation institutions.

Analysis of national reports forecasting an impending teacher shortage confirms that such predictions are based on three assumptions or propositions that: (1) there will be a significant enrollment increase; (2) there are a large number of teachers about to retire; and (3) beginning teachers will be employed to staff the classrooms needed for the additional pupils and for the vacancies created by the teachers who retire. *It will be shown that Ohio data do not confirm these assumptions and that a teacher shortage in Ohio need not occur.*

Fourteen years of data are now available on all certificated personnel employed in the public schools of Ohio. For each type of position (e.g., elementary teacher, secondary foreign language teacher, teacher of the orthopedically handicapped, vocational agriculture teacher), the following information has been maintained:

* Number employed per year
* Number per 1,000 pupils
* Number and percent employed who held the same type of position the previous year
* Number and percent employed who were not employed in the public schools the previous year
* Number and percent of new hires who have no previous teaching experience
* Number and percent who transferred into and out of the position from another position in the public schools

Information is also maintained on the age, experience, gender, and race of all certificated personnel in addition to the school district, county, and geographic region of employment. Birth rate data is obtained annually from the Ohio Department of Health, Bureau of Vital Statistics.

In the sections that follow, information is presented on enrollment in Ohio schools, staffing and staffing ratios in the public schools of Ohio, age and experience of the certificated staff, and the number of new certificated personnel employed each year. The status of Ohio teacher supply and demand is then presented, followed by a section on methodology.

Enrollment

Enrollment in the public schools of Ohio increased in 1991 for the first time since 1972. The increase was anticipated.[1] Public school enrollment is determined largely by the number of births in the state. It is also affected by nonpublic school enrollment and in- and out-of-state migration. The number of births in Ohio from 1930 to 1989 is shown in Figure 1. (See also Appendix A.) The number of births peaked in 1957 and has declined virtually every year since that time. Minor exceptions are noted around 1970, 1980, and the late 1980s.

Figure 1

Births in Ohio
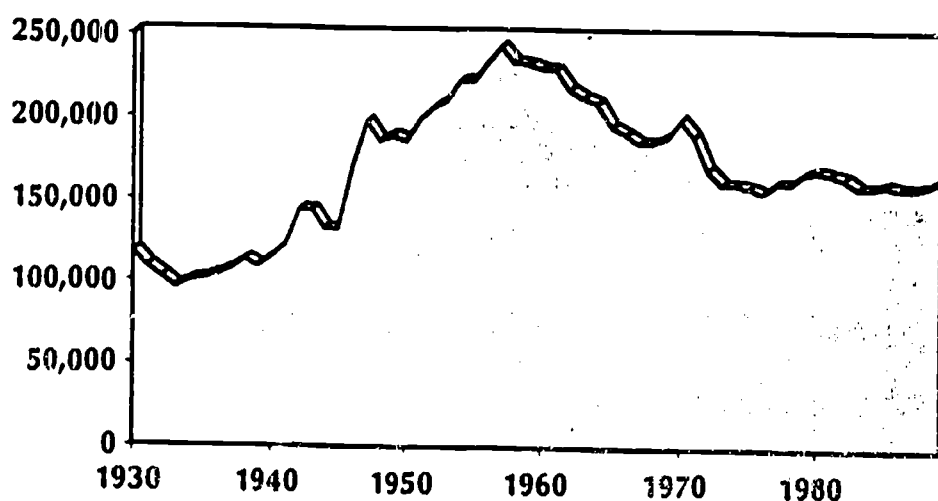
The increase in the number of births from 1975 to 1980 gave rise to the prediction of a "baby boomlet" resulting from the post-World War II baby boom. *Despite minor upturns in the number of births, it is anticipated the trend will be downward as the size of the child-bearing cohort begins to decline as reflected in Figure 2 on the following page.* (See also Appendix B.)

Public and nonpublic enrollments, and projections, are shown in Figures 3 and 4, respectively, on page 4. Enrollment trends in the public and nonpublic schools of Ohio from 1965 to 1991 in relationship to the 13-year cohort of children born five years earlier are illustrated in Figure 5 on page 5. (See also Appendix C.) The percentage of children in the 13-year cohort enrolled in the public or nonpublic schools of Ohio has ranged from 92 percent to 96 percent since 1965 and averaged

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[1] In *Ohio Teacher Supply and Demand, March 1988*, it was projected that "Public school enrollment will increase slightly in the early 1990s and then decline, while nonpublic enrollment is projected to decline gradually over the next decade."

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94.6 percent. It is currently 95.7 percent as shown in Figure 6, page 5. Between 88 and 89 percent of all pupils enrolled in school attend the public schools of the state. This percentage has remained relatively stable throughout the 1980s as shown in Figure 7, page 5.

Figure 2

Births and Child-Bearing Cohort
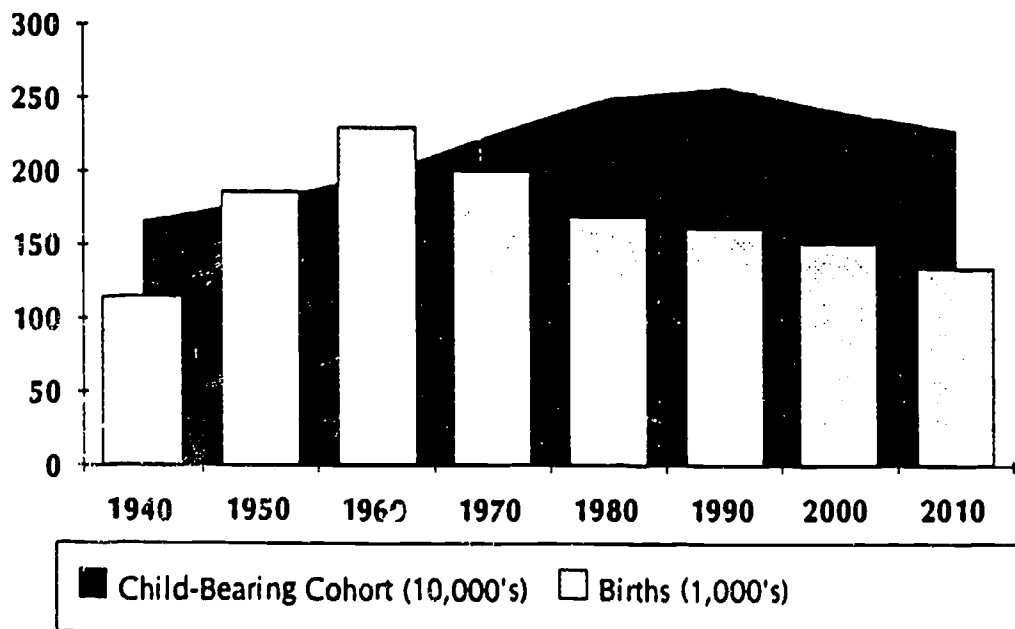
Figure 3

Public School Enrollments and Projections
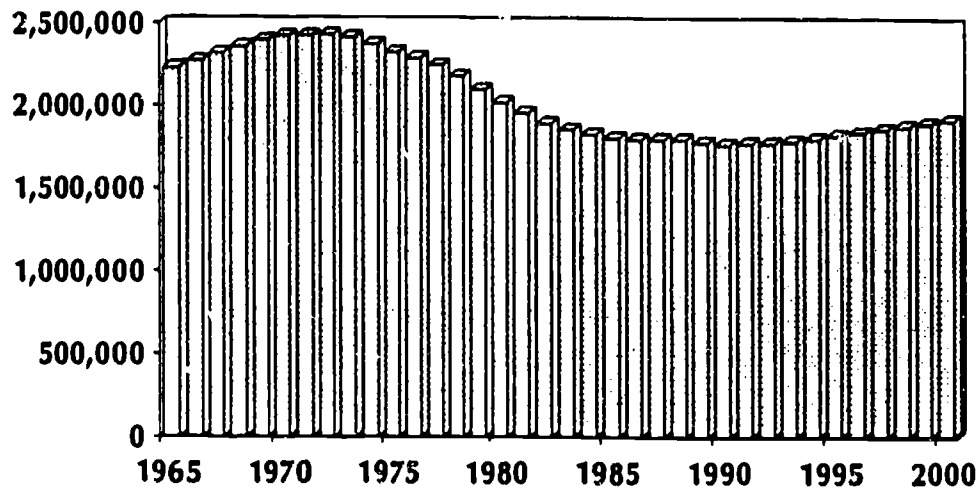
Figure 4

Nonpublic School Enrollments and Projections

4
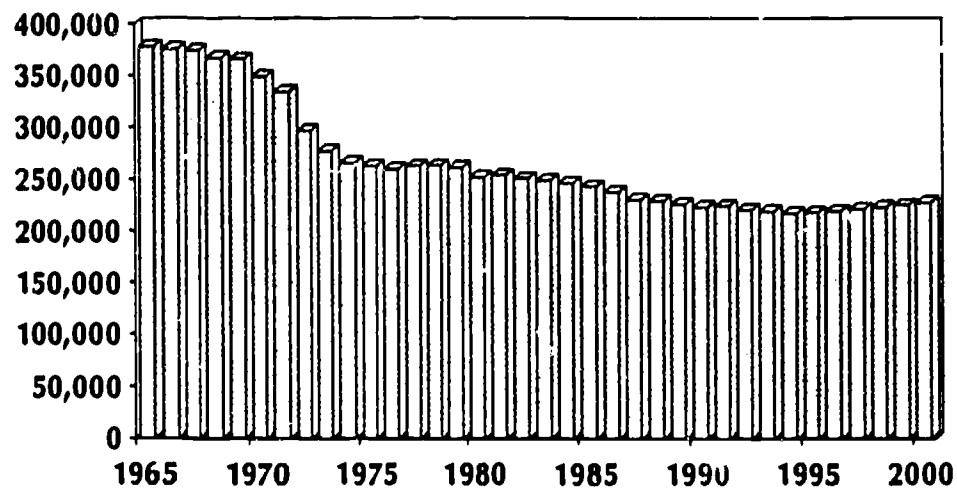
Figure 5

Public and Nonpublic School Enrollments in 13-Year Cohort

Legend:
- ☐ 13-Year Cohort
- ■ Nonpublic School Enrollment
- ▦ Public School Enrollment
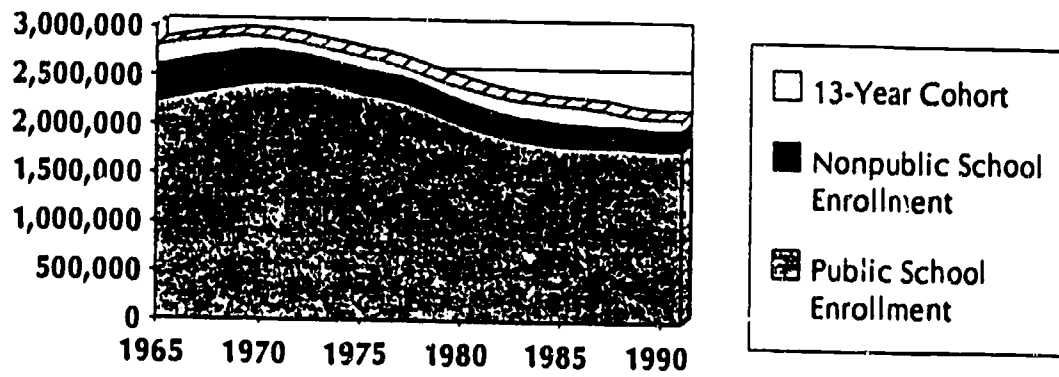
Figure 6

Percent of Cohort in School
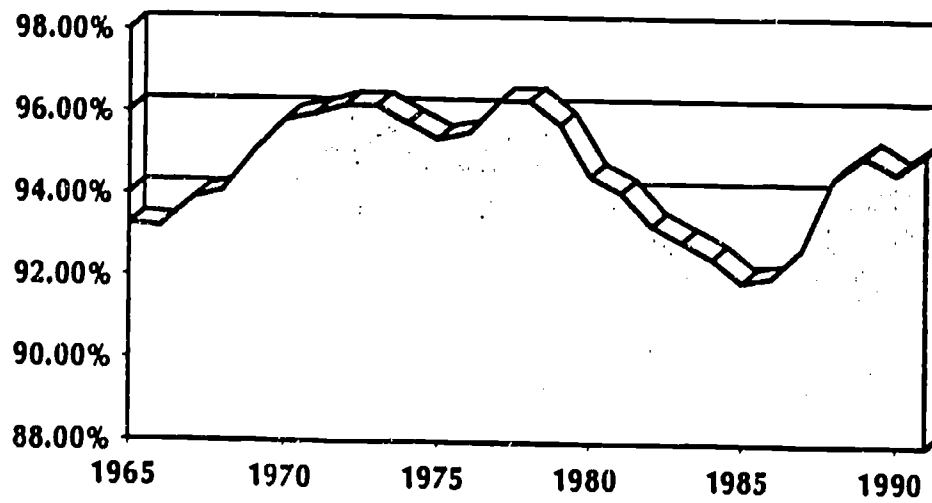
Figure 7

Percent of Total Enrollment in Public Schools
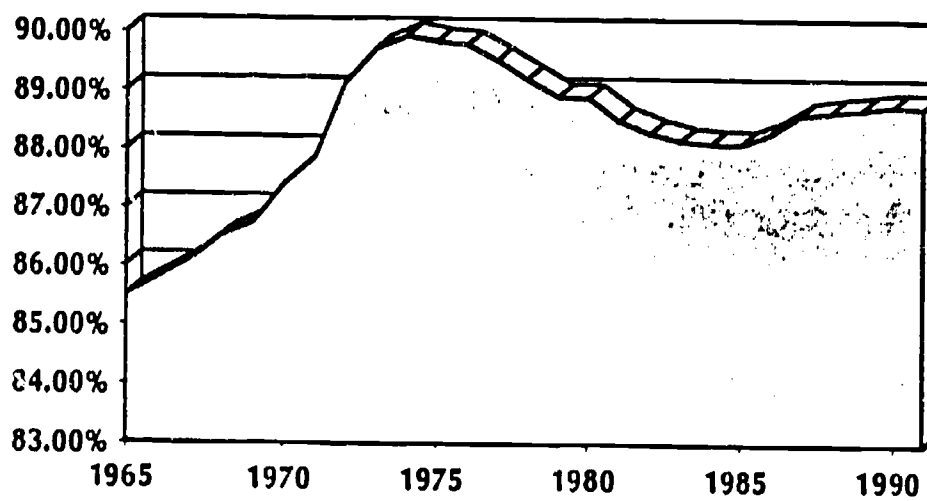
Staffing and Staffing Ratios

The total number of certificated personnel in the public schools of Ohio reached a peak of 125,086 in 1979. It dropped to 115,580 in 1983 as a result of enrollment declines over a number of years and the economic recession of 1982. Since 1983, the number of certificated staff has increased each year to a total of 122,201 in 1991. The number of certificated personnel in Ohio public schools since 1978 is shown in Figure 8. (See also Appendix D.)

Figure 8

Number of Certificated Personnel
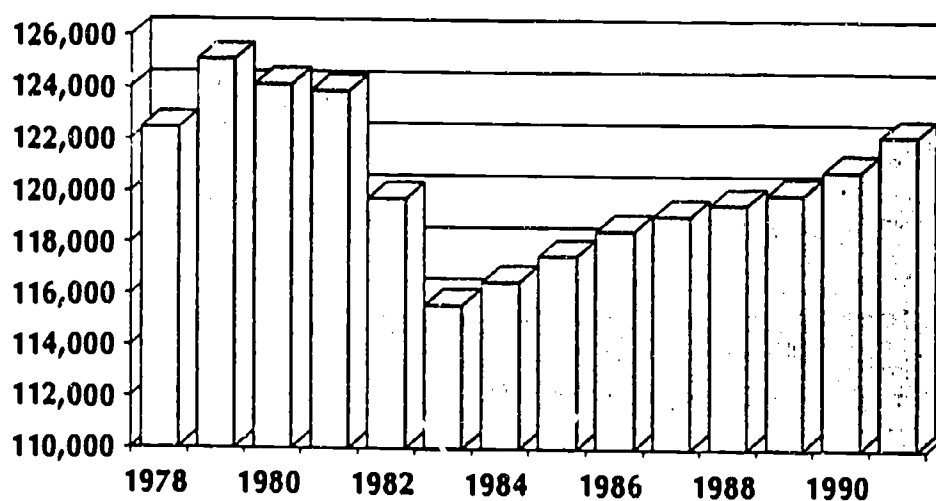
A better understanding of staffing ratios is provided by analyzing the number of certificated personnel per 1,000 pupils. The number of certificated personnel per 1,000 pupils has increased to 69.00 from 56.2 over the past 14 years as illustrated in Figure 9. (See also Appendix D.)

Figure 9

Certificated Personnel per 1,000 Pupils
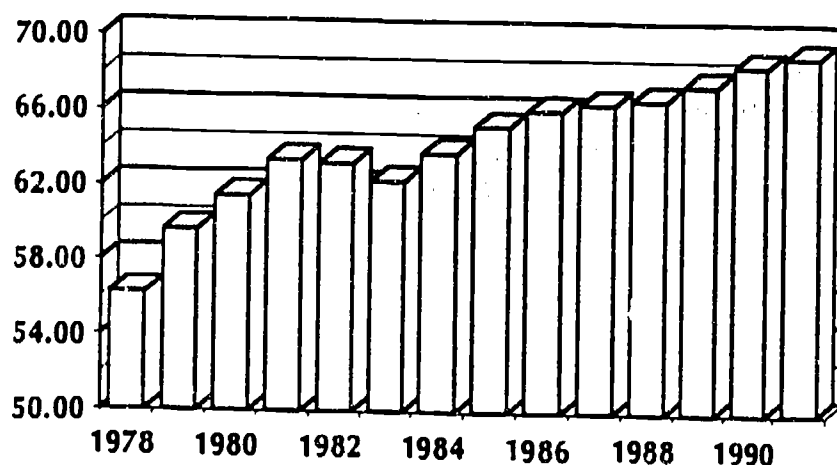
Staffing ratios for classroom teachers have increased to 44.7 from 37.5 per 1,000 pupils during the past fourteen years as shown in Figure 10.

Figure 10

Classroom Teachers per 1,000 Pupils
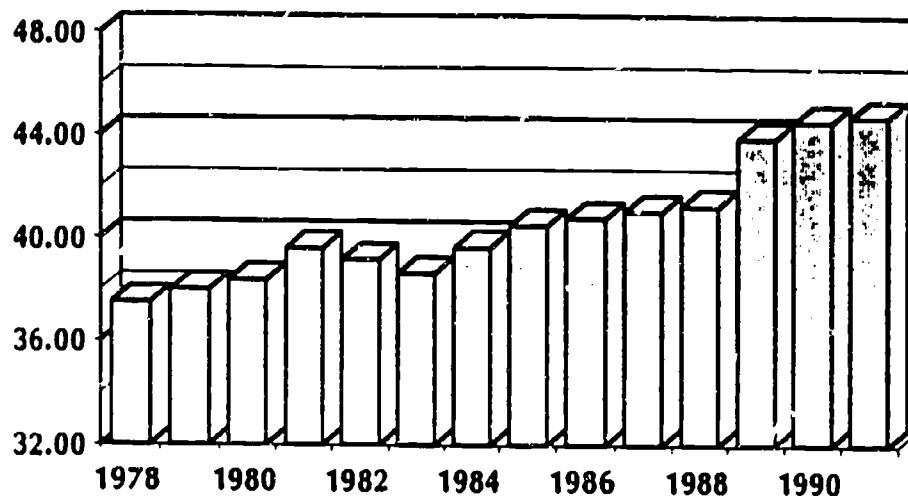
During the past fourteen years, staffing ratios for education service personnel (counselors, librarians, nurses, school social workers, and elementary art, music, and physical education teachers) have increased to 6.8 from 5.8 per 1,000 pupils. Staffing ratios for teachers of handicapped pupils have increased to 8.8 from 3.7 per 1,000 pupils as a result of implementing Public Law 94-142 (The Education of All Handicapped Children Act) and House Bill 455, the Ohio law on the education of handicapped children, that was passed after P.L. 94-142. Staffing ratios for vocational education teachers increased to 4.2 from 3.6 per 1,000 pupils, but peaked at 4.4 in 1983. The number of administrators has increased to 4.5 from 3.5 per 1,000 pupils. These staffing ratios are represented in Figures 11 through 14 on pages 8 and 9.

Figure 11

Education Service Personnel per 1,000 Pupils
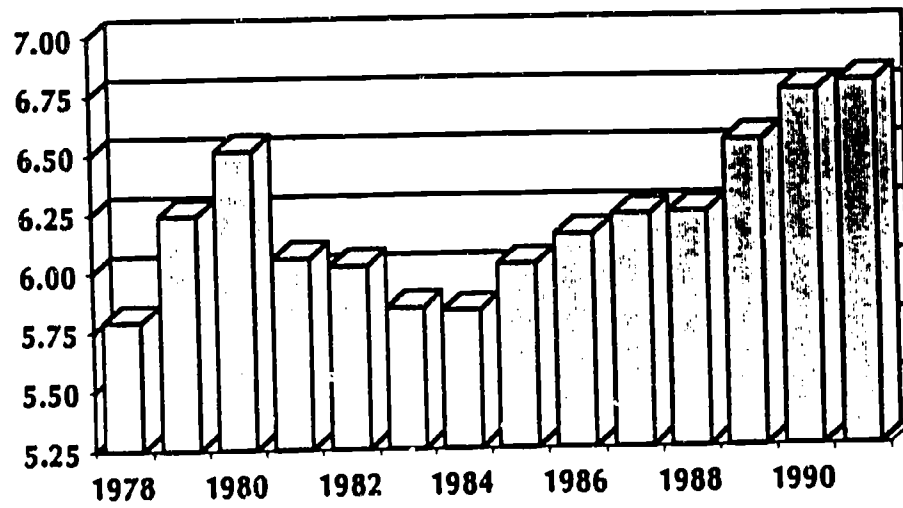
Figure 12

Special Education Teachers per 1,000 Pupils
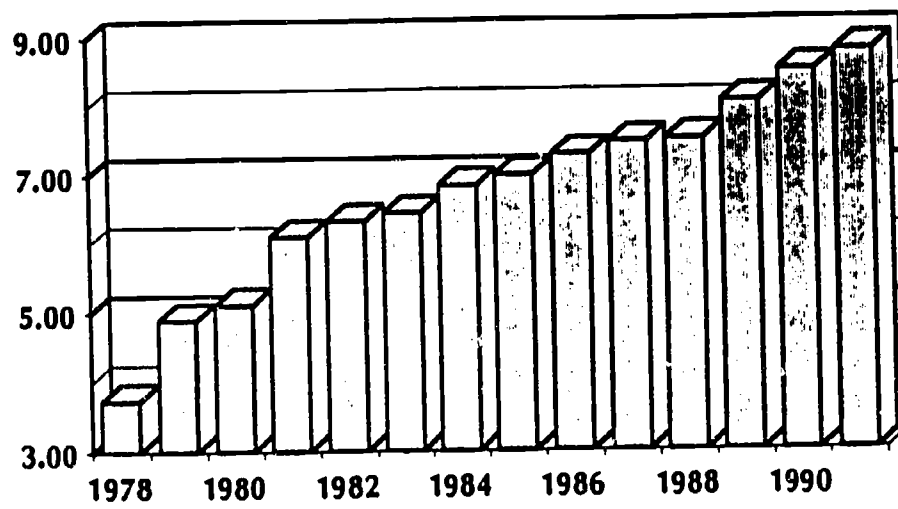
Figure 13

Vocational Teachers per 1,000 Pupils
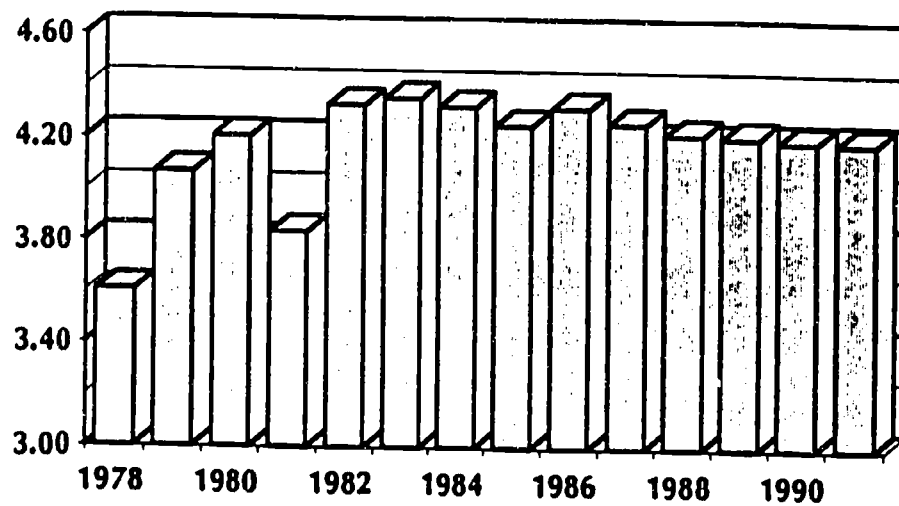
Figure 14

Administrators per 1,000 Pupils

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14
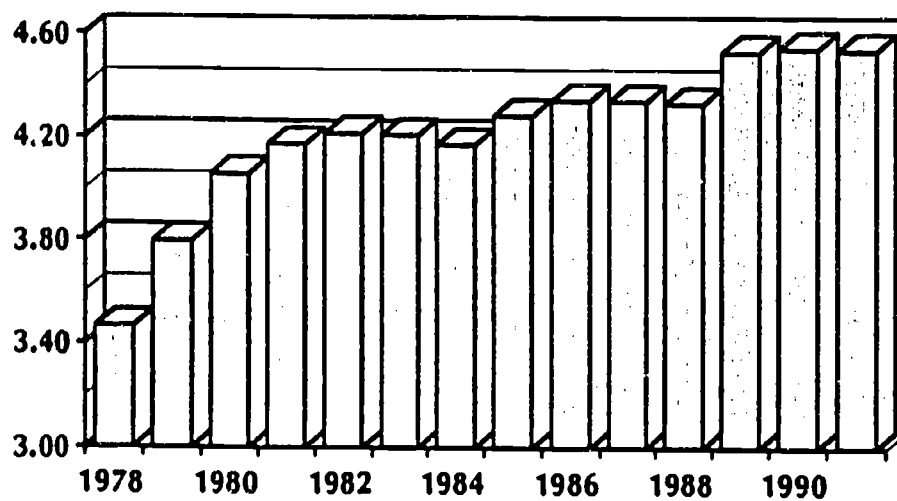
Age and Experience

The average age of the certificated staff in Ohio public schools was 42.7 in 1991 compared to 37.7 in 1978 as shown in Figure 15. (See also Appendix E.)

Figure 15

Average Age of Certificated Personnel
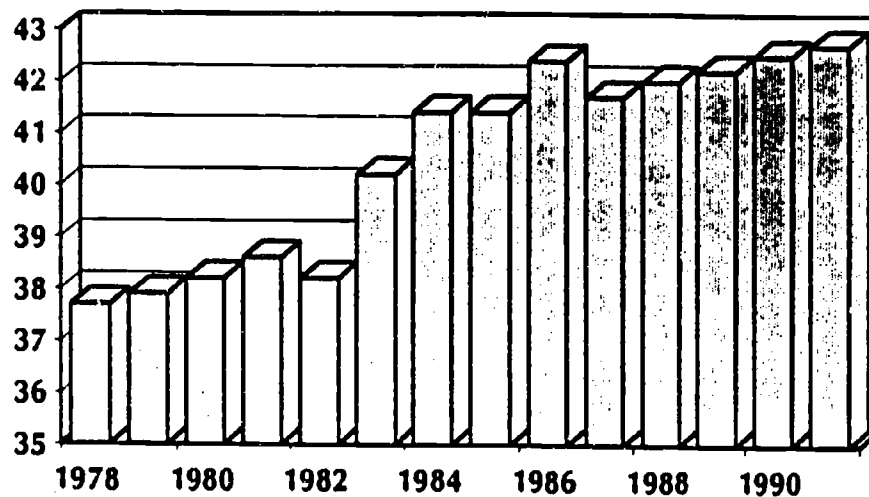
A frequency distribution of the certificated personnel by age is shown in Figure 16. (See also Appendix F.)

Figure 16

Age Distribution of Certificated Personnel

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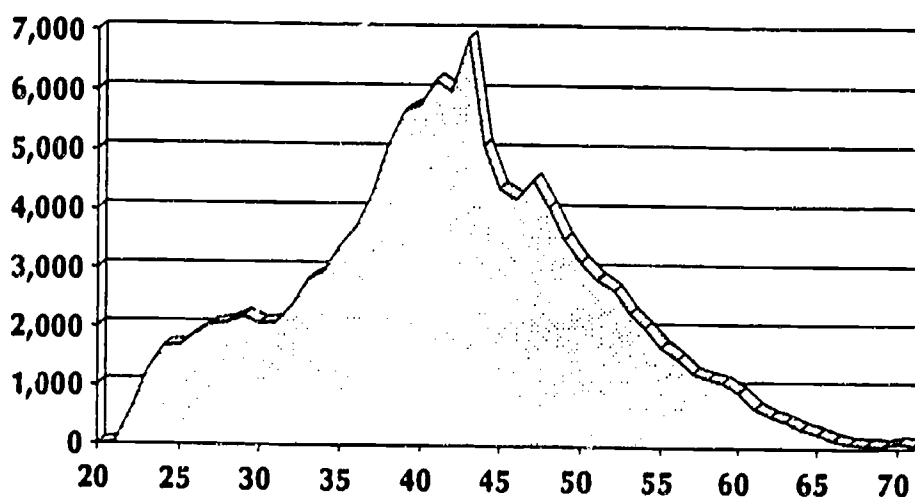
While the average age has increased by five years over the past fourteen years, it is important to note that four of these years were gained from 1982 to 1986. This period of time was marked by considerable reduction-in-force as a result of the 1982 recession and enrollment declines.

The average experience of the certificated staff in Ohio public schools is 14.8 years, up from 10.9 years in 1978. The average experience of the certificated personnel in Ohio schools during the past fourteen years is shown in Figure 17. A frequency distribution of the certificated staff by years of experience is shown in Figure 18 below. (See also Appendices E and F.) About half of the increase in the average experience is due primarily to the reduction in staff that took place in 1982 and 1983 as a result of the economic recession and the enrollment decline. *From Figures 16 and 18, it can be seen that there is not a large number of certificated staff about ready to retire.*

Figure 17

Average Experience of Certificated Personnel
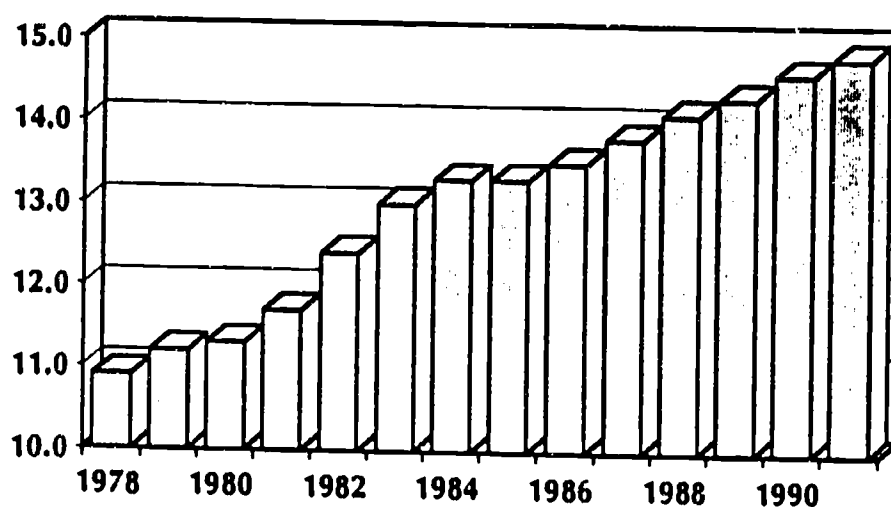
Figure 18

Experience Distribution of Certificated Personnel

Years of Experience
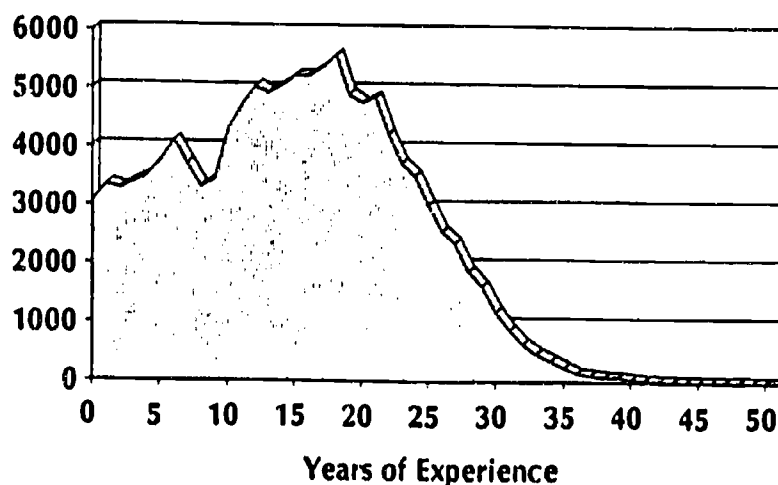
Number of New Certificated Personnel

The number of certificated personnel new to the public schools of Ohio each year is largely dependent on whether or not enrollment is increasing or decreasing and whether or not staffing ratios are increasing or decreasing. During the past fourteen years, enrollment has been decreasing, and except for 1982 and 1983 the staffing ratios have been increasing. (See Figures 3 and 6, pages 4 and 6, respectively.) During the past decade the number of new certificated personnel in Ohio schools has varied from 14,600 in 1979 to a low of 4,531 in 1983. In 1991, there were 7,002 new certificated personnel[2] as shown in Figure 19. (See also Appendix G.)

Figure 19

Number of New Certificated Personnel
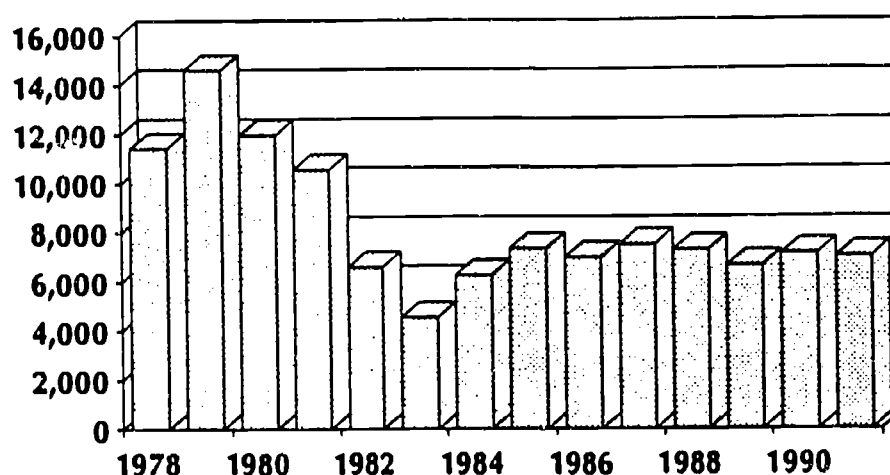
The percentage of the total certificated staff who are new to Ohio schools has varied during the past fourteen years from a high of 11.7 percent in 1979 to a low of 4.9 percent in 1983. As shown in Figure 20 on the following page, it was 6.7 percent in 1991. (See also Appendix G.)

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[2] As used here, "new certificated personnel" are those who did not teach in the public schools of Ohio the preceding year.

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Figure 20

Percentage of New Certificated Personnel
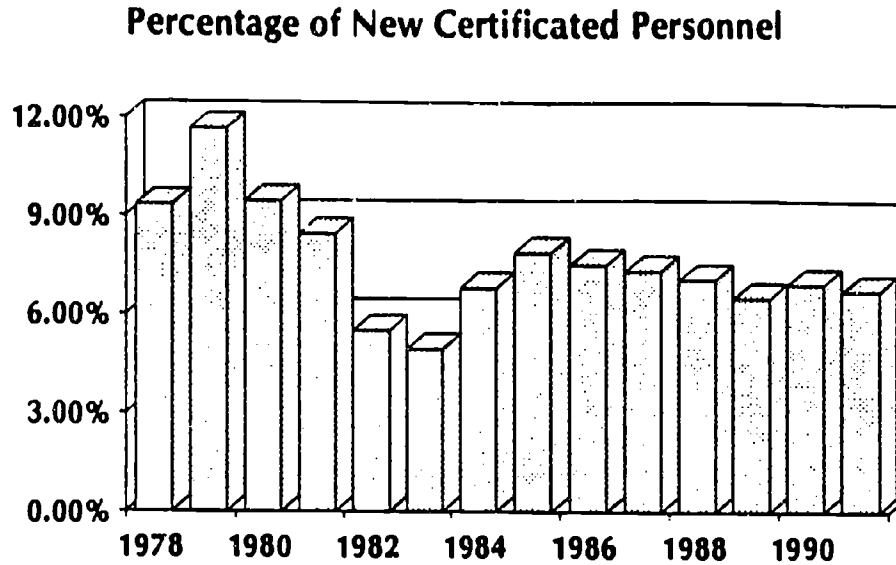
However, not all certificated personnel new to the public schools of Ohio each year are entry-year teachers. In fact, the majority of them have had previous teaching experience. During the past fourteen years, the percentage of experienced teachers returning to the public schools of Ohio has ranged from more than 78 percent in 1982 to a low of 62 percent in 1990. Put another way, entry-year teachers have filled from 21.7 percent of all positions in 1982 to a high of 37.8 percent in 1990 as shown in Figure 21. (See also Appendix G.) *These data illustrate clearly that all positions are not filled by entry-year teachers.*

Figure 21

**Percentage of New Certificated Personnel Who Are
Entry-Year Teachers**

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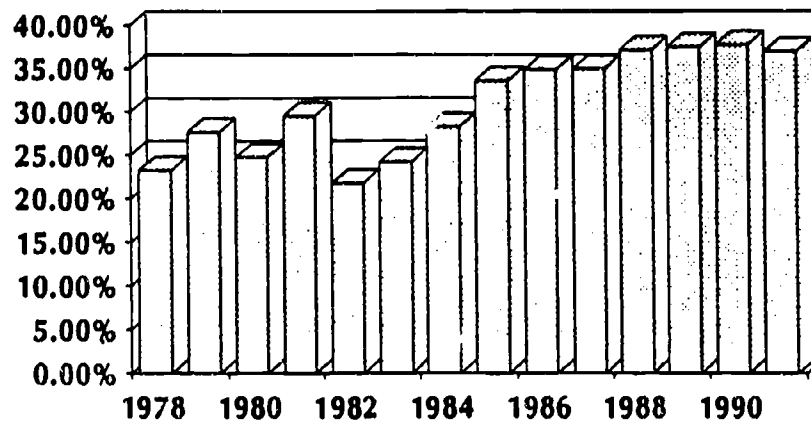
Status of Ohio Teacher Supply and Demand

Supply and demand data are available for 37 different teaching fields found in Ohio schools. It is projected that there will be an average of 116,088 teachers in these teaching fields over the next five years. A "Considerable Shortage" is forecast for twenty-one of these teaching fields. "Some Shortage" is forecast for two teaching fields, while eleven appear "Balanced." It is anticipated that "Some Surplus" will exist in two teaching fields and "Considerable Surplus" in one.[3] (See Table 1, next page.) **But, a teacher shortage need not exist.**

The twenty-one teaching fields represent only 26 percent of the total teaching positions anticipated. This is depicted in Figure 22.

Figure 22

Percentage of Positions by Supply/Demand Status

- ⊟ Considerable Shortage
- ⊞ Some Shortage
- ⊡ Balanced
- ▨ Some Surplus
- ▩ Considerable Surplus

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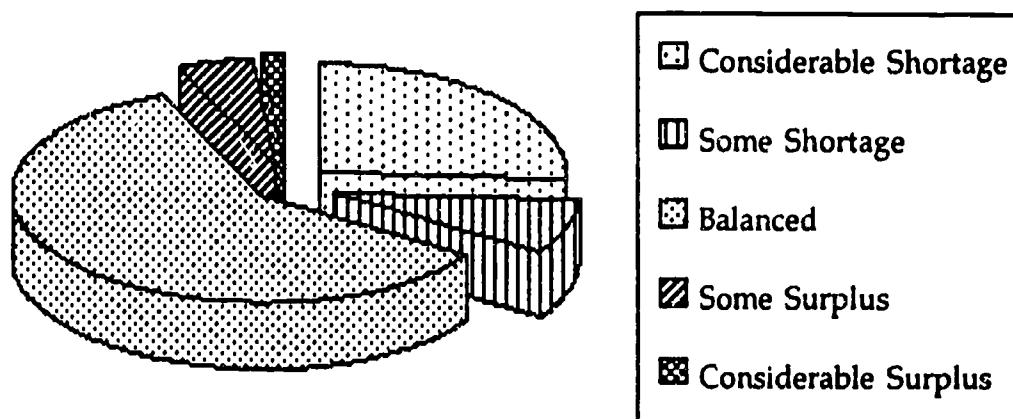
[3] As used in this report, the supply and demand status is determined from the supply/demand ratio as follows: >3.0 · Considerable Surplus; >2.0 · Some Surplus; 1.2-2.0 · Balanced; 1.0-1.2 · Some Shortage; <1.0 · Considerable Shortage.

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Table 1

Status of Ohio Teacher Supply and Demand

Teaching Field	Size of Teaching Field	Supply/ Demand Ratio	S/D Ratio Beginning Teachers	Status	Prospects
Elementary					
Grades K-8	50,930	1.87	2.81	Balanced	Fair
Secondary					
Business	1,282	2.82	2.98	Some Surplus	Fair
English	7,091	1.81	3.17	Balanced	Poor
Foreign Language	2,397	1.36	1.05	Balanced	Good
Health	1,204	1.38	5.74	Balanced	Poor
Industrial Technology	1,146	0.51	3.36	Considerable Shortage	Poor
Mathematics	5,579	1.06	·2.27	Some Shortage	Fair
Science					
Earth Science	385	0.81	2.95	Considerable Shortage	Fair
Life Science	1,487	1.94	5.32	Balanced	Poor
Physical Science	1,280	0.26	1.02	Considerable Shortage	Good
Chemistry	732	1.84	2.73	Balanced	Fair
Physics	302	1.70	4.79	Balanced	Poor
Social Studies	4,478	2.54	7.04	Some Surplus	Poor
Vocational					
Agriculture	552	0.80	0.70	Considerable Shortage	Excellent
Business and Office	1,119	1.44	2.70	Balanced	Fair
Distributive	1,103	0.69	1.18	Considerable Shortage	Good
Home Economics	2,271	0.53	1.41	Considerable Shortage	Average
Trade and Industrial	3,008	0.44	1.68	Considerable Shortage	Average
ELEMENTARY OR SCONDARY					
Art	2,910	0.80	1.72	Considerable Shortage	Average
Music	3,519	0.87	3.38	Considerable Shortage	Poor
Physical Education	3,537	1.28	3.04	Balanced	Poor
Librarian	1,721	0.87	3.62	Considerable Shortage	Poor
Social Worker	198	0.26	13.11	Considerable Shortage	Poor
School Nurse	1,283	0.85	0.19	Considerable Shortage	Excellent
SPECIAL EDUCATION					
Specific Learning Disabled	1,345	3.52	1.80	Considerable Surplus	Average
Gifted	648	0.48	3.55	Considerable Shortage	Poor
Developmentally Handicapped	3,885	1.25	1.20	Some Shortage	Good
Multi-handicapped	954	0.72	1.59	Considerable Shortage	Average
Orthopedically Handicapped	228	1.43	1.62	Balanced	Average
Pre-school Handicapped	524	0.74	0.35	Considerable Shortage	Excellent
Severe Behavior Handicapped	4,865	0.12	0.35	Considerable Shortage	Excellent
Visually Handicapped	67	0.86	0.89	Considerable Shortage	Excellent
Hearing Impaired	286	0.95	2.96	Considerable Shortage	Fair
Psychologist	1,431	0.59	1.13	Considerable Shortage	Good
Adapted Physical Education	193	0.30	0.97	Considerable Shortage	Excellent
Occupational Therapist	273	1.69		Balanced	
Speech Therapist	1,875	0.72	1.03	Considerable Shortage	Good

2:)

An analysis of the cumulative supply and demand data confirms that Ohio is issuing about 1.4 initial four-year provisional certificates for each projected vacancy. *This ratio is within the "Balanced" range and suggests that the issue is one of balance among the various teaching fields and not an impending shortage of teachers per se.* ·(See Table 2, below.)

Table 2

Summary of Projection Data on Supply and Demand

	Supply	Demand		Graduates	Entry-Year Teachers
Critical Shortage	2,490	4,379	Excellent	1,115	819
Some Shortage	1,379	1,220	Good	557	311
Balanced	12,186	6,888	Average	4,902	1,715
Some Surplus	1,563	600	Fair	564	92
Considerable Surplus	1,160	330	Poor	163	90
Total	18,778	13,417		7,301	3,027
S/D Ratio	1.40			2.41	

Another aspect of teacher supply and demand centers on the prospects of a position for a new teacher education graduate. As shown in Table 2, above, Ohio will be graduating about 7,300 teachers per year while an average of 3,027 will be employed in the public schools of the state.[4] As shown on Table 1, the prospects for a teacher education graduate are "Excellent" in six teaching fields, "Good" in six teaching fields, "Average" in six, "Fair" in seven, and "Poor" in twelve.[5] However, as depicted in Figure 23, on the following page, the percentages are "Poor" for about 22 percent of the graduates, "Fair" for 52 percent, with the remainder about equally divided among "Average," "Fair," and "Good."

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[4] It has been suggested in earlier reports that Ohio needs to prepare at least twice as many teachers as will be employed to avoid a shortage of beginning teachers. This is because many teacher education graduates do not opt for immediate placement. It is projected that the supply/demand ratio for beginning teachers will be 2.4/1 over the next five year.

[5] As used in this report, the prospects for beginning teachers are based on the supply/demand ratios as follows: >3.0 - Poor; >2.0 - Fair; 1.2-2.0 - Average; 1.0-2.0 - Good; <1.0 - Excellent

2 ⌐

An effective counseling program for teacher education students could do much to improve their prospects for obtaining a teaching position in Ohio and alleviating the possibility of shortages in various teaching fields.

Figure 23

Percentage of Positions by Prospects for Beginning Teachers

☐ Excellent

☒ Good

☒ Average

☐ Fair

☐ Poor

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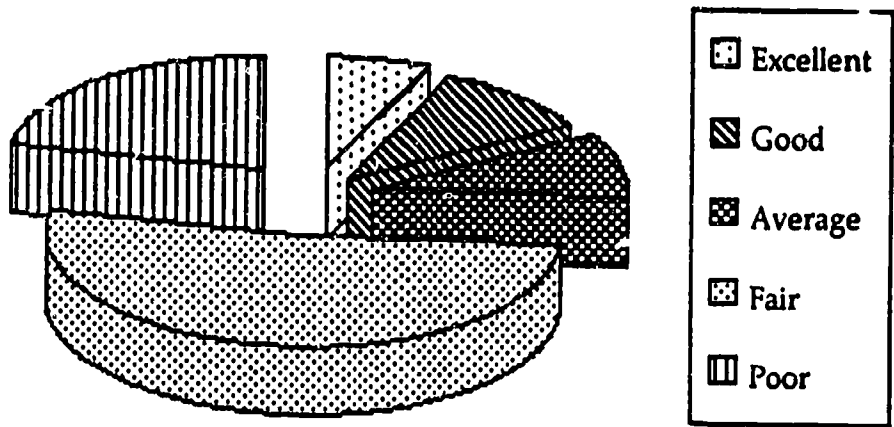
Methodology

The calculations used to arrive at the status of Ohio teacher supply and demand as shown in Table 1, page 15, are found in Appendix H.

The columns[6] in the tables found in Appendix H are described as follows:

Column A lists the year for which the data are either reported or projected. The year "87" refers to the 1986-1987 school year.

Column B lists the enrollment that has been reported and projected for the teaching field involved. The elementary enrollment is projected for all public elementary schools in Ohio. Depending on the vertical organization, this may involve kindergarten through grade six or grade eight. Accordingly, the secondary enrollment includes some pupils in grade seven and eight and all pupils enrolled in grades nine through twelve.

Column C lists the number of teachers employed in a particular teaching field by the public schools of Ohio for the years 1987 through 1991, and the number projected to be employed from 1992 through 1996. The projected number of teachers is the projected number of teachers per 1,000 pupils listed in Column D multiplied times the projected number of pupils in Column ь multiplied times 0.001.

Column D lists the number of teachers in a particular teaching field employed per 1,000 pupils. This is calculated by dividing the number of teachers in Column B by the number of pupils in Column c and multiplying the quotient by 1,000. The projected number of teachers per 1,000 pupils is determined by the "Trend" (linear regression) formula in *Excel* based on the five years of reported data.

Column E lists the number of new teachers to the public schools of Ohio each year. By definition, "new teachers" are those who did not teach in the public schools of Ohio the preceding year. They may have taught in previous years. The number of new teachers each year is calculated from certificated staff data submitted to the Ohio Department of Education. The projected number of new teachers is calculated by multiplying the projected percentage of new teachers in Column F times the projected number of teachers in Column C.

Column F lists the percentage of all teachers within a particular teaching field who are new teachers. It is calculated by dividing the number of new teachers in Column E by the number of teachers in Column C and multiplying the quotient by 100. The projected percentage of all teachers within a particular teaching field who are new

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[6] See Appendix H-1 for a Projection with columns labeled.

teachers is calculated by using the last two-, three-, four-, or five-year average of the reported percentages. The number of years of reported data used in determining the projected average is listed at the bottom of the column. The selection of the number of years to use in calculating this average is a subjective judgment call based on what average appears to best describe the future. Linear regression would have been used rather than averages if it had been judged to be a better predictor.

Column G lists the number of teachers who transferred into a particular teaching field from any other teaching field in a given year. The projected number of transfers is calculated by multiplying the projected percentage of transfers in Column H times the projected number of teachers in Column C.

Column H lists the percentage of all teachers within a particular teaching field who are transfers. The projected percentages are calculated relationally on the same basis as described for Column F.

Column I lists the number of new teachers (Column E) who are beginning teachers, those without previous experience. The projected number of beginning teachers is calculated by multiplying the projected percentage of "O Exp" teachers in Column J times the number of new teachers in Column E.

Column J lists the percentage of new teachers (Column E) who are beginning teachers, those without previous experience. The projected percentages are calculated similar to that described for Column F.

Column K lists the "Demand" for teachers in a particular teaching field. The number is the sum of the number of "new teachers" in Column E and number of "transfer in" in Column G.

Column L lists the percentage demand for teachers in a particular teaching field. It is the sum of the percentage of "new teachers" in Column F and the percentage of "transfer in" in Column H.

Column M lists the supply of teachers for a particular teaching field. This number is the sum of all new four-year provisional certificates issued by the Ohio Department of Education each year for that teaching field. It is recognized that there is some (unmeasurable) duplication in this count since some individuals receive more than one provisional certificate, but the status and prospects formulae have been adjusted to account for this by using the supply/demand range of 1.2 to 2.0 as the "balanced" status or "average" prospect. (See Footnotes 3 and 5, respectively.) The projected supply is calculated by multiplying the projected percentage of supply in Column N times the projected number of teachers in Column C.

Column N lists the percentage of supply for a particular teaching field. This percentage is calculated be dividing the "supply" in Column M by the number of teachers in Column C. The projected percentages are calculated similar to that described for Column F.

Data are summarized at the bottom of each projection table. The figures listed for "size of teaching field," "annual demand," "from transfers," "from new hires," "number of whom without experience," and "annual supply" are five-year averages of the projected data. The supply "from Ohio colleges and universities" is determined from data submitted to the Ohio Department of Education by the teacher preparation institutions in the state. The supply/demand ratio is calculated by dividing the "annual supply" by the "annual demand." The s/d ratio for beginning teachers" is calculated by dividing the supply "from Ohio colleges and universities" by the "number of (new hires) without experience." The "supply and demand status" and "prospects for beginning teachers" are determined by the rationale found in Footnotes 3 and 5, respectively.

APPENDICES

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Live Births in Ohio

Year	Births		Year	Births
1930	117,611		1960	230,219
1931	108,272		1961	229,708
1932	102,184		1962	217,465
1933	95,962		1963	212,583
1934	100,164		1964	209,480
1935	101,377		1965	194,927
1936	104,016		1966	190,444
1937	107,797		1967	185,204
1938	112,988		1968	185,580
1939	109,271		1969	189,099
1940	114,895		1970	199,781
1941	122,456		1971	189,919
1942	143,610		1972	169,151
1943	143,064		1973	160,436
1944	132,531		1974	160,199
1945	131,910		1975	158,341
1946	169,645		1976	155,215
1947	197,236		1977	161,239
1948	185,799		1978	160,850
1949	189,087		1979	166,731
1950	185,559		1980	168,745
1951	199,429		1981	166,971
1952	206,779		1982	164,468
1953	210,727		1983	158,697
1954	222,266		1984	158,343
1955	222,689		1985	160,433
1956	234,517		1986	157,950
1957	243,470		1987	157,820
1958	234,040		1988	160,344
1959	232,578		1989	163,776

Births and Child-Bearing Cohort

Year	Child-Bearing Cohort (10,000's)	Births (1,000's)
1940	166	115
1950	180	186
1960	197	230
1970	225	200
1980	250	169
1990	257	161
2000	241	151
2010	228	134

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Public and Nonpublic School Enrollment in 13-Year Cohort

Year	13-Year Cohort	Public School Enrollment	Nonpublic School Enrollment	Number in Cohort not in School
1965	2,797,159	2,230,124	377,959	189,076
1966	2,841,068	2,271,420	376,226	193,422
1967	2,869,446	2,319,866	374,417	175,163
1968	2,896,470	2,357,647	367,422	171,401
1969	2,906,521	2,397,000	366,325	143,196
1970	2,894,669	2,423,831	349,683	121,155
1971	2,874,386	2,424,227	334,420	115,739
1972	2,837,324	2,432,640	296,510	108,174
1973	2,800,215	2,415,724	276,991	107,500
1974	2,754,797	2,371,578	265,547	117,672
1975	2,711,108	2,322,874	262,628	125,606
1976	2,666,987	2,287,275	260,082	119,630
1977	2,603,560	2,244,564	262,453	96,543
1978	2,533,777	2,177,221	263,133	93,423
1979	2,464,268	2,097,669	261,545	105,054
1980	2,405,144	2,020,154	252,185	132,805
1981	2,347,776	1,955,157	253,866	138,753
1982	2,299,535	1,894,311	250,851	154,373
1983	2,265,458	1,855,839	248,845	160,774
1984	2,241,745	1,827,270	246,303	168,172
1985	2,225,286	1,802,601	243,062	179,623
1986	2,206,677	1,793,746	237,656	175,275
1987	2,182,046	1,793,508	230,436	158,102
1988	2,140,962	1,793,431	229,130	118,401
1989	2,109,386	1,778,397	226,084	104,905
1990	2,100,668	1,764,401	223,082	113,185
1991	2,098,182	1,771,019	224,538	102,625

Distribution of Certificated Personnel

Number of Certificated Personnel

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Teachers	81,623	79,648	77,481	77,413	74,138	71,677	72,403	72,951	73,118	73,563	73,942	77,990	78,530	79,179
Ed. Svc . Pers.	12,607	13,086	13,157	11,837	11,405	10,841	10,648	10,856	11,027	11,172	11,187	11,631	11,913	12,022
Spec. Ed.	8,120	10,250	10,315	11,904	11,973	11,937	12,487	12,590	13,068	13,387	13,456	14,302	14,971	15,533
Voc. Ed.	7,851	8,532	8,496	7,499	8,199	8,079	7,898	7,663	7,750	7,638	7,566	7,492	7,405	7,420
Admin.	7,544	7,962	8,196	8,158	7,984	7,809	7,622	7,722	7,789	7,784	7,766	8,056	8,018	8,037
Other	4,712	5,608	6,477	7,075	6,039	5,237	5,435	5,736	5,754	5,557	5,614	440	0	2
Total	122,457	125,086	124,122	123,886	119,738	115,580	116,493	117,518	118,506	119,101	119,531	119,911	120,837	122,193

Number of Certificated Personnel Per 1,000 Pupils

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Teachers	37.49	37.97	38.35	39.59	39.14	38.62	39.62	40.47	40.76	41.02	41.23	43.85	44.51	44.71
Ed. Svc. Pers.	5.79	6.24	6.51	6.05	6.02	5.84	5.83	6.02	6.15	6.23	6.24	6.54	6.75	6.79
Spec. Ed.	3.73	4.89	5.11	6.09	6.32	6.43	6.83	6.98	7.28	7.46	7.50	8.04	8.49	8.77
Voc. Ed.	3.61	4.07	4.21	3.84	4.33	4.35	4.32	4.25	4.32	4.26	4.22	4.21	4.20	4.19
Admin.	3.46	3.80	4.06	4.17	4.21	4.21	4.17	4.28	4.34	4.34	4.33	4.53	4.54	4.54
Other	2.16	2.67	3.21	3.62	3.19	2.82	2.97	3.18	3.21	3.10	3.13	0.25	0.00	0.00
Total	56.24	59.63	61.44	63.36	63.21	62.28	63.75	65.19	66.06	66.41	66.65	67.43	68.49	69.00

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Average Age and Experience
of Certificated Personnel

Year	Average Age	Average Experience
1978	37.7	10.9
1979	37.9	11.2
1980	38.2	11.3
1981	38.6	11.7
1982	38.2	12.4
1983	40.2	13.0
1984	41.4	13.3
1985	41.4	13.3
1986	42.4	13.5
1987	41.7	13.8
1988	42.0	14.1
1989	42.2	14.3
1990	42.5	14.6
1991	42.7	14.8

Age and Experience of Certificated Personnel

Age	Number		Experience	Number
21			0	3,065
22	27		1	3,347
23	583		2	3,284
24	1,246		3	3,396
25	1,672		4	3,501
26	1,688		5	3,769
27	1,885		6	4,115
28	2,046		7	3,711
29	2,090		8	3,328
30	2,195		9	3,445
31	2,078		10	4,319
32	2,097		11	4,729
33	2,379		12	5,041
34	2,828		13	4,933
35	2,975		14	5,064
36	3,413		15	5,225
37	3,738		16	5,225
38	4,290		17	5,379
39	5,093		18	5,589
40	5,678		19	4,908
41	5,793		20	4,762
42	6,194		21	4,862
43	6,015		22	4,221
44	6,911		23	3,732
45	5,110		24	3,515
46	4,388		25	3,006
47	4,210		26	2,565
48	4,543		27	2,360
49	4,077		28	1,881
50	3,537		29	1,630
5:	3,151		30	1,182
52	2,858		31	886
53	2,664		32	637
54	2,289		33	474
55	2,037		34	356
56	1,707		35	230
57	1,498		36	141
58	1,259		37	109
59	1,170		38	79
60	1,117		39	77
61	943		40	44
62	670		41	29
63	545		42	18
64	455		43	7
65	334		44	7
66	241		45	2
67	139		46	3
68	79		47	4
69	59		48	3
70	43		49	
>70	103		50	1
n	61		>50	5
Total	122,201			122,201

Number and Percent of New Certificated Personnel and Percent of Entry-Year Teachers

Year	New	% New	Entry-Year
1978	11,429	9.33%	23.18%
1979	14,600	11.66%	27.66%
1980	11,973	9.45%	24.70%
1981	10,550	8.45%	29.48%
1982	6,591	5.50%	21.68%
1983	4,531	4.94%	24.12%
1984	6,256	6.80%	28.20%
1985	7,343	7.88%	33.53%
1986	6,971	7.51%	34.80%
1987	7,511	7.32%	34.88%
1988	7,284	7.06%	37.07%
1989	6,636	6.49%	37.42%
1990	7,134	6.93%	37.75%
1991	7,002	6.72%	36.95%

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2	Ohio Teacher Supply and Demand													
3														
4														
5	Projections for Elementary Teachers													
6														
7														
8				Per			Transfer							
9	Yr	Enrollment	Teachers	1000	New	%	In	%	0 Exp	%	Demand	%	Supply	%
10	87	1,102,828	41,152	37.31	2,764	6.72%	1,163	2.83%	893	32.31%	3,927	9.54%	6,345	15.42%
11	88	1,112,824	41,784	37.55	2,956	7.07%	1,011	2.42%	1,079	36.50%	3,967	9.49%	4,081	9.77%
12	89	1,120,924	45,013	40.16	2,777	6.17%	3,593	7.98%	934	35.79%	6,370	14.15%	5,864	13.03%
13	90	1,130,275	45,558	40.31	2,893	6.35%	952	2.09%	1,152	39.82%	3,845	8.44%	6,972	15.30%
14	91	1,141,960	46,272	40.52	2,981	6.44%	769	1.66%	1,155	38.75%	3,750	8.10%	7,515	16.24%
15	92	1,143,667	47,942	41.92	3,140	6.55%	899	1.88%	1,234	39.29%	4,040	8.43%	7,561	15.77%
16	93	1,151,535	49,330	42.84	3,231	6.55%	925	1.88%	1,269	39.29%	4,157	8.43%	7,780	15.77%
17	94	1,159,809	50,747	43.75	3,324	6.55%	952	1.88%	1,306	39.29%	4,276	8.43%	8,004	15.77%
18	95	1,174,606	52,471	44.67	3,437	6.55%	984	1.88%	1,350	39.29%	4,421	8.43%	8,276	15.77%
19	96	1,188,096	54,162	45.59	3,548	6.55%	1,016	1.88%	1,394	39.29%	4,564	8.43%	8,543	15.77%
20				5 yr trend		5 yr ave		2 yr ave		2 yr ave				2 yr ave
21														
22		Size of teaching field				50,930		Annual supply				8,033		
23		Annual demand				4,292		From Ohio Colleges & Universities				3,687		
24		From transfers				955								
25		From new hires				3,336		Supply/Demand Ratio				1.87		
26		Number of whom without experience				1,311		S/D Ratio for Beginning Teachers				2.81		
27														
28		Status				Balanced								
29		Prospects for Beginning Teachers				Fair								
30														

Ohio Teacher Supply and Demand

Projections for Business Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	1,736	2.51	75	4.32%	170	9.79%	35	46.67%	245	14.11%	658	37.90%
88	680,607	1,676	2.46	81	4.83%	155	9.25%	43	53.09%	236	14.08%	665	39.68%
89	657,473	1,530	2.33	57	3.73%	92	6.01%	22	38.60%	149	9.74%	583	38.10%
90	634,126	1,505	2.37	74	4.92%	124	8.24%	28	37.84%	198	13.16%	448	29.77%
91	629,619	1,376	2.19	52	3.78%	76	5.52%	16	30.77%	128	9.30%	436	31.69%
92	630,561	1,355	2.15	58	4.31%	89	6.59%	21	35.74%	148	10.91%	416	30.73%
93	634,898	1,317	2.07	57	4.31%	87	6.59%	20	35.74%	144	10.91%	405	30.73%
94	639,460	1,279	2.00	55	4.31%	84	6.59%	20	35.74%	139	10.91%	393	30.73%
95	647,618	1,247	1.93	54	4.31%	82	6.59%	19	35.74%	136	10.91%	383	30.73%
96	655,056	1,212	1.85	52	4.31%	80	6.59%	19	35.74%	132	10.91%	373	30.73%
			5 yr trend		5 yr ave		3 yr ave		3 yr ave				2 yr ave

Size of teaching field	1,282	Annual supply	394
Annual demand	140	From Ohio Colleges & Universities	59
From transfers	85		
From new hires	55	Supply/Demand Ratio	2.82
Number of whom without experience	20	S/D Ratio for Beginning Teachers	2.98

Status   Some Surplus

Prospects for Beginning Teachers   Fair

37

3

Ohio Teacher Supply and Demand

Projections for English Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	6,281	9.09	449	7.15%	457	7.28%	169	37.64%	906	14.42%	1,319	21.00%
88	680,607	6,374	9.37	388	6.09%	440	6.90%	144	37.11%	828	12.99%	1,269	19.91%
89	657,473	6,323	9.62	401	6.34%	394	6.23%	146	36.41%	795	12.57%	:,427	22.57%
90	634,126	6,468	10.20	394	6.09%	432	6.68%	140	35.53%	826	12.77%	1,468	22.70%
91	629,619	6,333	10.06	397	6.27%	314	4.96%	140	35.26%	711	11.23%	1,524	24.06%
92	630,561	6,618	10.50	423	6.39%	424	6.41%	154	36.39%	847	12.80%	1,529	23.11%
93	634,898	6,840	10.77	437	6.39%	438	6.41%	159	36.39%	875	12.80%	1,581	23.11%
94	639,460	7,065	11.05	451	6.39%	453	6.41%	164	36.39%	904	12.80%	1,633	23.11%
95	647,618	7,334	11.32	468	6.39%	470	6.41%	170	36.39%	939	12.80%	1,695	23.11%
96	655,056	7,599	11.60	485	6.39%	487	6.41%	177	36.39%	972	12.80%	1,756	23.11%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				3 yr ave

Size of teaching field	7,091	Annual supply	1,639
Annual demand	907	From Ohio Colleges & Universities	522
From transfers	455		
From new hires	453	Supply/Demand Ratio	1.81
Number of whom without experience	165	S/D Ratio for Beginning Teachers	3.17

Status   Balanced
Prospects for Beginning Teachers   Poor

Ohio Teacher Supply and Demand

Projections for Foreign Language Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	‚	Demand	%	Supply	%
87	690,680	2,100	3.04	190	9.05%	155	7.38%	63	33.16%	345	16.43%	329	15.67%
88	680,607	2,136	3.14	154	7.21%	115	5.38%	50	32.47%	269	12.59%	352	16.48%
89	657,473	2,099	3.19	143	6.81%	101	4.81%	49	34.27%	244	11.62%	379	18.06%
9C	634,126	2,152	3.39	153	7.11%	123	5.72%	53	34.64%	276	12.83%	374	17.38%
91	629,619	2,148	3.41	159	7.40%	108	5.03%	61	38.36%	267	12.43%	351	16.34%
92	630,561	2,229	3.53	159	7.13%	117	5.23%	55	34.58%	276	12.37%	374	16.78%
93	634,898	2,307	3.63	165	7.13%	121	5.23%	57	34.58%	285	12.37%	387	16.78%
94	639,460	2,388	3.73	170	7.13%	125	5.23%	59	34.58%	295	12.37%	401	16.78%
95	647,618	2,483	3.83	177	7.13%	130	5.23%	61	34.58%	307	12.37%	417	16.78%
96	655,056	2,577	3.93	184	7.13%	135	5.23%	64	34.58%	319	12.37%	432	16.78%
			5 yr trend		4 yr ave		4 yr ave		5 yr ave				5 yr ave

Size of teaching field	2,397	Annual supply	402
Annual demand	296	From Ohio Colleges & Universities	62
From transfers	125		
From new hires	171	Supply/Demand Ratio	1.36
Number of whom without experience	59	S/D Ratio for Beginning Teachers	1.05

Status	Balanced
Prospects for Beginning Teachers	Good

41

42

Ohio Teacher Supply and Demand

Projections for Health Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	1,054	1.53	55	5.22%	134	12.71%	20	36.36%	189	17.93%	445	42.22%
88	680,607	1,067	1.57	46	4.31%	194	18.18%	20	43.48%	240	22.49%	393	36.83%
89	657,473	1,044	1.59	40	3.83%	162	15.52%	15	37.50%	202	19.35%	410	39.27%
90	634,126	1,067	1.68	50	4.69%	190	17.81%	16	32.00%	240	22.49%	335	31.40%
91	629,619	1,087	1.73	38	3.50%	235	21.62%	14	36.84%	273	25.11%	332	30.54%
92	630,561	1,118	1.77	46	4.08%	204	18.28%	16	35.45%	250	22.36%	346	30.97%
93	634,898	1,158	1.82	47	4.08%	212	18.28%	17	35.45%	259	22.36%	359	30.97%
94	639,460	1,200	1.88	49	4.08%	219	18.28%	17	35.45%	268	22.36%	372	30.97%
95	647,618	1,248	1.93	51	4.08%	228	18.28%	18	35.45%	279	22.36%	387	30.97%
96	655,056	1,296	1.98	53	4.08%	237	18.28%	19	35.45%	290	22.36%	401	30.97%
			5 yr trend		4 yr ave		4 yr ave		3 yr ave				2 yr ave

Size of teaching field	1,204	Annual supply	373
Annual demand	269	From Ohio Colleges & Universities	100
From transfers	220		
From new hires	49	Supply/Demand Ratio	1.38
Number of whom without experience	.17	S/D Ratio for Beginning Teachers	5.74

Status   Balanced

Prospects for Beginning Teachers   Poor

Ohio Teacher Supply and Demand

Projections for Industrial TechnologyTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	1,578	2.28	55	3.49%	139	8.81%	32	58.18%	194	12.29%	98	6.21%
88	680,607	1,523	2.24	43	2.82%	82	5.38%	17	39.53%	125	8.21%	104	6.83%
89	657,473	1,428	2.17	44	3.08%	68	4.76%	12	27.27%	112	7.84%	85	5.95%
90	634,126	1,316	2.08	41	3.12%	73	5.55%	12	29.27%	114	8.66%	52	3.95%
91	629,619	1,259	2.00	41	3.26%	101	8.02%	16	39.02%	142	11.28%	63	5.00%
92	630,561	1,220	1.93	38	3.15%	79	6.50%	13	33.77%	118	9.66%	61	4.97%
93	634,898	1,181	1.86	37	3.15%	77	6.50%	13	33.77%	114	9.66%	59	4.97%
94	639,460	1,143	1.79	36	3.15%	74	6.50%	12	33.77%	110	9.66%	57	4.97%
95	647,618	1,110	1.71	35	3.15%	72	6.50%	12	33.77%	107	9.66%	55	4.97%
96	655,056	1,075	1.64	34	3.15%	70	6.50%	11	33.77%	104	9.66%	53	4.97%
			5 yr trend		5 yr ave		5 yr ave		4 yr ave				3 yr ave

Size of teaching field	1,146	Annual supply	57
Annual demand	111	From Ohio Colleges & Universities	41
From transfers	75		
From new hires	36	Supply/Demand Ratio	0.51
Number of whom without experience	12	S/D Ratio for Beginning Teachers	3.36

Status   Considerable Shortage

Prospects for Beginning Teachers   Poor

48

45

Ohio Teacher Supply and Demand

Projections for Mathematics Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	4,165	6.03	332	7.97%	341	8.19%	159	47.89%	673	16.16%	592	14.21%
88	680,607	4,425	6.50	269	6.08%	458	10.35%	137	50.93%	727	16.43%	986	22.28%
89	657,473	4,439	6.75	272	6.13%	281	6.33%	133	48.90%	553	12.46%	848	19.10%
90	634,126	4,605	7.26	247	5.36%	348	7.56%	118	47.77%	595	12.92%	688	14.94%
91	629,619	4,738	7.53	293	6.18%	364	7.68%	142	48.46%	657	13.87%	696	14.69%
92	630,561	5,006	7.94	318	6.35%	381	7.62%	155	48.79%	699	13.96%	742	14.82%
93	634,898	5,279	8.31	335	6.35%	402	7.62%	163	48.79%	737	13.96%	782	14.82%
94	639,460	5,556	8.69	353	6.35%	423	7.62%	172	48.79%	776	13.96%	823	14.82%
95	647,618	5,870	9.06	372	6.35%	447	7.62%	182	48.79%	820	13.96%	870	14.82%
96	655,056	6,183	9.44	392	6.35%	471	7.62%	191	48.79%	863	13.96%	916	14.82%
			5 yr trend		5 yr ave		2 yr ave		5 yr ave				2 yr ave

Size of teaching field	5,579	Annual supply	826
Annual demand	779	From Ohio Colleges & Universities	392
From transfers	425		
From new hires	354	Supply/Demand Ratio	1.06
Number of whom without experience	173	S/D Ratio for Beginning Teachers	2.27

Status — Some Shortage

Prospects for Beginning Teachers — Fair

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Ohio Teacher Supply and Demand

Projections for Earth Science Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	411	0.60	27	6.57%	63	15.33%	18	66.67%	90	21.90%	54	13.14%
88	680,607	395	0.58	22	5.57%	68	17.22%	10	45.45%	90	22.78%	71	17.97%
89	657,473	400	0.61	22	5.50%	86	21.50%	9	40.91%	108	27.00%	86	21.50%
90	634,126	390	0.62	23	5.90%	70	17.95%	11	47.83%	93	23.85%	72	18.46%
91	629,619	366	0.58	15	4.10%	68	18.58%	6	40.00%	83	22.68%	66	18.03%
92	630,561	377	0.60	20	5.27%	68	18.11%	9	43.55%	88	23.38%	72	18.99%
93	634,898	380	0.60	20	5.27%	69	18.11%	9	43.55%	89	23.38%	72	18.99%
94	639,460	383	0.60	20	5.27%	69	18.11%	9	43.55%	90	23.38%	73	18.99%
95	647,618	389	0.60	20	5.27%	70	18.11%	9	43.55%	91	23.38%	74	18.99%
96	655,056	394	0.60	21	5.27%	71	18.11%	9	43.55%	92	23.38%	75	18.99%
			5 yr trend	4 yr ave		5 yr ave		4 yr ave				4 yr ave	

Size of teaching field	385	Annual supply	73
Annual demand	90	From Ohio Colleges & Universities	26
From transfers	70		
From new hires	20	Supply/Demand Ratio	0.81
Number of whom without experience	9	S/D Ratio for Beginning Teachers	2.95

Status   Considerable Shortage

Prospects for Beginning Teachers   Fair

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Ohio Teacher Supply and Demand

Projections for Life Science Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	1,243	1.80	75	6.03%	168	13.52%	33	44.00%	243	19.55%	452	36.36%
88	680,607	1,225	1.80	44	3.59%	172	14.04%	25	56.82%	216	17.63%	428	34.94%
89	657,473	1,215	1.85	61	5.02%	122	10.04%	29	47.54%	183	15.06%	479	39.42%
90	634,126	1,323	2.09	53	4.01%	232	17.54%	21	39.62%	285	21.54%	439	33.18%
91	629,619	1,294	2.06	67	5.18%	148	11.44%	34	50.75%	215	16.62%	404	31.22%
92	630,561	1,360	2.16	64	4.73%	181	13.31%	31	47.75%	245	18.05%	476	35.03%
93	634,898	1,420	2.24	67	4.73%	189	13.31%	32	47.75%	256	18.05%	497	35.03%
94	639,460	1,481	2.32	70	4.73%	197	13.31%	33	47.75%	267	18.05%	519	35.03%
95	647,618	1,552	2.40	73	4.73%	207	13.31%	35	47.75%	280	18.05%	544	35.03%
96	655,056	1,622	2.48	77	4.73%	216	13.31%	37	47.75%	293	18.05%	568	35.03%
			5 yr trend		3 yr ave		5 yr ave		5 yr ave				5 yr ave

Size of teaching field   1,487   Annual supply   521

Annual demand   268   From Ohio Colleges & Universities   179

   From transfers   198

   From new hires   70   Supply/Demand Ratio   1.94

     Number of whom without experience   34   S/D Ratio for Beginning Teachers   5.32

Status   Balanced

Prospects for Beginning Teachers   Poor

5 ?

Ohio Teacher Supply and Demand

Projections for Physical ScienceTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	1,156	1.67	87	7.53%	255	22.06%	42	48.28%	342	29.58%	66	5.71%
88	680,607	1,170	1.72	76	6.50%	255	21.79%	47	61.84%	331	28.29%	79	6.75%
89	657,473	1,110	1.69	54	4.86%	201	18.11%	20	37.04%	255	22.97%	86	7.75%
90	634,126	1,211	1.91	82	6.77%	289	23.86%	33	40.24%	371	30.64%	93	7.68%
91	629,619	1,141	1.81	86	7.54%	193	16.91%	26	30.23%	279	24.45%	78	6.84%
92	630,561	1,199	1.90	80	6.64%	246	20.55%	29	35.84%	326	27.19%	83	6.94%
93	634,898	1,237	1.95	82	6.64%	254	20.55%	29	35.84%	336	27.19%	86	6.94%
94	639,460	1,275	1.99	85	6.64%	262	20.55%	30	35.84%	347	27.19%	89	6.94%
95	647,618	1,322	2.04	88	6.64%	272	20.55%	31	35.84%	359	27.19%	92	6.94%
96	655,056	1,368	2.09	91	6.64%	281	20.55%	33	35.84%	372	27.19%	95	6.94%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				5 yr ave

Size of teaching field	1,280	Annual supply	89
Annual demand	348	From Ohio Colleges & Universities	31
From transfers	263		
From new hires	85	Supply/Demand Ratio	0.26
Number of whom without experience	30	S/D Ratio for Beginning Teachers	1.02

Status   Considerable Shortage

Prospects for Beginning Teachers   Good

Ohio Teacher Supply and Demand

Projections for ChemistryTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	O Exp	%	Demand	%	Supply	%
87	690,680	611	0.88	35	5.73%	87	14.24%	20	57.14%	122	19.97%	164	26.84%
88	680,607	637	0.94	26	4.08%	78	12.24%	7	26.92%	104	16.33%	168	26.37%
89	657,473	630	0.96	31	4.92%	58	9.21%	20	64.52%	89	14.13%	193	30.63%
90	634,126	634	1.00	23	3.63%	63	9.94%	13	56.52%	86	13.56%	167	26.34%
91	629,619	649	1.03	34	5.24%	72	11.09%	14	41.18%	106	16.33%	169	26.04%
92	630,561	674	1.07	32	4.72%	68	10.08%	17	54.07%	100	14.8C %	184	27.25%
93	634,898	701	1.10	33	4.72%	71	10.08%	18	54.07%	104	14.80%	191	27.25%
94	639,460	729	1.14	34	4.72%	73	10.08%	19	54.07%	108	14.80%	199	27.25%
95	647,618	761	1.18	36	4.72%	77	10.08%	19	54.07%	113	14.80%	207	27.25%
96	655,056	793	1.21	37	4.72%	80	10.08%	20	54.07%	117	14.80%	216	27.25%
			5 yr trend		5 yr ave		3 yr ave		3 yr ave				5 yr ave

Size of teaching field	732	Annual supply	199
Annual demand	108	From Ohio Colleges & Universities	51
From transfers	74		
From new hires	35	Supply/Demand Ratio	1.84
Number of whom without experience	19	S/D Ratio for Beginning Teachers	2.73

Status   Balanced

Prospects for Beginning Teachers   Fair

Ohio Teacher Supply and Demand

Projections for Physics Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	261	0.38	16	6.13%	44	16.86%	8	50.00%	60	22.99%	66	25.29%
88	680,607	262	0.38	15	5.73%	35	13.36%	8	53.33%	50	19.08%	79	30.15%
89	657,473	276	0.42	12	4.35%	43	15.58%	10	83.33%	55	19.93%	86	31.16%
90	634,126	273	0.4ċ	13	4.76%	34	12.45%	4	30.77%	47	17.22%	93	34.07%
91	629,619	264	0.42	8	3.03%	36	13.64%	3	37.50%	44	16.67%	78	29.55%
92	630,561	281	0.44	11	4.05%	40	14.38%	4	34.14%	52	18.42%	88	31.23%
93	634,898	291	0.46	12	4.05%	42	14.38%	4	34.14%	54	18.42%	91	31.23%
94	639,460	301	0.47	12	4.05%	43	14.38%	4	34.14%	55	18.42%	94	31.23%
95	647,618	313	0.48	13	4.05%	45	14.38%	4	34.14%	58	18.42%	98	31.23%
96	655,056	325	0.50	13	4.05%	47	14.38%	4	34.14%	60	18.42%	102	31.23%
			5 yr trend		3 yr ave		5 yr ave		2 yr ave				4 yr ave

Size of teaching field	302	Annual supply	94
Annual demand	56	From Ohio Colleges & Universities	20
From transfers	43		
From new hires	12	Supply/Demand Ratio	1.70
Number of whom without experience	4	S/D Ratio for Beginning Teachers	4 79

Status   Balanced

Prospects for Beginning Teachers   Poor

Ohio Teacher Supply and Demand

Projections for Social Science Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	690,680	4,238	6.14	197	4.65%	374	8.82%	77	39.09%	571	13.47%	900	21.24%
88	680,607	4,250	6.24	192	4.52%	288	6.78%	71	36.98%	480	11.29%	903	21.25%
89	657,473	4,204	6.39	161	3.83%	260	6.18%	58	36.02%	421	10.01%	1,091	25.95%
90	634,126	4,242	6.69	169	3.98%	290	6.84%	65	38.46%	459	10.82%	1,054	24.85%
91	629,619	4,092	6.50	181	4.42%	172	4.20%	66	36.46%	353	8.63%	1,127	27.54%
92	630,561	4,252	6.74	182	4.28%	255	6.00%	68	37.40%	437	10.28%	1,110	26.11%
93	634,898	4,356	6.86	186	4.28%	261	6.00%	70	37.40%	448	10.28%	1,138	26.11%
94	639,460	4,462	6.98	191	4.28%	268	6.00%	71	37.40%	459	10.28%	1,165	26.11%
95	647,618	4,595	7.10	197	4.28%	276	6.00%	74	37.40%	472	10.28%	1,200	26.11%
96	655,056	4,725	7.21	202	4.28%	283	6.00%	76	37.40%	486	10.28%	1,234	26.11%
			5 yr trend		5 yr ave		4 yr ave		5 yr ave				3 yr ave

Size of teaching field	4,478	Annual supply	1,169
Annual demand	460	From Ohio Colleges & Universities	505
From transfers	269		
From new hires	192	Supply/Demand Ratio	2.54
Number of whom without experience	72	S/D Ratio for Beginning Teachers	7.04

Status   Some Surplus

Prospects for Beginning Teachers   Poor

Ohio Teacher Supply and Demand

Projections for Agriculture Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	277,352	595	2.15	44	7.39%	2	0.34%	19	43.18%	46	7.73%	64	10.76%
88	282,549	583	2.06	45	7.72%	3	0.51%	22	48.89%	48	8.23%	51	8.75%
89	270,653	565	2.09	39	6.90%	8	1.42%	21	53.85%	47	8.32%	50	8.85%
90	250,525	549	2.19	35	6.38%	8	1.46%	19	54.29%	43	7.83%	40	7.29%
91	240,344	533	2.22	25	4.69%	6	1.13%	9	36.00%	31	5.82%	24	4.50%
92	238,559	530	2.22	32	5.99%	7	1.33%	15	47.24%	39	7.32%	31	5.89%
93	237,990	536	2.25	32	5.99%	7	1.33%	15	47.24%	39	7.32%	32	5.89%
94	239,190	545	2.28	33	5.99%	7	1.33%	15	47.24%	40	7.32%	32	5.89%
95	244,190	563	2.30	34	5.99%	8	1.33%	16	47.24%	41	7.32%	33	5.89%
96	251,613	587	2.33	35	5.99%	8	1.33%	17	47.24%	43	7.32%	35	5.89%
			5 yr trend		3 yr ave		3 yr ave		5 yr ave				2 yr ave

Size of teaching field	552	Annual supply	33
Annual demand	40	From Ohio Colleges & Universities	11
From transfers	7		
From new hires	33	Supply/Demand Ratio	0.80
Number of whom without experience	16	S/D Ratio for Beginning Teachers	0.70

Status   Considerable Shortage

Prospects for Beginning Teachers   Excellent

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Ohlo Teacher Supply and Demand

Projections for Business and Office EducationTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	277,352	1,388	5.00	82	5.91%	31	2.23%	25	30.49%	113	8.14%	148	10.66%
88	282,549	1,314	4.65	62	4.72%	50	3.81%	28	45.16%	112	8.52%	169	12.86%
89	270,653	1,267	4.68	45	3.55%	62	4.89%	18	40.00%	107	8.45%	181	14.29%
90	250,525	1,186	4.73	41	3.46%	39	3.29%	14	34.15%	80	6.75%	130	10.96%
91	240,344	1,155	4.81	41	3.55%	50	4.33%	8	19.51%	91	7.88%	114	9.87%
92	238,559	1,117	4.68	39	3.52%	41	3.71%	13	33.86%	81	7.23%	116	10.42%
93	237,990	1,107	4.65	39	3.52%	41	3.71%	13	33.86%	80	7.23%	115	10.42%
94	239,190	1,105	4.62	39	3.52%	41	3.71%	13	33.86%	80	7.23%	115	10.42%
95	244,190	1,120	4.59	39	3.52%	42	3.71%	13	33.86%	81	7.23%	117	10.42%
96	251,613	1,146	4.56	40	3.52%	43	3.71%	14	33.86%	83	7.23%	119	10.42%
			5 yr trend		3 yr ave		5 yr ave		5 yr ave				2 yr ave

Size of teaching field	1,119	Annual supply	117
Annual demand	81	From Ohio Colleges & Universities	36
From transfers	42		
From new hires	39	Supply/Demand Ratio	1.44
Number of whom without experience	13	S/D Ratio for Beginning Teachers	2.70

Status   Balanced

Prospects for Beginning Teachers   Fair

63   64

Ohio Teacher Supply and Demand

Projections for Distributive EducationTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	277,352	871	3.14	41	4.71%	69	7.92%	13	31.71%	110	12.63%	46	5.28%
88	282,549	886	3.14	29	3.27%	81	9.14%	6	20.69%	110	12.42%	75	8.47%
89	270,653	892	3.30	31	3.48%	71	7.96%	9	29.03%	102	11.43%	73	8.18%
90	250,525	913	3.64	35	3.83%	75	8.21%	8	22.86%	110	12.05%	80	8.76%
91	240,344	959	3.99	26	2.71%	105	10.95%	9	34.26%	131	13.66%	77	8.03%
92	238,559	979	4.10	33	3.32%	87	8.84%	9	27.71%	119	12.16%	82	8.36%
93	237,990	1,029	4.32	34	3.32%	91	8.84%	9	27.71%	125	12.16%	86	8.36%
94	239,190	1,087	4.55	36	3.32%	96	8.84%	10	27.71%	132	12.16%	91	8.36%
95	244,190	1,164	4.77	39	3.32%	103	8.84%	11	27.71%	142	12.16%	97	8.36%
96	251,613	1,255	4.99	42	3.32%	111	8.84%	12	27.71%	153	12.16%	105	8.36%
			5 yr trend		4 yr ave		5 yr ave		5 yr ave				4 yr ave

Size of teaching field	1,103	Annual supply	92
Annual demand	134	From Ohio Colleges & Universities	12
From transfers	97		
From new hires	37	Supply/Demand Ratio	0.69
Number of whom without experience	10	S/D Ratio for Beginning Teachers	1.18

Status   Considerable Shortage

Prospects for Beginning Teachers   Good

Ohio Teacher Supply and Demand

Projections for Home Economics Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	277,352	1,821	6.57	140	7.69%	54	2.97%	44	31.43%	194	10.65%	138	7.58%
88	282,549	1,826	6.46	135	7.39%	64	3.50%	34	25.19%	199	10.90%	130	7.12%
89	270,653	1,868	6.90	129	6.91%	85	4.55%	29	22.48%	214	11.46%	127	6.80%
90	250,525	1,895	7.56	127	6.70%	77	4.06%	31	24.41%	204	10.77%	108	5.70%
91	240,344	1,973	8.23	149	7.53%	69	3.49%	42	28.19%	218	11.02%	118	5.97%
92	238,559	2,021	8.47	146	7.24%	75	3.71%	39	26.34%	222	10.96%	118	5.83%
93	237,990	2,122	8.92	154	7.24%	79	3.71%	40	26.34%	233	10.96%	124	5.83%
94	239,190	2,239	9.36	162	7.24%	83	3.71%	43	26.34%	245	10.96%	131	5.83%
95	244,190	2,394	9.80	173	7.24%	89	3.71%	46	26.34%	262	10.96%	140	5.83%
96	251,613	2,578	10.24	187	7.24%	96	3.71%	49	26.34%	282	10.96%	150	5.83%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				2 yr ave

Size of teaching field	2,271	Annual supply	132
Annual demand	249	From Ohio Colleges & Universities	61
From transfers	84		
From new hires	164	Supply/Demand Ratio	0.53
Number of whom without experience	43	S/D Ratio for Beginning Teachers	1.41

Status   Considerable Shortage

Prospects for Beginning Teachers   Average

67

Ohio Teacher Supply and Demand

Projections for Trade and Industrial Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	277,352	2,963	10.68	196	6.61%	78	2.63%	75	38.27%	274	9.25%	170	5.74%
88	282,549	2,957	10.47	191	6.46%	116	3.92%	76	39.79%	307	10.38%	174	5.88%
89	270,653	2,900	10.71	148	5.10%	98	3.38%	40	27.03%	246	8.48%	179	6.17%
90	250,525	2,862	11.42	174	6.08%	121	4.23%	43	24.71%	295	10.31%	137	4.79%
91	240,344	2,795	11.63	149	5.33%	86	3.08%	29	19.46%	235	8.41%	90	3.22%
92	238,559	2,824	11.84	155	5.50%	103	3.65%	37	23.73%	259	9.16%	113	4.00%
93	237,990	2,885	12.12	159	5.50%	105	3.65%	38	23.73%	264	9.16%	116	4.00%
94	239,190	2,968	12.41	163	5.50%	108	3.65%	39	23.73%	272	9.16%	119	4.00%
95	244,190	3,100	12.69	171	5.50%	113	3.65%	40	23.73%	284	9.16%	124	4.00%
96	251,613	3,265	12.98	180	5.50%	119	3.65%	43	23.73%	299	9.16%	131	4.00%
			5 yr trend		3 yr ave		4 yr ave		3 yr ave				2 yr ave

Size of teaching field	3,008	Annual supply	120
Annual demand	275	From Ohio Colleges & Universities	66
From transfers	110		
From new hires	166	Supply/Demand Ratio	0.44
Number of whom without experience	39	S/D Ratio for Beginning Teachers	1.68

Status — Considerable Shortage

Prospects for Beginning Teachers — Average

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Ohio Teacher Supply and Demand

Projections for Art Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	2,399	1.34	192	8.00%	202	8.42%	66	34.38%	394	16.42%	263	10.96%
88	1,793,431	2,441	1.36	207	8.48%	169	6.92%	82	39.61%	376	15.40%	270	11.06%
89	1,778,397	2,493	1.40	198	7.94%	166	6.66%	83	41.92%	364	14.60%	289	11.59%
90	1,764,401	2,595	1.47	206	7.94%	159	6.13%	76	36.89%	365	14.07%	293	11.29%
91	1,771,579	2,628	1.48	154	5.86%	170	6.47%	67	43.51%	324	12.33%	303	11.53%
92	1,774,228	2,717	1.53	208	7.64%	178	6.54%	84	40.48%	386	14.19%	307	11.29%
93	1,786,433	2,807	1.57	215	7.64%	184	6.54%	87	40.48%	398	14.19%	317	11.29%
94	1,709,269	2,900	1.61	222	7.64%	190	6.54%	90	40.48%	411	14.19%	327	11.29%
95	1,822,224	3,010	1.65	230	7.64%	197	6.54%	93	40.48%	427	14.19%	340	11.29%
96	1,843,152	3,118	1.69	238	7.64%	204	6.54%	97	40.48%	442	14.19%	352	11.29%
		5 yr trend		5 yr ave		4 yr ave		4 yr ave				5 yr ave	

Size of teaching field	2,910	Annual supply	329
Annual demand	413	From Ohio Colleges & Universities	155
From transfers	190		
From new hires	222	Supply/Demand Ratio	0.80
Number of whom without experience	90	S/D Ratio for Beginning Teachers	1.72

Status — Considerable Shortage

Prospects for Beginning Teachers — Average

Ohio Teacher Supply and Demand

Projections for Music Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	3,248	1.81	327	10.07%	272	8.37%	102	31.19%	599	18.44%	493	15.18%
88	1,793,431	3,258	1.82	276	8.47%	231	7.09%	75	27.17%	507	15.56%	439	13.47%
89	1,778,397	3,251	1.83	272	8.37%	240	7.38%	97	35.66%	512	15.75%	466	14.33%
90	1,764,401	3,321	1.88	324	9.76%	191	5.75%	93	28.70%	515	15.51%	437	13.16%
91	1,771,579	3,336	1.88	265	7.94%	241	7.22%	66	24.91%	506	15.17%	441	13.22%
92	1,774,228	3,384	1.91	292	8.63%	232	6.86%	78	26.81%	524	15.50%	458	13.55%
93	1,786,433	3,444	1.93	297	8.63%	236	6.86%	80	26.81%	534	15.50%	467	13.55%
94	1,799,269	3,507	1.95	303	8.63%	241	6.86%	81	26.81%	543	15.50%	475	13.55%
95	1,822,224	3,590	1.97	310	8.63%	246	6.86%	83	26.81%	556	15.50%	486	13.55%
96	1,843,152	3,670	1.99	317	8.63%	252	6.86%	85	26.81%	569	15.50%	497	13.55%
			5 yr trend	4 yr ave		4 yr ave		2 yr ave				4 yr ave	

Size of teaching field	3,519	Annual supply	477
Annual demand	545	From Ohio Colleges & Universities	275
From transfers	241		
From new hires	304	Supply/Demand Ratio	0.87
Number of whom without experience	81	S/D Ratio for Beginning Teachers	3.38

Status   Considerable Shortage

Prospects for Beginning Teachers   Poor

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Ohio Teacher Supply and Demand

Projections for Physical EducationTeachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	O Exp	%	Demand	%	Supply	%
87	1,793,508	3,336	1.86	192	5.76%	392	11.75%	83	43.23%	584	17.51%	805	24.13%
88	1,793,431	3,326	1.85	141	4.24%	343	10.31%	61	43.26%	484	14.55%	714	21.47%
89	1,778.397	3,313	1.86	165	4.98%	304	9.18%	73	44.24%	469	14.16%	719	21.70%
90	1,764,401	3,359	1.90	167	4.97%	311	9.26%	77	46.11%	478	14.23%	593	17.65%
91	1,771,579	3,393	1.92	163	4.80%	364	10.73%	73	44.79%	527	15.53%	579	17.06%
92	1,774,228	3,419	1.93	169	4.95%	350	10.25%	75	44.33%	520	15.20%	666	19.47%
93	1,786,433	3,471	1.94	172	4.95%	356	10.25%	76	44.33%	527	15.20%	676	19.47%
94	1,799,269	3,525	1.96	174	4.95%	361	10.25%	77	44.33%	536	15.20%	686	19.47%
95	1,822,224	3,599	1.98	178	4.95%	369	10.25%	79	44.33%	547	15.20%	701	19.47%
96	1,843,152	3,670	1.99	182	4.95%	376	10.25%	81	44.33%	558	15.20%	715	19.47%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				4 yr ave

Size of teaching field	3,537	Annual supply	689
Annual demand	537	From Ohio Colleges & Universities	236
From transfers	362		
From new hires	175	Supply/Demand Ratio	1.28
Number of whom without experience	78	S/D Ratio for Beginning Teachers	3.04

Status   Balanced

Prospects for Beginning Teachers   Poor

Ohio Teacher Supply and Demand

Projections for Librarians

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	1,694	0.94	81	4.78%	51	3.01%	14	17.28%	132	7.79%	155	9.15%
88	1,793,431	1,688	0.94	70	4.15%	55	3.26%	11	15.71%	125	7.41%	108	6.40%
89	1,778,397	1,692	0.95	62	3.66%	62	3.66%	12	19.35%	124	7.33%	112	6.62%
90	1,764,401	1,685	0.95	59	3.50%	43	2.55%	10	16.95%	102	6.05%	97	5.76%
91	1,771,579	1,672	0.94	58	3.47%	52	3.11%	11	18.97%	110	6.58%	93	5.56%
92	1,774,228	1,687	0.95	66	3.91%	53	3.12%	12	17.65%	119	7.03%	103	6.08%
93	1,786,433	1,701	0.95	67	3.91%	53	3.12%	12	17.65%	120	7.03%	103	6.08%
94	1,799,269	1,715	0.95	67	3.91%	54	3.12%	12	17.65%	121	7.03%	104	6.08%
95	1,822,224	1,739	0.95	68	3.91%	54	3.12%	12	17.65%	122	7.03%	106	6.08%
96	1,843,152	1,762	0.96	69	3.91%	55	3.12%	12	17.65%	124	7.03%	107	6.08%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				4 yr ave

Size of teaching field   1,721   Annual supply   105

Annual demand   121   From Ohio Colleges & Universities   43

    From transfers   54

    From new hires   67   Supply/Demand Ratio   0.87

      Number of whom without experience   12   S/D Ratio for Beginning Teachers   3.62

Status   Considerable Shortage

Prospects for Beginning Teachers   Poor

73

77

Ohio Teacher Supply and Demand

Projections for School Social Workers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	120	0.07	8	6.67%	11	9.17%	4	50.00%	19	15.83%	27	22.50%
88	1,793,431	112	0.06	2	1.79%	7	6.25%	1	50.00%	9	8.04%	17	15.18%
89	1,778,397	141	0.08	5	3.55%	45	31.91%	1	20.00%	50	35.46%	10	7.09%
90	1,764,401	144	0.08	0	0.00%	20	13.89%	0	0.00%	20	13.89%	7	4.86%
91	1,771,579	161	0.09	6	3.73%	29	18.01%	1	16.67%	35	21.74%	11	6.83%
92	1,774,228	171	0.10	5	3.15%	36	21.27%	1	12.22%	42	24.42%	11	6.26%
93	1,786,433	184	0.10	6	3.15%	39	21.27%	1	12.22%	45	24.42%	12	6.26%
94	1,799,269	198	0.11	6	3.15%	42	21.27%	1	12.22%	48	24.42%	12	6.26%
95	1,822,224	212	0.12	7	3.15%	45	21.27%	1	12.22%	52	24.42%	13	6.26%
96	1,843,152	227	0.12	7	3.15%	48	21.27%	1	12.22%	55	24.42%	14	6.26%
			5 yr trend		5 yr ave		3 yr ave		3 yr ave				3 yr ave

Size of teaching field	198	Annual supply	12
Annual demand	48	From Ohio Colleges & Universities	10
From transfers	42		
From new hires	6	Supply/Demand Ratio	0.26
Number of whom without experience	1	S/D Ratio for Beginning Teachers	13.11

Status — Considerable Shortage

Prospects for Beginning Teachers — Poor

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Ohio Teacher Supply and Demand

Projections for School Nurses

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	678	0.38	55	8.11%	15	2.21%	38	69.09%	70	10.32%	55	8.11%
88	1,793,431	692	0.39	56	8.09%	18	2.60%	49	87.50%	74	10.69%	68	9.83%
89	1,778,397	890	0.50	69	7.75%	192	21.57%	40	57.97%	261	29.33%	57	6.40%
90	1,764,401	954	0.54	136	14.26%	12	1.26%	85	62.50%	148	15.51%	86	9.01%
91	1,771,579	959	0.54	75	7.82%	7	0.73%	49	65.33%	82	8.55%	80	8.34%
92	1,774,228	1,089	0.61	100	9.21%	11	0.99%	64	63.92%	111	10.20%	94	8.68%
93	1,786,433	1,182	0.66	109	9.21%	12	0.99%	70	63.92%	121	10.20%	103	8.68%
94	1,799,269	1,278	0.71	118	9.21%	13	0.99%	75	63.92%	130	10.20%	111	8.68%
95	1,822,224	1,381	0.76	127	9.21%	14	0.99%	81	63.92%	141	10.20%	120	8.68%
96	1,843,152	1,486	0.81	137	9.21%	15	0.99%	87	63.92%	152	10.20%	129	8.68%
			5 yr trend		5 yr ave		2 yr ave		2 yr ave				2 yr ave

Size of teaching field	1,283	Annual supply	111
Annual demand	131	From Ohio Colleges & Universities	14
From transfers	13		
From new hires	118	Supply/Demand Ratio	0.85
Number of whom without experience	76	S/D Ratio for Beginning Teachers	0.19

Status   Considerable Shortage

Prospects for Beginning Teachers   Excellent

81

82

Ohio Teacher Supply and Demand

Projections for Teachers of the Specific Learning Disabled

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	954	0.53	169	17.71%	53	5.56%	65	38.46%	222	23.27%	1,133	118.76%
88	1,793,431	973	0.54	161	16.55%	53	5.45%	56	34.78%	214	21.99%	1,069	109.87%
89	1,778,397	1,018	0.57	156	15.32%	68	6.68%	48	30.77%	224	22.00%	944	92.73%
90	1,764,401	1,077	0.61	215	19.96%	52	4.83%	74	34.42%	267	24.79%	991	92.01%
91	1,771,579	1,168	0.66	211	18.07%	59	5.05%	81	38.39%	270	23.12%	863	73.89%
92	1,774,228	1,207	0.68	229	19.01%	67	5.51%	81	35.36%	296	24.53%	1,040	86.21%
93	1,786,433	1,273	0.71	242	19.01%	70	5.51%	86	35.36%	312	24.53%	1,097	86.21%
94	1,799,269	1,340	0.74	255	19.01%	74	5.51%	90	35.36%	329	24.53%	1,155	86.21%
95	1,822,224	1,416	0.78	269	19.01%	78	5.51%	95	35.36%	347	24.53%	1,220	86.21%
96	1,843,152	1,491	0.81	284	19.01%	82	5.51%	100	35.36%	366	24.53%	1,286	86.21%
			5 yr trend		2 yr ave		5 yr ave		5 yr ave				3 yr ave

Size of teaching field	1,345	Annual supply	1,160
Annual demand	330	From Ohio Colleges & Universities	163
From transfers	74		
From new hires	256	Supply/Demand Ratio	3.52
Number of whom without experience	90	S/D Ratio for Beginning Teachers	1.80

Status   Considerable Surplus

Prospects for Beginning Teachers   Average

83   84

Ohio Teacher Supply and Demand

Projections for Teachers of the Gifted

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	497	0.28	50	10.06%	125	25.15%	8	16.00%	175	35.21%	0	0.00%
88	1,793,431	503	0.28	38	7.55%	78	15.51%	8	21.05%	116	23.06%	73	14.51%
89	1,778,397	514	0.29	42	8.17%	69	13.42%	6	14.29%	111	21.60%	83	16.15%
90	1,764,401	549	0.31	49	8.93%	71	12.93%	16	32.65%	120	21.86%	32	5.83%
91	1,771,579	574	0.32	50	8.71%	62	10.80%	15	30.00%	112	19.51%	20	3.48%
92	1,774,228	592	0.33	49	8.34%	73	12.39%	15	31.33%	123	20.73%	59	9.99%
93	1,786,433	618	0.35	52	8.34%	77	12.39%	16	31.33%	128	20.73%	62	9.99%
94	1,799,269	645	0.36	54	8.34%	80	12.39%	17	31.33%	134	20.73%	64	9.99%
95	1,822,224	676	0.37	56	8.34%	84	12.39%	18	31.33%	140	20.73%	68	9.99%
96	1,843,152	707	0.38	59	8.34%	88	12.39%	18	31.33%	146	20.73%	71	9.99%
			5 yr trend		4 yr ave		3 yr ave		2 yr ave				4 yr ave

Size of teaching field	648	Annual supply	65
Annual demand	134	From Ohio Colleges & Universities	60
From transfers	80		
From new hires	54	Supply/Demand Ratio	0.48
Number of whom without experience	17	S/D Ratio for Beginning Teachers	3.55

Status   Considerable Shortage

Prospects for Beginning Teachers   Poor

85   86

Ohio Teacher Supply and Demand

Projections for Teachers of the Developmentally Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	3,809	2.12	337	8.85%	123	3.23%	138	40.95%	460	12.08%	558	14.65%
88	1,793,431	3,778	2.11	324	8.58%	112	2.96%	129	39.81%	436	11.54%	548	14.51%
89	1,778,397	3,776	2.12	268	7.10%	127	3.36%	123	45.90%	395	10.46%	510	13.51%
90	1,764,401	3,774	2.14	323	8.56%	113	2.99%	127	39.32%	436	11.55%	564	14.94%
91	1,771,579	3,781	2.13	311	8.23%	109	2.88%	135	43.41%	420	11.11%	513	13.57%
92	1,774,228	3,799	2.14	314	8.26%	117	3.09%	135	42.88%	431	11.35%	541	14.23%
93	1,786,433	3,835	2.15	317	8.26%	118	3.09%	136	42.88%	435	11.35%	546	14.23%
94	1,799,269	3,872	2.15	320	8.26%	120	3.09%	137	42.88%	439	11.35%	551	14.23%
95	1,822,224	3,931	2.16	325	8.26%	121	3.09%	139	42.88%	446	11.35%	560	14.23%
96	1,843,152	3,986	2.16	329	8.26%	123	3.09%	141	42.88%	452	11.35%	567	14.23%
			5 yr trend		5 yr ave		5 yr ave		3 yr ave				5 yr ave

Size of teaching field	3,885	Annual supply	553
Annual demand	441	From Ohio Colleges & Universities	165
From transfers	120		
From new hires	321	Supply/Demand Ratio	1.25
Number of whom without experience	138	S/D Ratio for Beginning Teachers	1.20

Status   Balanced

Prospects for Beginning Teachers   Good

89

87

Ohio Teacher Supply and Demand

Projections for Teachers of the Multi-Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	621	0.35	120	19.32%	32	5.15%	41	34.17%	152	24.48%	0	0.00%
88	1,793,431	655	0.37	100	15.27%	27	4.12%	45	45.00%	127	19.39%	0	0.00%
89	1,778,397	689	0.39	113	16.40%	29	4.21%	37	32.74%	142	20.61%	0	0.00%
90	1,764,401	739	0.42	129	17.46%	35	4.74%	43	33.33%	164	22.19%	106	14.34%
91	1,771,579	803	0.45	133	16.56%	38	4.73%	40	30.08%	171	21.30%	127	15.82%
92	1,774,228	842	0.47	138	16.42%	37	4.45%	44	32.05%	176	20.87%	127	15.08%
93	1,786,433	895	0.50	147	16.42%	40	4.45%	47	32.05%	187	20.87%	135	15.08%
94	1,799,269	950	0.53	156	16.42%	42	4.45%	50	32.05%	198	20.87%	143	15.08%
95	1,822,224	1,011	0.55	166	16.42%	45	4.45%	53	32.05%	211	20.87%	152	15.08%
96	1,843,152	1,072	0.58	176	16.42%	48	4.45%	56	32.05%	224	20.87%	162	15.08%
			5 yr trend	4 yr ave		4 yr ave		3 yr ave				2 yr ave	

Size of teaching field	954	Annual supply	144
Annual demand	199	From Ohio Colleges & Universities	80
From transfers	42		
From new hires	157	Supply/Demand Ratio	0.72
Number of whom without experience	50	S/D Ratio for Beginning Teachers	1.59

Status   Considerable Shortage

Prospects for Beginning Teachers   Average

Ohio Teacher Supply and Demand

Projections for Teachers of the Orthopedically Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	221	0.12	21	9.50%	5	2.26%	5	23.81%	26	11.76%	37	16.74%
88	1,793,431	218	0.12	10	4.59%	9	4.13%	4	40.00%	19	8.72%	44	20.18%
89	1,778,397	220	0.12	11	5.00%	10	4.55%	4	36.36%	21	9.55%	28	12.73%
90	1,764,401	222	0.13	18	8.11%	7	3.15%	5	27.78%	25	11.26%	44	19.82%
91	1,771,579	219	0.12	21	9.59%	3	1.37%	6	28.57%	24	10.96%	27	12.33%
92	1,774,228	222	0.13	16	7.36%	7	3.09%	5	33.18%	23	10.45%	33	14.96%
93	1,786,433	224	0.13	17	7.36%	7	3.09%	5	33.18%	23	10.45%	34	14.96%
94	1,799,269	227	0.13	17	7.36%	7	3.09%	6	33.18%	24	10.45%	34	14.96%
95	1,822,224	231	0.13	17	7.36%	7	3.09%	6	33.18%	24	10.45%	35	14.96%
96	1,843,152	234	0.13	17	7.36%	7	3.09%	6	33.18%	24	10.45%	35	14.96%
		5 yr trend		5 yr ave		5 yr ave		4 yr ave				3 yr ave	

Size of teaching field	228	Annual supply	34
Annual demand	24	From Ohio Colleges & Universities	9
From transfers	7		
From new hires	17	Supply/Demand Ratio	1.43
Number of whom without experience	6	S/D Ratio for Beginning Teachers	1.62

Status   Balanced
Prospects for Beginning Teachers   Average

Ohio Teacher Supply and Demand

Projections for Teachers of Pre-school Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	67	0.04	3	4.48%	6	8.96%	0	0.00%	9	13.43%	0	0.00%
88	1,793,431	66	0.04	2	3.03%	6	9.09%	0	0.00%	8	12.12%	0	0.00%
89	1,778,397	75	0.04	7	9.33%	21	28.00%	2	28.57%	28	37.33%	0	0.00%
90	1,764,401	214	0.12	87	40.65%	65	30.37%	21	24.14%	152	71.03%	6	2.80%
91	1,771,579	350	0.20	97	27.71%	66	18.86%	23	23.71%	163	46.57%	155	44.29%
92	1,774,228	370	0.21	126	34.18%	95	25.74%	32	25.47%	222	59.93%	164	44.29%
93	1,786,433	445	0.25	152	34.18%	115	25.74%	39	25.47%	267	59.93%	197	44.29%
94	1,799,269	521	0.29	178	34.18%	134	25.74%	45	25.47%	312	59.93%	231	44.29%
95	1,822,224	601	0.33	205	34.18%	155	25.74%	52	25.47%	360	59.93%	266	44.29%
96	1,843,152	683	0.37	233	34.18%	176	25.74%	59	25.47%	409	59.93%	302	44.29%
			5 yr trend		2 yr ave		3 yr ave		3 yr ave				1 yr

Size of teaching field	524	Annual supply	232
Annual demand	314	From Ohio Colleges & Universities	16
From transfers	135		
From new hires	179	Supply/Demand Ratio	0.74
Number of whom without experience	46	S/D Ratio for Beginning Teachers	0.35

Status   Considerable Shortage
Prospects for Beginning Teachers   Excellent

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Ohio Teacher Supply and Demand

Projections for Teachers of the Severe Behavior Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	3,559	1.98	358	10.06%	213	5.98%	94	26.26%	571	16.04%	0	0.00%
88	1,793,431	3,618	2.02	360	9.95%	206	5.69%	81	22.50%	566	15.64%	0	0.00%
89	1,778,397	3,902	2.19	362	9.28%	367	9.41%	100	27.62%	729	18.68%	0	0.00%
90	1,764,401	4,079	2.31	447	10.96%	196	4.81%	144	32.21%	643	15.76%	68	1.67%
91	1,771,579	4,176	2.36	408	9.77%	169	4.05%	126	30.88%	577	13.82%	69	1.65%
92	1,774,228	4,409	2.48	441	10.00%	195	4.43%	139	31.55%	636	14.43%	73	1.66%
93	1,786,433	4,625	2.59	463	10.00%	205	4.43%	146	31.55%	667	14.43%	77	1.66%
94	1,799,269	4,846	2.69	485	10.00%	214	4.43%	153	31.55%	699	14.43%	80	1.66%
95	1,822,224	5,097	2.80	510	10.00%	226	4.43%	161	31.55%	735	14.43%	85	1.66%
96	1,843,152	5,347	2.90	535	10.00%	237	4.43%	169	31.55%	772	14.43%	89	1.66%
			5 yr trend		5 yr ave		2 yr ave		2 yr ave				2 yr ave

Size of teaching field	4,865	Annual supply	81
Annual demand	702	From Ohio Colleges & Universities	54
From transfers	215		
From new hires	487	Supply/Demand Ratio	0.12
Number of whom without experience	154	S/D Ratio for Beginning Teachers	0.35

Status   Considerable Shortage

Prospects for Beginning Teachers   Excellent

Ohio Teacher Supply and Demand

Projections for Teachers of the Visually Handicapped

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	62	0.03	5	8.06%	0	0.00%	0	0.00%	5	8.06%	13	20.97%
88	1,793,431	65	0.04	6	9.23%	3	4.62%	3	50.00%	9	13.85%	3	4.62%
89	1,778,397	66	0.04	6	9.09%	6	9.09%	3	50.00%	12	18.18%	11	16.67%
90	1,764,401	62	0.04	8	12.90%	1	1.61%	1	12.50%	9	14.52%	9	14.52%
91	1,771,579	64	0.04	7	10.94%	3	4.69%	4	57.14%	10	15.63%	8	12.50%
92	1,774,228	65	0.04	8	11.92%	3	5.00%	3	42.41%	11	16.92%	9	14.56%
93	1,786,433	65	0.04	8	11.92%	3	5.00%	3	42.41%	11	16.92%	10	14.56%
94	1,799,269	66	0.04	8	11.92%	3	5.00%	3	42.41%	11	16.92%	10	14.56%
95	1,822,224	68	0.04	8	11.92%	3	5.00%	3	42.41%	11	16.92%	10	14.56%
96	1,843,152	69	0.04	8	11.92%	3	5.00%	3	42.41%	12	16.92%	10	14.56%
			5 yr trend		2 yr ave		4 yr ave		4 yr ave				3 yr ave

Size of teaching field	67	Annual supply	10
Annual demand	11	From Ohio Colleges & Universities	3
From transfers	3		
From new hires	8	Supply/Demand Ratio	0.86
Number of whom without experience	3	S/D Ratio for Beginning Teachers	0.89

Status   Considerable Shortage

Prospects for Beginning Teachers   Excellent

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Ohio Teacher Supply and Demand

Projections for Teachers of the Hearing Impaired

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	286	0.16	25	8.74%	9	3.15%	7	28.00%	34	11.89%	71	24.83%
88	1,793,431	278	0.16	23	8.27%	8	2.88%	6	26.09%	31	11.15%	53	19.06%
89	1,778,397	275	0.15	17	6.18%	20	7.27%	9	52.94%	37	13.45%	44	16.00%
90	1,764,401	275	0.16	26	9.45%	11	4.00%	9	34.62%	37	13.45%	23	8.36%
91	1,771,579	284	0.16	36	12.68%	10	3.52%	11	30.56%	46	16.20%	38	13.38%
92	1,774,228	280	0.16	25	9.07%	12	4.16%	8	32.59%	37	13.23%	35	12.58%
93	1,786,433	282	0.16	26	9.07%	12	4.16%	8	32.59%	37	13.23%	36	12.58%
94	1,799,269	285	0.16	26	9.07%	12	4.16%	8	32.59%	38	13.23%	36	12.58%
95	1,822,224	289	0.16	26	9.07%	12	4.16%	9	32.59%	38	13.23%	36	12.58%
96	1,843,152	293	0.16	27	9.07%	12	4.16%	9	32.59%	39	13.23%	37	12.58%
			5 yr trend		5 yr ave		5 yr ave		2 yr ave				3 yr ave

Size of teaching field	286	Annual supply	36
Annual demand	38	From Ohio Colleges & Universities	25
From transfers	12		
From new hires	26	Supply/Demand Ratio	0.95
Number of whom without experience	8	S/D Ratio for Beginning Teachers	2.96

Status   Considerable Shortage

Prospects for Beginning Teachers   Fair

Ohio Teacher Supply and Demand

Projections for Psychologists

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	951	0.53	116	12.20%	36	3.79%	38	32.76%	152	15.98%	89	9.36%
88	1,793,431	936	0.52	88	9.40%	45	4.81%	45	51.14%	133	14.21%	63	6.73%
89	1,778,397	1,110	0.62	137	12.34%	138	12.43%	51	37.23%	275	24.77%	81	7.30%
90	1,764,401	1,152	0.65	115	9.98%	32	2.78%	52	45.22%	147	12.76%	92	7.99%
91	1,771,579	1,168	0.66	111	9.50%	25	2.14%	54	48.65%	136	11.64%	88	7.53%
92	1,774,228	1,268	0.71	135	10.69%	31	2.46%	64	46.94%	167	13.14%	99	7.78%
93	1,786,433	1,346	0.75	144	10.69%	33	2.46%	68	46.94%	177	13.14%	105	7.78%
94	1,799,269	1,426	0.79	152	10.69%	35	2.46%	71	46.94%	187	13.14%	111	7.78%
95	1,822,224	1,515	0.83	162	10.69%	37	2.46%	76	46.94%	199	13.14%	118	7.78%
96	1,843,152	1,604	0.87	171	10.69%	39	2.46%	80	46.94%	211	13.14%	125	7.78%
			5 yr trend		5 yr ave		2 yr ave		2 yr ave				5 yr ave

Size of teaching field	1,431	Annual supply	111
Annual demand	188	From Ohio Colleges & Universities	81
From transfers	35		
From new hires	153	Supply/Demand Ratio	0.59
Number of whom without experience	72	S/D Ratio for Beginning Teachers	1.13

Status — Considerable Shortage

Prospects for Beginning Teachers — Good

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Ohio Teacher Supply and Demand

Projections for Adapted Physical Education Teachers

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	82	0.05	16	19.51%	18	21.95%	4	25.00%	34	41.46%	0	0.00%
88	1,793,431	79	0.04	9	11.39%	10	12.66%	5	55.56%	19	24.05%	20	25.32%
89	1,778,397	99	0.06	17	17.17%	22	22.22%	3	17.65%	39	39.39%	21	21.21%
90	1,764,401	123	0.07	19	15.45%	26	21.14%	6	31.58%	45	36.59%	7	5.69%
91	1,771,579	143	0.08	22	15.38%	19	13.29%	5	22.73%	41	28.67%	21	14.69%
92	1,774,228	156	0.09	25	15.78%	28	18.25%	8	30.50%	53	34.03%	16	10.19%
93	1,786,433	174	0.10	27	15.78%	32	18.25%	8	30.50%	59	34.03%	18	10.19%
94	1,799,269	193	0.11	30	15.78%	35	18.25%	9	30.50%	66	34.03%	20	10.19%
95	1,822,224	212	0.12	34	15.78%	39	18.25%	10	30.50%	72	34.03%	22	10.19%
96	1,843,152	232	0.13	37	15.78%	42	18.25%	11	30.50%	79	34.03%	24	10.19%
			5 yr trend		5 yr ave		5 yr ave		5 yr ave				2 yr ave

Size of teaching field   193   Annual supply   20

Annual demand   66   From Ohio Colleges & Universities   9

    From transfers   35

    From new hires   31   Supply/Demand Ratio   0.30

       Number of whom without experience   9   S/D Ratio for Beginning Teachers   0.97

Status   Considerable Shortage

Prospects for Beginning Teachers   Excellent

Ohio Teacher Supply and Demand

Projections for Occupational Therapists

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	194	0.11	32	16.49%	2	1.03%	4	12.50%	34	17.53%	64	32.99%
88	1,793,431	200	0.11	28	14.00%	2	1.00%	11	39.29%	30	15.00%	75	37.50%
89	1,778,397	193	0.11	23	11.92%	3	1.55%	3	13.04%	26	13.47%	65	33.68%
90	1,764,401	223	0.13	53	23.77%	3	1.35%	9	16.98%	56	25.11%	51	22.87%
91	1,771,579	238	0.13	48	20.17%	1	0.42%	12	25.00%	49	20.59%	73	30.67%
92	1,774,228	245	0.14	42	17.27%	3	1.07%	8	18.34%	45	18.34%	76	31.01%
93	1,786,433	258	0.14	45	17.27%	3	1.07%	8	18.34%	47	18.34%	80	31.01%
94	1,799,269	272	0.15	47	17.27%	3	1.07%	9	18.34%	50	18.34%	84	31.01%
95	1,822,224	288	0.16	50	17.27%	3	1.07%	9	18.34%	53	18.34%	89	31.01%
96	1,843,152	304	0.16	52	17.27%	3	1.07%	10	18.34%	56	18.34%	94	31.01%
			5 yr trend		5 yr ave		5 yr ave		3 yr ave				4 yr ave

Size of teaching field	273	Annual supply	85
Annual demand	50	From Ohio Colleges & Universities	0
From transfers	3		
From new hires	47	Supply/Demand Ratio	1.69
Number of whom without experience	9	S/D Ratio for Beginning Teachers	0.00

Status   Balanced

Prospects for Beginning Teachers   Excellent

Ohio Teacher Supply and Demand

Projections for Speech Therapists

Yr	Enrollment	Teachers	Per 1000	New	%	Transfer In	%	0 Exp	%	Demand	%	Supply	%
87	1,793,508	1,190	0.66	113	9.50%	38	3.19%	33	29.20%	151	12.69%	210	17.65%
88	1,793,431	1,197	0.67	98	8.19%	40	3.34%	35	35.71%	138	11.53%	147	12.28%
89	1,778,397	1,410	0.79	136	9.65%	180	12.77%	39	28.68%	316	22.41%	153	10.85%
90	1,764,401	1,463	0.83	157	10.73%	19	1.30%	30	19.11%	176	12.03%	140	9.57%
91	1,771,579	1,520	0.86	163	10.72%	14	0.92%	35	21.47%	177	11.64%	115	7.57%
92	1,774,228	1,645	0.93	177	10.73%	18	1.11%	36	20.29%	195	11.84%	141	8.57%
93	1,786,433	1,755	0.98	188	10.73%	19	1.11%	38	20.29%	208	11.84%	150	8.57%
94	1,799,269	1,867	1.04	200	10.73%	21	1.11%	41	20.29%	221	11.84%	160	8.57%
95	1,822,224	1,991	1.09	214	10.73%	22	1.11%	43	20.29%	236	11.84%	171	8.57%
96	1,843,152	2,115	1.15	227	10.73%	23	1.11%	46	20.29%	250	11.84%	181	8.57%
			5 yr trend		2 yr ave		2 yr ave		2 yr ave				2 yr ave

Size of teaching field	1,875	Annual supply	161
Annual demand	222	From Ohio Colleges & Universities	42
From transfers	21		
From new hires	201	Supply/Demand Ratio	0.72
Number of whom without experience	41	S/D Ratio for Beginning Teachers	1.03

Status   Considerable Shortage

Prospects for Beginning Teachers   Good

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