

COLORADO'S EDUCATOR SHORTAGE

Survey Results for the 2023-2024 School Year



Background on the Educator Shortage Survey

In response to Colorado House Bill 17-1003, *Concerning a Strategic Action Plan to Address Teacher Shortages in Colorado*, the Colorado Department of Education (CDE) and Colorado Department of Higher Education (CDHE) collaboratively collected data to analyze the state's educator shortage problem and developed a corresponding action plan regarding identified shortages. As a part of that plan, CDE created the Educator Shortage Survey, which is an annual statewide survey¹ for all local education agencies (LEAs), that is, school districts and Boards of Cooperative Educational Services (BOCES) that employ educators.²

The purpose of the survey is to gather facts about the number of vacant educator positions and the ways those vacancies were filled, if they were filled at all. The survey includes questions regarding the number of vacant teaching positions by subject area, the number of vacant special services provider (SSP) positions by type, and beginning in 2019-2020, the number of vacant school leadership (i.e., principal and assistant principal) and paraprofessional positions. These shortage data allow CDE to identify educator shortage areas in Colorado and to report to the Colorado Legislature to inform decisions regarding support for recruiting and retaining educators.

Results are reported here according to varying levels of detail. This summary includes state shortage information for the following groups: (1) all teachers (including by subject area), SSPs (including by SSP type), principals/assistant principals and paraprofessionals; (2) all teachers, SSPs, principals/assistant principals and paraprofessionals separated by rural designation; and (3) all teachers by teaching subject area and rural designation. In addition, information regarding trends in the recruitment strategies used is included. For more detail about the frequency with which specific shortage mechanisms (hiring long-term substitutes, retired educators, alternative licensure program candidates and emergency authorization candidates) and recruiting strategies were used and for LEA-level data, [please see the data dashboard here](#).

When analyzing the data by rural designation,³ non-rural school districts had the most open positions, likely since these districts employ a larger number of educators than those in rural and small rural areas. Additionally, when analyzing results by teaching subject area, some teaching areas, including elementary education, had comparatively high numbers of open positions, likely because there are more elementary teacher positions than exist in some other subject areas, such as physical education. To better understand the educator shortages in Colorado, the proportion of positions filled by a shortage mechanism or left unfilled to the total number of available positions in that subject area or region is reported, in addition to the total count of available positions⁴.

Statewide Shortage Survey Results

Across the state, LEAs reported having teacher, SSP, principal/assistant principal and paraprofessional positions to hire for the 2023-2024 school year. More specifically, LEAs reported having to hire for:

- 6,911 (12.41%) teaching positions from among the 55,686 teaching positions in the state. This is a count of all open positions that are available to be filled by educators switching districts and/or schools, newly trained

¹ Starting with the 2018-2019 school year, the survey is required by statute per Senate Bill 19-003 and to meet Federal requirements per 34 CFR 682.201(q), 34 CFR 674. 53(c), and 34 CFR 686.12. It was first administered in 2017-2018 as a voluntary survey. Data from the first-year survey are not comparable because of the vast differences in representativeness.

² Front Range BOCES, Mount Evans BOCES, and Ute Pass BOCES did not complete the Educator Shortage Survey for 2023-2024 because they are not required to submit data for the collection in which the survey is embedded. Other LEAs included are the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools.

³ A Colorado school district is determined to be rural based on the size of the district, the distance from the nearest large urban/urbanized area, and a student enrollment of approximately 6,500 students or fewer. Small rural districts are those districts meeting these same criteria and having a student population of fewer than 1,000 students.

⁴ The number of all existing positions was calculated using the full-time equivalent (FTE) reported by each district and BOCES as a part of the annual Human Resources snapshot along with the number of unfilled positions reported in the survey. Percentage calculations for positions without a unique teaching subject (e.g., culturally and linguistically diverse educators) are not available because FTE data are not reported in the Human Resources snapshot.

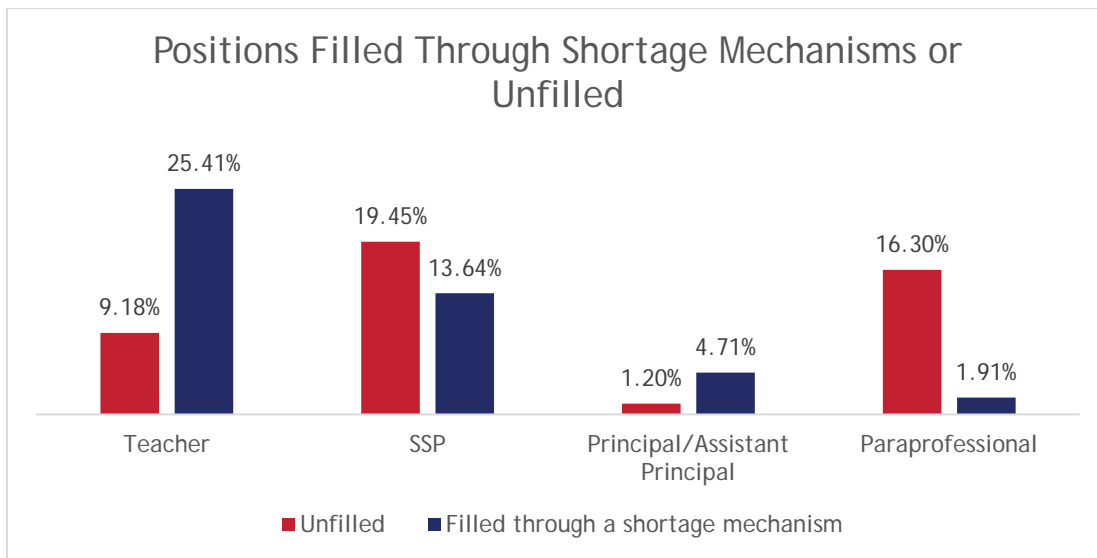


educators completing preparation programs, out-of-state educators relocating to Colorado and others holding qualifying credentials.

- 1,186 (15.43%) SSP positions from among the 7,685 SSP positions in the state.
- 499 (13.17%) principal/assistant principal positions from among the 3,739 principal and assistant principal positions in the state.
- 3,468 (15.11%) paraprofessional positions from among the 22,951 paraprofessional positions in the state.

Of the total teaching positions to hire, 635 (9.18%) remained unfilled for the entire school year and 1,756 (25.41%) were filled through a shortage mechanism. Of the total SSP positions to hire, 231 (19.45%) remained unfilled for the entire school year and 162 (13.64%) were filled through a shortage mechanism. Of the total principal/assistant principal positions to hire, 6 (1.20%) remained unfilled for the entire school year and 24 (4.71%) were filled through a shortage mechanism. Of the total paraprofessional positions to hire, 565 (16.30%) remained unfilled for the entire school year and 66 (1.91%) were filled through a shortage mechanism. Positions to hire that were filled, but not filled by a shortage mechanism, are presumed to have been filled through traditional hiring mechanisms.

This series of graphs shows the percentage of all existing open positions that were filled in the 2023-2024 school year through a shortage mechanism and that remained unfilled for each educator group as well as for each teaching subject area⁵ and SSP type.⁶

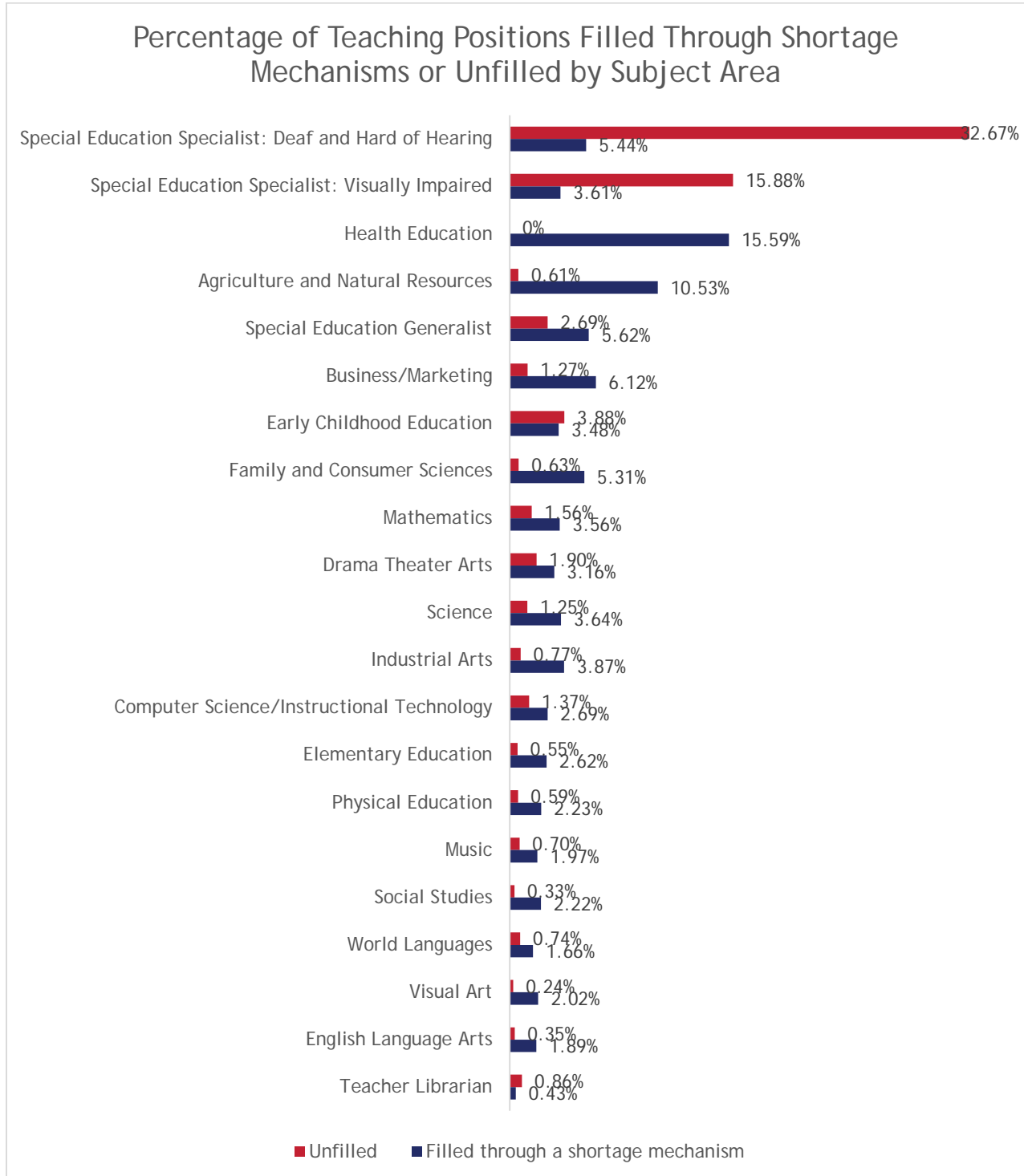


⁵ Based on the feedback from the 2018-2019 survey, two subject areas, Health Education and Industrial Arts, were added to the survey starting with the 2019-2020 administration of the survey. For teaching positions not aligned to a unique subject area reported in the Human Resources Collection (e.g., culturally and linguistically diverse education), [please see additional tables here](#).

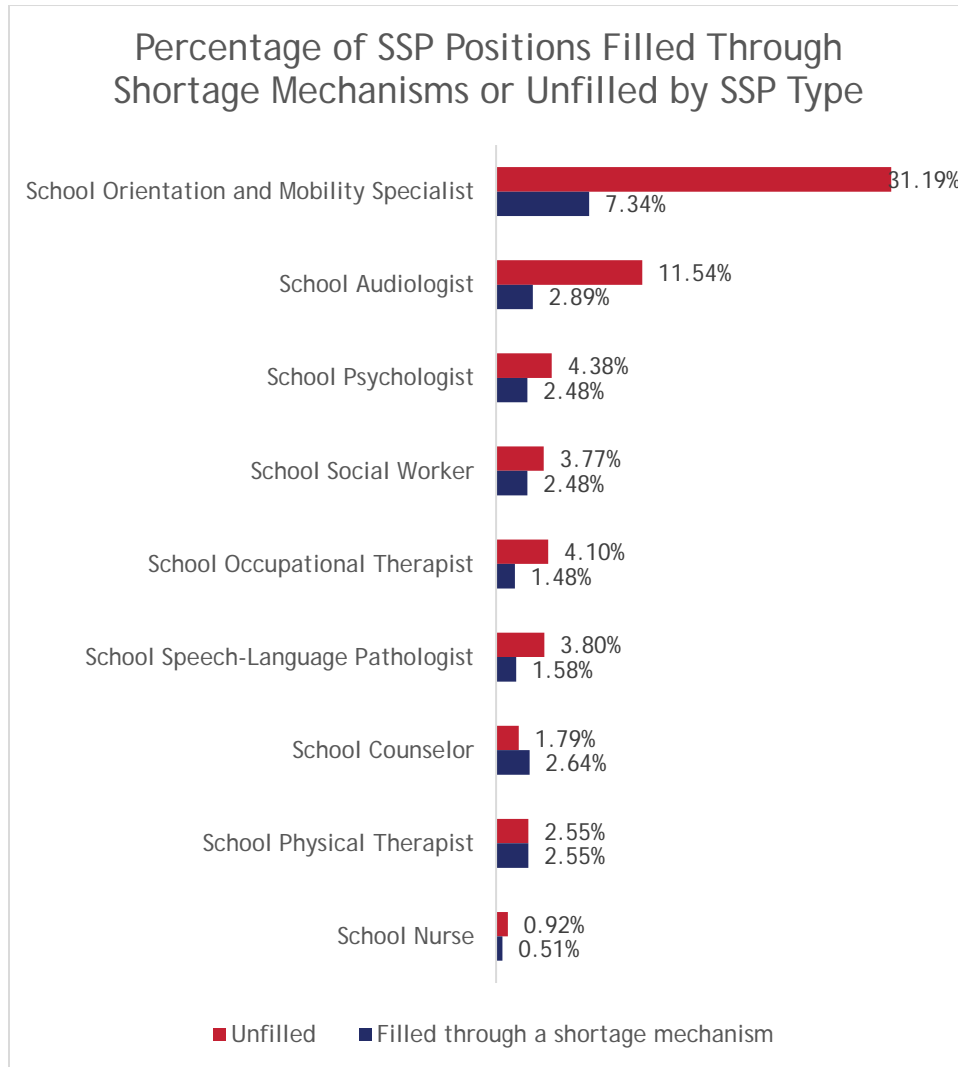
⁶ Principal/assistant principal and paraprofessional data cannot be disaggregated into subgroups.



Analysis of the percentage of positions unfilled by subject area revealed a statewide shortage in special education. Three special education subject areas ranked in the top five shortage areas. Although the specialist positions are comparatively fewer, nearly 40% of all Deaf and hard of hearing specialist positions were left unfilled or filled by a shortage mechanism, and nearly 20% of all visually impaired specialist positions were left unfilled or filled by a shortage mechanism. Top core teaching subject shortage areas left unfilled or filled by a shortage mechanism include Special Education Generalist ($n = 486$), Mathematics ($n = 204$), Science ($n = 174$) and Early Childhood Education ($n = 74$).



Shortage areas in the 2023-2024 academic year also included special services providers. Of these categories, School Counselors have the largest number of total positions in Colorado, and the 4.43% of positions left unfilled or filled via a shortage mechanism (seen below) represents the largest category by job count ($n = 116$).

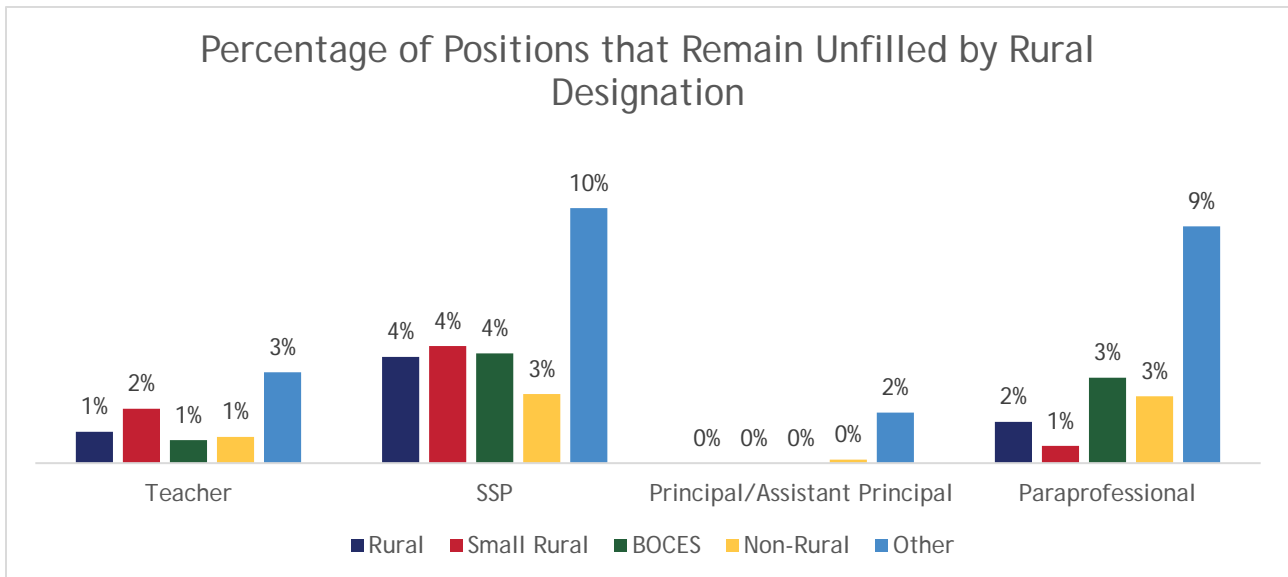
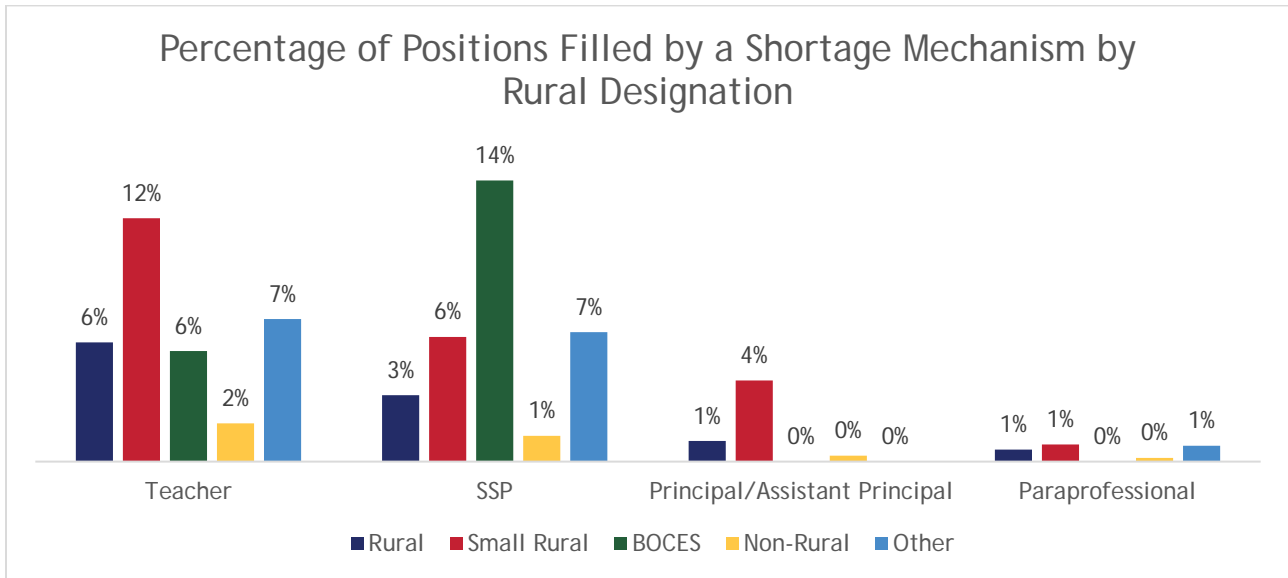


Shortage Survey Results by Rural Designation

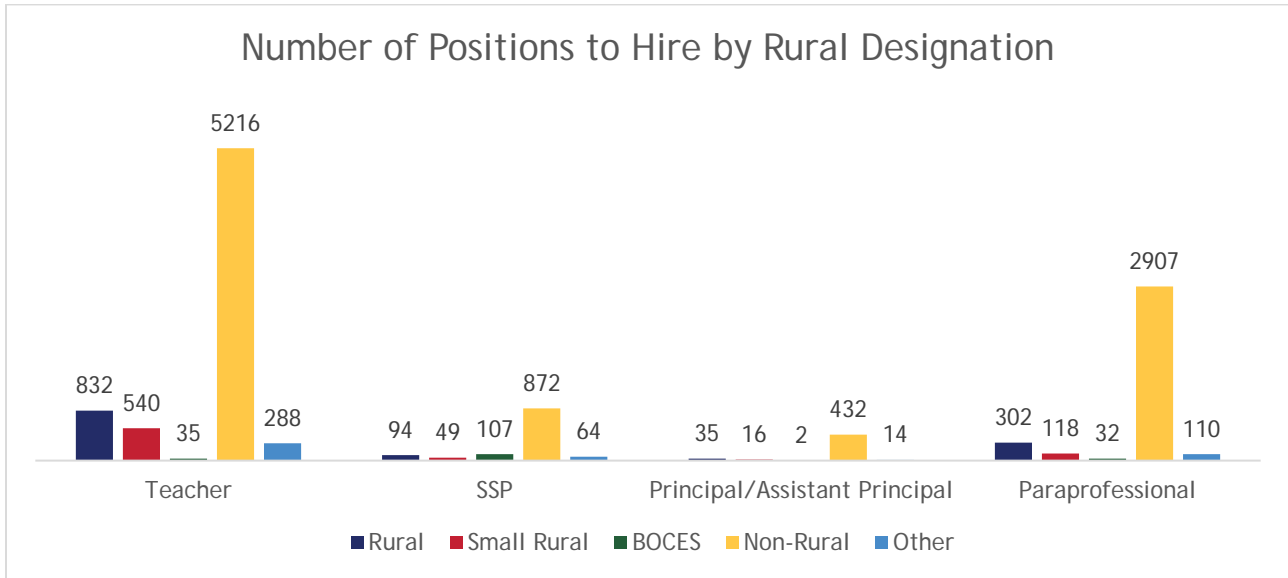
To better understand how geographical setting impacts educator shortages, survey results are presented for the following categories: small rural, rural, non-rural, BOCES and ‘other’⁷. The graphs below display the percentages of existing positions filled through a shortage mechanism or that remained unfilled for teachers, SSPs, principals/assistant principals and paraprofessionals by rural designation. Because the other category is comprised of fewer LEAs and thus fewer educators, it is important to note that any position unfilled or filled through a shortage mechanism in this category had a large impact on the overall shortage percentages in this category.

⁷ ‘Other’ is comprised of the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools. These LEAs serve students statewide and therefore are considered a separate category.

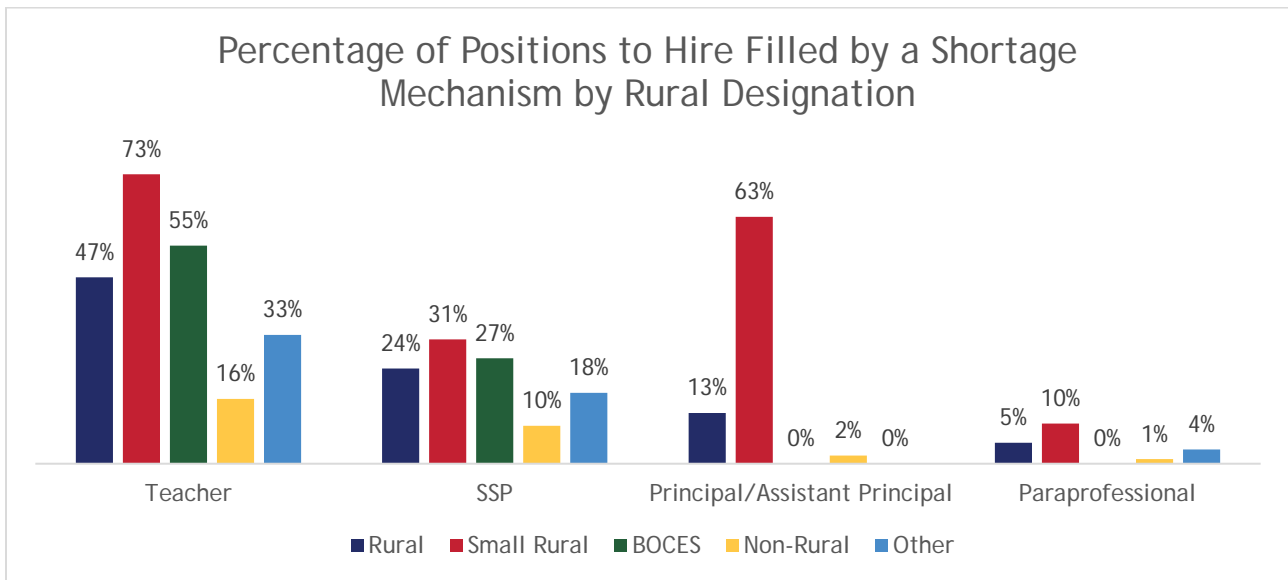
Among small rural, rural and non-rural districts, non-rural districts had the lowest percentage of positions filled through a shortage mechanism for teachers and SSPs. Generally, small rural districts reported the most usage of shortage mechanisms, followed by rural districts, while institutions identified as “Other” held the highest number of unfilled positions for SSPs and paraprofessionals.

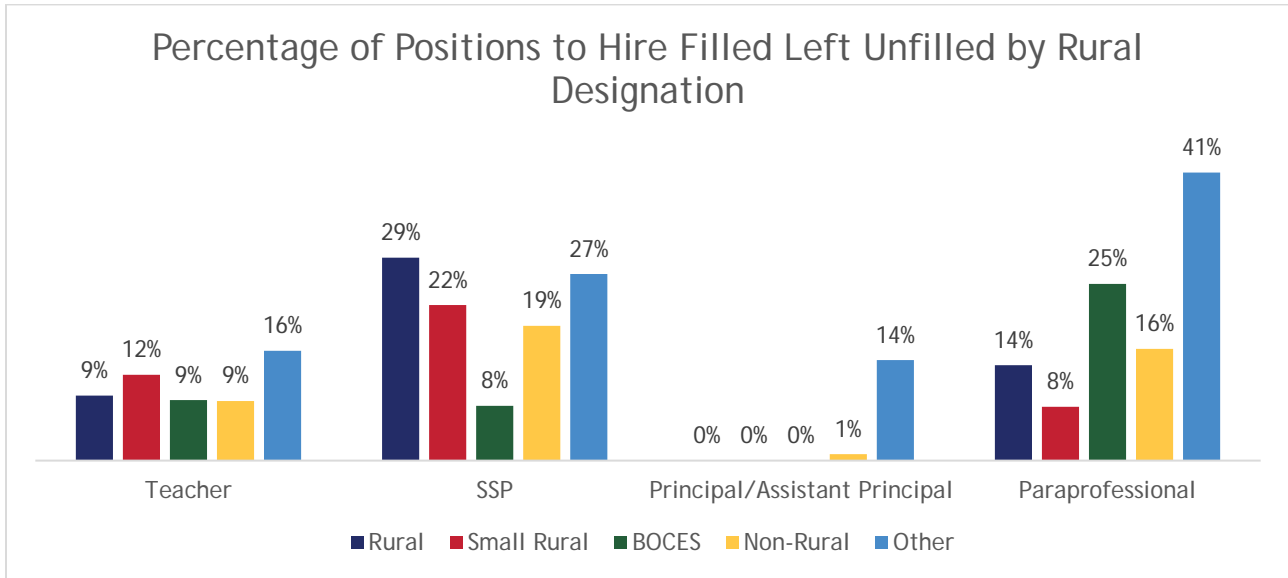


It is important to note that positions in non-rural locations comprised 78% of all positions to hire in Colorado for the 2023-2024 school year ($n = 12,063$), which is consistent with the fact that non-rural districts have more staff overall than rural ($n = 1,262$, 10%) or small rural ($n = 722$, 6%) locations; however, as illustrated in the following charts, hiring mechanisms employed by districts varied drastically by rural designation.



The percentages of positions to hire that were filled through a shortage mechanism were generally higher in rural and small rural areas than in non-rural areas. Nearly three quarters of the teaching positions to hire and more than 60% of principal and assistant principal positions to hire in small rural districts were filled through a shortage mechanism.

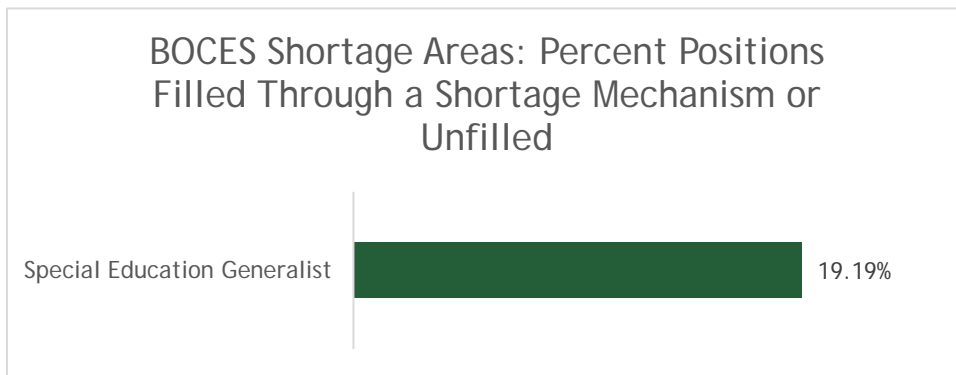




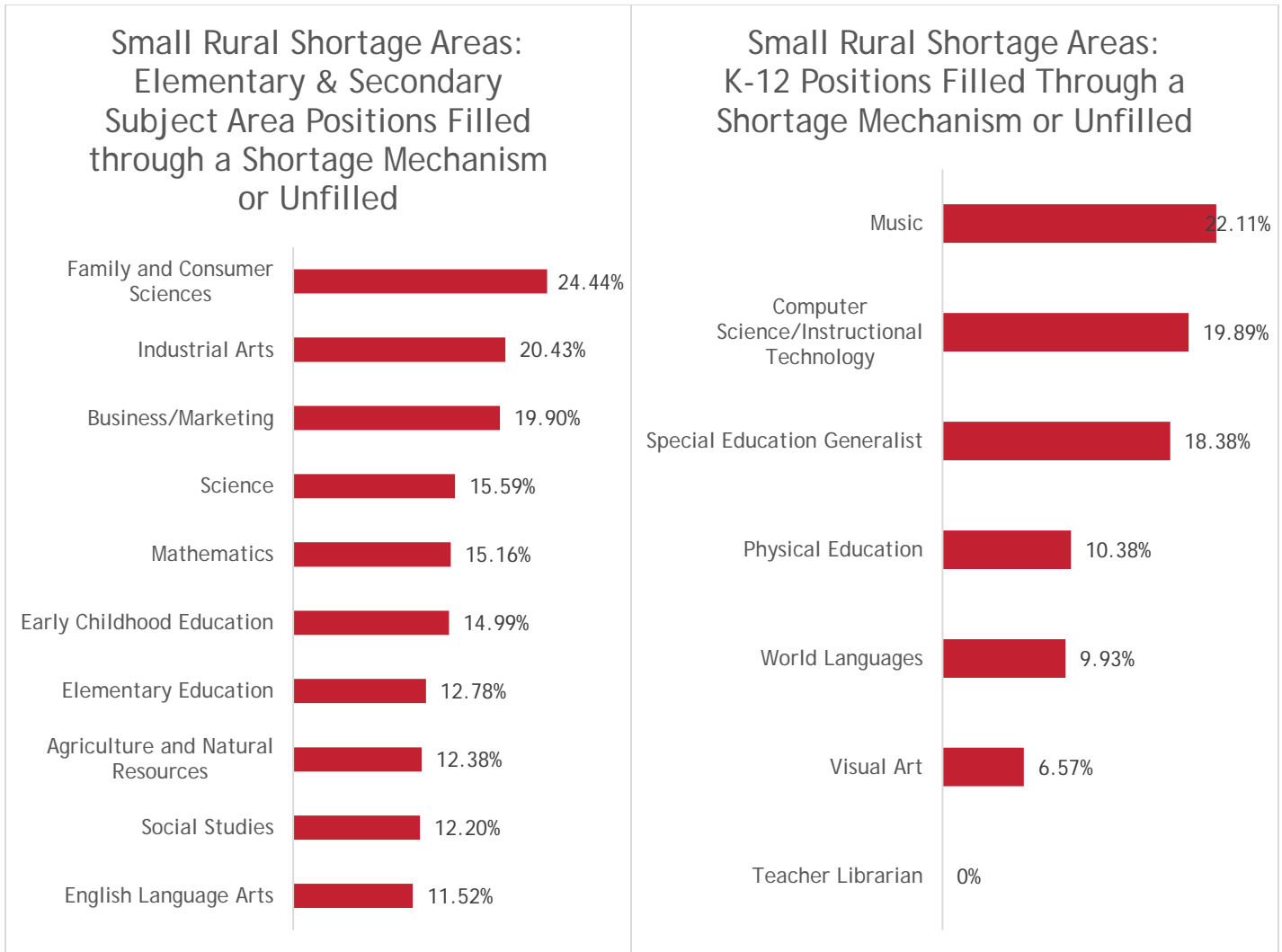
Shortage Survey Results by Teaching Subject Area and Rural Designation

To understand how shortages vary by subject areas, shortages in elementary and secondary subject areas and kindergarten through twelfth grade (K-12) subject areas are presented for each rural designation: small rural, rural, non-rural, BOCES, and other. Because unfilled positions and positions filled through a shortage mechanism are both indicators of a shortage, the data are combined to determine the percentage of all teaching positions that remained unfilled or filled through a shortage mechanism for each subject area. Note that this is the percentage of all existing teaching positions for each subject area within the LEAs, not the percentage of positions to hire, that were filled through a shortage mechanism or remained unfilled. For teaching positions not aligned to a unique subject area (e.g., culturally and linguistically diverse educators), [please see the data dashboard here](#).

BOCES data are presented first due to their unique role in employing teachers. In addition to operating alternative or online schools and programs when needed by their member districts, BOCES also operate as Special Education Administrative Units. This means that a BOCES may be responsible for hiring special education teachers for its member districts. In most cases, BOCES engage in this role for small rural districts. As a result, shortage data for small rural districts and BOCES must be considered together. Due to the unique role BOCES have in employing teachers, shortage information is only displayed for subject areas for which BOCES reported employing teachers.



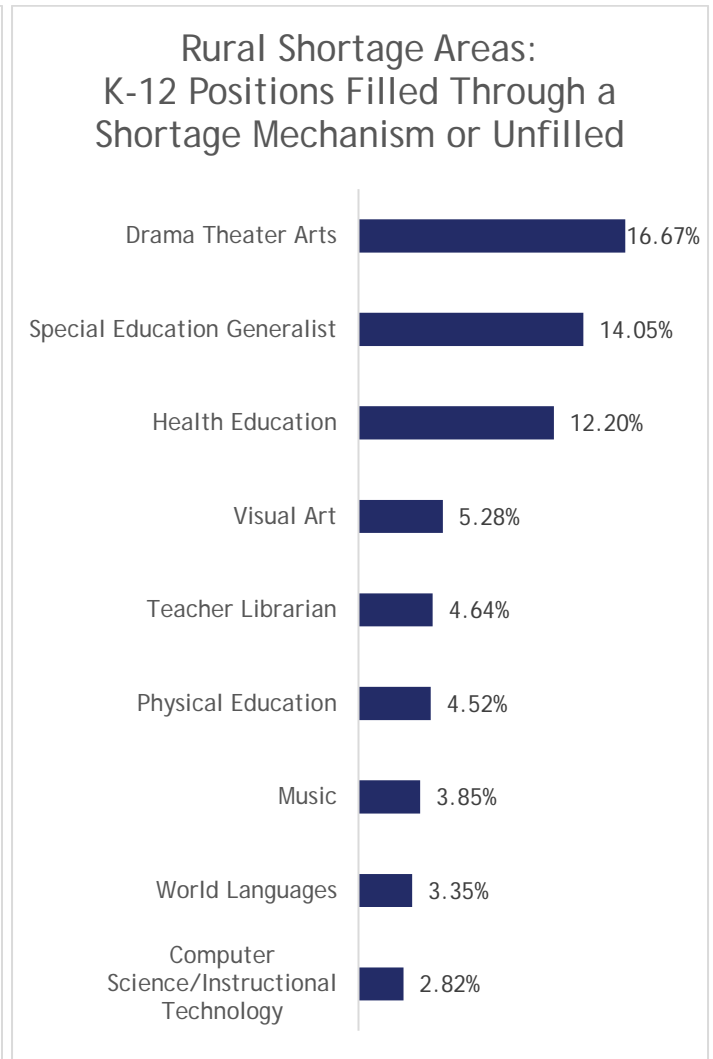
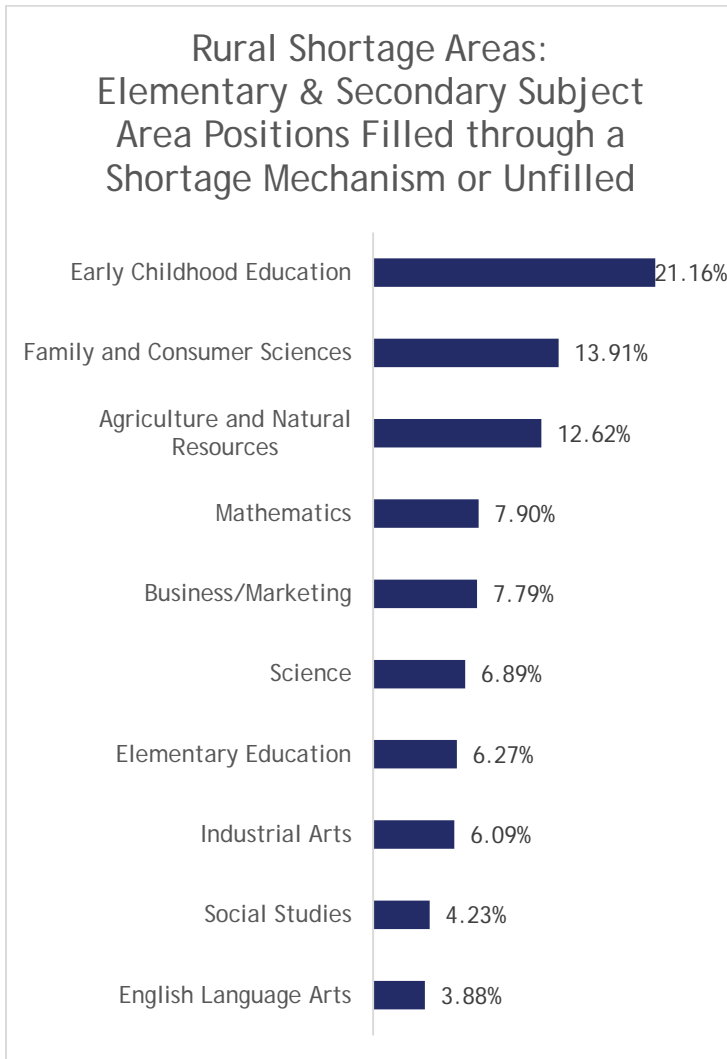
In small rural districts, family and consumer sciences, industrial arts, and business/marketing subject areas had the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas.



Among K-12 subject areas, Music and Computer Science/Instructional Technology had the highest percentage of positions unfilled or filled through a shortage mechanism in small rural districts. There were fewer than five FTE positions for Health Education, Computer Science/Instructional Technology, Drama Theater Arts, Special Education Specialist: Visually Impaired, or Special Education Specialist: Deaf and Hard of Hearing, so these proportions were not reported.



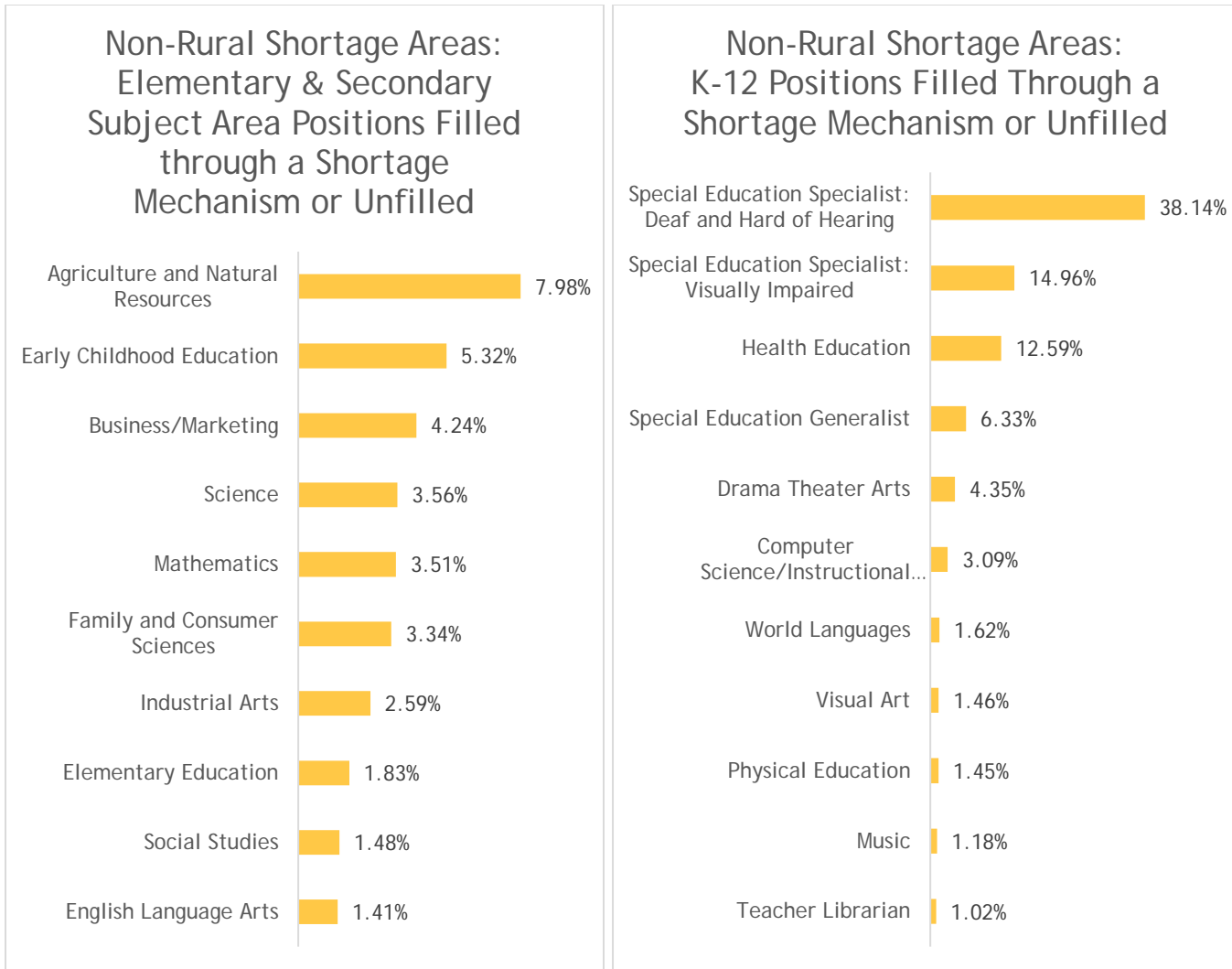
As illustrated in the charts below, shortages in rural districts are more severe than those in small rural districts. Early Childhood Education ranked first among the elementary and secondary shortage areas, followed by Family and Consumer Sciences.



Among K-12 subject areas, special education generalist and visual art had the highest shortage rates, followed by physical education. This demonstrates an increase in special education generalist shortages in rural areas when compared with the 2022-2023 rural shortages.



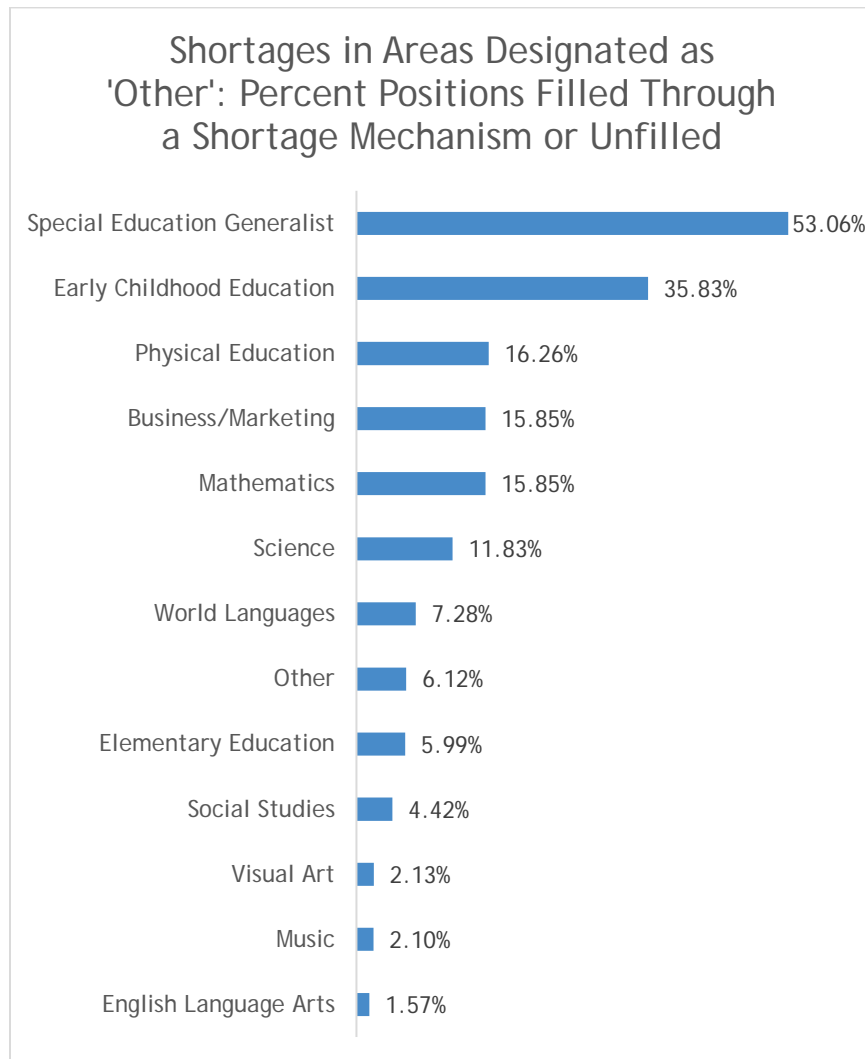
In non-rural districts, early childhood education and business/marketing remain the subjects with the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas.



For K-12 subject areas in non-rural districts, special education specialist for the visually impaired, special education specialist for the deaf and hard of hearing and health educators had the highest percentages of unfilled positions or positions filled through a shortage mechanism. This is also consistent with the previous two year’s shortage areas in non-rural areas, although the proportions are all higher.

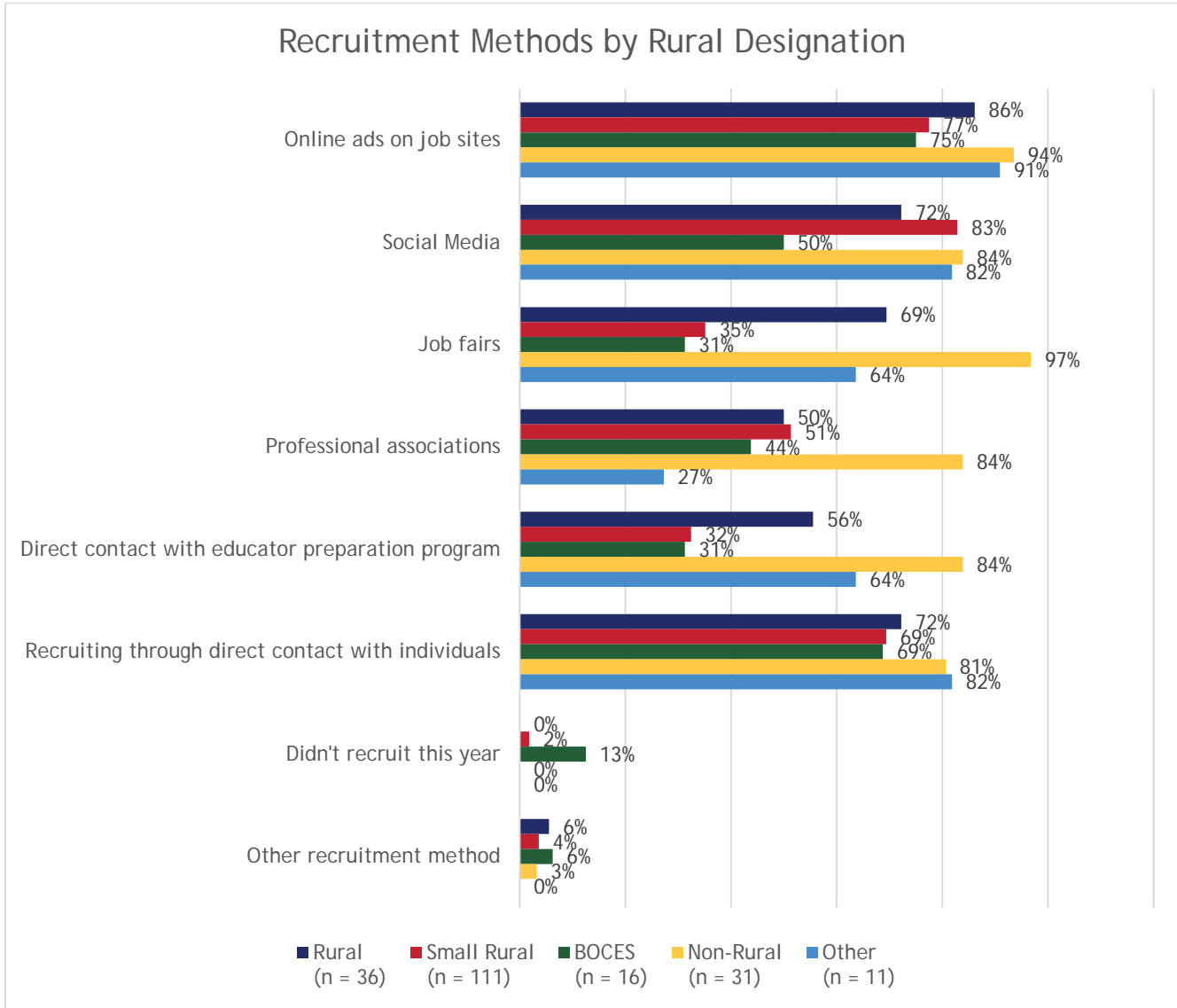


Shortage areas in the 'other' category are reported together due to the smaller number of shortage areas. In the 'other' category, comprised of the Colorado School for the Deaf and Blind, Charter School Institute, Division of Youth Services, and Approved Facility Schools, special education generalists and early childhood educators had the highest percentage of positions unfilled or filled through a shortage mechanism.



Recruitment Methods

Most LEAs reported recruiting through online ads and job sites, followed by job fair recruitment. Very few districts reported that they did not do any type of recruitment. Of those that indicated an alternative to the provided options, most cited word-of-mouth and direct recruitment of retired educators. For more information on recruitment methods, please see [data dashboard here](#).



WHERE CAN I LEARN MORE?

- For additional information about Colorado’s teacher shortage, see the [Educator Shortage](#) website.
- For questions about the survey and/or to provide feedback, contact the Research and Impact Office at EdTalentResearch@cde.state.co.us.
- [View all CDE fact sheets](http://www.cde.state.co.us/communications/factsheetsandfaqs): www.cde.state.co.us/communications/factsheetsandfaqs