

DATA BULLETIN

DESIGNATION OF TEACHER SHORTAGE AREAS, 2007-08 (Fall Hiring Report)

For 19 of the past 20 years, the Connecticut State Department of Education has surveyed local school districts to determine areas of teacher and administrator shortage. This Data Bulletin summarizes the Fall Hiring Survey data for the 2007-08 school year and compares these data to previous years. The data have been provided by all 166 local and regional school districts, the 3 endowed and incorporated academies, 6 regional educational service centers, 12 charter schools, the state technical high school system, state-approved nonpublic special education facilities and the Connecticut Birth-to-Three Program.

School districts had 5,349 full- and part-time teaching positions out of 52,870 total positions to fill for the fall of 2007. This is an increase of 262 vacancies from the 2006-07 school year.

October Vacancies

The number of vacancies remaining because no qualified person could be found also increased, from 292 in 2006 to 313 in 2007 (see Table 1).

District Reference Group (DRG) I, comprised of Connecticut's large urban districts, continues to have the highest number of vacancies remaining due to a lack of qualified applicants (see Table 2).

Table 2. Vacancies, No Qualified Person Found, by DRGs¹

DRG	Total Positions to Fill, 2007-08 School Year	# Vacancies, No Qualified Person Found	% Vacant of Total Positions to Fill
A	363	7	1.9
B	1017	9	0.8
C	394	24	6.1
D	743	17	2.3
E	255	12	4.7
F	244	17	6.9
G	573	28	4.9
H	512	34	6.6
I	841	105	12.5
NA*	407	60	14.7

* includes charter schools, RESCs, nonpublic special education facilities, and the technical high school system

Table 1. Fall Hiring Summary, 1991-2007

Fall of Year	Total Positions	Annual Positions To Fill	Percent of Positions To Fill That Are Part Time	Percent Positions To Fill of Total	Vacancies Remaining in October	Percent of Annual Positions Filled	Vacancies Due to No Qualified Applicants	Percent of Annual Positions Vacant, No Qualified Applicants
2007	53,129	5349	9.2	10.1	451	91.6	313	5.9
2006	52,870	5087	9.0	9.6	381	92.5	292	5.7
2005	52,314	5262	10.2	10.1	372	92.9	248	4.7
2004	51,697	5147	8.4	10.0	308	94.0	201	3.9
2003	51,370	4515	11.7	8.8	370	91.8	249	5.5
2002	51,414	4688	9.8	9.1	348	92.6	227	4.8
2001	50,087	5135	10.3	10.3	505	90.2	353	6.9
2000	48,750	5701	11.3	11.7	622	89.1	428	7.5
1999	47,800	5557	12.0	11.6	528	90.5	338	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
Averages	46,780	4,152	14.7	8.5	352	91.5	211	4.6

¹ District Reference Groups (DRGs) 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 DRG classification, a research bulletin is available at the State Department of Education's website at www.state.ct.us/sde/.

The majority of school districts indicated that they were using short-term substitutes as a solution to their October vacancies (see Table 3). In addition, approximately 16 percent of the October vacancies were handled by either redistributing students among other classes, thereby increasing class size, or by adding additional classes to teachers' schedules. Approximately five percent of the vacancies were resolved by no longer offering a course.

Table 3. Solution to October Vacancies

Solution	% of October Vacancies
Course no longer offered	5.1
Students redistributed among other classes	5.4
Short-term substitute	45.6
Teacher(s) with appropriate certification pick up additional class	11.2
Remaining vacant (administrative positions only)	5.1
Filled by interim appointment (administrative positions only)	7.8
Other	19.7

Designation of Shortage Areas

Based on 2006-07 school-year data, the state-identified shortage areas for the 2007-08 school year are:

- **Bilingual Education, PK-12**
- **Comprehensive Special Education, 1-12**
- **English, 7-12**
- **Intermediate Administrator**
- **Library Media Specialist**
- **Mathematics, 7-12**
- **Music, PK-12**
- **Science, 7-12**
- **Speech and Language Pathology**
- **Technology Education, PK-12**
- **World Languages, 7-12**

These subject areas were approved by the U.S. Department of Education as federally designated teacher shortage areas. The data collected in the 2007 Fall Hiring Survey will be used to determine the teacher shortage areas for the 2008-09 school year.

The Connecticut State Department of Education sends a yearly proposal to the U.S. Department of Education 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 they are 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). This program enables teachers who teach in a priority 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 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 homes statewide. This program is available to first-time home buyers only and is subject to CHFA eligibility requirements. The mortgage assistance program was created to serve as a tool to help recruit and retain public school teachers in Connecticut.

In addition to loan deferment and mortgage assistance benefits for teaching in a shortage area, school districts may also take advantage of this designation when rehiring retired teachers. The 2003 General Assembly enacted a law that enables retired teachers to be reemployed without being subject to the earnings limit if they teach in a position designated by the Commissioner of Education as a subject shortage area for the school year in which they are employed.

For the past several years, subject areas designated as shortage areas have been difficult positions to fill (see Table 4). While the number of positions available for the start of the school year has decreased for many of the shortage areas, the number of these vacancies remaining in October because no qualified person could be found continues to be of concern. Initiatives such as the mortgage assistance program, federal loan deferment program and the rehiring of retirees are intended to somewhat reduce these specific subject-area shortages.

Table 4. Positions Available in the Shortage Areas, 2003-04 to 2007-08

Subject	# Positions Available					# Positions Remaining Vacant, No Qualified Person Found				
	03-04	04-05	05-06	06-07	07-08	03-04	04-05	05-06	06-07	07-08
Bilingual Education	65	40	34	53	41	22	14	14	21	18
Special Education	493	502	615	578	511	48	32	52	56	41
English	317	392	403	379	348	11	7	11	15	15
Intermediate Administrator	165	220	261	244	268	10	8	20	26	14
Library Media Specialist	43	52	63	73	74	2	4	7	7	14
Mathematics	286	322	376	329	321	18	18	32	21	20
Music	175	196	151	177	175	10	4	9	15	11
Science	265	315	322	333	319	11	13	8	30	18
Speech and Language Pathologist	95	104	118	140	133	16	19	30	28	30
Technology Education	52	53	47	61	63	7	0	3	8	6
World Languages	204	257	310	251	239	13	17	10	21	22

Table 5. 2007-08 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	3	1	0	0	0	7	6	2	36
Art, Pre-K-12	115	3	1	1	4	19	169	3	23
Bilingual, PK-12	41	18	0	0	16	5	12	1	8
Business, 7-12	66	3	1	0	3	10	69	2	24
Comprehensive Special Education	511	41	2	0	14	26	407	3	3
Department Chairperson	13	2	27	0	3	6.5	56	2	20
Elementary, 1-6	1065	3	35	2	2	130	2337	4.5	17
English, 7-12	348	15	32	5	10	28	437	3.5	7
English, Middle School	54	1	12	0	2	15.5	29	3	27
External Diploma Program	1	0	0	0	0	10	55	4	45
General Science, Middle School	39	1	6	13	5	10.5	18	2	26
Health Occupations – V-T Schools	3	1	0	0	2	10	3	1	31
Health, Pre-K-12	58	2	4	5	1	18	61	3	28
Hearing Impaired, PK-12	4	0	0	0	2	2	9	2.5	41
History & Social Studies, 7-12	216	0	8	1	3	48.5	476	4	39
History & Social Studies, Middle School	21	0	1	0	1	47	13	3	42
Home Economics, Pre-K-12	42	6	4	0	13	5	19	2	12
Integrated Early Childhood/Spec. Ed, Birth-K	14	0	1	0	1	11.5	18	2.5	40
Integrated Early Childhood/Spec. Ed, Nursery-3	52	3	15	0	6	13	178	4	21
Intermediate Administrator	268	14	26	0	10	23	631	3	10
Marketing Education, 7-12	2	1	0	0	0	9	3	2	33
Mathematics, 7-12	321	20	55	3	44	17	338	2	4
Mathematics, Middle School	45	1	19	0	6	13	47	2	25
Music, PK-12	175	11	2	0	11	21	163	3	13
Non-English Speaking Adults	1	0	0	0	0	10	110	4	46
Occupational Subject, V-T Schools	13	0	0	0	1	8	73	2	43
Physical Education, Pre-K-12	126	4	0	0	2	18	133	3	19
Practical Nurse Education Instruction	2	0	0	0	0	10	4	2	44
Reading and Language Arts Consultant	30	8	0	0	8	5	39	1	15
Remedial Reading & Language Arts, 1-12	64	3	24	0	14	9	24	2	14
School Business Administrator	6	1	0	0	0	8.5	66	2	37
School Counselor	130	4	10	0	3	30	236	3	18
School Library Media Specialist	75	14	14	0	17	8	47	2	6
School Nurse Teacher	8	1	0	0	2	2	9	1	30
School Psychologist	114	7	0	0	10	9	117	2	16
School Social Worker	72	1	0	0	4	15.5	197	3	32
Science, 7-12	319	18	13	0	77	11	328	2	5
Speech and Language Pathologist	133	30	0	0	42	4	103	2	1
Superintendent of Schools	14	1	0	0	0	6.5	65	3.5	35
Technology Education, PK-12	63	6	3	0	25	5	40	2	9
TESOL, PK-12	50	7	14	0	7	7.5	29	2	11
Trade & Industrial Occupations- Comprehensive H.S.	10	4	0	0	1	6	14	1	22
Unique Subject Area Endorsement	8	1	7	0	6	5	17	1	29
Vocational Agriculture, 7-12	7	0	0	0	3	6.5	5	1.5	38
World Language Instructor, Elementary	9	0	1	0	3	6	45	2	34
World Languages, 7-12	239	22	2	8	65	7	183	2	2

Calculation of Shortage Areas

Connecticut takes several variables into account in order to determine areas of shortage (see Table 5). The column headed "Vacancy: No Qualified Person Found" indicates the number of full-time and part-time positions that were unfilled as of October 1, 2007, because no individual had met a district's criteria after a complete search.

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

Teachers working under a Temporary Authorization for Minor Assignment (TAMA) must already be certified in another area and have at least 12 semester hours of credit in the subject to be taught. The column headed by "Minimum Qualified Hire" identifies 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." DSAPs and TAMAs are included in the calculation of teacher shortage areas because they are typically issued when a school district cannot find a candidate with full certification in the subject area needed.

"Median Applications" heads the column that lists 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 used for determining shortage areas, certificates issued or renewed per position, is calculated by dividing the number of people receiving or renewing Connecticut certificates between October 1, 2006, and September 30, 2007, 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 the following 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 and the number of minor assignments;
- 3) median applications weighted 25 percent; and
- 4) the number of Connecticut certificates first issued or renewed per position, also weighted 25 percent.

Applicant Quality Rating

District personnel responsible for hiring were asked to rate the quality of the applicant pool for each position. They were 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

No subject areas received a median rating of 5. Of the subject areas with more than one position available, three received a median rating of 1; they were: bilingual education, reading/language arts consultant, and trade and industrial occupations for comprehensive high schools.