

**CONNECTICUT STATE BOARD OF EDUCATION
Hartford**

TO: State Board of Education

FROM: Theodore S. Sergi
Commissioner of Education

SUBJECT: FALL HIRING REPORT AND RELATED DATA, 2002

Attached please find the 2002 Fall Hiring Report and additional data related to changes in school district staffing patterns over a period of time.

An analysis of fall hiring data from the fall of 2000 through the fall of 2002 indicates a two-year trend of better news for Connecticut school districts, including a two-year decline in the vacant positions which needed to be filled each year and a decline in the percent of positions vacant on October 1 due to no qualified applicants.

For the 2000 school year, 5,457 certified positions needed to be filled, compared to 4,894 in 2001 and 4,344 in 2002. This represents a reduction of 1,113 positions needing to be filled in 2002 compared to 2000. Of the positions needed to be filled for the 2000 beginning school year, 7.7 percent were vacant on October 1, compared with 6.9 percent vacant in 2001 and 5.2 percent still vacant on October 1, 2002, due to no qualified candidates.

The decrease in the number of vacancies remaining in October for the past two years may be attributable to: the national and state economic recessions; more concentrated efforts by the school districts to begin their searches earlier; utilization of broader advertising systems such as through the internet; the expansion of several teacher preparation programs and the Alternative Route to Certification.

The good news of the last two years does not eliminate the concern that 19,000 certified staff – or 40 percent of all teachers and administrators – are predicted to retire in the next decade, nor does it apply to all school districts and all subject areas. Urban, priority and poor rural school districts continue to struggle in the hiring and, particularly, the retention of staff. In addition, areas such as special education, 7-12 mathematics, bilingual education, music, speech language pathology and world languages continue to have shortages.

Highlights of the data, which are as of October 1, 2002, include:

- The total number of certified positions in Connecticut has increased by over 9,000 since 1987, and student enrollment also increased.
- The percent of certified positions filled by October 1 was 92.6, the highest percentage over the last 15 years.
- Although ERG I districts still had the greatest percentage of vacancies on October 1 (13.3 percent, compared to the average of 2.6 percent across the other Education Reference Groups [ERGs] for 2002), this is a marked decline of 5.3 percentage points compared to 2001.
- Using 2001-2002 data, Special Education was identified as the greatest shortage area, followed by Music, Speech and Language Pathology, and Mathematics. Based on 2002-2003 data, Speech and Language Pathology was identified as the greatest shortage area, followed by Bilingual Education, Special Education and Music.
- The number of Durational Shortage Area Permits (DSAPs) issued to districts has increased significantly over the past six years, from 35 in 1997-1998 to 484 in 2000-2001 to 805 in 2001-2002. The largest number of DSAPs were issued in Spanish, Special Education and 7-12 Mathematics. (To obtain a DSAP, a district must demonstrate the inability to find a qualified certified teacher **and** present a candidate who has passed Praxis I **and** has at least 12 semester hours of credit in the area to be taught **and** has enrolled in a teacher preparation or alternative route to certification program.)
- As of November 13, 2002, 466 DSAPs have been issued for the 2002-2003 school year, compared with 507 DSAPs at this time last year.
- Just over one-half of one percent of the total certified positions were vacant on October 1, 2002.
- The number of ARC 90-day certificates issued as of November 12, 2002, was 205, compared to 162 at the same time last year. (A 90-day certificate is issued to an ARC program completer upon employment with a public school district.)

Connecticut's certification regulations provide districts with a degree of flexibility to fill vacant positions in shortage areas (DSAP, Minor Assignment, Long-Term Substitute Authorization) while still requiring a minimum standard of coursework (12 semester hours of credit in the area to be taught) and additional coursework for renewals. Districts have increasingly needed to employ these uncertified candidates and have also hired increasing numbers of candidates who completed the ARC program (1995-1996, 88 ARC completers were hired; 2001-2002 209 ARC completers were hired). See Attachments A-1 through A-4.

To track future trends and needs, it is important to look at the projected number of students attending Connecticut's schools, the age of the current teaching staff and the numbers of teachers certified each year. See Attachments B-1 through B7.

- As of October 1, 2001, Connecticut had 50,087 certified educators employed in its public schools, which is the largest number to date (just over 40,000 in 1985).
- Almost 41 percent of these educators are age 50 or older.
- Over the last three years, almost 1,500 teachers have retired each year; the mean age of retirement in 2001-2002 was 58.8, with 30.9 years experience.

Given the trends in teacher retirement, over 40 percent of our educators will be retiring within the next 10-12 years. The number of students in public schools will peak at approximately 582,000 in the fall of 2005. By 2010, total student enrollment is expected to be very close to the fall 2001 student enrollment of 570,900. Therefore, the gross demand for educators should be relatively stable for the next decade.

- Over the last three years, on average, approximately 3,700 educators were certified annually for the first time.
- Of those educators certified for the first time, 65 percent were hired in 2000-2001 compared to 20 percent ten years ago. Almost 70 percent of newly certified teachers in areas other than elementary were hired.
- The number of returning experienced teachers has decreased to 35 percent in 2001 compared to 50 percent prior to 1995. As the demand for educators has increased, Connecticut schools are relying more on recently certified teachers and less on returning experienced teachers.
- The number of educators transferring amongst districts has almost tripled in the past five years, from over 600 in 1995 to over 1,700 in 2001-2002; although, there was a decline of 1,000 transfers from 2000-2001 to 2001-2002.

As shortages become more acute, districts with higher salaries and benefits are attracting teachers from the poorer rural and urban districts. Teachers can gain anywhere from a few thousand dollars to \$10,000 increases in annual salary by changing districts. A number of these transfers take place immediately before schools open or after schools have started, which poses a significant problem to those districts which lose teachers.

Although the number of educators receiving new certificates is larger than the number of teachers retiring, the teachers are often not certified in the subject areas of need. Of newly certified educators in 2001-2002, approximately 32 percent were in elementary education, which is currently not an area of shortage.

State Initiatives to Attract and Retain Educators

- Connecticut Regional Applicant and Placement Program (CTREAP) – Internet Vacancy and Application Access.
- Department of Higher Education Minority Teacher Incentive Grant.
- Title II Scholarship Grant to minority students pursuing teaching.
- Connecticut Finance Housing Authority Mortgage Assistance Program.
- School to Career Initiatives in high schools – emphasizing teaching.
- Expansion of Alternate Route to Certification – which has recently focused on providing teachers in shortage areas; currently three summer programs in the Hartford, Bridgeport and New Haven areas and two weekend programs (Hartford and New London) which take place during the school year, are available.
- New statewide support to teacher candidates for passing Praxis II.
- Public relations advertisements in Connecticut and national publications to attract teachers/administrators to Connecticut.
- Minority Teacher Recruitment web page.
- BEST Induction program for beginning teachers.

Conclusions

Connecticut has been experiencing problems with finding qualified certified teachers in certain subject areas and in urban districts and districts with lower annual salaries and benefits. Over the next decade, Connecticut districts will need to hire approximately 19,000 new teachers and although the number of educators certified each year (approximately 3,700) would appear to meet that need, the new teachers are: 1) often not certified in the subject areas of need; 2) are not seeking employment in Connecticut; or 3) choose not to work in the state's urban and priority districts.

Although only 1.5 percent of all certified positions are filled by people holding a DSAP – which is very low when compared to other states – the numbers of DSAPs issued has increased dramatically over the past five years (35 in 1997-1998 to 484 in 2000-2001, 805 in 2001-2002, and 466 as of 11-12-02 and continuing to grow). Currently, approximately 800 classes in Connecticut are taught by someone who does not hold a certificate (DSAP, long-term substitutes or minor assignments), which can have an impact on student learning in those particular classes. Over 25 percent of these non-certificated teachers are teaching in ERG I districts, with the remaining 75 percent equally distributed across all remaining districts. There has been a continuing statewide problem of the inability to attract highly qualified teachers to our schools serving students with the greatest need.

The new federal legislation, No Child Left Behind, requires that by 2005-2006, all teachers teaching in core academic subjects be highly qualified (hold full certification). Based on the 2001-2002 Educator Staff File data, 2.4 percent of Connecticut’s teachers teaching core academic subjects are not “highly qualified” based on the federal definition.

**2001-2002 Certified Staff File:
Percentage of Not Highly Qualified Teachers by Core Academic Subject**

Assignment	Total FTE	Total *NHQ FTE	% NHQ FTE
Art	1,297.91	14.26	1.10
Bilingual	490.50	27.83	5.67
Elementary	11,750.58	65.00	0.55
English Language Arts	3,115.17	84.24	2.70
ESL	316.75	15.80	4.99
Gifted and Talented	234.62	2.00	0.85
History/Social Studies	2,474.08	31.70	1.28
Kindergarten	1,489.40	19.00	1.28
Mathematics	2,627.89	110.11	4.19
Music	1,494.43	60.25	4.03
Pre-Kindergarten	211.34	8.50	4.02
Reading	1,270.25	24.50	1.93
Science**	2,594.69	162.97	6.28
Special Education	5,288.06	103.55	1.96
World Languages	1,614.82	147.66	9.14
<i>FTE Totals and Percent</i>	36,270.49	877.37	2.42

*NHQ – Not Highly Qualified

**Includes biology, chemistry, physics, earth science, general science, physical science, life science, and integrated science.

This requirement will have implications for districts to find and hire fully certified teachers. To ensure all students are taught by a qualified certified teacher, Connecticut must diligently continue to attract people into the profession and provide the support necessary to retain quality teachers. Each member of the educational community has to take a proactive role in this critical endeavor. The Department will pursue its current efforts and, in addition, continue to seek additional incentives to attract people into the profession. Local districts need to annually improve their recruitment efforts, teaching environment, contracts and means of support to new teachers.

The overall strategy is to establish or strengthen programs that attract high school students, undecided college students, recent graduates, out-of-state candidates, retirees and non-educators. There is also a need to retain a higher proportion of new teacher candidates in existing teacher preparation programs, to expand these programs to include more candidates in shortage areas, and to retain a higher proportion of newly-hired teachers through improved support and mentoring.

Connecticut's students' continued growth in achievement and the closing of achievement gaps is dependent upon continuing the quality of Connecticut's teaching force.

Prepared by: _____
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December 4, 2002

DATA BULLETIN

FALL HIRING REPORT, 2002

For the past 16 years, the Connecticut State Department of Education has surveyed local school districts to determine areas of teacher shortage. This Bulletin summarizes the Fall Hiring Survey data for the 2002-2003 school year and compares it to previous years. The data have been provided by all 166 local and regional school districts, the three endowed and incorporated academies, six regional educational service centers, 16 charter schools, the state vocational-technical school system and the state approved nonpublic special education schools. The Connecticut Birth-to-Three Programs were also surveyed.

Public school districts had 4,344 full- and part-time teaching positions out of an estimated 50,800 total positions to fill for the fall of 2002. This is a decrease of 550 vacancies from the 2001-2002 school year. Nonpublic special education schools had 163 certified teaching vacancies to fill.

October Vacancies

For several years, there had been an upward trend in the number of vacancies remaining in October. For the second year in a row, however, there has been a decline in the number of October vacancies. In October 2002 there was a total of 320 positions in the public schools unfilled due to some special circumstance (see Table 1). This figure represents a decrease of 153 positions from the 2001-2002

school year. The number of vacancies remaining because no qualified person could be found also decreased, from 337 in 2001 to 227 in 2002.

The decrease in the number of vacancies remaining in October may be attributable to small and typical annual fluctuations, more concentrated efforts by the school districts to begin their searches earlier, utilization of broader advertising systems such as through the internet, and the national and state economic recessions.

Table 2. Vacancies, No Qualified Person Found, by ERGs¹

ERG	Total Positions to Fill, 2002-2003 School Year	# Vacancies, No Qualified Person Found	% Vacant of Total Positions to Fill
A	448	8	1.8
B	866	22	2.5
C	413	8	1.9
D	621	17	2.7
E	218	6	2.8
F	587	16	2.7
G	175	6	3.4
H	715	24	3.3
I	790	105	13.3

Table 1. Fall Hiring Summary, 1987-2002, Public Schools Only

Fall of Year	Total Positions	Annual Positions To Fill	% Part-time of Positions To Fill	Percent Positions To Fill of Total	Vacancies Remaining in October	% of Annual Positions Filled	Vacancies Due to No Qualified Applicants	% of Annual Positions Vacant, No Qualified Applicants
2002	50,800*	4344	9.8	8.6	320	92.6	227	5.2
2001	50,087	4894	10.3	9.8	473	90.3	337	6.9
2000	48,750	5457	11.3	11.2	590	89.2	422	7.7
1999	47,800	5293	12.0	11.1	485	90.8	323	6.1
1998	46,459	4331	13.4	9.3	415	90.4	274	6.3
1997	45,269	3630	17.1	8.0	274	92.5	151	4.2
1996	44,893				No Data Collected			
1995	43,261	2990	22.7	6.9	245	91.8	103	3.4
1994	42,451	2895	22.8	6.8	237	91.8	81	2.8
1993	41,324	2349	23.1	5.7	268	88.6	59	2.5
1992	41,179	2515	17.7	6.1	201	92.0	50	2.0
1991	41,733	1281	26.5	3.1	101	92.1	21	1.6
1990	42,397	1965	19.8	4.6	220	88.8	44	2.2
1989	42,176	2161	17.2	5.1	263	87.8	81	3.7
1988	42,335	2358	16.6	5.6	176	92.5	98	4.2
1987	41,724	2845	14.6	6.8	258	90.9	145	5.1
Averages	44,123	3287.2	17.0	7.2	301.7	90.8	161.1	4.3

* Estimated

¹ Education Reference Groups (ERGs) are a classification of the state's public school districts into groups based on similar socioeconomic status and need of the families with children in public schools. For more information about ERG classification, a research bulletin is available at the State Department of Education's website at www.state.ct.us/sde/. Select the Division of Evaluation and Research and view data bulletins.

Education Reference Group (ERG) I continues to have the highest number and percentage of vacancies remaining due to a lack of qualified applicants (see Table 2), although the percentage is down from 18.6 in 2001.

The majority of school districts indicated that they were utilizing short-term substitutes as a solution to their October vacancies (see Table 3). In addition, approximately 25 percent of the October vacancies are handled by either redistributing students among other classes and therefore increasing class size, or by adding additional classes to teachers' schedules.

Table 3. Solution to October Vacancies

Solution	% of October Vacancies
Course no longer offered	1.3
Students redistributed among other classes	15.1
Short-term substitute	50.7
Teacher(s) with appropriate certification pick up additional class	10.1
Remaining vacant (administrative positions only)	4.4
Filled by interim appointment (administrative positions only)	8.7
Other	9.7

Designation of Shortage Areas

Based on 2001-2002 school year data, the state-identified shortage areas for the 2002-2003 school year are:

- **Bilingual Education, Pre-K-12**
- **Consumer Home Economics, Pre-K-12**
- **Mathematics, 7-12**
- **Music, Pre-K-12**
- **School Library Media Specialist, Pre-K-12**
- **School Psychologist**
- **Spanish, 7-12**
- **Comprehensive Special Education, Pre-K-12**
- **Speech and Language Pathology (no grades)**

With the exception of library media specialist, these subject areas will also be submitted to the U.S. Department of Education this winter for federal designation as teacher shortage areas.

The Connecticut State Department of Education sends a yearly proposal to Washington, D.C. to consider certain subjects as areas of shortage. This designation enables borrowers under the Stafford and Supplemental Loans for Students programs, who teach in one of these areas, to possibly qualify for a deferral of loan repayments. Perkins loan holders may qualify for full loan forgiveness if teaching in one of these shortage areas.

Connecticut also designates shortage areas in response to a mortgage assistance program administered by the Connecticut Housing Finance Authority (CHFA). The program enables teachers who teach in a priority or transitional school district or who teach in a state-identified subject matter shortage area to qualify for mortgage assistance. In the case of certified teachers employed by a priority or transitional school district, the teacher's residence must be located in that district. Teachers who teach in a state-identified subject matter shortage area are able to purchase statewide. This program is available to first-time homebuyers only and is subject to CHFA eligibility requirements. The mortgage assistance program was created to serve as a tool to assist in recruiting and retaining public school teachers in Connecticut. Additional information may be obtained on the State Department of Education's website www.state.ct.us/sde.

For the past several years, the subject areas designated as shortages have been difficult positions to fill (see Table 4). Initiatives such as the mortgage assistance program and the federal loan deferment program are intended to somewhat reduce these specific subject area shortages.

Calculation of Shortage Areas

Connecticut takes several variables into account in order to determine areas of shortage (see Table 5). "Vacancy No Qualified Person Found", is the number of full-time and part-time positions that were unfilled as of October 1, 2002, because no individual had met a district's criteria after a complete search.

Teachers working under a "Durational Shortage Area Permit" must hold a bachelor's degree, have at least 12 semester hours of credit in the area and meet the state's basic skills testing requirement.

Table 4. Positions Available in the Shortage Areas, 1997-2002

Subject	# Positions Available					# Positions Remaining Vacant, No Qualified Person Found				
	98-99	99-00	00-01	01-02	02-03	98-99	99-00	00-01	01-02	02-03
Music	181	219	247	226	216	31	32	46	28	20
Spanish	175	196	191	178	182	22	17	11	13	7
Bilingual	59	69	71	101	97	5	25	27	18	23
Mathematics	234	314	397	318	260	6	27	17	21	8
Special Education	484	740	685	590	580	25	83	96	70	61
Media Specialist	95	98	93	62	38	22	23	12	15	5
Consumer Home Economics	30	34	45	27	36	4	7	9	3	7
Speech Language Pathologist	104	101	117	139	139	18	6	18	37	47
School Psychologist	91	87	119	134	97	6	10	11	25	23

Table 5. 2002-2003 Hiring Statistics

Endorsement Area	Total Positions to Fill	Vacancy: No Qualified Person Found	Durational Shortage Area Permit	Minor Assignment	Minimum Qualified Hire	Median Applications	1st CT Certificates	Median Applicant Quality Rating	Shortage Rank
Agriculture, Pre-K-12	4	0	1	0	0	6	5	3	53
Art, Pre-K-12	121	5	5	0	9	15	166	3	24
Bilingual, Pre-K-12	97	23	16	0	40	10	39	1	2
Biology, 7-12	112	4	21	0	15	11	193	2	19
Biology, Middle School	2	0	0	0	0	13	197	2	61
Blind, Pre-K-12	2	0	0	0	0	0	8	2	52
Business, 7-12	42	3	6	0	7	11	86	2	30
Chemistry, 7-12	54	1	14	1	10	11	74	2	32
Chemistry, Middle School	1	0	0	0	0	3	74	2	55
Comprehensive Special Education, 1-12	580	61	31	0	21	19	716	2	3
Co-Operative Work Education/Diversified Occupations	3	0	2	0	2	1	3	1	42
Department Chairperson	11	2	4	0	4	6	26	2	31
Driver Education	3	0	0	0	0	15	10	2	62
Earth Science, 7-12	27	3	5	4	8	9	34	2	26
Earth Science, Middle School	3	0	0	0	1	6	35	2	54
Elementary, 1-6	1148	0	0	0	0	119	2760	5	66
English, 7-12	308	6	21	1	8	24	467	3	15
English, Middle School	83	5	3	0	4	15	518	2	28
French, 7-12	49	2	13	1	23	5	64	2	20
General Science, 7-12	97	5	21	9	9	12	103	2	17
General Science, Middle School	41	0	9	1	6	10	125	2	43
German, 7-12	4	0	2	0	2	4	3	2	45
Health Occupations – V-T Schools	2	0	0	0	0	9	6	2	58
Health, Pre-K-12	54	9	4	3	3	9	93	2	12
Hearing Impaired, Pre-K-12	11	3	0	0	3	3	10	1	29
High School Diploma Program	1	0	6	0	0	1	34	5	39
History & Social Studies, 7-12	233	6	5	3	1	43	436	4	27
History & Social Studies, Middle School	38	1	3	1	0	24	485	3	40
Home Economics, Pre-K-12	36	7	15	0	14	4	21	1	7
Integrated Early Childhood/Spec. Ed, Birth-K	15	1	2	0	4	8	13	2	37
Integ. Early Childhood/Spec. Ed, Nursery-3	113	6	13	0	10	22	235	3	21
Integrated Science, Middle School	4	0	0	0	4	10	0	1	51
Intermediate Administrator/Supervisor	187	13	2	0	4	23	240	4	18
Italian, 7-12	4	1	2	0	3	2	18	1	34
Latin, 7-12	12	0	2	0	9	2	17	1	38
Marketing Education, 7-12	3	0	0	0	0	10	15	3	59
Mathematics, 7-12	260	8	51	1	6	17	305	2	10
Mathematics, Middle School	49	0	14	0	8	11	355	2	41
Music, Pre-K-12	216	20	24	0	28	12	180	2	4
Non-English Speaking Adults	3	0	0	0	0	12	107	2	60
Occupational Subject, V-T Schools	37	0	0	0	0	75	134	5	64
Other World Languages, 7-12	4	0	0	0	1	3	2	3	50
Partially Sighted, Pre-K-12	7	0	0	0	2	2	8	2	47
Physical Education, Pre-K-12	146	17	1	0	5	15	214	3	14
Physics, 7-12	36	3	8	3	14	6	40	1	22
Physics, Middle School	3	0	0	0	0	6	40	4	56

Table 5. 2002-2003 Hiring Statistics (cont'd)

<u>Endorsement Area</u>	<u>Total Positions to Fill</u>	<u>Vacancy: No Qualified Person Found</u>	<u>Durational Shortage Area Permit</u>	<u>Minor Assignment</u>	<u>Minimum Qualified Hire</u>	<u>Median Applications</u>	<u>1st CT Certificates</u>	<u>Median Applicant Quality Rating</u>	<u>Shortage Rank</u>
Practical Nurse Education Instruction	4	0	0	0	0	57	7	3	63
Reading and Language Arts Consultant	29	6	6	0	18	5	70	1	11
Remedial Reading & Language Arts, 1-12	50	11	6	0	15	7	80	1	9
School Business Administrator	11	1	0	0	0	10	85	4	44
School Counselor	130	10	10	0	10	22	195	3	13
School Library Media Specialist	38	5	17	0	7	10	74	2	16
School Nurse Teacher	9	0	0	0	2	4	13	2	49
School Psychologist	97	23	1	0	19	7	107	2	5
School Social Worker	55	4	0	0	2	10	162	2	33
Spanish, 7-12	182	7	54	6	59	8	182	2	6
Speech and Language Pathologist	139	47	1	0	37	4	105	1	1
Superintendent of Schools	14	1	0	0	0	11	62	3	46
Technology Education, Pre-K-12	55	8	9	0	15	6	31	2	8
TESOL, Pre-K-12	33	2	10	1	9	4	59	2	23
Trade & Industrial Occupations- Comp. H.S.	5	0	0	0	2	4	25	2	48
Trade Related Subjects, V-T Schools	20	7	0	0	0	75	74	2	35
Unique Subject Area Endorsement	2	0	0	0	0	6	2	3	57
Vocational Agriculture, 7-12	5	1	0	0	3	3	10	1	36
Vocational Technical Administrator	4	0	0	0	0	75	5	4	65
World Language Instructor, Elementary	29	2	2	0	7	2	58	1	25

Teachers working under a Temporary Authorization for Minor Assignment must already be certified in another area and have at least 12 semester hours of credit in the subject to be taught. A "Minimum Qualified Hire" is the number of full-time and part-time positions that were filled from an applicant pool that was judged by school district personnel to contain "Few or no minimally-qualified applicants."

"Median Applications" is the median number of applications that the district screened, from appropriately certified people, for any number of full- or part-time positions within a subject area.

The final variable, certificates issued or renewed per position is calculated by dividing the number of people receiving or renewing Connecticut certificates between October 1, 2001, and September 30, 2002, by the number of full- and part-time positions for which a district actively sought applicants or reviewed applications from existing files.

The designated shortage areas for any given school year are determined by the sum of four items:

- 1) the number of vacancies because no qualified person was found;
- 2) the weighted sum of the number of durational shortage area permits, the number of minor assignments;
- 3) median applications weighted 25 percent; and
- 4) the number of first Connecticut certificates issued or renewed per position, also weighted 25 percent.

Applicant Quality Rating

District personnel responsible for hiring are asked to rate the quality of the applicant pool for each position. They are asked to consider academic qualifications, experience, recommendations, background and other factors to make this subjective rating. The ratings were made on the following scale, with the emphasis being placed on the quality, not the quantity, of the applicant pool:

- 1=Few or no minimally qualified applicants
- 2=Some acceptable applicants
- 3=Many acceptable applicants
- 4=Some high-quality applicants
- 5=Many high-quality applicants

Only two areas received a median applicant pool rating of 5: elementary and high school diploma program. Five areas received a median applicant pool rating of 4: history & social studies, intermediate administrator and supervisor, middle school physics, school business administrator, and vocational-technical administrator.

Thirteen certifiable subject areas received a median rating of 1; they are: bilingual, co-operative work education, hearing impaired, home economics, middle school integrated science, Italian, Latin, physics, reading and language arts consultant, remedial reading and language arts, speech and language pathologist, vocational agriculture, and elementary world language.

Public vs. Nonpublic

The nonpublic state-approved special education schools continue to have a more difficult time than the public school districts when it comes to filling their special education vacancies. Although nonpublic schools had fewer positions to fill (62) than public schools (518), a greater proportion of the nonpublic vacancies remained unfilled because a qualified person could not be found (32.3 percent in nonpublic vs. 7.9 percent in public, see Table 6). Public schools, on average, continue to report receiving a higher number of applications than the nonpublic schools, and rate their applicant pools higher (see Table 6).

Table 6. Public and Nonpublic Special Education Vacancies

	Public School Districts	Non-Public Schools
Number Positions Available	518	62
Median Applications Received	21.0	4.5
October Vacancies, No Qualified Person Found	41	20
Median Applicant Pool Quality Rating	3.0	2.0

ATTACHMENT A-1-1

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 Durational Shortage Area Permits - School Year (1997-2002)
 School Year: July 1st to June 30th

Subject	Total	1997-98	1998-99	1999-00	2000-01	2001-02
Spanish, Grades 7 - 12	244	13	29	47	60	95
Comprehensive Special Education, Grades, 1 - 12	161			15	58	88
Mathematics, Grades 7 - 12	150		1	10	52	87
Music, Pre-K - Grade 12	74		3	7	18	46
General Science, Grades 7 - 12	76		2	7	26	41
Biology, Grades 7 - 12	65	1	1	4	21	38
English, Grades 7 - 12	57		1	2	18	36
Integrated Early Childhood/Special Ed., Nursery - K: Elem. Grades 1 - 3	42		2	3	7	30
School Library-Media Specialist	102	3	9	26	35	29
Home Economics, Pre-K - Grade 12	53	1	5	7	16	24
School Counselor	47		2	8	15	22
French, Grades 7 - 12	41		4	3	12	22
Mathematics, Middle School	36			4	10	22
Technology Education, Pre-K - Grade 12	71	4	12	14	20	21
Chemistry, Grades 7 - 12	36			4	12	20
Bilingual	19			1	1	17
Health, Pre-K - Grade 12	24		1		9	14
Remedial Reading and Remedial Language Arts, Grades 1 - 12	36		2	8	14	12
Intermediate Administrator or Supervisor	32	1	3	5	11	12
Physics, Grades 7 - 12	27		1	6	8	12
Department Chairperson	25	4	1	7	3	10
Business, Grades 7 - 12	25			4	11	10
History and Social Studies, Grades 7 - 12	21		1	5	5	10
General Science, Middle School	12			1	1	10
Reading and Language Arts Consultant, Kindergarten - Grade 12	22	1	4	2	6	9
Physical Education, Pre-K - Grade 12	10				1	9
Art, Pre-K - Grade 12	11		1	1	1	8
Latin, Grades 7 - 12	21		2	3	9	7
Teaching English to Speakers of Other Languages (TESOL)	17		2	2	6	7
Earth Science, Grades 7 - 12	13	1	1	3	1	7
History and Social Studies, Middle School	8				2	6
English, Middle School	8				2	6
Integrated Early Childhood/Special Ed., Birth - Kindergarten	6				1	5
School Psychologist	7		1		3	3
Italian, Grades 7 - 12	4				1	3
Speech and Language Pathologist	4		1		1	2
German, Grades 7 - 12	5			2	1	2
Elementary, Kindergarten - Grade 6	4			1	1	2
Comprehensive Special Education, Pre-K - Grade 12	12	1	6	3	1	1
Other World Language	5	2	1	1	1	
Pre-K and Kindergarten	2	2				
Blind, Pre-K - Grade 12	2				2	
Co-Operative Work Education/Diversified Occupations (CWEDO)	2	1		1		
Russian, Grades 7 - 12	1			1		
Agriculture, Pre-K - Grade 12	1			1		
School Social Worker	1			1		
Superintendent of Schools	1				1	
Total:	1643	35	99	220	484	805

ATTACHMENT A-1-2

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 Durational Shortage Area Permits (1999-2002)
 Date Range: July 1st to November 12th

Subject	Total	1999	2000	2001	2002
Art, Pre-K - Grade 12	13		1	6	6
Bilingual	29	1	1	10	17
Biology, Grades 7 - 12	59	1	14	21	23
Blind, Pre-K - Grade 12	1		1		
Business, Grades 7 - 12	23	4	8	5	6
Chemistry, Grades 7 - 12	35	3	6	12	14
Comprehensive Special Education, Grades, 1 - 12	119	8	33	44	34
Comprehensive Special Education, Pre-K - Grade 12	5	3	1	1	
Co-Operative Work Education/Diversified Occupations (CWEDO)	3	1			2
Department Chairperson	23	7	3	9	4
Earth Science, Grades 7 - 12	14	1	1	7	5
Elementary, Grades 1 - 6	2			2	
English, Grades 7 - 12	52	2	8	21	21
English, Middle School	10		2	5	3
French, Grades 7 - 12	42	2	8	17	15
General Science, Grades 7 - 12	72	4	17	26	25
General Science, Middle School	16	1		6	9
German, Grades 7 - 12	7	2	1	2	2
Health, Pre-K - Grade 12	20		6	9	5
History and Social Studies, Grades 7 - 12	19	5	1	7	6
History and Social Studies, Middle School	11		2	6	3
Home Economics, Pre-K - Grade 12	50	5	13	17	15
Integrated Early Childhood/Special Ed., Birth - Kindergarten	7		1	4	2
Integrated Early Childhood/Special Ed., Nursery - K: Elem. Grades 1 - 3	33	2	4	13	14
Intermediate Administrator or Supervisor	15	2	6	5	2
Italian, Grades 7 - 12	4		1	1	2
Latin, Grades 7 - 12	19	3	8	6	2
Mathematics, Grades 7 - 12	151	7	34	53	57
Mathematics, Middle School	36	2	7	13	14
Music, Pre-K - Grade 12	70	6	14	25	25
Other World Language	1	1			
Physical Education, Pre-K - Grade 12	6		1	4	1
Physics, Grades 7 - 12	28	6	5	9	8
Reading and Language Arts Consultant, Kindergarten - Grade 12	21	2	6	7	6
Remedial Reading and Remedial Language Arts, Grades 1 - 12	31	5	10	10	6
School Counselor	37	4	8	15	10
School Library-Media Specialist	80	17	25	20	18
School Psychologist	3		1	1	1
Spanish, Grades 7 - 12	210	41	46	65	58
Speech and Language Pathologist	4		1	2	1
Teaching English to Speakers of Other Languages (TESOL)	23	1	5	6	11
World Language Instructor, Elementary	2				2
Vocational Agriculture, Grades 7 through 12	1				1
Technology Education, Pre-K - Grade 12	55	13	17	15	10
Total:	1462	162	327	507	466

ATTACHMENT A-2-1

CONNECTICUT DEPARTMENT OF EDUCATION
Bureau of Certification and Professional Development
Long-Term Substitute Authorizations - By School Year (1997-2002)
School Year: July 1st to June 30th

Subject	Total	1997-98	1998-99	1999-00	2000-01	2001-02
Comprehensive Special Education, Grades, 1 - 12	96	5	11	45	27	8
Spanish, Grades 7 - 12	62	9	12	11	14	16
Music, Pre-K - Grade 12	61	10	4	16	14	17
Mathematics, Grades 7 - 12	54	9	8	13	15	9
English, Grades 7 - 12	53	5	15	9	10	14
Bilingual	42		1	6	20	15
Physical Education, Pre-K - Grade 12	37	4	7	9	10	7
Elementary, Grades 1 - 6	33			6	14	13
General Science, Grades 7 - 12	29	5	7	10	6	1
Art, Pre-K - Grade 12	26	1		8	5	12
Biology, Grades 7 - 12	24	1	5	4	6	8
Unique Subject Area Endorsement	23	11	10	2		
Comprehensive Special Education, Pre-K - Grade 12	21	14	7			
Health, Pre-K - Grade 12	21		1	6	4	10
Business, Grades 7 - 12	19	2	3	7	6	1
English, Middle School	18			3	9	6
History and Social Studies, Grades 7 - 12	17	2	5	1	4	5
Home Economics, Pre-K - Grade 12	17	1	3	5	3	5
School Library-Media Specialist	17	2	2	5	4	4
General Science, Middle School	15	1		5	3	6
Integrated Early Childhood/Special Ed., Nursery - K: Elem. Grades 1 - 3	15			1	3	11
Mathematics, Middle School	12		1	1	3	7
Integrated Early Childhood/Special Ed., Birth - Kindergarten	10				7	3
Technology Education, Pre-K - Grade 12	10	1		1	4	4
Remedial Reading and Remedial Language Arts, Grades 1 - 12	9		2	2	4	1
French, Grades 7 - 12	8	1	1	3	1	2
Physics, Grades 7 - 12	7	1	1	2	1	2
Pre-K and Kindergarten	7		3	4		
Latin, Grades 7 - 12	6	4	1			1
Chemistry, Grades 7 - 12	5			2		3
Elementary, Kindergarten - Grade 6	5	5				
Earth Science, Grades 7 - 12	4	1		3		
History and Social Studies, Middle School	4			3	1	
Health Occupations in Comprehensive High Schools	3	3				
Other World Language	3		2		1	
Teaching English to Speakers of Other Languages (TESOL)	3			2		1
World Language Instructor, Elementary	3					3
Agriculture, Pre-K - Grade 12	2		1		1	
Pre-K - Grade 3	2	2				
Vocational Agriculture, Grades 7 - 12	2		1			1
Italian, Grades 7 through 12	2					2
Integrated Science, Middle School	2					2
Hearing Impaired, Pre-K - Grade 12	1	1				
High School Credit Diploma Program	1				1	
School Nurse - Teacher	1		1			
Speech and Language Pathologist	1	1				
Trade-Related Subjects in Vocational-Technical Schools	1				1	
Occupational Subjects in Vocational-Technical Schools	1					1
Occupational Subjects in Comprehensive High School	1					1
External Diploma Program/Noncredit Mandated Programs	1					1
Total:	817	102	115	195	202	203

ATTACHMENT A-2-2

CONNECTICUT DEPARTMENT OF EDUCATION
Bureau of Certification and Professional Development
Long-Term Substitute Authorizations (1999-2002)
Date Range: July 1st to November 12th

Subject	Total	1999	2000	2001	2002
Comprehensive Special Education, Grades, 1 - 12	37	17	9	9	2
Music, Pre-K - Grade 12	26	6	5	9	6
Spanish, Grades 7 - 12	21	7	6	6	2
English, Grades 7 - 12	17	2	2	3	10
Mathematics, Grades 7 - 12	15	6	4	3	2
Art, Pre-K - Grade 12	14	4	2	4	4
Elementary, Grades 1 - 6	14	3	5	3	3
Bilingual	13	1	4	5	3
Business, Grades 7 - 12	11	6	2	2	1
History and Social Studies, Grades 7 - 12	11	3	3	2	3
Biology, Grades 7 - 12	7	2		4	1
English, Middle School	7	1	1	4	1
General Science, Grades 7 - 12	7	4	1		2
Home Economics, Pre-K - Grade 12	7	1	1	4	1
Mathematics, Middle School	7	2	1	3	1
Health, Pre-K - Grade 12	6	2	1	2	1
Physical Education, Pre-K - Grade 12	6	2	2	2	
General Science, Middle School	5	2		2	1
Integrated Early Childhood/Special Ed., Nursery - K: Elem. Grades 1 - 3	4	1		2	1
Chemistry, Grades 7 - 12	3	2			1
French, Grades 7 - 12	3	2		1	
Pre-K and Kindergarten	3	3			
Remedial Reading and Remedial Language Arts, Grades 1 - 12	3	1	2		
School Library-Media Specialist	3	1		2	
Technology Education, Pre-K - Grade 12	3		1	1	1
Earth Science, Grades 7 - 12	2	2			
Integrated Science, Middle School	2			2	
Other World Language	2		1		1
Unique Subject Area Endorsement	2	2			
Bilingual Elementary Education	1				1
Bilingual English, Middle School	1				1
History and Social Studies, Middle School	1				1
Italian, Grades 7 through 12	1				1
Latin, Grades 7 - 12	1			1	
Physics, Grades 7 - 12	1	1			
Pre-K - Grade 8	1	1			
Teaching English to Speakers of Other Languages (TESOL)	1			1	
Trade and Industrial Occupations in Comprehensive High Schools	1			1	
Vocational Agriculture, Grades 7 through 12	1				1
World Language Instructor, Elementary	1				1
Total:	272	87	53	78	54

ATTACHMENT A-3-1

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 90-Day Certificates - By School Year (1995-2002)
 School Year: July 1st to June 30th

Subject	Total	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Grades 4 - 8	109	25	11	39	13	10	7	4
Art, Pre-K - Grade 12	91	10	9	12	13	17	13	17
Music, Pre-K - Grade 12	85	7	10	15	11	12	17	13
Mathematics, Grades 7 - 12	84	7	10	9	13	14	12	19
English, Grades 7 - 12	78	8	12	7	16	15	7	13
Biology, Grades 7 - 12	75	4	8	9	16	14	13	11
History and Social Studies, Grades 7 - 12	70	2	8	8	9	19	13	11
English, Middle School	68				13	12	23	20
Spanish, Grades 7 - 12	67	6	4	5	7	15	16	14
History and Social Studies, Middle School	55				14	12	20	9
Mathematics, Middle School	50				6	12	15	17
Chemistry, Grades 7 - 12	39	3	2	2	7	9	5	11
Physics, Grades 7 - 12	38	5	5	3	6	6	9	4
French, Grades 7 - 12	36	4	2	6	7	5	5	7
Earth Science, Grades 7 - 12	34	4	3	6	6	4	4	7
General Science, Middle School	32				4	5	11	12
General Science, Grades 7 - 12	30	3	2	4	6	5	3	7
Bilingual	12							12
Latin, Grades 7 - 12	8			2		3	2	1
Biology, Middle School	6					6		
Chemistry, Middle School	4					4		
Earth Science, Middle School	4				2	1	1	
Other World Language	4			1			3	
German, Grades 7 - 12	2					2		
Italian, Grades 7 - 12	2				1	1		
Health, Pre-K - Grade 12	1					1		
Total:	1084	88	86	128	170	204	199	209

Note: 90-Day Certificates are issued to graduates of the Alternate Route to Certification (ARC) Program upon request of an employing board of education.

ATTACHMENT A-3-2

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 90-Day Certificates (1999-2002)
 Date Range: July 1st to November 12th

Subject	Total	1999	2000	2001	2002
Spanish, Grades 7 - 12	71	13	15	10	33
Mathematics, Grades 7 - 12	65	13	9	14	29
Biology, Grades 7 - 12	59	12	13	13	21
Art, Pre-K - Grade 12	49	13	12	8	16
English, Grades 7 - 12	47	14	6	11	16
Earth Science, Middle School	15	1	1		13
Bilingual	18			7	11
History and Social Studies, Grades 7 - 12	46	16	10	10	10
History and Social Studies, Middle School	35	8	19	6	2
Music, Pre-K - Grade 12	41	9	13	10	9
Chemistry, Grades 7 - 12	29	9	4	10	6
French, Grades 7 - 12	21	5	4	7	5
General Science, Grades 7 - 12	16	5	3	5	3
General Science, Middle School	29	5	9	12	3
Italian, Grades 7 - 12	3	1			2
Earth Science, Grades 7 - 12	16	4	4	7	1
Grades 4 - 8	16	9	6		1
Latin, Grades 7 - 12	7	3	2	1	1
Biology, Middle School	6	6			
Chemistry, Middle School	4	4			
English, Middle School	56	9	20	14	13
German, Grades 7 - 12	2	2			
Mathematics, Middle School	49	11	14	14	10
Other World Language	3		3		
Physics, Grades 7 - 12	16	6	7	3	
Total:	719	178	174	162	205

Note: 90-Day Certificates are issued to graduates of the Alternate Route to Certification (ARC) Program upon request of an employing board of

ATTACHMENT A-4-1

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 Minor Assignments - By School Year (1998-2002)
 School July 1st to June 30th

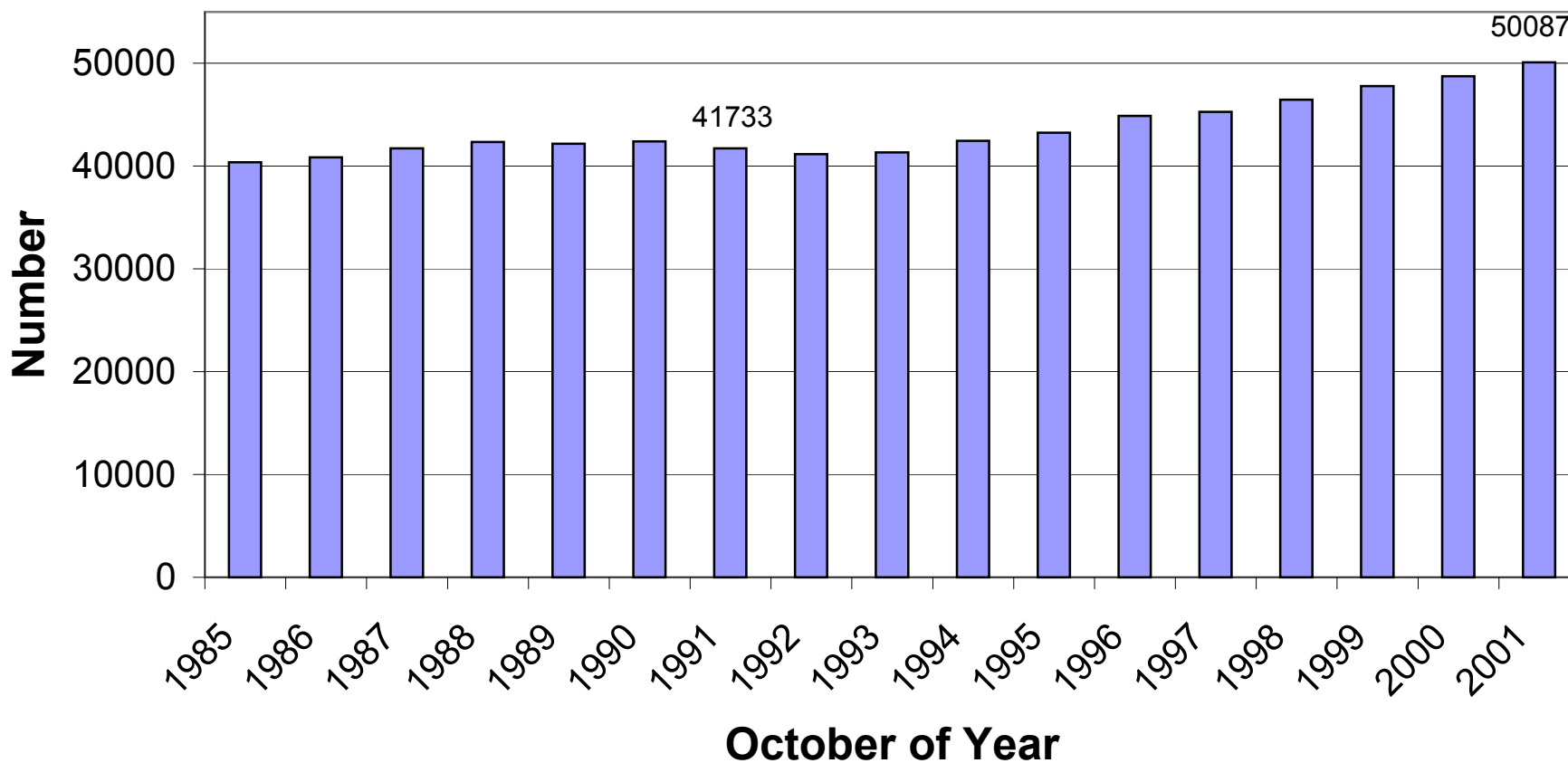
Subject	Total	1998-99	1999-00	2000-01	2001-02
Spanish, Grades 7 - 12	59	17	16	13	13
Health, Pre-K - Grade 12	51	14	17	15	5
History and Social Studies, Grades 7 - 12	37	15	7	9	6
General Science, Grades 7 - 12	29	4	7	10	8
English, Grades 7 - 12	28	12	8	3	5
Mathematics, Grades 7 - 12	26	7	8	7	4
French, Grades 7 - 12	23	3	8	8	4
Physics, Grades 7 - 12	13	3	5	2	3
Earth Science, Grades 7 - 12	11	2	3	2	4
Chemistry, Grades 7 - 12	10	3	2	4	1
Biology, Grades 7 - 12	7	2	3	2	
Physical Education, Pre-K - Grade 12	7	2	3	2	
Italian, Grades 7 - 12	6	2	3		1
English, Middle School	5	1	1	2	1
Latin, Grades 7 - 12	5	2	2	1	
History and Social Studies, Middle School	4		1	1	2
Teaching English to Speakers of Other Languages (TESOL)	4	1	2	1	
Elementary, Grades 1 - 6	3	2	1		
Home Economics, Pre-K - Grade 12	3	1		2	
Art, Pre-K - Grade 12	1		1		
Business, Grades 7 through 12	1				1
Grades 4 - 8	1	1			
Mathematics, Middle School	1				1
School Library-Media Specialist	1	1			
Unique Subject Area Endorsement	1				1
Total:	337	95	98	84	60

ATTACHMENT A-4-2

CONNECTICUT DEPARTMENT OF EDUCATION
 Bureau of Certification and Professional Development
 Minor Assignments (1999-2002)
 Date Range: July 1st to November 12th

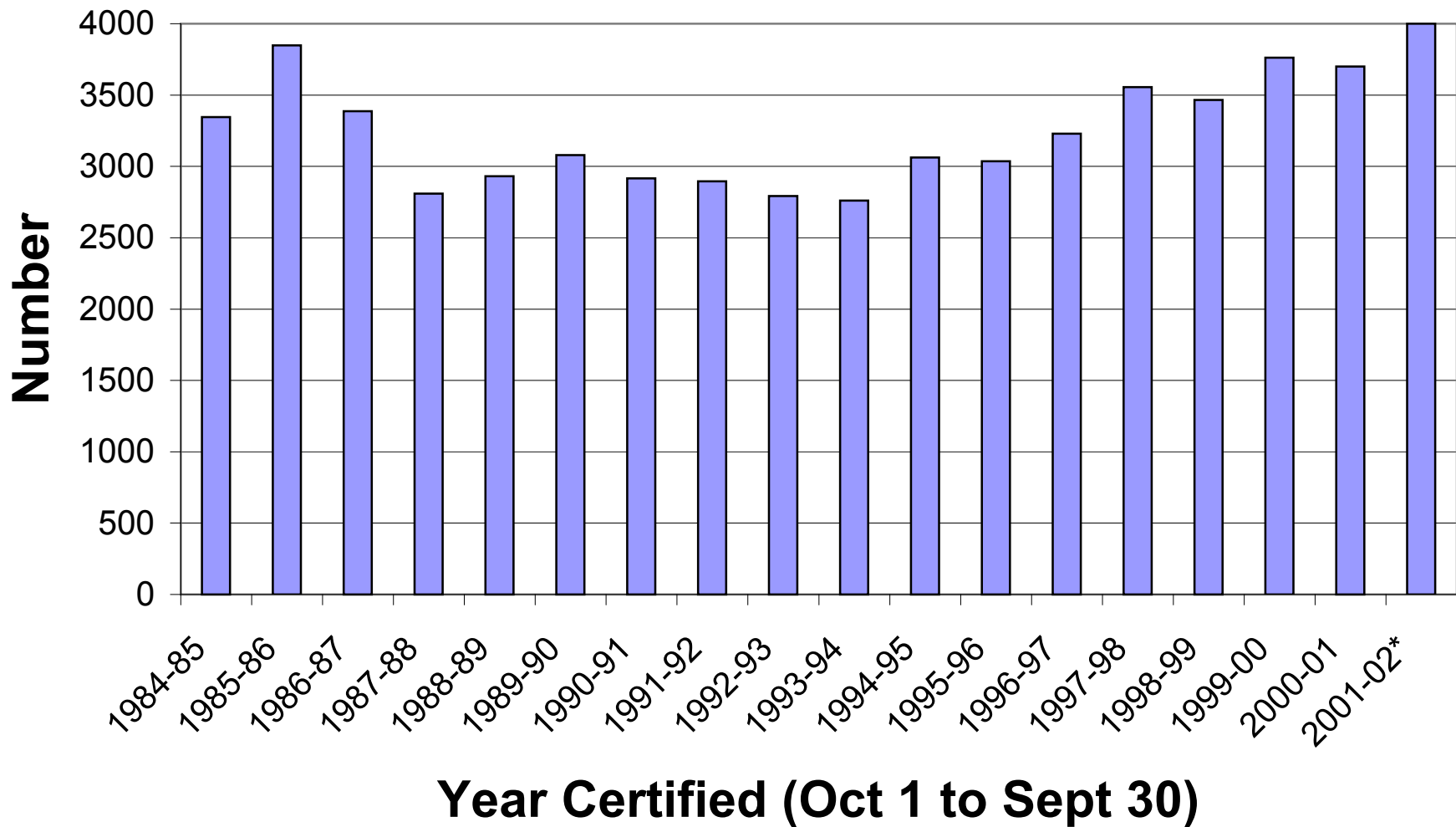
Subject	Total	1999	2000	2001	2002
Spanish, Grades 7 - 12	41	14	12	9	6
General Science, Grades 7 - 12	31	7	9	7	8
Health, Pre-K - Grade 12	29	14	10	2	3
History and Social Studies, Grades 7 - 12	21	6	9	2	4
French, Grades 7 - 12	15	5	5	4	1
Mathematics, Grades 7 - 12	15	6	3	3	3
Earth Science, Grades 7 - 12	12	3	2	3	4
English, Grades 7 - 12	11	6	3	1	1
Physics, Grades 7 - 12	9	4	1	2	2
Chemistry, Grades 7 - 12	7	2	3	1	1
Italian, Grades 7 - 12	4	3		1	
History and Social Studies, Middle School	4	1	1	1	1
Teaching English to Speakers of Other Languages (TESOL)	4	2			2
Latin, Grades 7 - 12	3	2	1		
Biology, Grades 7 - 12	3	1	2		
Physical Education, Pre-K - Grade 12	3	3			
English, Middle School	3	1	2		
Home Economics, Pre-K - Grade 12	2		2		
Art, Pre-K - Grade 12	1	1			
General Science, Middle School	1				1
Comprehensive Special Education, Pre-K - Grade 12	1			1	
Total:	220	81	65	37	37

Full- and Part-Time Connecticut Public School Certified Professional Staff



In 2001, there were 50,087 full-time and part-time certified professionals serving the public schools of Connecticut.

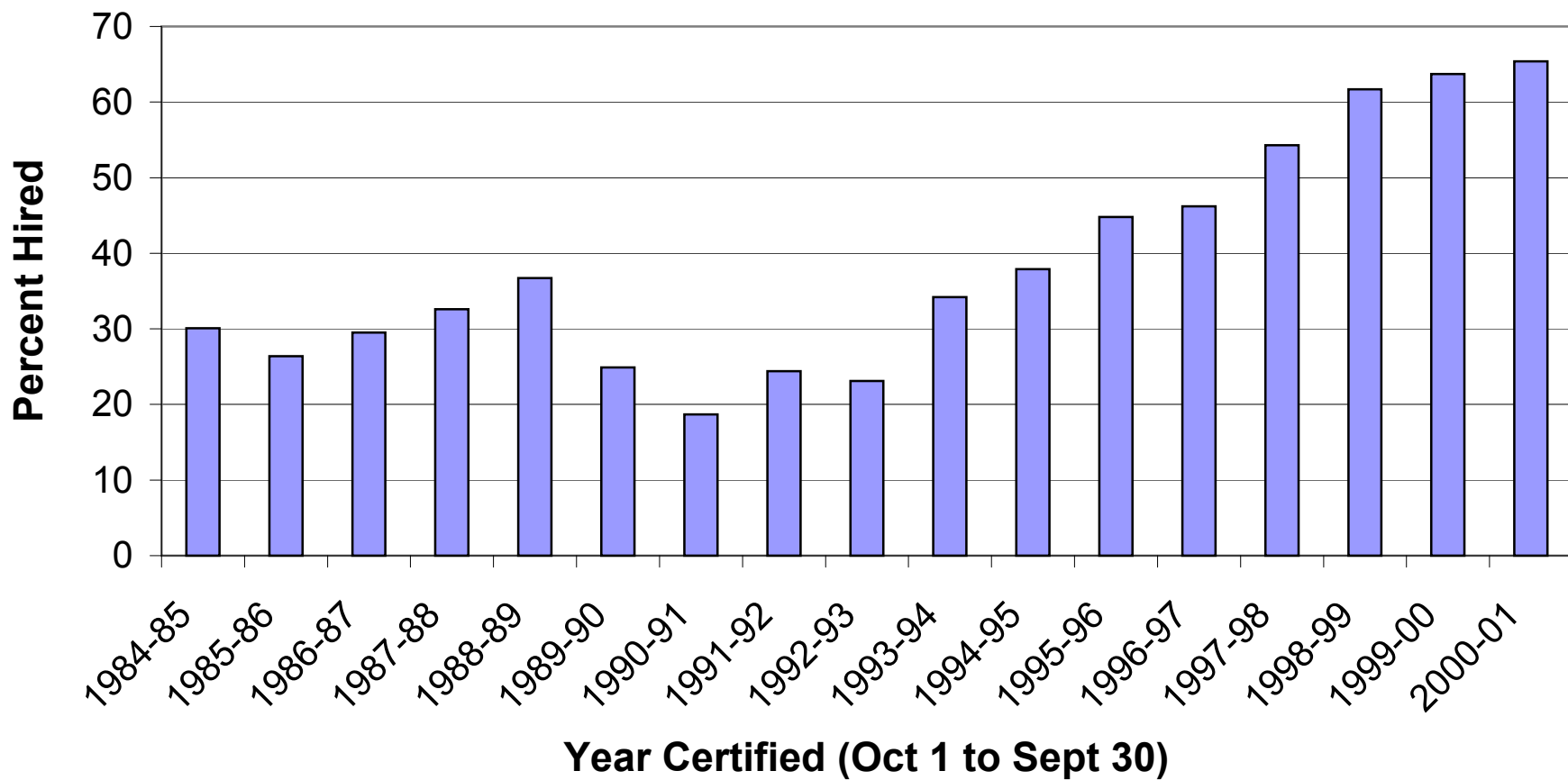
Number First Certified in Connecticut



* Preliminary

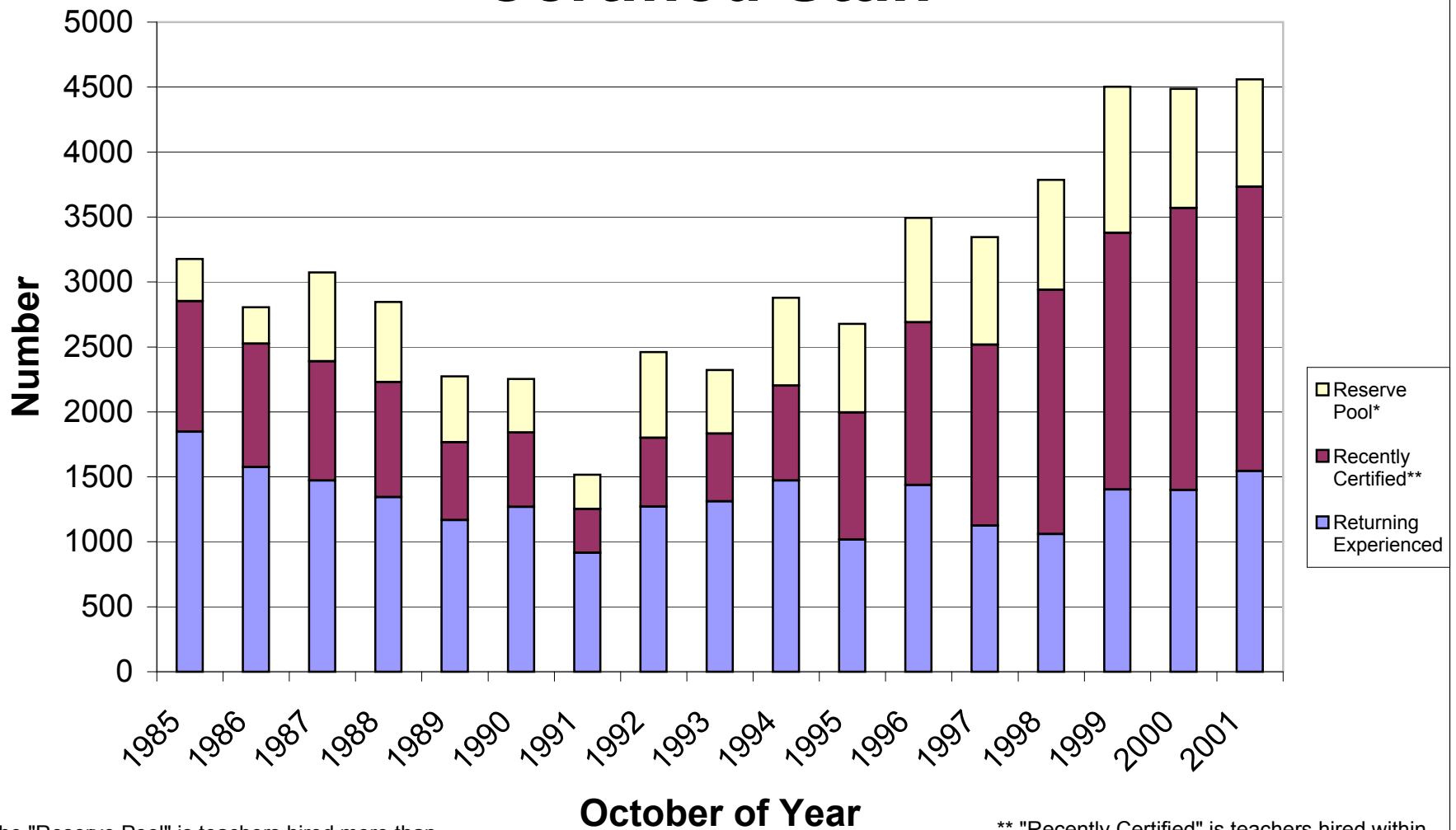
There were 3,700 first certified in CT in 2000-01. Preliminary 2001-02 data indicate over 4,000 were first certified. Not all who are 1st certified seek employment or are hired.

Percent of First Certified Connecticut Teachers Who Are Hired by October 1



Over 65% of the staff 1st certified in CT in the year prior to October 2001 were hired compared to under 20% ten years ago. In most subjects except elementary education, about 70% are hired.

New and Returning Connecticut Certified Staff

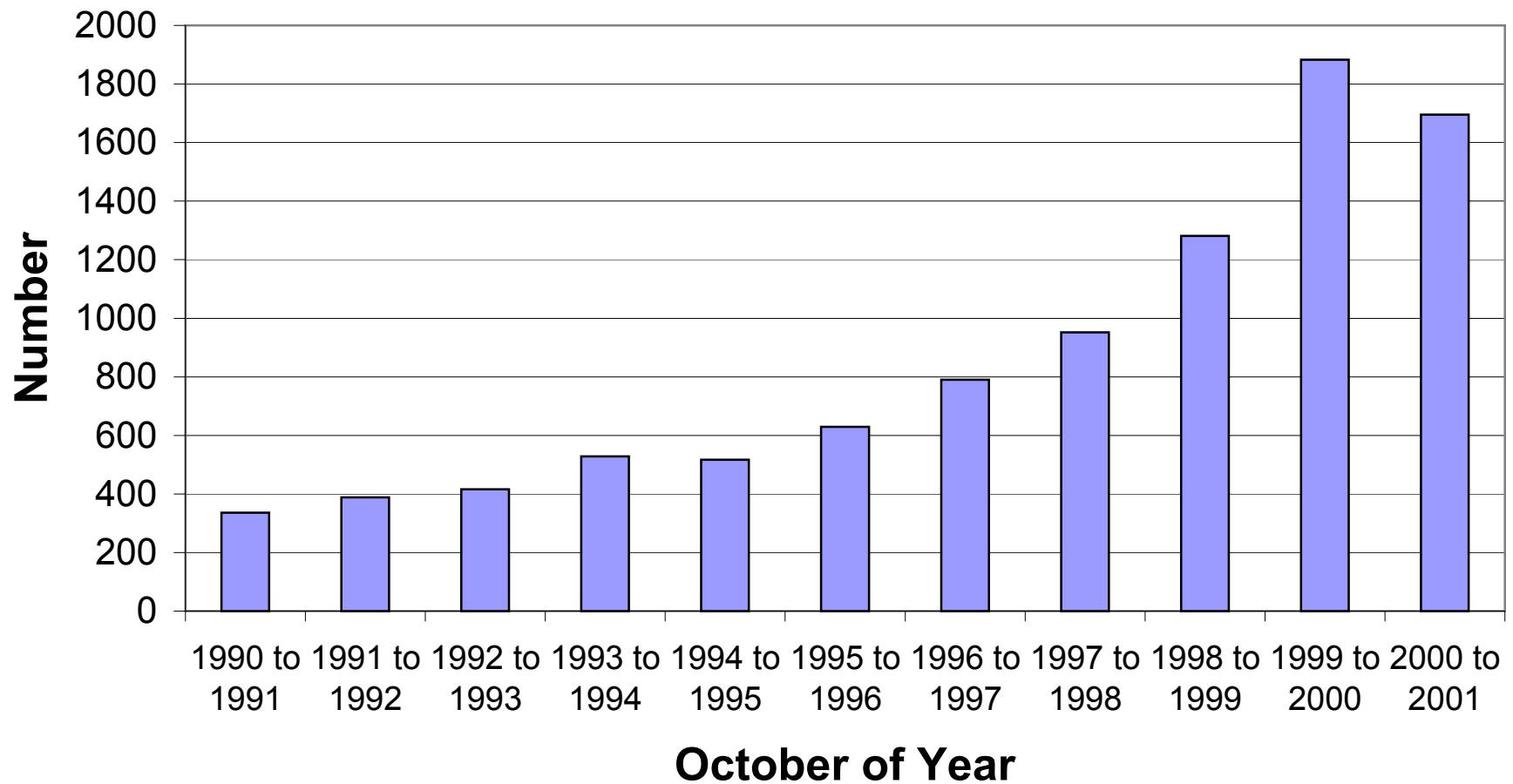


* The "Reserve Pool" is teachers hired more than one year before October 1 of the school year.

** "Recently Certified" is teachers hired within one year of October 1 of the school year.

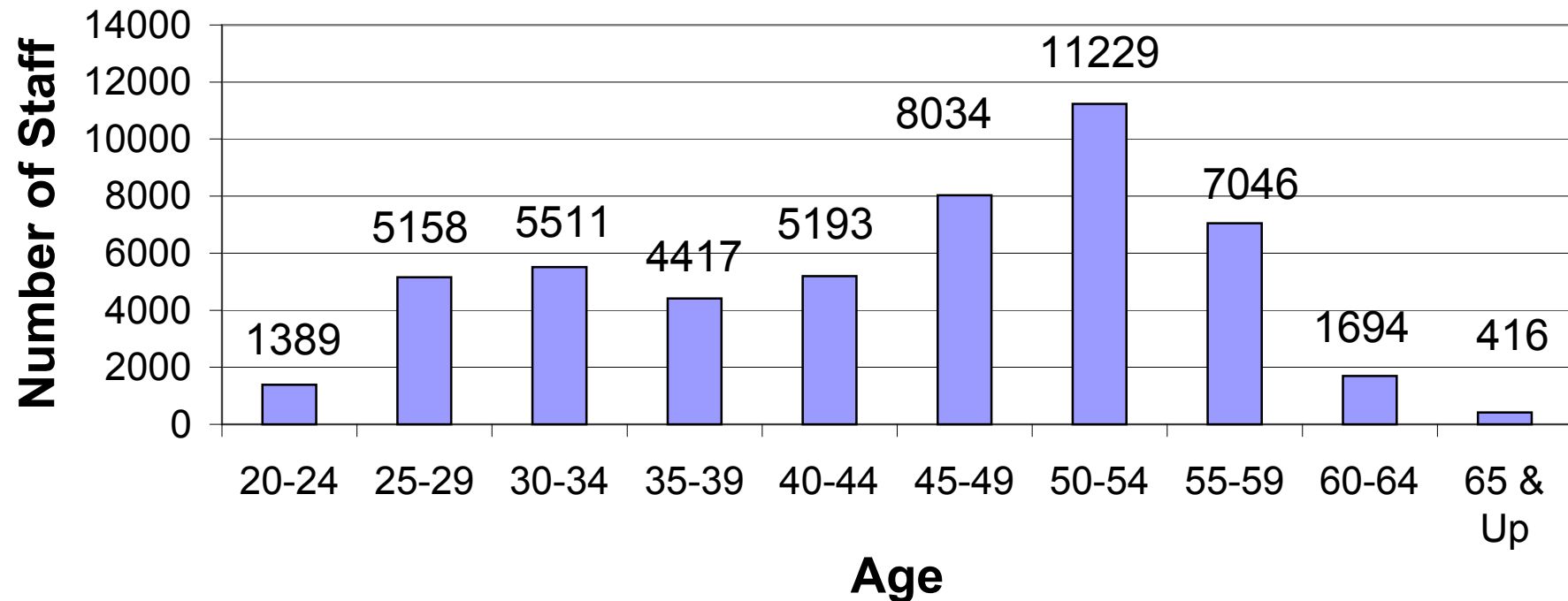
The new annual demand for certified staff has grown from 1,500 in 1991 to over 4,500 in 2001. Prior to 1995, over 50% of the demand was filled by returning experienced teachers. In 2001, these teachers filled only 34% of the available positions.

Transfers of Teachers Among Connecticut Public School Districts



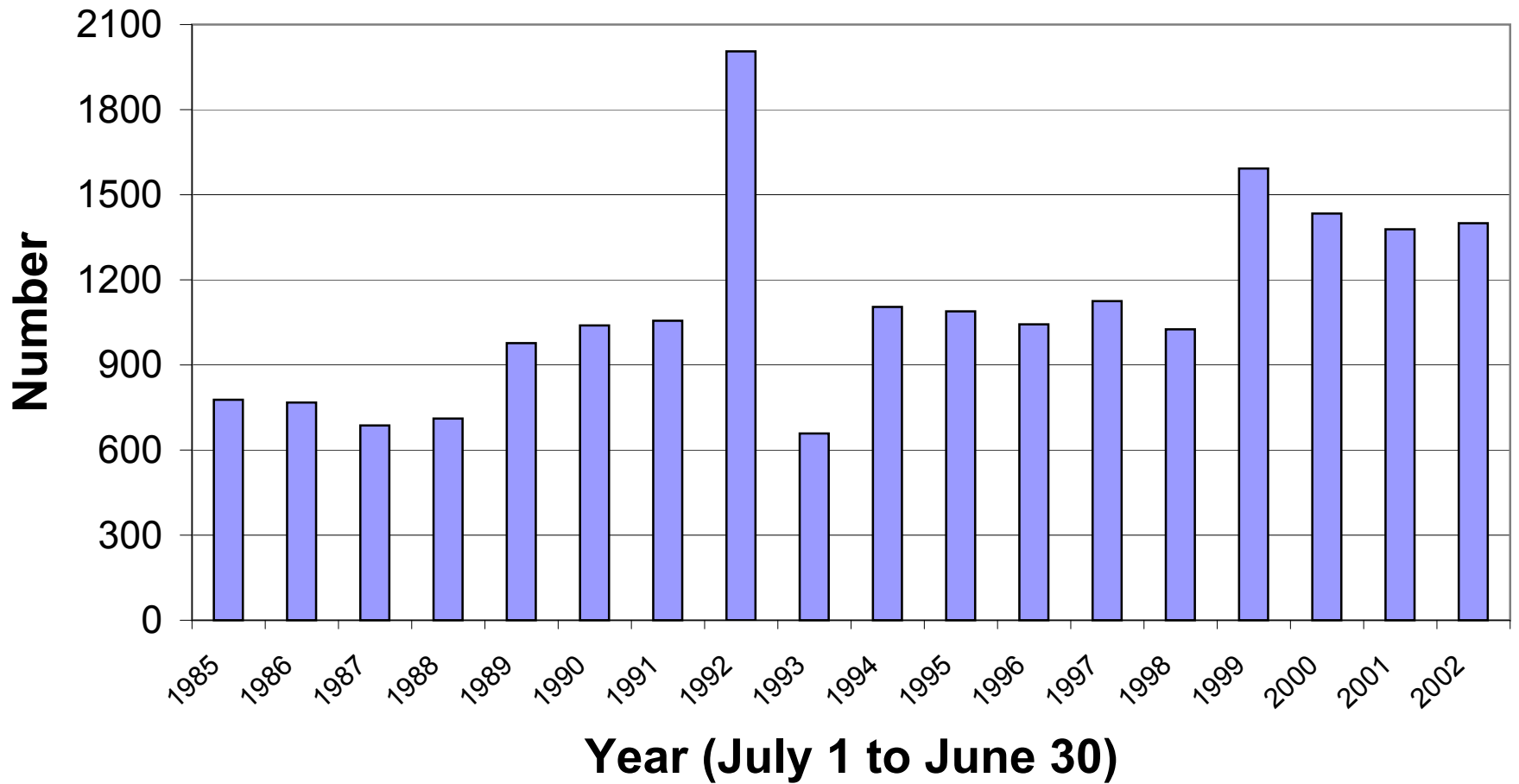
The number of transfers declined last year, but is still 1000 more than five years ago. Transfers do not affect statewide demand for teachers. However, they do affect the demand in districts which lose teachers.

Age of 2001 Connecticut Public School Professional Staff



Almost 41% of the staff was 50 years of age or older. The mean age of retirement in 2001-02 was 58.8 years with 30.9 years experience.

Retirees From the Connecticut Teachers' Retirement System



Over the past three years an average of about 1,400 Professionals have retired. This figure is expected to increase. This figure excludes teachers in the vocational technical and state schools who are covered by the state retirement system