

DATA BULLETIN

DESIGNATION OF TEACHER SHORTAGE AREAS, 2008-09 (Fall Hiring Report)

For 20 of the past 21 years, the Connecticut State Department of Education has surveyed local school districts to determine areas of teacher and administrator shortages. This Data Bulletin summarizes the Fall Hiring Survey data for the 2008-09 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, 18 charter schools, the State Technical High School System, State-approved nonpublic special education facilities, the Connecticut Birth to Three Program, the Connecticut Departments of Correction, Children and Families, and Developmental Services.

School districts had 4,830 full and part-time teaching positions to fill out of 52,554 total positions, for the fall of 2008. This was a decrease of 575 vacancies from the 2007-08 school year. While total positions decreased only 1.1 percent, vacancies declined by 10.7 percent as a higher percentage of positions were filled this year compared to last.

October Vacancies

The number of vacancies remaining because no qualified person could be found also decreased, from 313 in 2007 to 219 in 2008 (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). Since 2007, however, these vacancies declined from 12.5 percent to 10 percent of total vacant positions.

Table 2: Vacancies Due To 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 | 308 | 2 | .6 |
| B | 774 | 13 | 1.7 |
| C | 311 | 2 | .6 |
| D | 680 | 14 | 2.1 |
| E | 207 | 7 | 3.4 |
| F | 232 | 9 | 3.9 |
| G | 524 | 16 | 3.1 |
| H | 415 | 26 | 6.3 |
| I | 843 | 84 | 10.0 |
| NA* | 536 | 46 | 8.6 |

*Includes charter schools, RESCs, nonpublic special education facilities and the Technical High School System

Table 1: Fall Hiring Summary, 1991-2008

| Fall of Year | Total Positions | Annual Positions To Fill | Percent of Positions To Fill That Are | | Vacancies Remaining in October | Percent of Annual Positions Filled | | Vacancies Due to No Qualified Applicants | Percent of Annual Positions Vacant, No Qualified Applicants | |
|--------------|-----------------|--------------------------|---------------------------------------|---------------|--------------------------------|------------------------------------|---|--|---|--|
| | | | Part-Time | Fill of Total | | Percent of Annual Positions Filled | Percent of Annual Positions Vacant, No Qualified Applicants | | | |
| 2008 | 52,554 | 4,830 | 8.1 | 9.2 | 312 | 93.5 | 219 | 4.5 | | |
| 2007 | 53,129 | 5,349 | 9.2 | 10.1 | 451 | 91.6 | 313 | 5.9 | | |
| 2006 | 52,870 | 5,087 | 9.0 | 9.6 | 381 | 92.5 | 292 | 5.7 | | |
| 2005 | 52,314 | 5,262 | 10.2 | 10.1 | 372 | 92.9 | 248 | 4.7 | | |
| 2004 | 51,697 | 5,147 | 8.4 | 10.0 | 308 | 94.0 | 201 | 3.9 | | |
| 2003 | 51,370 | 4,515 | 11.7 | 8.8 | 370 | 91.8 | 249 | 5.5 | | |
| 2002 | 51,414 | 4,688 | 9.8 | 9.1 | 348 | 92.6 | 227 | 4.8 | | |
| 2001 | 50,087 | 5,135 | 10.3 | 10.3 | 505 | 90.2 | 353 | 6.9 | | |
| 2000 | 48,750 | 5,701 | 11.3 | 11.7 | 622 | 89.1 | 428 | 7.5 | | |
| 1999 | 47,800 | 5,557 | 12.0 | 11.6 | 528 | 90.5 | 338 | 6.1 | | |
| 1998 | 46,459 | 4,331 | 13.4 | 9.3 | 415 | 90.4 | 274 | 6.3 | | |
| 1997 | 45,269 | 3,630 | 17.1 | 8.0 | 274 | 92.5 | 151 | 4.2 | | |
| 1996 | 44,893 | | | | No Data Collected | | | | | |
| 1995 | 43,261 | 2,990 | 22.7 | 6.9 | 245 | 91.8 | 103 | 3.4 | | |
| 1994 | 42,451 | 2,895 | 22.8 | 6.8 | 237 | 91.8 | 81 | 2.8 | | |
| 1993 | 41,324 | 2,349 | 23.1 | 5.7 | 268 | 88.6 | 59 | 2.5 | | |
| 1992 | 41,179 | 2,515 | 17.7 | 6.1 | 201 | 92.0 | 50 | 2.0 | | |
| 1991 | 41,733 | 1,281 | 26.5 | 3.1 | 101 | 92.1 | 21 | 1.6 | | |
| Averages | 47,697 | 4,192 | 14.3 | 8.6 | 349 | 91.6 | 212 | 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 20.1 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 3.3 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 | 3.3 |
| Students redistributed among other classes | 7.1 |
| Short-term substitute | 40.6 |
| Teacher(s) with appropriate certification pick up additional class | 13.0 |
| Remaining vacant (administrative positions only) | 2.1 |
| Filled by interim appointment (administrative positions only) | 10.0 |
| Other | 23.9 |

Designation of Shortage Areas

Based on 2007-08 school-year data, the State-identified shortage areas for the 2008-09 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 2008 Fall Hiring Survey will be used to determine the teacher shortage areas for the 2009-10 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, 2004-05 to 2008-09

| Subject | # Positions Available | | | | | # Positions Remaining Vacant, No Qualified Person Found | | | | |
|---------------------------------|------------------------------|--------------|--------------|--------------|--------------|--|--------------|--------------|--------------|--------------|
| | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 |
| Bilingual Education | 40 | 34 | 53 | 41 | 34 | 14 | 14 | 21 | 18 | 6 |
| Special Education | 502 | 615 | 578 | 511 | 566 | 32 | 52 | 56 | 41 | 34 |
| English | 392 | 403 | 379 | 348 | 364 | 7 | 11 | 15 | 15 | 10 |
| Intermediate Administrator | 220 | 261 | 244 | 268 | 253 | 8 | 20 | 26 | 14 | 12 |
| Library Media Specialist | 52 | 63 | 73 | 74 | 68 | 4 | 7 | 7 | 14 | 10 |
| Mathematics | 322 | 376 | 329 | 321 | 314 | 18 | 32 | 21 | 20 | 16 |
| Music | 196 | 151 | 177 | 175 | 160 | 4 | 9 | 15 | 11 | 10 |
| Science | 315 | 322 | 333 | 319 | 322 | 13 | 8 | 30 | 18 | 7 |
| Speech and Language Pathologist | 104 | 118 | 140 | 133 | 131 | 19 | 30 | 28 | 30 | 23 |
| Technology Education | 53 | 47 | 61 | 63 | 35 | 0 | 3 | 8 | 6 | 2 |
| World Languages | 257 | 310 | 251 | 239 | 265 | 17 | 10 | 21 | 22 | 25 |

Table 5: 2008-09 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, PK-12 | 4 | 0 | 0 | 0 | 2 | 6 | 8 | 2.5 | 41 |
| Art, PK-12 | 87 | 1 | 2 | 1 | 6 | 23 | 102 | 4 | 30 |
| Bilingual, PK-12 | 34 | 6 | 17 | 0 | 19 | 9 | 0 | 1 | 6 |
| Business, 7-12 | 43 | 0 | 0 | 0 | 4 | 11 | 26 | 2.5 | 44 |
| Comprehensive Special Education, K-12 | 566 | 34 | 79 | 0 | 31 | 20 | 398 | 2 | 3 |
| Department Chairperson | 7 | 1 | 41 | 0 | 1 | 11 | 0 | 2 | 23 |
| Elementary, K-6 | 913 | 7 | 3 | 2 | 14 | 124 | 1499 | 5 | 12 |
| English, 7-12 | 364 | 10 | 26 | 3 | 36 | 30 | 325 | 3 | 9 |
| English, Middle School | 29 | 2 | 7 | 2 | 2 | 12 | 27 | 3 | 25 |
| External Diploma Program/Noncredit Mandated Programs | 4 | 0 | 0 | 0 | 0 | 10 | 0 | 4 | 47 |
| General Science, Middle School | 37 | 3 | 4 | 0 | 6 | 9 | 20 | 2 | 14 |
| Health Occupations - Comprehensive H.S. | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 38 |
| Health Occupations – CT Tech. High Schools | 2 | 1 | 0 | 0 | 1 | 7 | 0 | 1 | 33 |
| Health, PK-12 | 68 | 3 | 0 | 4 | 3 | 20 | 22 | 3 | 21 |
| Hearing Impaired, PK-12 | 13 | 2 | 0 | 0 | 5 | 4 | 12 | 1 | 26 |
| High School Diploma Program | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 45* |
| History & Social Studies, 7-12 | 217 | 1 | 3 | 6 | 3 | 49 | 271 | 4 | 35 |
| History & Social Studies, Middle School | 30 | 0 | 1 | 6 | 1 | 31 | 15 | 3 | 42 |
| Home Economics, PK-12 | 30 | 1 | 3 | 0 | 13 | 5 | 12 | 2 | 27 |
| Integrated Early Childhood/Spec. Ed, Birth-K | 29 | 0 | 2 | 0 | 2 | 12 | 16 | 2 | 39 |
| Integrated Early Childhood/Spec. Ed, Nursery-3 | 56 | 2 | 15 | 0 | 7 | 14.5 | 113 | 3 | 24 |
| Intermediate Administrator | 253 | 12 | 36 | 0 | 19 | 20.5 | 462 | 4 | 7 |
| Marketing Education, 7-12 | 2 | 0 | 0 | 0 | 1 | 2.5 | 0 | 2 | 40 |
| Mathematics, 7-12 | 314 | 16 | 36 | 2 | 60 | 17.5 | 159 | 2 | 4 |
| Mathematics, Middle School | 51 | 2 | 20 | 1 | 5 | 15 | 27 | 2 | 19 |
| Music, PK-12 | 160 | 10 | 6 | 0 | 5 | 14 | 124 | 3 | 10 |
| Non-English Speaking Adults | 2 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 45* |
| Occupational Subject, CT Tech. High Schools | 11 | 0 | 0 | 0 | 0 | 85 | 0 | 4 | 48 |
| Physical Education, PK-12 | 149 | 5 | 0 | 0 | 4 | 24 | 161 | 4 | 18 |
| Practical Nurse Education Instruction | 4 | 2 | 0 | 0 | 0 | 17 | 0 | 2 | 31 |
| Reading and Language Consultant | 31 | 5 | 1 | 0 | 2 | 6 | 34 | 2 | 16 |
| Remedial Reading & Language Arts, 1-12 | 81 | 4 | 23 | 0 | 12 | 10 | 77 | 2 | 11 |
| School Business Administrator | 7 | 2 | 0 | 0 | 0 | 14 | 0 | 2 | 29 |
| School Counselor | 144 | 1 | 5 | 0 | 5 | 29 | 164 | 4 | 34 |
| School Library Media Specialist | 68 | 10 | 13 | 0 | 18 | 8 | 22 | 2 | 5 |
| School Nurse Teacher | 6 | 3 | 0 | 0 | 1 | 1 | 0 | 1 | 20 |
| School Psychologist | 90 | 5 | 0 | 0 | 11 | 16 | 86 | 3 | 15 |
| School Social Worker | 59 | 2 | 0 | 0 | 6 | 16 | 69 | 3 | 28 |
| Science, 7-12 | 322 | 7 | 31 | 17 | 86 | 11 | 201 | 2 | 8 |
| Speech and Language Pathologist | 131 | 23 | 0 | 0 | 53 | 4 | 83 | 1 | 2 |
| Superintendent of Schools | 12 | 1 | 0 | 0 | 1 | 6 | 36 | 3.5 | 36 |
| Technology Education, PK-12 | 35 | 2 | 6 | 0 | 16 | 6 | 20 | 1 | 17 |
| TESOL, PK-12 | 29 | 3 | 15 | 0 | 7 | 8 | 14 | 2 | 13 |
| Trade and Industrial Occupations - Comprehensive H.S. | 6 | 0 | 0 | 0 | 5 | 2 | 0 | 1 | 37 |
| Unique Subject Area Endorsement | 9 | 0 | 12 | 0 | 8 | 3 | 6 | 1 | 32 |
| Vocational Agriculture, 7-12 | 3 | 0 | 0 | 0 | 1 | 6 | 2 | 2 | 43 |
| World Language Instructor, Elementary | 22 | 2 | 2 | 0 | 11 | 6 | 25 | 1 | 22 |
| World Languages | 265 | 25 | 42 | 6 | 76 | 7 | 90 | 2 | 1 |

*Shared ranking due to same overall score.

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, 2008, 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, 2007, and September 30, 2008, 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, and trade and industrial occupations for comprehensive high schools, technology education, hearing impaired, speech pathologist, school nurse, world language instructor (elementary), unique subject area endorsement and health occupations (CT Technical High Schools).