

# COLORADO'S EDUCATOR SHORTAGE

## SURVEY RESULTS FOR THE 2018-2019 SCHOOL YEAR



### EDUCATOR SHORTAGE SURVEY

In response to [Colorado House Bill 17-1003, Strategic Action Plan to Address Teacher Shortages](#), 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 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 teaching positions by endorsement area, the number of vacant special services provider (SSP) positions and the ways those vacancies were filled, if they were filled at all. 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 report includes state shortage information for the following groups: (1) all teachers and SSPs; (2) all teachers and SSPs separated by district type; and (3) all teachers separated by district type and teaching subject area. 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 district-level data, please see the [2018-2019 Educator Shortage Survey Additional Information workbook](#) (Excel).

When analyzing the data by district type,<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 percentage of all existing positions<sup>4</sup> and positions to hire that were filled through a shortage mechanism or remained unfilled is used in this report in addition to total number of positions.

### STATEWIDE SHORTAGE RESULTS

Districts and BOCES reported having 7,773 teaching positions to hire for the 2018-2019 school year, which represents 13.79% of all teaching positions in the state. Districts and BOCES also reported having 1,177 SSP positions to hire for the 2018-2019 school year, representing 18.82% of all SSP positions in the state.

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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.

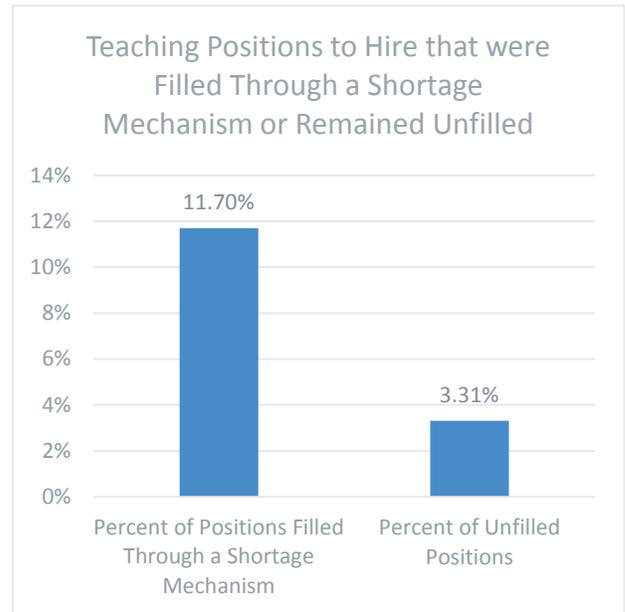
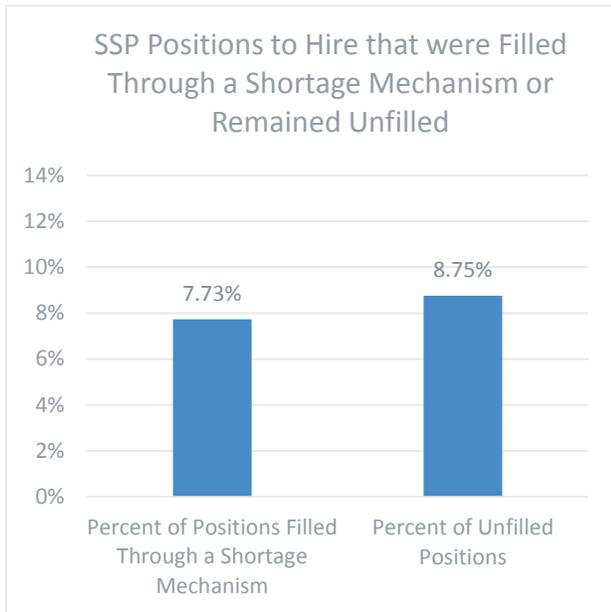
<sup>2</sup> South Central BOCES, Rio Blanco BOCES, Mount Evans BOCES, Uncompahgre BOCES and Ute Pass BOCES did not complete the Educator Shortage Survey because they are not required to submit data for the collection in which the survey is embedded. In future years, these BOCES will be included in the survey.

<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 having 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.

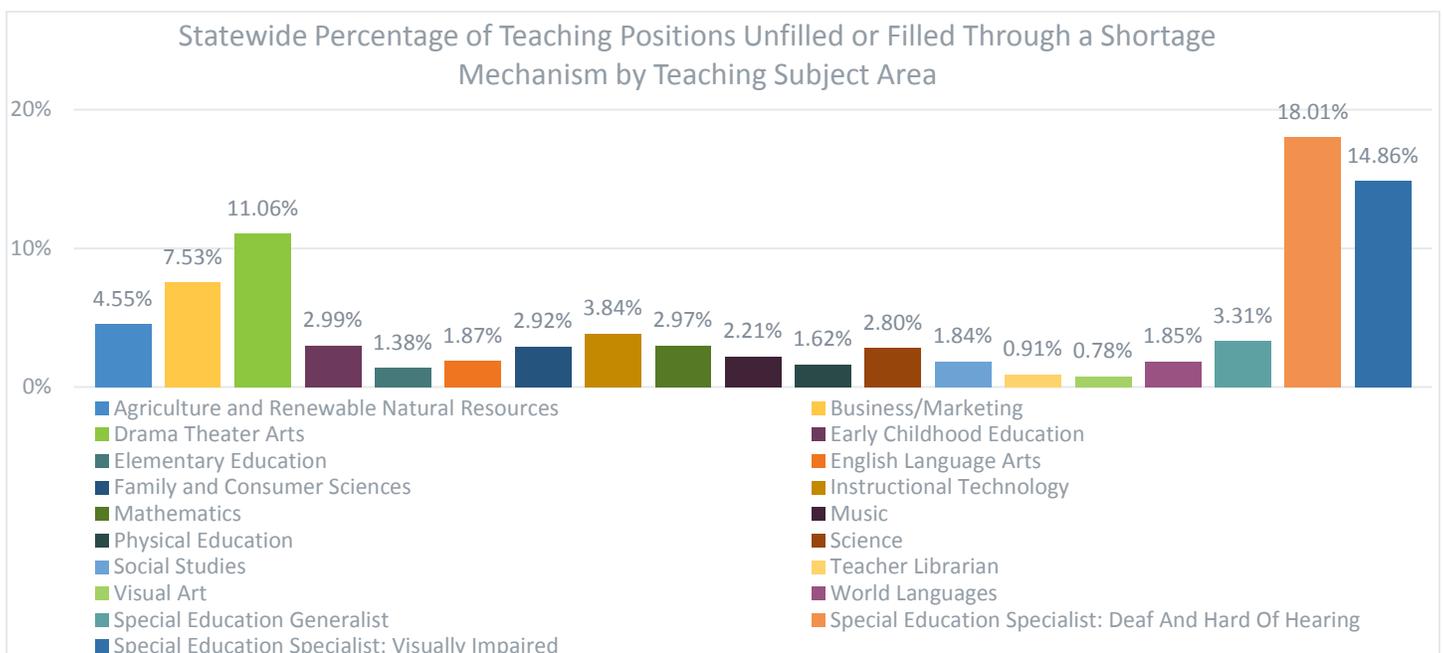
<sup>4</sup> The number of all existing positions was calculated using the full-time equivalent (FTE) reported by each district and BOCES as a part of the annual Human Resources snapshot along with the number of unfilled positions reported in the survey.



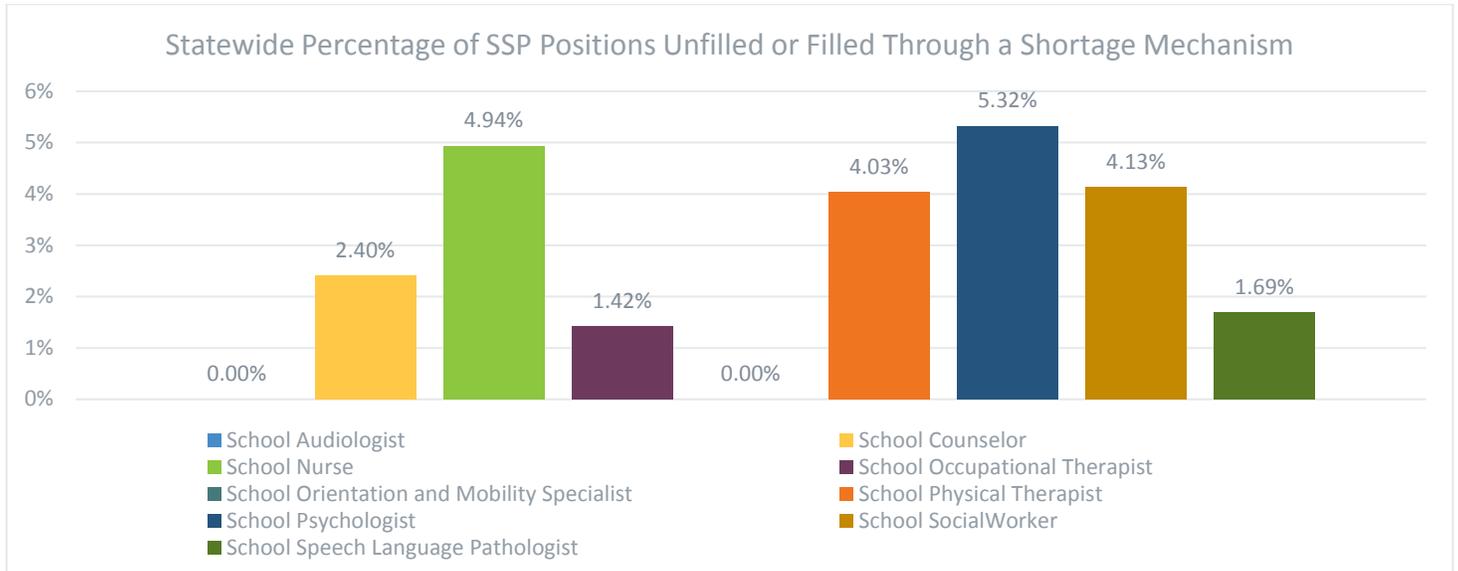
Of the total teaching positions to hire, 264 (3.31%) remained unfilled for the entire school year and 933 (11.70%) were filled through a shortage mechanism. Of the total SSP positions to hire, 103 (8.75%) remained unfilled for the entire school year and 91 (7.73%) were filled through a shortage mechanism. Shortage mechanisms considered in this report include hiring long-term substitutes, retired educators, alternative candidates and emergency candidates. Positions to hire that were filled, but not filled by a shortage mechanism, are presumed to have been filled through traditional hiring mechanisms.



The following graph indicates for each teaching subject area the percentage of all teaching positions in the state 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 [2018-2019 Educator Shortage Survey Additional Information workbook](#) (Excel). Later in the report, this information will be provided by district type to reveal how shortage areas vary across the state.

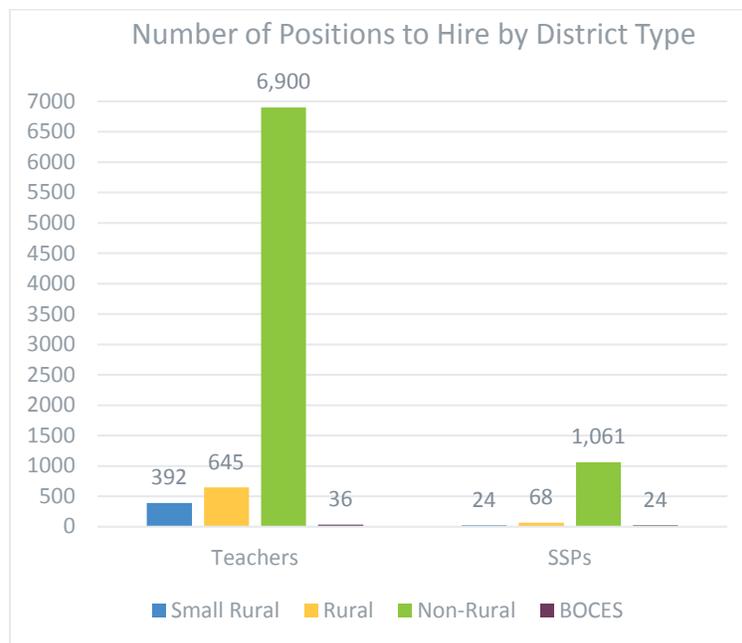


The graph below illustrates the percentage of all SSP positions in the state that were filled through a shortage mechanism or remained unfilled for each type of SSP. Because it is not unusual for SSPs to be employed by more than one district, only statewide data for SSP shortages are presented to avoid over-counting.

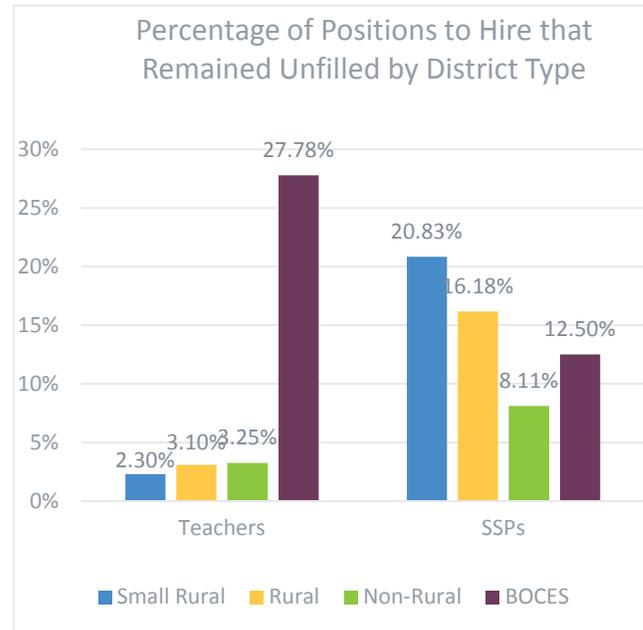
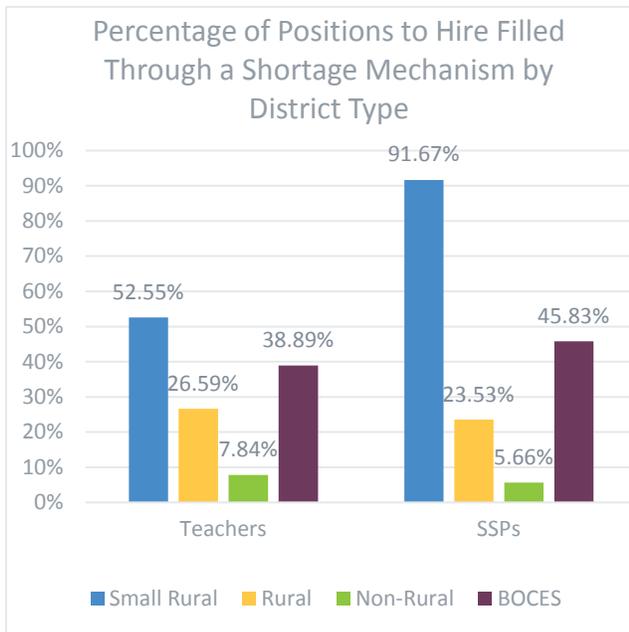


## RESULTS BY DISTRICT TYPE

To better understand how district geographical setting impacts educator shortages, survey results are presented for the following categories: small rural, rural, non-rural and BOCES. Non-rural locations had the highest number of teaching and SSP positions to hire for the 2018-2019 school year, which is consistent with the fact that non-rural locations have a larger population than rural or small rural locations and thus employ more educators.



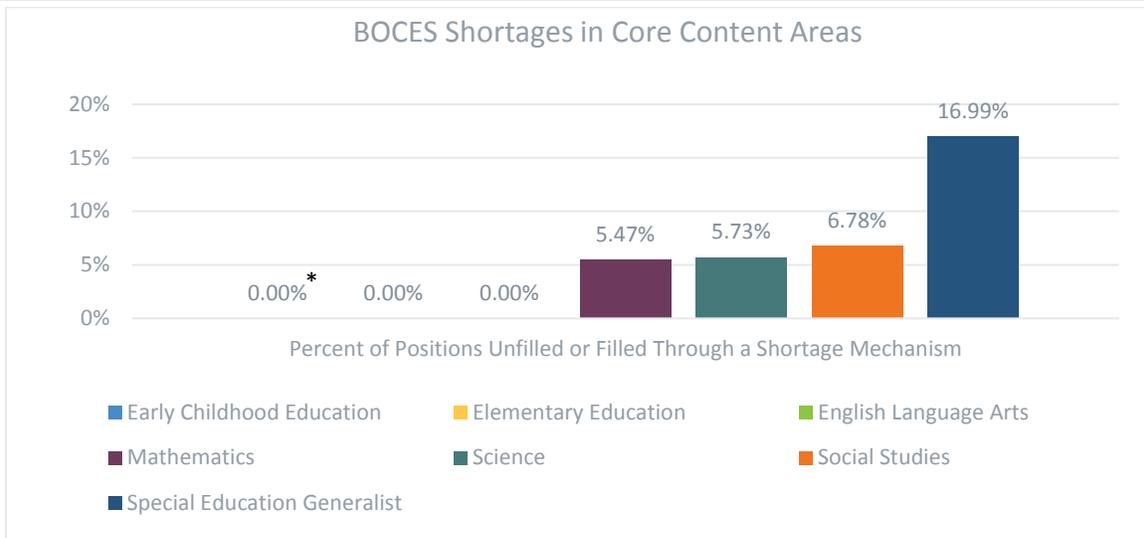
However, the percentages of positions filled through a shortage mechanism were much higher in small rural areas than in non-rural or rural areas. Just over half of the teaching positions to hire and over 90% of the SSP positions to hire in small rural districts were filled through a shortage mechanism. Additionally, small rural districts had the highest percentage of SSP positions that remained unfilled. With the exception of the BOCES, less than 5% of teaching positions in all settings remained unfilled for the entire school year. The higher percentage of unfilled teaching positions among BOCES is likely a result of there being fewer teaching positions in BOCES (which only operate programs or alternative or online schools when needed by their member districts).



## RESULTS BY DISTRICT TYPE AND TEACHING SUBJECT AREA

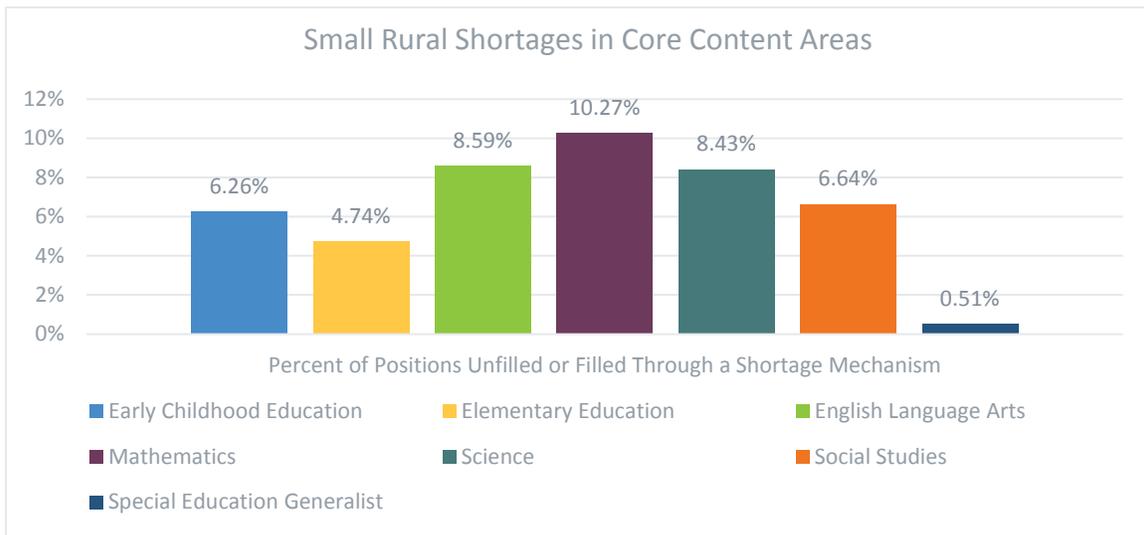
To further understand the breakdown of teaching shortage areas, shortages in core content teaching subject areas and non-core content teaching subject areas are presented for each district type: small rural, rural, non-rural and BOCES. Because unfilled positions and positions filled through a shortage 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 districts or BOCES, not the percentage of positions to hire, that were filled through a shortage mechanism or remained unfilled; this metric is chosen for the following graphs to provide a more accurate representation of total shortages by subject area. For teaching positions not aligned to a unique subject area (e.g., culturally and linguistically diverse educators), please see the [2018-2019 Educator Shortage Survey Additional Information workbook](#) (Excel).

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 when needed. 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, the shortage of special education teachers among BOCES is primarily reflective of a shortage of special education teachers in small rural districts. (Due to the small number of teaching positions in BOCES, only core content area shortage information is displayed in the graphs.)

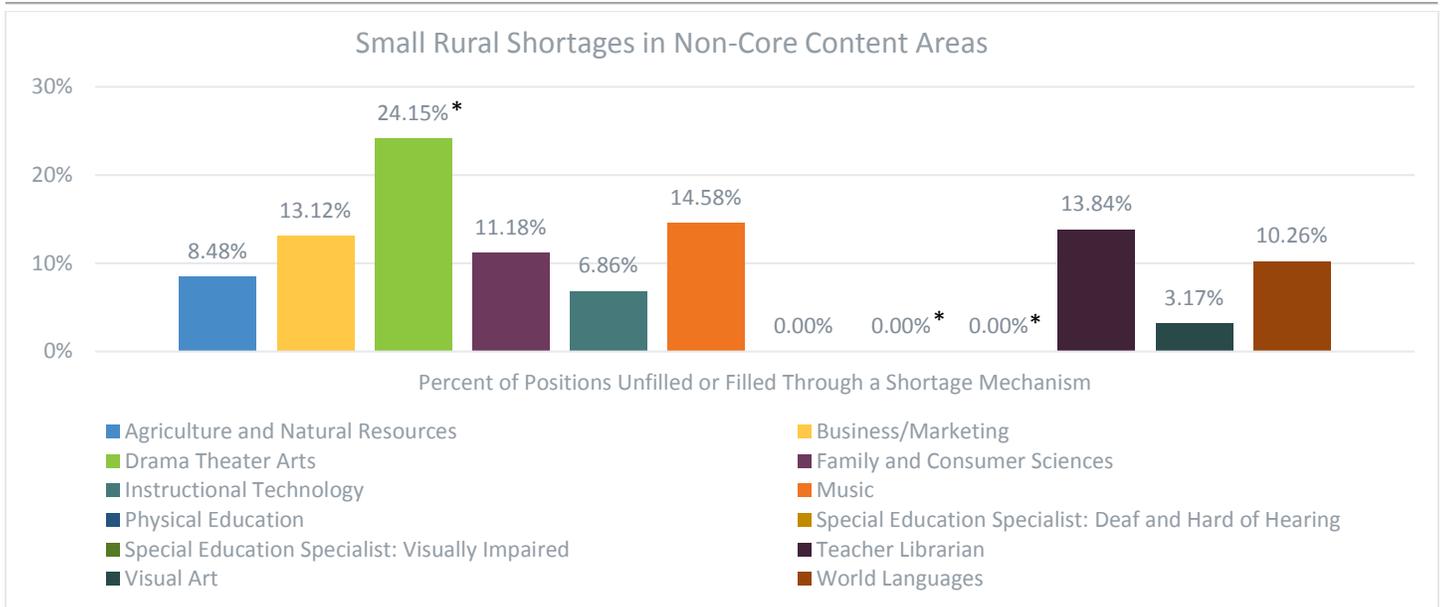


\*Total FTE less than 5.

Shortage data for small rural districts and BOCES must be considered together due to the role of BOCES. In small rural districts, mathematics had the highest percentage of positions unfilled or filled through a shortage mechanism among core content areas and, additionally, an even higher percentage shortage of special education teachers as reflected in the BOCES data.

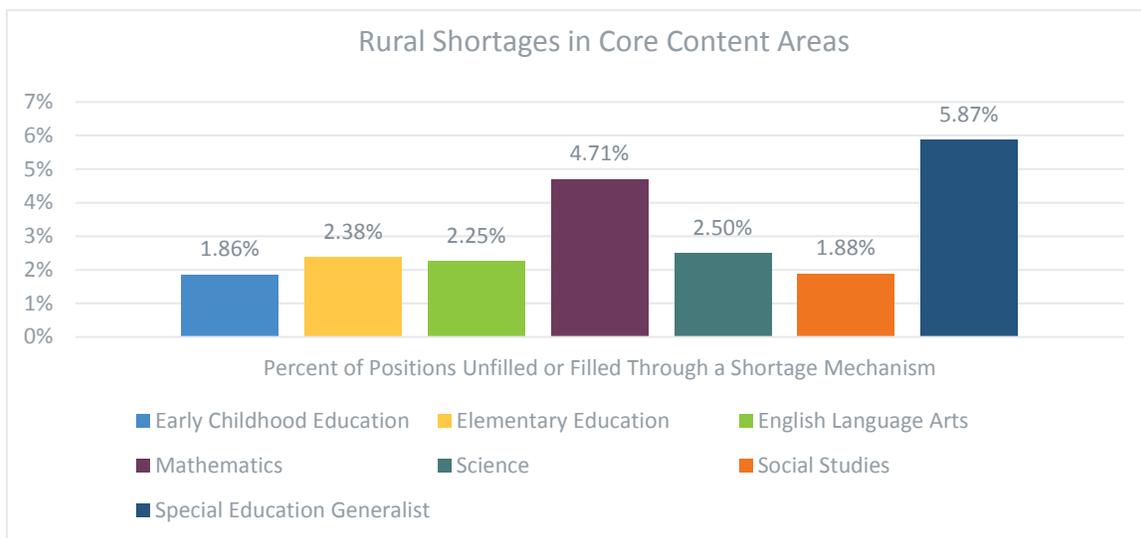


In non-core content areas in small rural districts, drama theater arts, business/marketing, music and teacher librarian have the highest percentage of positions unfilled or filled through a shortage mechanism. Important to note is that there were less than five FTE positions in drama theater arts across all small rural districts, so any position unfilled or filled through a shortage mechanism had a large impact on the overall percentage.

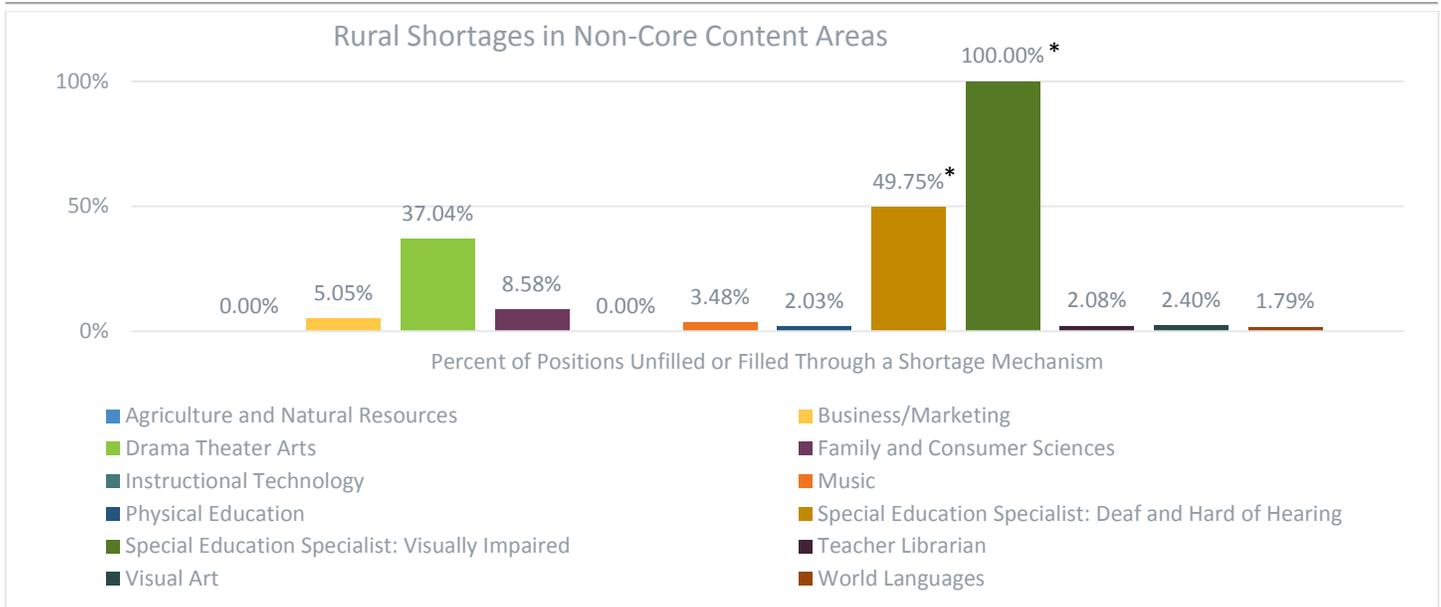


\*Total FTE less than 5.

As illustrated in the graph below, shortages in rural districts are very similar to those in small rural districts. Mathematics and special education had the highest percentage of positions unfilled or filled through a shortage mechanism among core content areas in rural districts.

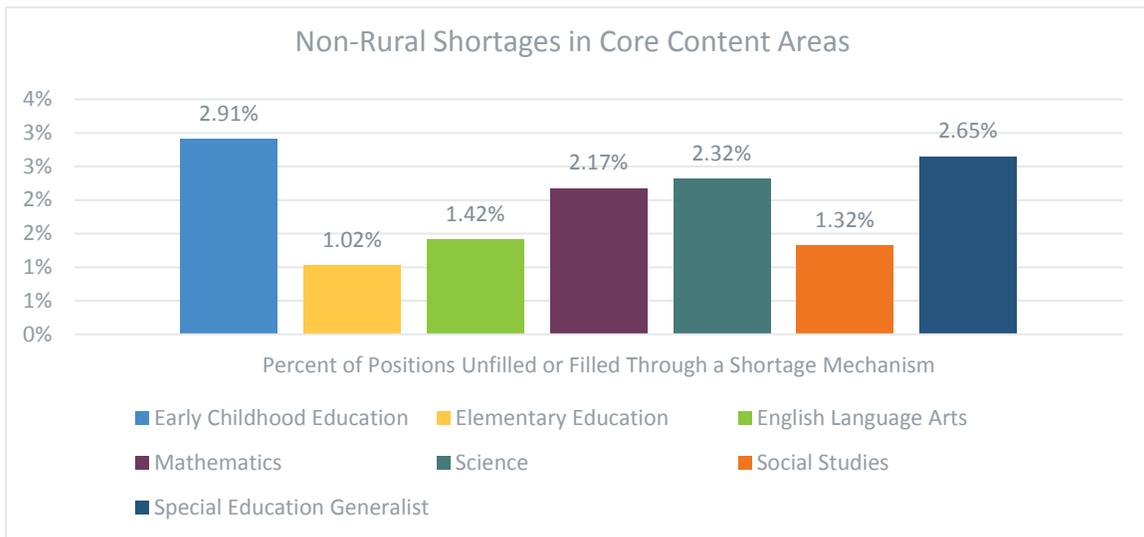


Among non-core content areas, drama theater arts and special education specialists for the visually impaired and deaf and hard of hearing had the highest percentage of unfilled positions or positions filled through a shortage mechanism in rural areas. Please note that due to the fact there were less than five special education specialist for the visually impaired and special education specialist for the deaf and hard of hearing positions across all rural districts, any unfilled position or position filled through a shortage mechanism had a significant impact on the overall percentages.

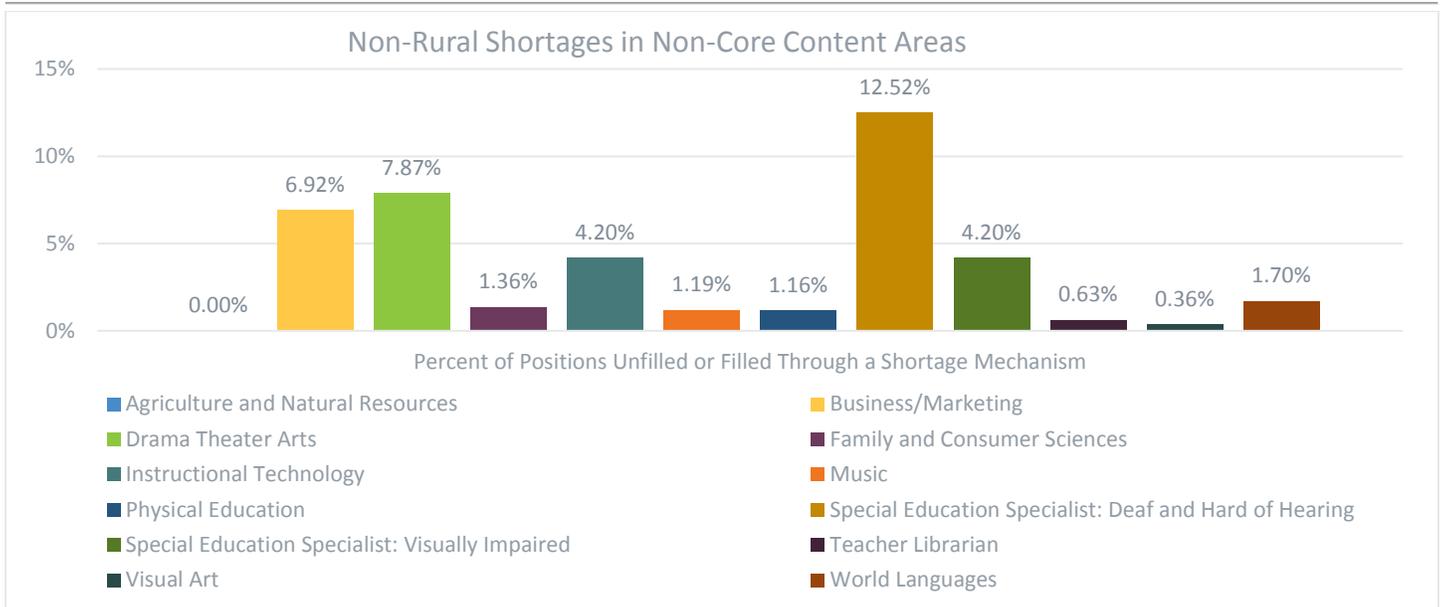


\*Total FTE less than 5.

Non-rural districts had the highest percentage of unfilled or filled through a shortage mechanism positions in early childhood education, special education, mathematics and science among core content areas.



For non-core content areas in non-rural districts, special education specialist for the deaf and hard of hearing, drama theater arts and business/marketing had the highest percentages of unfilled positions or positions filled through a shortage mechanism.



## RECRUITMENT STRATEGIES

Overall, school districts and BOCES reported recruiting primarily through online advertisements on job websites and job fairs. Both non-rural and rural districts reported using job websites, job fairs, contact with professional associations and direct contact with educator preparation programs most frequently. Recruiting door-to-door or not engaging in recruiting activities was most common among small rural districts. For more information on recruitment methods, please see the [2018-2019 Educator Shortage Survey Additional Information workbook](#) (Excel).

## 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).