

# COLORADO'S EDUCATOR SHORTAGE

## Survey Results for the 2019-2020 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 survey<sup>1</sup> for all local education agencies (LEAs), such as school districts and Boards of Cooperative Educational Services (BOCES) that employ educators.<sup>2</sup>

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 (e.g., 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 (i.e., 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 <https://www.cde.state.co.us/educatortalent/2020educatorshortagesurveyinfo>.

When analyzing the data by rural designation,<sup>3</sup> non-rural school districts had the most positions to hire, likely due to the fact that these districts are larger than those in rural and small rural areas. Additionally, when analyzing results by teaching subject area, some teaching areas such as elementary teachers had relatively high numbers of open positions likely due to the fact that there are more elementary teacher positions than exist in some subject areas. To better understand the educator shortages in Colorado, the percentages of all existing positions<sup>4</sup>, and in some cases percentages of only open positions, that were filled through a shortage mechanism or remained unfilled are used in this report in addition to total counts.

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<sup>1</sup> 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.

<sup>2</sup> Rio Blanco BOCES, Mount Evans BOCES, Uncompahgre BOCES and Ute Pass BOCES did not complete the Educator Shortage Survey because they are not required to submit data for the collection in which the survey is embedded. Survey data for Pritchett Re-3 was not reported. Other LEAs included are the Colorado School for the Deaf and Blind, Charter School Institute, and Division of Youth Services.

<sup>3</sup> 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.

<sup>4</sup> 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.

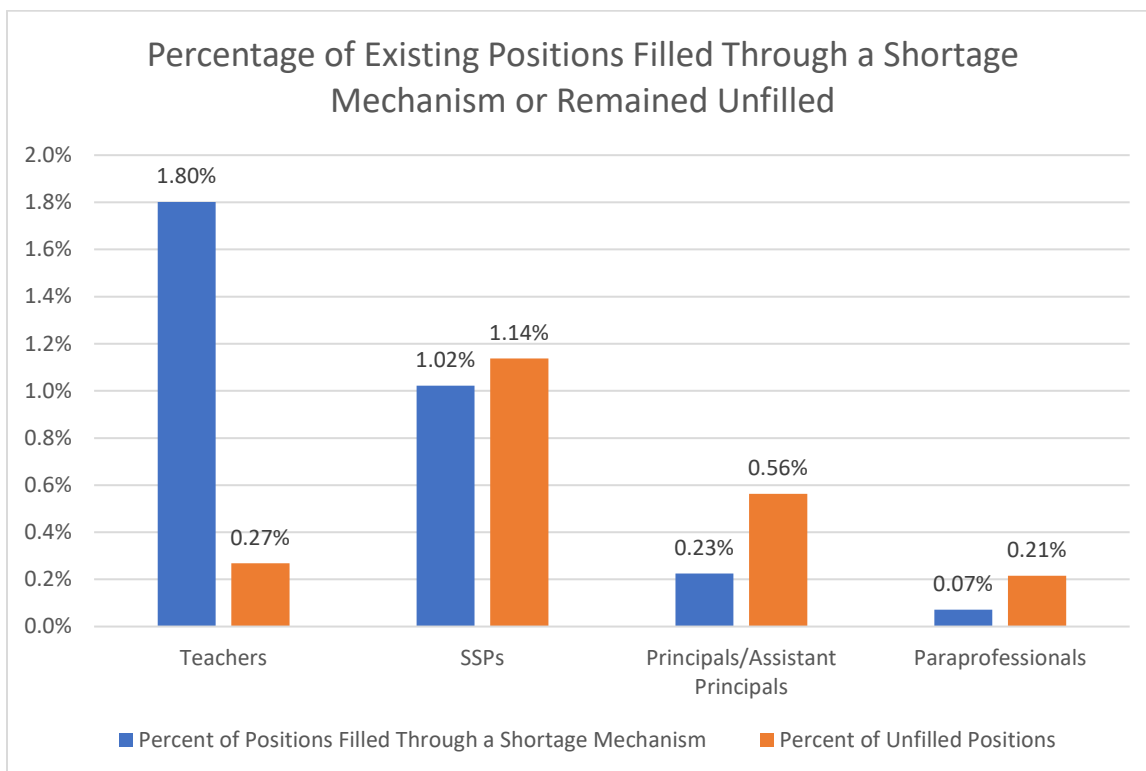
## Statewide Shortage Survey Results

Across the state, LEAs reported having teacher, SSP, principal/assistant principal and paraprofessional positions to hire for the 2019-20 school year. More specifically, LEAs reported having to hire for:

- 7,242 (13.25%) teaching positions from among the 54,662 teaching positions in the state;
- 1,123 (16.74%) SSP positions from among the 6,708 SSP positions in the state;
- 421 (11.84%) principal/assistant principal positions from among the 3,552 principal and assistant principal positions in the state; and
- 1,688 (8.16%) paraprofessional positions from among the 20,698 paraprofessional positions in the state.

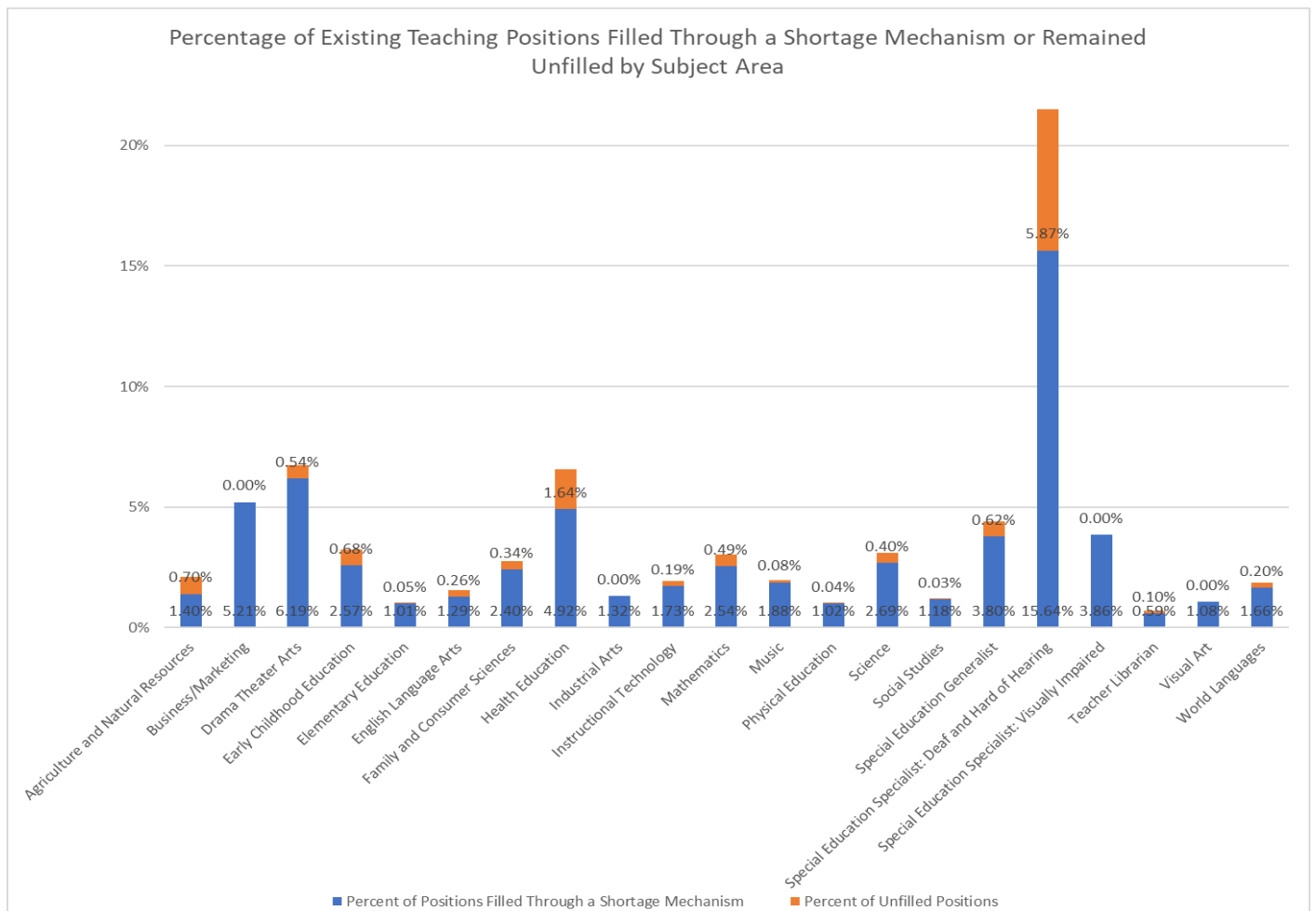
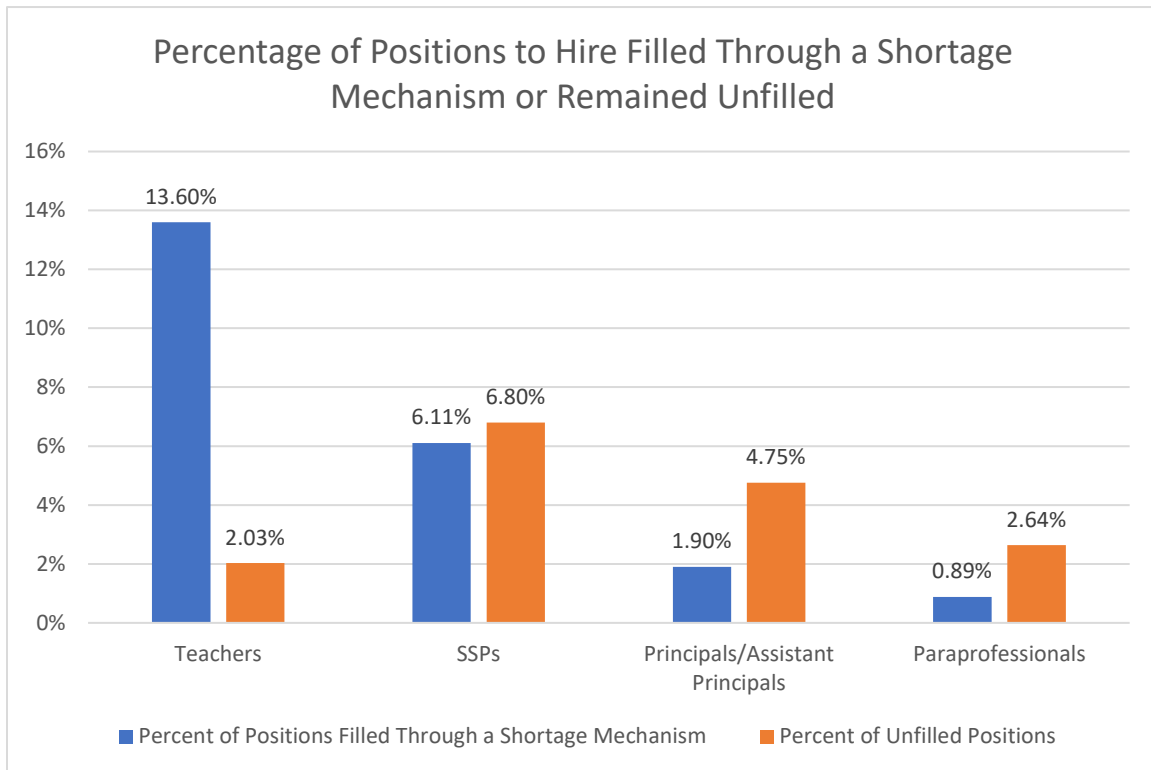
Of the total teaching positions to hire, 147 (2.03%) remained unfilled for the entire school year and 985 (13.60%) were filled through a shortage mechanism. Of the total SSP positions to hire, 76 (6.80%) remained unfilled for the entire school year and 69 (6.11%) were filled through a shortage mechanism. Of the total principal/assistant principal positions to hire, 20 (4.75%) remained unfilled for the entire school year and 8 (1.90%) were filled through a shortage mechanism. Of the total paraprofessional positions to hire, 45 (2.64%) remained unfilled for the entire school year and 15 (0.89%) 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.

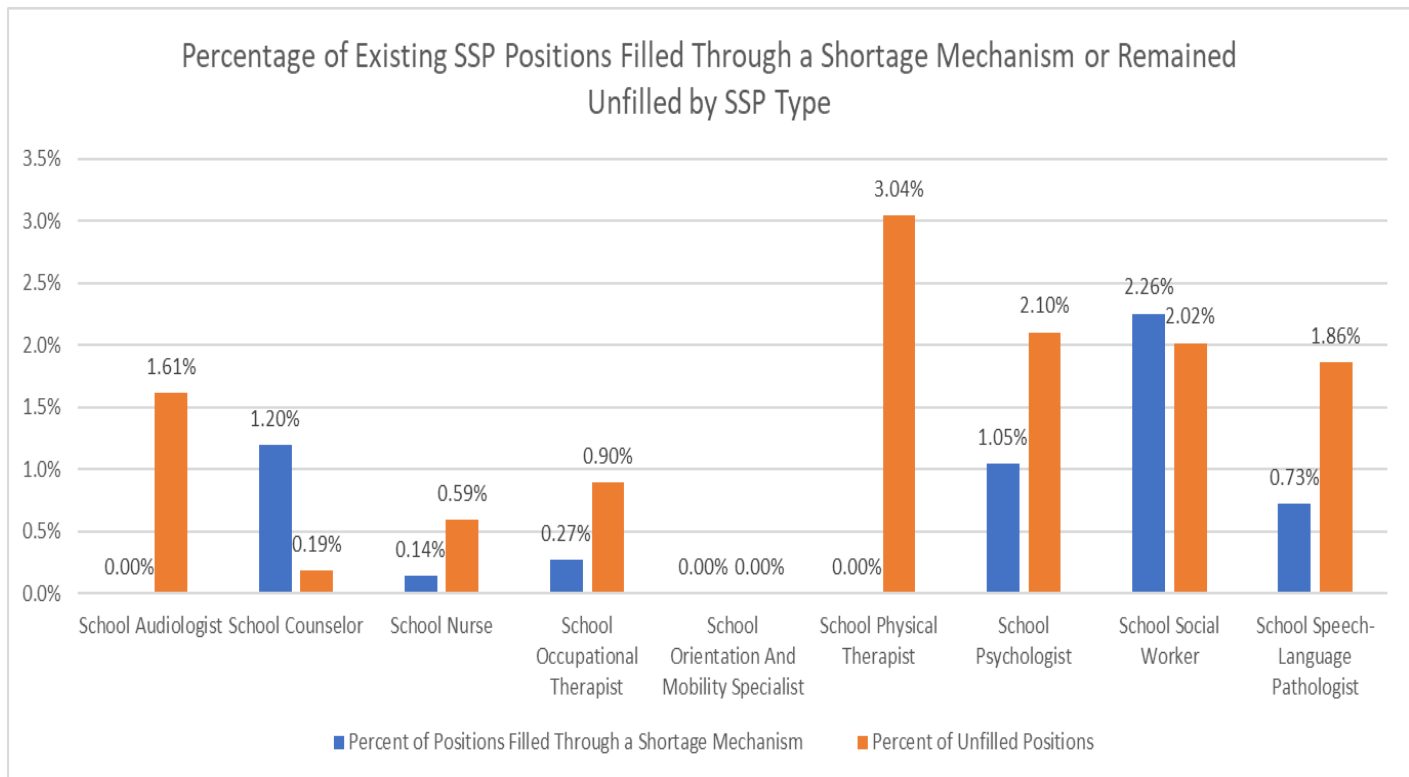
This series of graphs shows the percentage of all existing positions that were filled in the 2019-20 school year through a shortage mechanism and that remained unfilled for each educator group as well as for each teaching subject area<sup>5</sup> and SSP type.<sup>6</sup>



<sup>5</sup> Based on the feedback from the 2018-2019 survey, two subject areas, Health Education and Industrial Arts, were added to the 2019-2020 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 <https://www.cde.state.co.us/educator talent/2020educatorshortagesurveyinfo>.

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

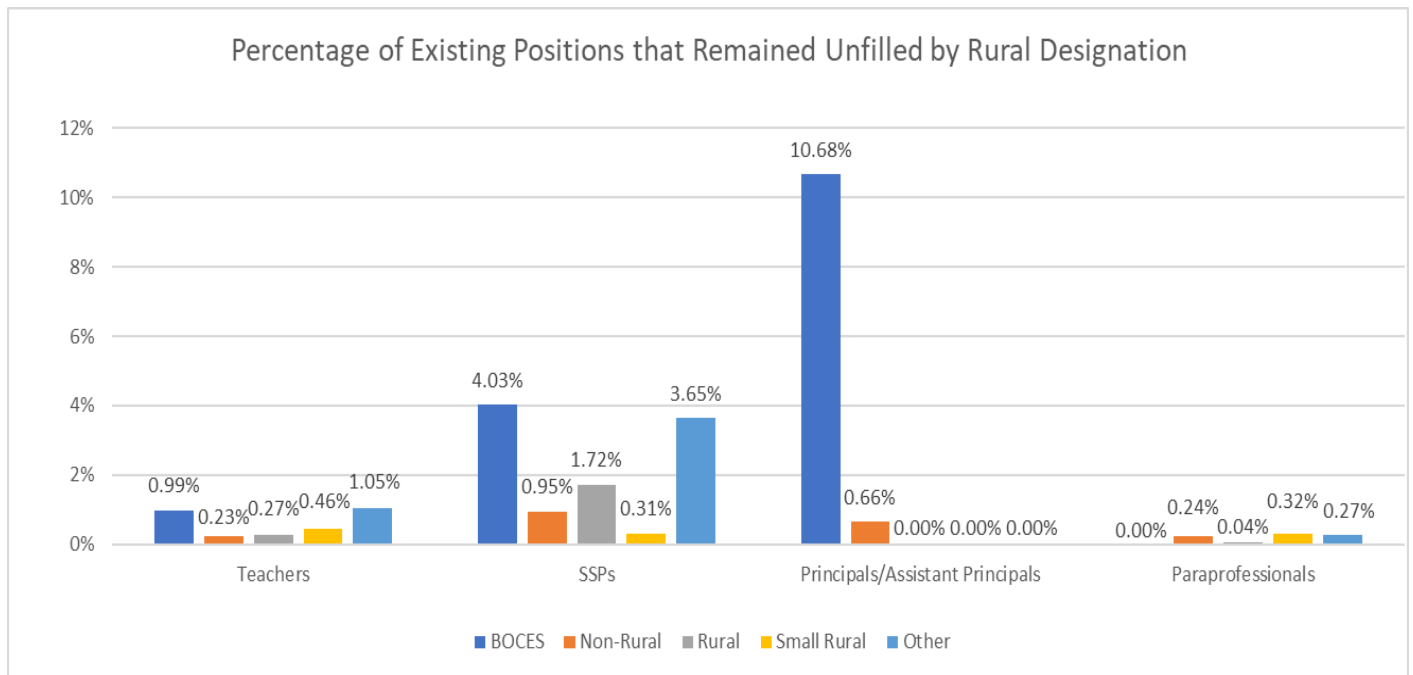
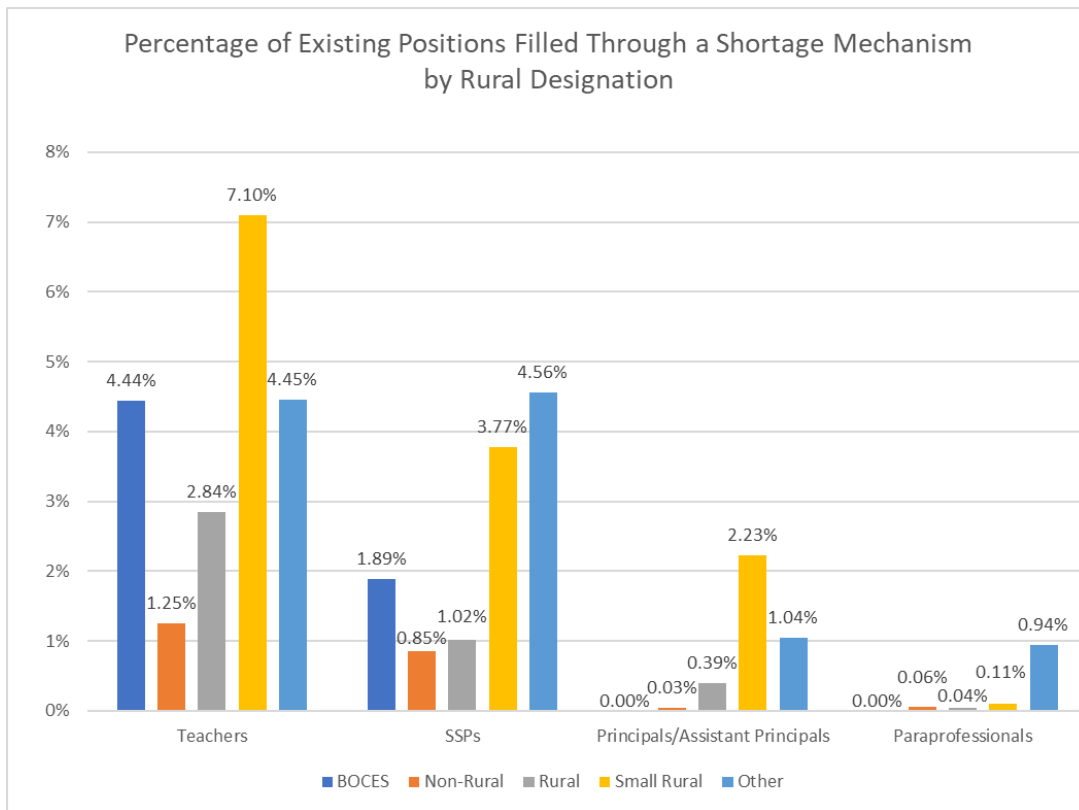




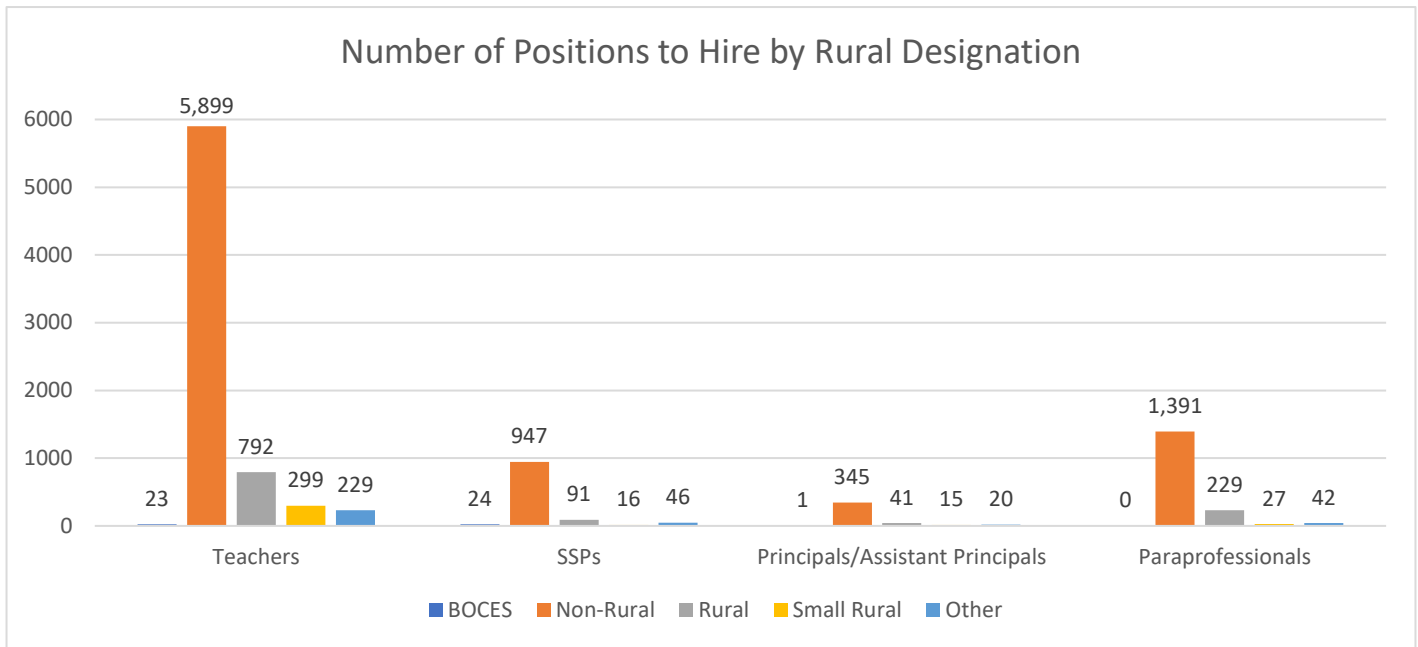
### Shortage Survey Results by Rural Designation

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<sup>7</sup>. 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. Among small rural, rural and non-rural districts, non-rural districts had the lowest percentage of positions filled through a shortage mechanism for teachers, SSPs and principals/assistant principals. 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.

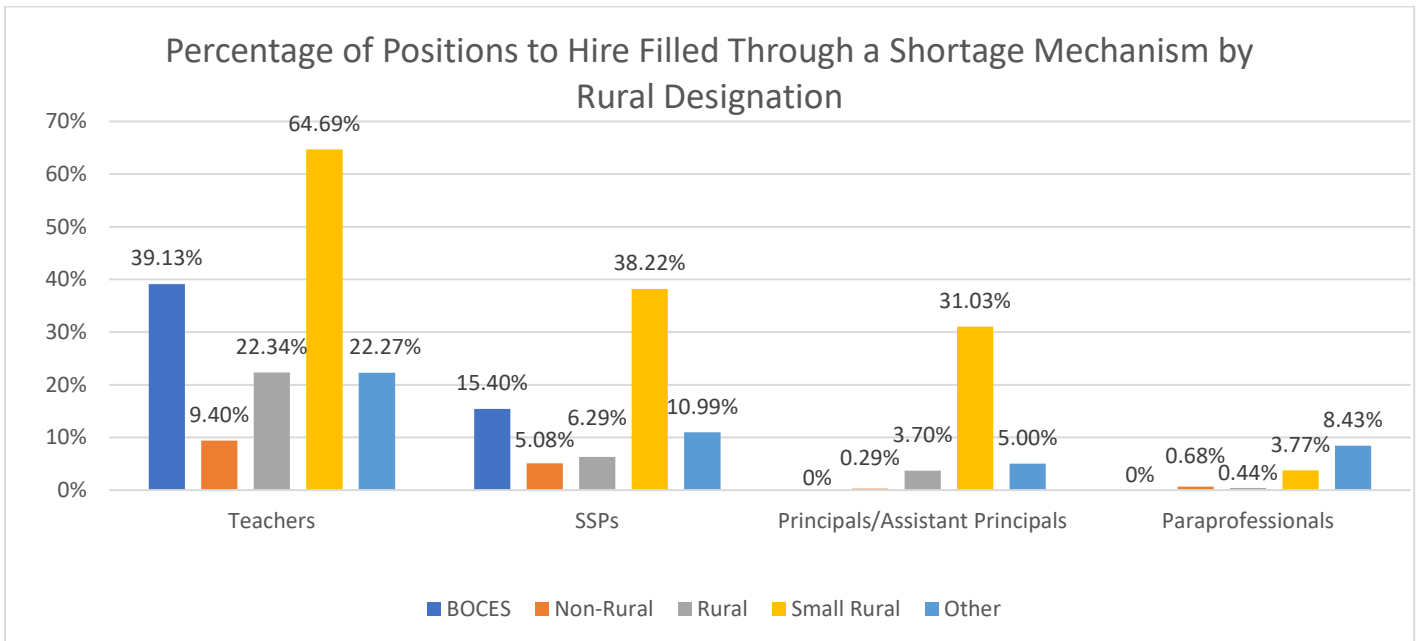
<sup>7</sup> Other is comprised of the Colorado School for the Deaf and Blind, Charter School Institute, and Division of Youth Services. These LEAs serve students statewide and therefore are considered a separate category.

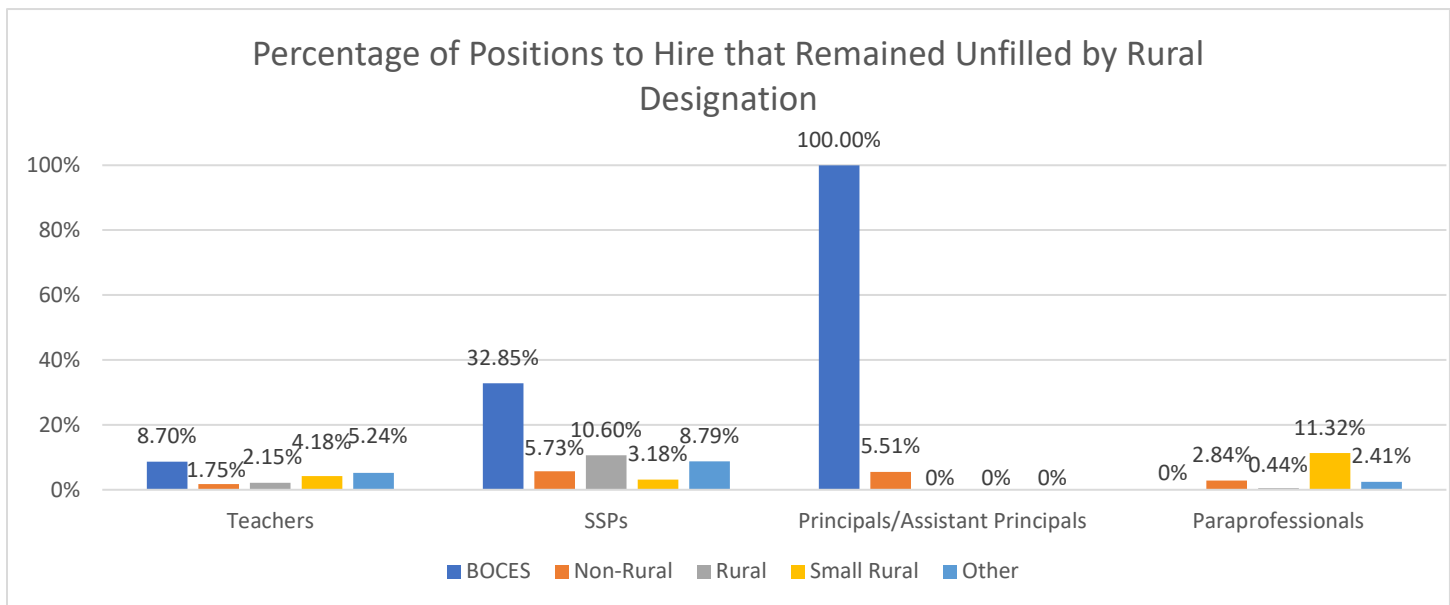


Non-rural locations had the highest number of positions to hire for all groups for the 2019-2020 school year, which is consistent with the fact that non-rural districts have more staff than rural or small rural locations.



However, with the exception of paraprofessionals, the percentages of positions to hire that were filled through a shortage mechanism were much higher in small rural areas than in all other areas. Over half of the teaching positions to hire and over one-third of the SSP and principal/assistant principal positions to hire in small rural districts were filled through a shortage mechanism. Small rural districts also had the highest percentage of paraprofessional positions that remained unfilled. Less than 10% of vacant teaching positions in all settings remained unfilled for the entire school year. The higher percentage of unfilled principal/assistant principal positions among BOCES is likely a result of there being fewer principal and assistant principal positions in BOCES (which only operate programs or alternative or online schools when needed by their member districts).

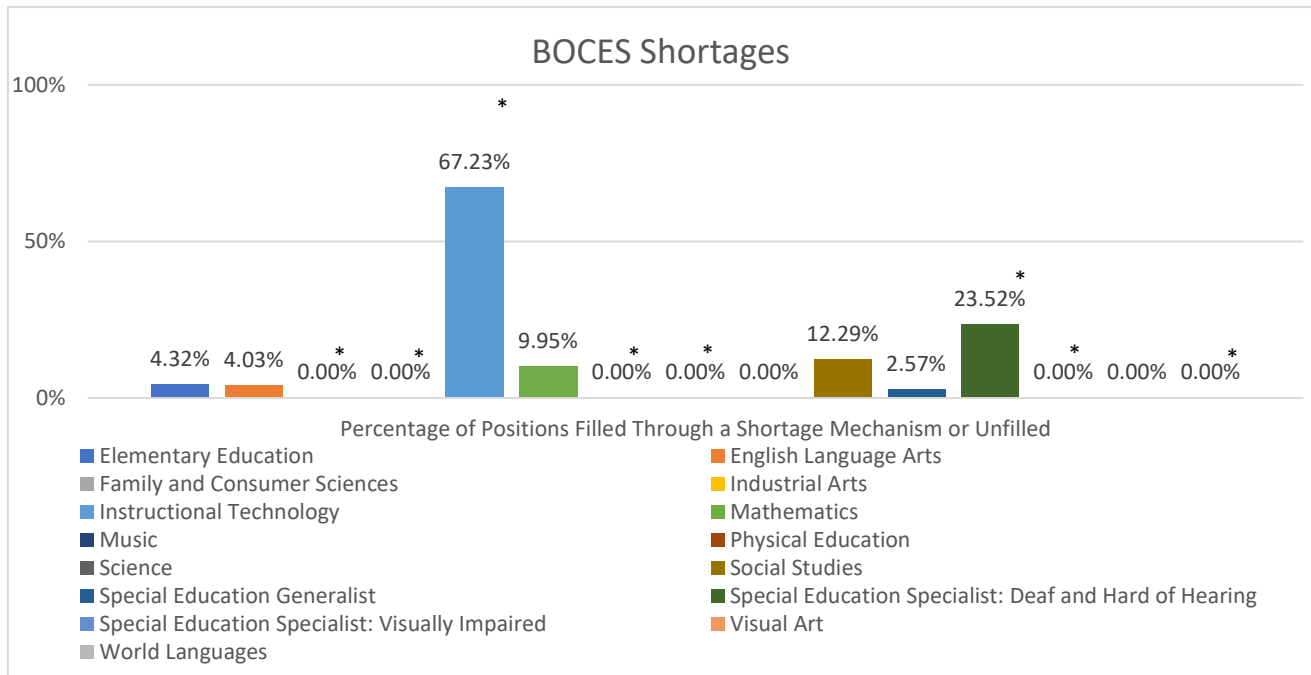




## Shortage Survey Results by Teaching Subject Area and Rural Designation

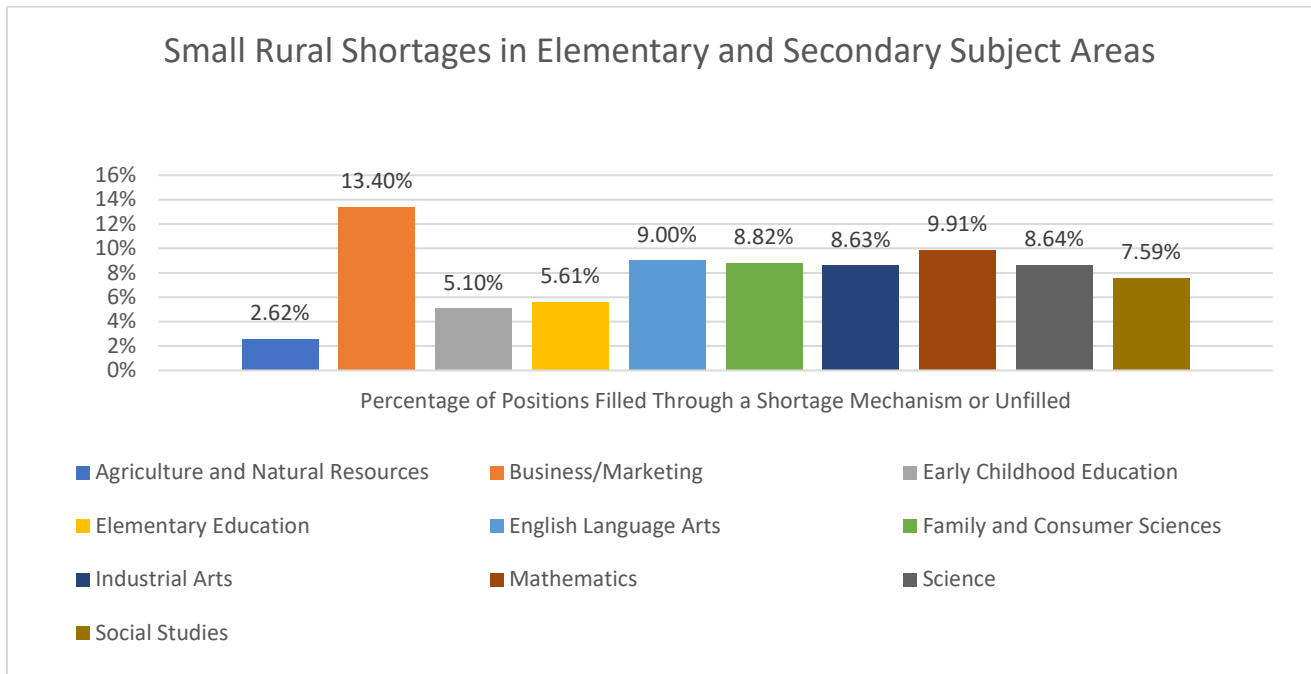
To further understand the breakdown of teaching shortage areas, shortages in elementary and secondary subject areas and kindergarten through twelfth grade (K-12) subject areas are presented for each rural designation: small rural, rural, non-rural, BOCES and other. Because unfilled positions and positions filled through a shortage mechanism are both indicators of a shortage, these categories are combined to determine total shortage as a percentage of all teaching positions. For teaching positions not aligned to a unique subject area (e.g., culturally and linguistically diverse educators), please see <https://www.cde.state.co.us/educatortalent/2020educatorshortagesurveyinfo>.

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.)



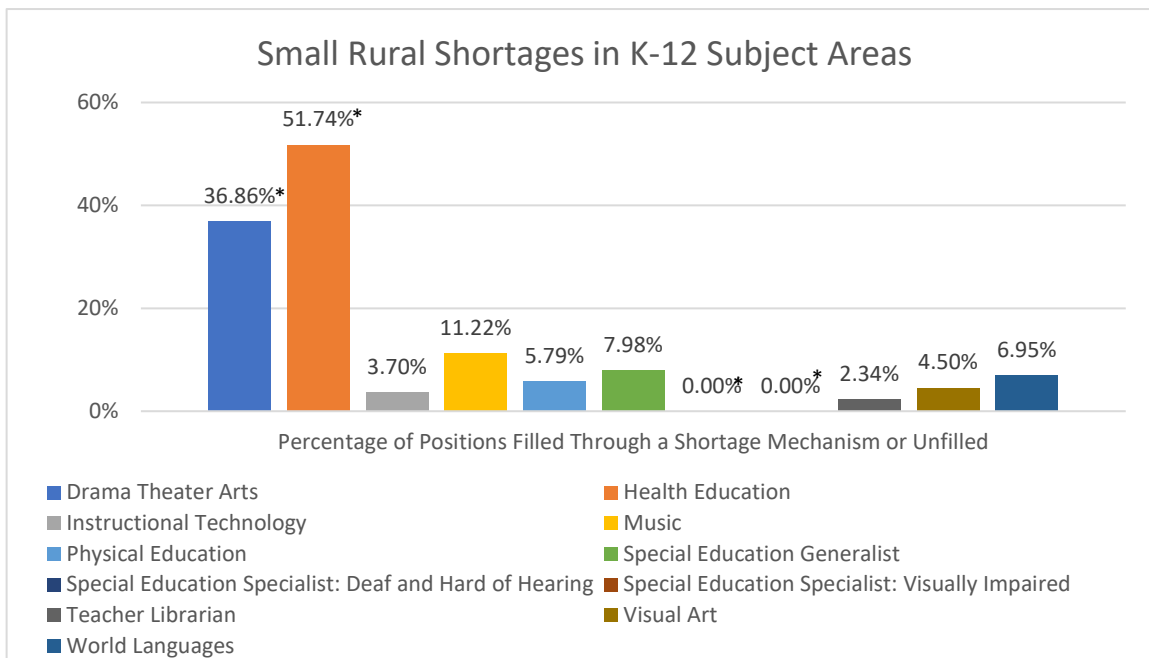
\*Total FTE less than five.

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



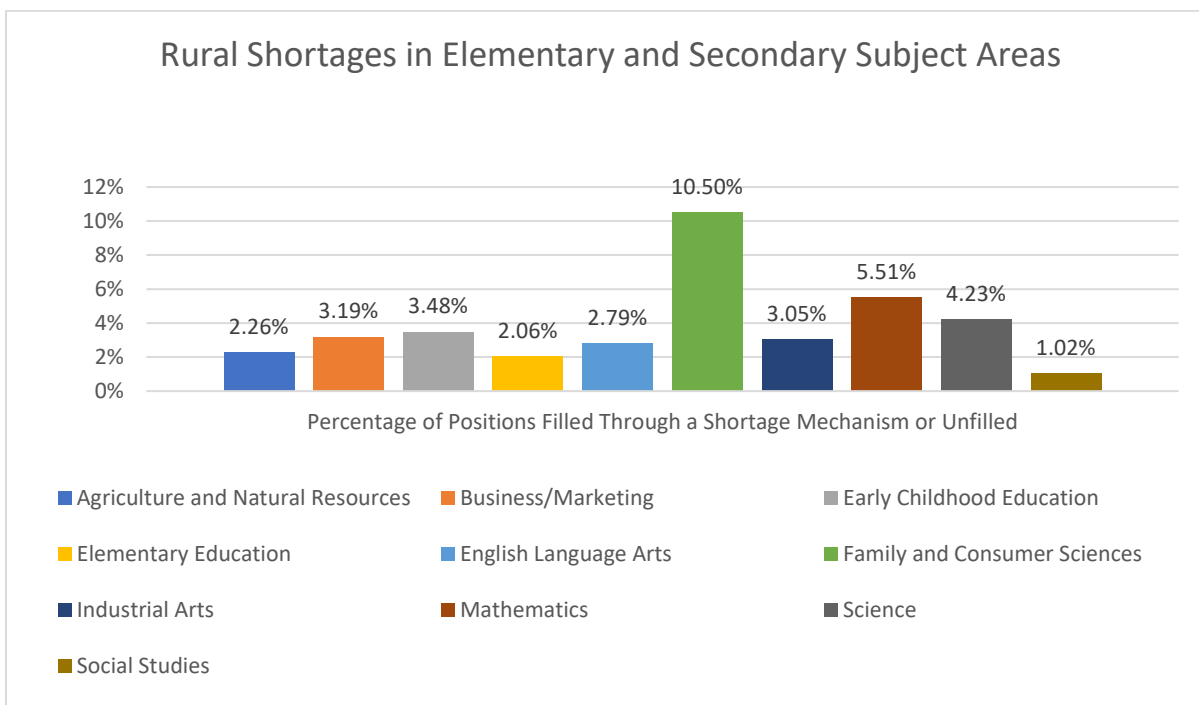
Among K-12 subject areas, health education and drama theater arts had the highest percentage of positions unfilled or filled through a shortage mechanism in small rural districts. Important to note is that there were less than five FTE positions in health education and in drama theater arts across all small rural districts, so any position unfilled or filled through a shortage mechanism had a large impact on the overall shortage percentages.



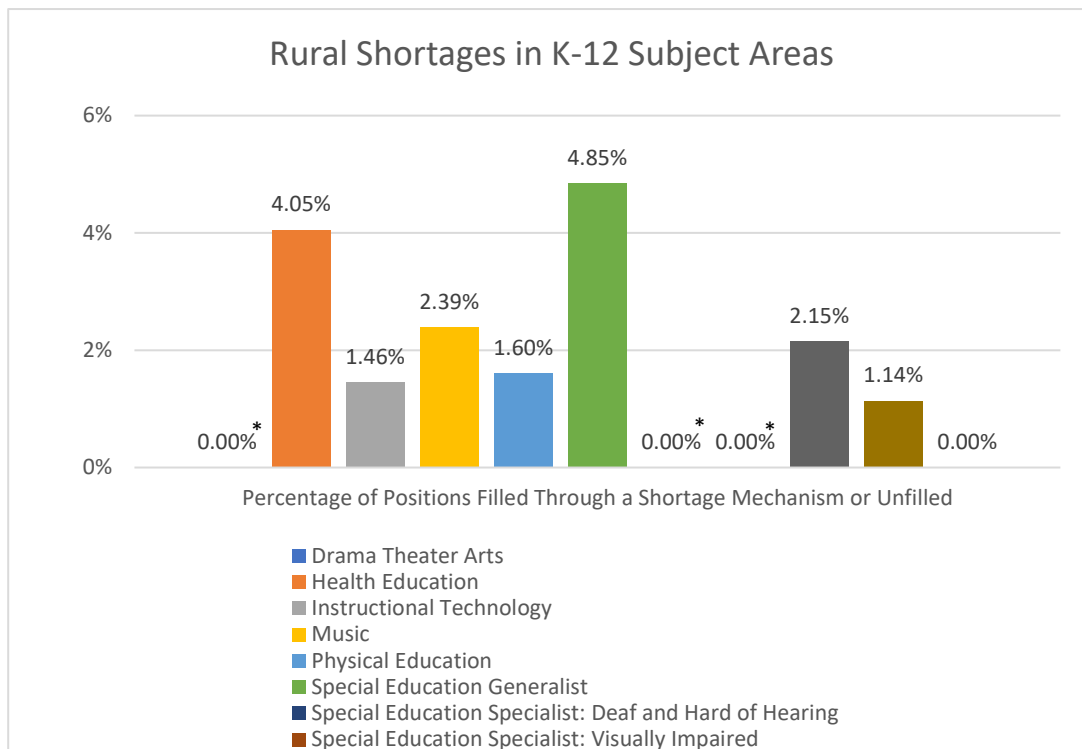


\*Total FTE less than five.

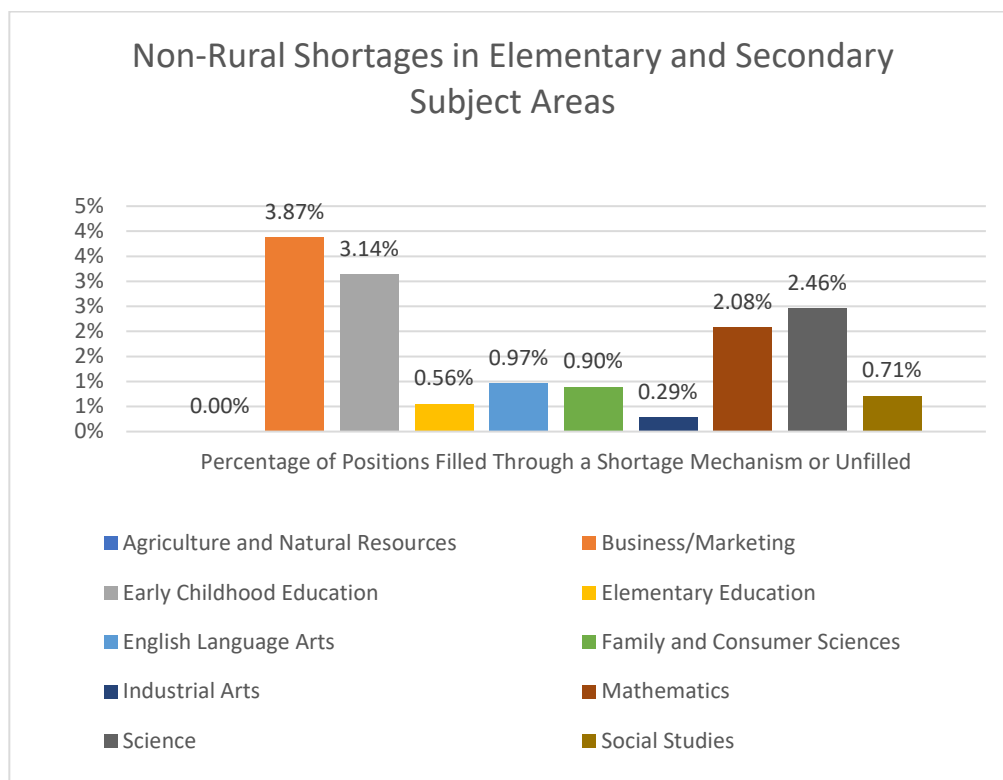
As illustrated in the graph below, shortages in rural districts are not as severe as those in small rural districts. Family and consumer sciences and mathematics had the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas in rural districts.



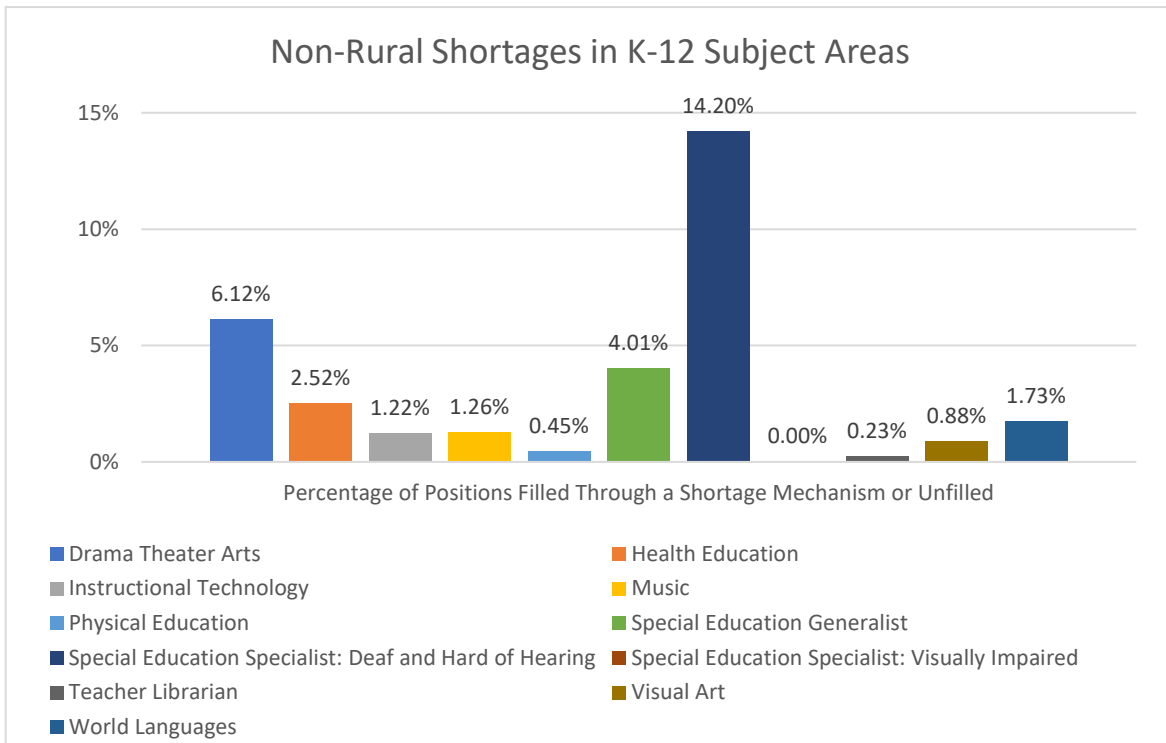
Among K-12 subject areas, special education generalist and health education had the highest percentage of unfilled positions or positions filled through a shortage mechanism in rural districts.



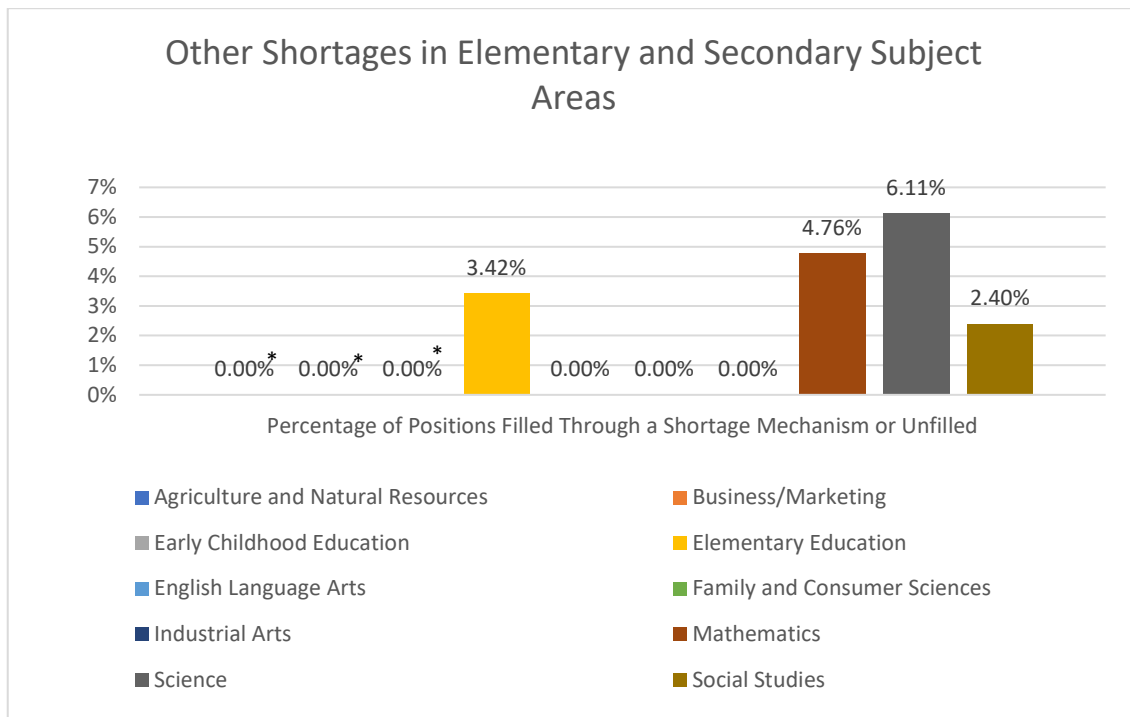
In non-rural districts, business/marketing, early childhood education, science and mathematics had the highest percentage of positions unfilled or filled through a shortage mechanism among elementary and secondary subject areas.



For K-12 subject areas in non-rural districts, special education specialist for the deaf and hard of hearing, drama theater arts and special education generalist had the highest percentages of unfilled positions or positions filled through a shortage mechanism.



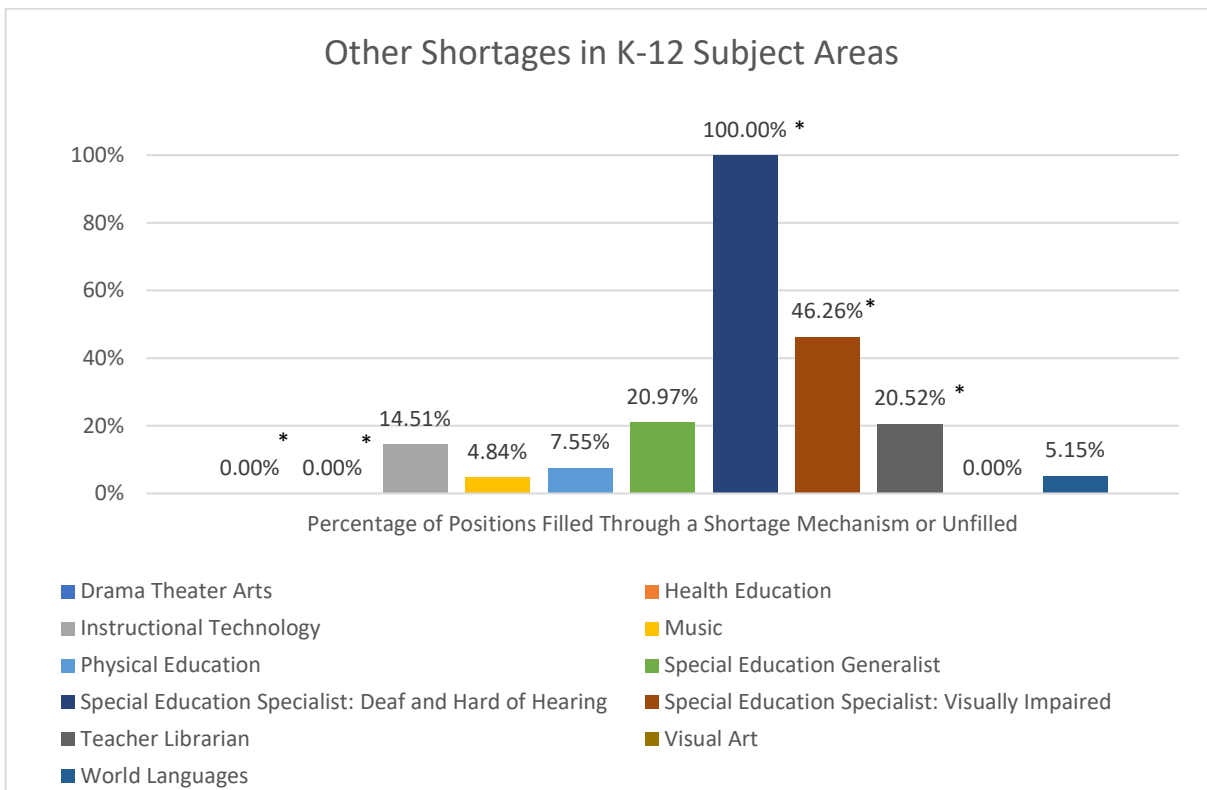
In the other category, comprised of the Division of Youth Services, Charter School Institute and Colorado School for the Deaf and Blind, science and mathematics had the highest percentage of positions unfilled or filled through a shortage mechanism in elementary and secondary subject areas.



\*Total FTE less than five.

Among K-12 subject areas, the three special education categories had the highest percentage of positions unfilled or filled through a shortage mechanism. It is important to note that there were less than five FTE positions for special education specialist: deaf and hard of hearing and for special education specialist: visually impaired within the other

category, so any position unfilled or filled through a shortage mechanism had a large impact on the overall shortage percentages.



\*Total FTE less than five.

## Recruitment Methods

Over 90 percent of LEAs reported recruiting through posting online advertisements on job websites. Additionally, about half of LEAs reported contacting professional associations and educator preparation programs and attending job fairs. Although online advertisements were the most frequently used recruitment method across all districts, non-rural and rural districts reported using job fairs, contact with professional associations and direct contact with educator preparation programs more frequently than small rural districts. Among those that indicated using other recruitment methods, networking and word-of-mouth communication were commonly mentioned. A number of small rural districts also indicated recruiting by posting advertisements in local newspapers and media outlets. For more information on recruitment methods, please see <https://www.cde.state.co.us/educatortalent/2020educatorshortagesurveyinfo>.

## WHERE CAN I LEARN MORE?

- For additional information about Colorado’s teacher shortage, see the [strategic plan](#) or the [full report](#) developed in response to House Bill 17-1003.
- For questions about the survey and/or to provide feedback, contact Educator Development staff at [Educator\\_Development@cde.state.co.us](mailto:Educator_Development@cde.state.co.us).
- [View all CDE fact sheets: www.cde.state.co.us/communications/factsheetsandfaqs](http://www.cde.state.co.us/communications/factsheetsandfaqs)