

Department of Education
Department of Human Services

Foster Care Education Initiative

Performance Audit
February 2022
2053P



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February 10, 2022

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Foster Care Education Initiative at the Department of Education. The audit was conducted pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of state government, and Section 2-7-204(5), C.R.S., which requires the State Auditor to annually conduct performance audits of one or more specific programs or services in at least two departments for purposes of the SMART Government Act. The report presents our findings, conclusions, and recommendations, and the responses of the Department of Education and Department of Human Services, since they are both charged with sharing data related to students in foster care.

Kerri L. Hunter



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Report Highlights



Foster Care Education Initiative

Department of Education • Department of Human Services
Performance Audit • February 2022 • 2053P

Key Concern

The Colorado Department of Education (CDE) has not effectively used available data to track the educational performance of students in foster care in order to help the Foster Care Education Initiative (Initiative) achieve its goals. Our analyses of CDE’s educational data, along with analyses conducted by CDE, show that students in foster care are not achieving educational success compared to other students in the state.

Key Findings

- CDE’s “aspirational” goals for the Initiative are to help students in foster care excel academically, complete courses, advance to the next grade level, and continue on a path to postsecondary success. CDE reports data points about students in foster care that are specifically required by state and federal law, such as graduation rates. However, CDE does not track other metrics that could provide insight about how foster care students are performing academically.
- Our analyses of CDE’s educational data suggest that the Initiative may not be progressing toward meeting its aspirational goals. For example, for the 2018-2019 school year:
 - On average, foster care students scored about 100 points lower than other students on the Colorado Measures of Academic Success (CMAS) Science test, and 20-30 points lower on both the CMAS Math and English Language Arts tests.
 - Foster care students scored an average of 822 on the SAT, while their peers averaged 1001. The score range for the SAT is 400 to 1600.
- CDE does not track and publicly report on the number of schools that students in foster care attend each year, even though this metric could provide insight about a factor that can affect a student’s academic achievement. Our analysis found that a higher proportion of students in foster care attended more schools during the 2018-2019 school year than other students. During the school year, 474 foster care students attended 3 different schools, 106 students attended 4 different schools, and 34 students attended 5 or more schools.
- The Department of Human Services (DHS) did not provide CDE with a complete list of all children who were in foster care during Fiscal Year 2019. Data that we obtained directly from DHS included 8,457 children in foster care during Fiscal Year 2019, compared to the 6,038 (71 percent) foster care children included in the data that DHS provided to CDE.
- CDE did not flag at least 273 children in its system as being in foster care even though they were between 6 to 16 years old, which are the ages that children are required by law to be in school. We also identified 149 foster care children between the ages of 4 to 5 years, and 104 foster care children between 17 to 21 years, who CDE did not flag in its system, but who could also be attending school or receiving services through the public school system.

Background

- In 2008, the General Assembly declared that children in foster care “deserve access to the same opportunities that are enjoyed by other students” and enacted requirements aimed at improving those students’ educational stability.
- In 2012, as part of the federal Every Student Succeeds Act, CDE launched the Foster Care Education Program, which it later rebranded to be an “initiative,” to help students in foster care excel academically.
- CDE is statutorily required to use student-level data for accountability, program improvement, and research, as well as to perform other activities to coordinate with child welfare education liaisons who work with students in foster care.
- Since 2013, CDE and DHS have had a data-sharing agreement in place to share relevant information on children in foster care at the state level.

Recommendations Made

10

Responses

Agree: **10**

Partially Agree: **0**

Disagree: **0**



Chapter 1

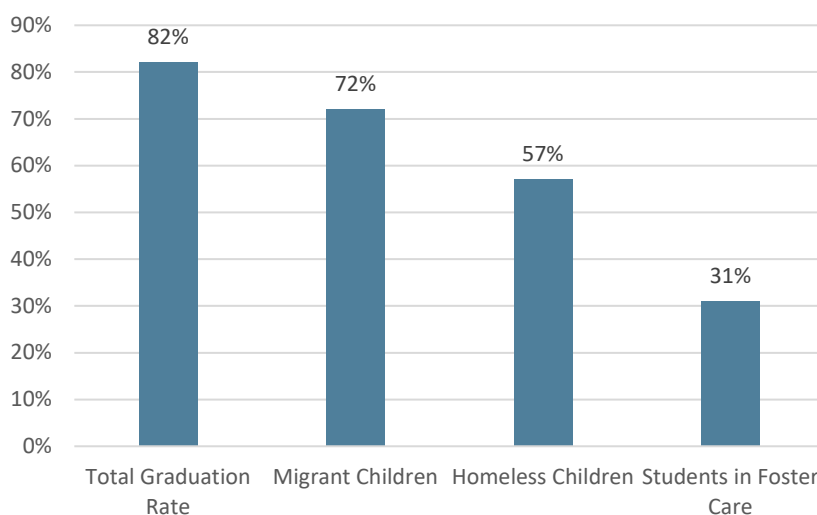
Foster Care Education Initiative

The Colorado Constitution establishes that all residents of the State between the ages of 6 and 21 may be educated free of charge by the State’s K-12 public education system, which is supervised by the State Board of Education, within the Colorado Department of Education (CDE) [Colorado Const. Art. IX, Sections 1 and 2 and Section 22-2-103(1)(a), C.R.S.].

The educational performance of students in out-of-home placement, or foster care, has been an ongoing concern among the federal government, General Assembly, and stakeholders interested in public education in Colorado. Data indicates that students in foster care have significantly worse educational outcomes than other high-risk groups, such as homeless and migrant students, and Colorado students as a whole. For example, as shown in Exhibit 1.1, for the 2019-2020 school year, students in foster care had the lowest 4-year graduation rates compared to other groups and students as a whole.

Exhibit 1.1

Statewide 4-Year Graduation Rates for the 2019-2020 School Year



Source: Colorado Department of Education.

In 2008, the General Assembly declared in House Bill 08-1019 that children in foster care “deserve access to the same opportunities that are enjoyed by other students” and enacted requirements aimed at improving those students’ educational stability. For example, the legislation required each school district and the State Charter School Institute to designate an employee to act as the district’s

or charter school's Child Welfare Education Liaison to work with child placement agencies, county departments of human/social services, and the Department of Human Services (DHS) to facilitate prompt and appropriate school placements, transfers, and enrollments for children in foster care. In 2012, as part of its responsibilities under the federal Every Student Succeeds Act, CDE launched a Foster Care Education Program to help students in foster care excel academically. Originally, the program's stated goals were to help ensure that students in foster care achieve academically through course completion, advancing to the next grade level, accruing credits toward graduation, and that they are on a path to post-secondary success.

In 2018, the General Assembly enacted House Bill 18-1306, which included creation of a foster care education coordinator position that CDE considered to be a primary aspect of the Foster Care Education Program. That staff person's responsibilities include providing training and professional development to local education providers on the implementation of state and federal mandates related to foster care education, collecting and disseminating contact information for child welfare education liaisons, coordinating with DHS and other agencies as necessary, and providing technical assistance to education providers to remove barriers to graduation for students in foster care. The foster care education coordinator also acts as a liaison when disputes arise over agreements between school districts and the state charter school institute and county departments of human/social services related to providing transportation for students in foster care so they can remain in their school of origin after being placed outside of their homes [Section 22-32-138(1.5), C.R.S.]. The 2018 legislation also required CDE and DHS to enter into a data-sharing agreement to ensure that individual data relevant to students in out-of-home placement is shared at the state level [Section 22-32-138(9), C.R.S.].

The program was originally situated within CDE's Office of Dropout Prevention and Student Reengagement until December 2019, when it was moved to CDE's Office of Student Support to align it with other programs in that office aimed at supporting vulnerable populations. After our audit began in April 2020, CDE made changes to the program and now refers to it as the Foster Care Education Initiative, rather than a program. Additionally, in December 2021, CDE reported that it now considers the goals that it had originally identified for the program to be "aspirational" rather than actual goals grounded in legislation that CDE is required to demonstrate accountability for working to achieve.

For Fiscal Year 2022, CDE reported that it allocated a \$102,622 budget to the Foster Care Education Initiative.

Foster Care Students

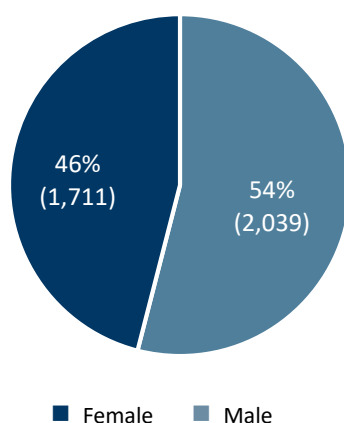
During the 2018-2019 school year, there were about 962,500 students enrolled in K-12 public schools in Colorado. Of those, about 3,750 students, or 0.4 percent, were in out-of-home placement, which is defined as youth who at any time during an academic term were:

- Placed in foster care, which is defined as:
 - The placement of a child or youth into the legal custody or legal authority of a county department of human or social services for physical placement of the child or youth in a kinship care placement, supervised independent living placement, or facility certified or licensed by DHS (e.g., day treatment centers and residential child care facilities), or
 - The physical placement of a juvenile committed to the custody of DHS into a community placement, which includes but is not limited to placement in a foster care home, group home, residential child care facility, or residential treatment facility.
- Placed outside of the home due to adjudication in the Colorado juvenile justice system;
- Enrolled in a different school as a result of being returned to his or her home at the conclusion of out-of-home placement; or
- Engaged in independent living [Sections 22-32-138(1)(h), 19-1-103(51.3), 19-1-103 (85), and 19-1-103(24.5), C.R.S.].

Throughout this report, we use the term “foster care” to refer to any type of out-of-home placement.

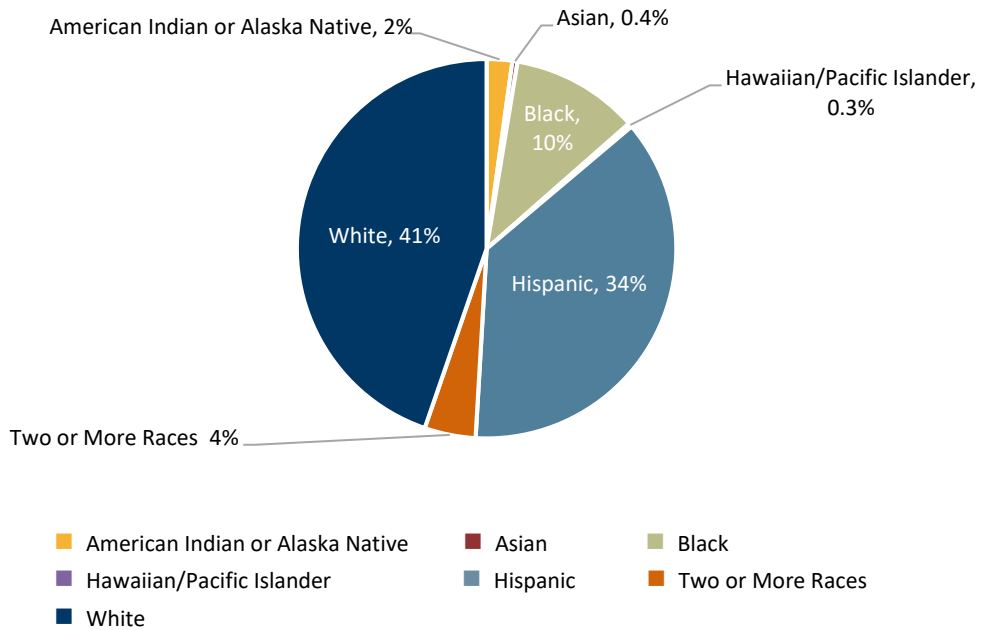
As shown in the following exhibits, our analysis of CDE’s data for the 2018-2019 school year identified the following characteristics associated with the 3,750 students who were in foster care:

Exhibit 1.2
Foster Care Students by Gender, 2018-2019



Source: Office of the State Auditor analysis of CDE data.

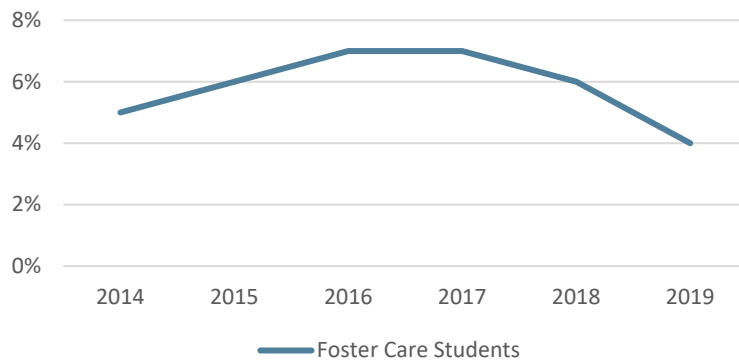
Exhibit 1.3
Foster Care Students by Ethnicity¹, 2018-2019



Source: Office of the State Auditor analysis of CDE data.

¹ CDE’s data categorized 8 percent of students in foster care as having more than one of the ethnicities listed above (White, American Indian or Alaska Native, Asian, Black, Hawaiian/Pacific Islander, Hispanic, or Two or More Races). These students are not reflected in the exhibit.

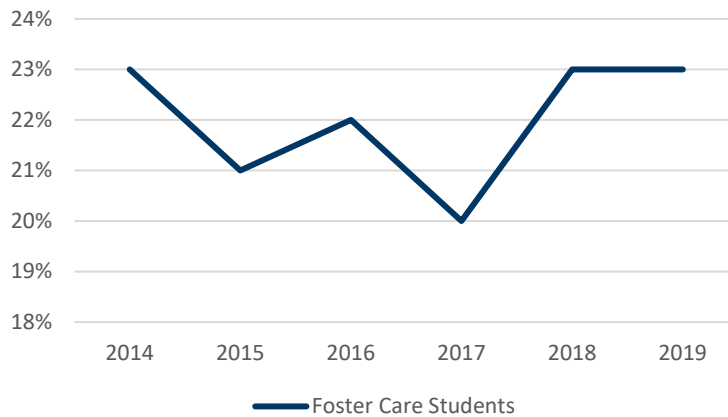
Exhibit 1.4
Foster Care Students Who Are English Language Learners¹, 2014-2019



Source: Office of the State Auditor analysis of CDE data.

¹ CDE defines English language learners as students who are linguistically diverse and who are identified using the State-approved English language proficiency assessment and a body of evidence as having a level of English language proficiency that requires language support to achieve standards in grade-level content in English.

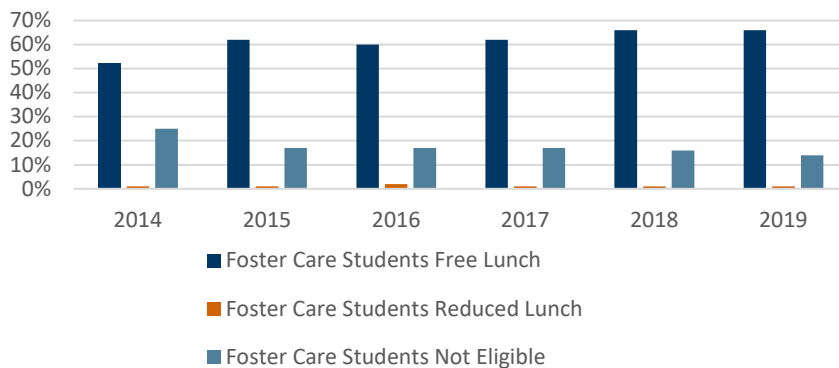
**Exhibit 1.5
Foster Care Students in Special Education, 2014-2019¹**



Source: Office of the State Auditor analysis of CDE data.

¹ Special education refers to students with exceptional educational needs due to a disability, or learners who are culturally and/or linguistically diverse or have some other special need.

**Exhibit 1.6
Foster Care Students, Free & Reduced Lunch Eligibility^{1, 2}
by Percentage, 2014-2019**



Source: Office of the State Auditor analysis of CDE data.

¹ Children are eligible for free or reduced-cost lunches based on their participation in certain assistance programs (e.g., Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, etc.); having categorical eligibility (e.g., having a status as homeless, migrant, runaway, in foster care, etc.); or meeting federal income eligibility requirements, which vary based on the size, composition, and income of the children’s household [U.S. Department of Agriculture, Eligibility Manual for School Meals].

² The exhibit does not show children whose eligibility status changed during a school year and, therefore, were categorized in CDE’s data as being both eligible and ineligible for free or reduced-cost lunch.

Audit Purpose, Scope, and Methodology

We conducted this performance audit pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of the state government, and Section 2-7-204(5), C.R.S., the State Measurement for Accountable, Responsive, and Transparent (SMART) Government Act. Audit work was performed from April 2020 through January 2022. The audit was delayed while our office and CDE negotiated the terms of a data sharing agreement. We appreciate the assistance provided by the management and staff of CDE and DHS during this audit.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The key objective of the audit was to determine if CDE is leveraging its available data to track the educational performance of children in foster care and inform decisions related to improving educational outcomes for these children.

This audit engaged CDE and DHS since they are both charged with sharing data related to students in foster care. The scope of the audit did not include reviewing tasks that CDE's foster care education coordinator performs or services that education and county department of human/social services staff provide for students in foster care at the local level, such as decisions about school changes or transportation to school.

To accomplish our audit objective, we performed the following audit work:

- Reviewed relevant state and federal laws and rules, and department policies and procedures.
- Reviewed two versions of a Memorandum of Understanding (MOU) (i.e., a data sharing agreement) between CDE and DHS, one that was effective from December 12, 2017, through May 30, 2020, and a revised version that became effective on May 31, 2020.
- Interviewed CDE and DHS staff and management.
- Compared foster care data from DHS' statewide automated child welfare information system, Trails, that DHS sends to CDE to data housed in CDE's Data Warehouse for the 2018-2019 school year to determine if both departments maintained consistent information about which students were in foster care.

- Analyzed CDE’s educational data for the 2013-2014 through 2018-2019 school years to identify demographic and other characteristics about students in foster care, as well as trends in how those students performed on standardized tests and how many different schools they attended compared to other students. This data included demographic details, school enrollment information, and standardized test scores.
- Reviewed annual reports that CDE published with data related to students in foster care for the 2018-2019 school year.
- Reviewed studies published in scholarly journals related to factors that can affect academic achievement among students in foster care, as well as research conducted by academic institutions in Colorado.

As required by auditing standards, we planned our audit work to assess the effectiveness of those internal controls that were significant to our audit objectives. Details about the audit work supporting our findings and conclusions, including any deficiencies in internal control that were significant to our audit objectives, are described in the remainder of this report.

A draft of this report was reviewed by CDE and DHS. We have incorporated the departments’ comments into the report where relevant. The written responses to the recommendations and the related implementation dates are the sole responsibility of CDE and DHS.

Finding 1—Educational Outcomes of Students in Foster Care

In 2018, the General Assembly enacted House Bill 18-1306, which was aimed at ensuring educational stability for students in foster care. In its Legislative Declaration, the General Assembly cited several statistics showing that students in foster care face challenges achieving academic success. For example, the declaration noted that for the class of 2017, only 24 percent of students who had been in foster care at any time during high school graduated on time, and half of Colorado students in foster care changed schools at least once, and often several times, each year. In its declaration, the General Assembly also observed that multiple school transitions create gaps in a student’s knowledge and create barriers to educational attainment. The General Assembly declared that “it is imperative to remove barriers to the educational success of students in foster care due to frequent moves and lack of continuity in education” and that “flexibility and cooperation between the education system, child welfare system, and families and students is necessary to ensure that students in foster care and other highly mobile student populations achieve educational success” [House Bill 18-1306].

The 2018 legislation required CDE and DHS to enter into a data-sharing agreement to ensure that individual data relevant to students in foster care is shared at the state level [Section 22-32-138(9), C.R.S.]. When that requirement was codified, the departments already had an MOU in place so they could share foster care data to facilitate required reporting and research about students in foster care,

as well as enable CDE to identify foster care students who are categorically eligible to receive special supports, such as free school lunches. Two versions of the MOU were in effect during the period we reviewed: one version that was effective from December 12, 2017, through May 30, 2020, and a revised version that the departments entered into on May 31, 2020.

According to both versions of the MOU that were in force during the period we reviewed, the departments are required to share data in order for CDE to conduct research projects, including: (1) annual reporting on dropout and graduation rates, matriculation (i.e., post-secondary enrollment) rates, and other education indicators for foster care students; (2) studies of academic performance and outcomes of Colorado foster care students; (3) identification of foster care students eligible for special supports and protections required by federal and state law, including free or reduced lunches; and (4) identification of foster care students by local education providers who are statutorily obligated to collaborate to provide services under state and federal law.

What was the purpose of the audit work and what work was performed?

The purpose of the audit work was to assess how CDE leverages data to achieve its goals for the Foster Care Education Initiative, which are intended to help students in foster care achieve academic success.

We reviewed educational data included in CDE's annual reports that it produces in response to state and federal requirements: the State Policy Report: Dropout Prevention and Student Engagement for the 2018-2019 and 2019-2020 school years and 2018-2019 school year data from the state report card that CDE is required to produce under the federal Every Student Succeeds Act [Section 22-14-111, C.R.S. and 20 USC 6311(h)(1)]. We also analyzed 5 years of student-level educational data for the 2013-2014 through 2018-2019 school years to identify demographic and other characteristics about students in foster care, as well as trends in how those students performed on standardized tests and how many different schools they attended compared to other students. This data included demographic details, school enrollment information, and standardized test scores.

What problems did the audit work identify and how were the results of the audit work measured?

Overall, we found that CDE has not effectively used available data to track the educational performance of students in foster care and help achieve the Foster Care Education Initiative's goals. Specifically, we found that CDE compiles and tracks limited information related to the educational performance of students in foster care, and only if required to do so by state or federal law.

At the beginning of our audit in April 2020, CDE's publicly stated goals for the program were to help students in foster care (1) excel academically, (2) complete courses, (3) advance to the next

grade level, and (4) continue on a path to postsecondary success. However, in August 2020, CDE told us that it had rebranded the program to be an initiative and, as of December 2021, CDE reported that it considers these goals to only be “aspirational” since the goals are not directed by legislation and do not reflect the actual work of and resources allocated to the Foster Care Education Initiative.

Although CDE may no longer consider these measures to be the “official” goals of the Foster Care Education Initiative, tracking how foster care students are performing in these areas provides valuable information for policymakers, as well as local education and human services staff who work with those students. For the four “aspirational” goals that CDE identified, which are listed in the sections below, we identified several metrics that can be used to track how students in foster care are performing academically in relation to CDE’s aspirational goals. CDE analyzes its data and reports information related to certain metrics, but we also conducted our own analyses of CDE’s data to provide additional insight about those and other metrics. Our analyses of CDE’s educational data related to foster care students compared to students who are not in foster care can be found in Appendix A. Collectively, our analyses, along with the analyses conducted by CDE, show that students in foster care are not achieving educational success compared to other students in the state.

Aspirational Goal: Excel Academically

CDE tracks some metrics that provide insight about the academic performance of students in foster care. According to CDE staff, they only analyze and report on data points about students in foster care that are specifically required by state and federal law. As part of our audit, we conducted additional analyses to augment CDE’s information. Overall, CDE’s and our analyses suggest that the Initiative is not progressing toward meeting its aspirational goal to help students in foster care excel academically.

Standardized Tests. Although CDE maintains data on standardized test scores, CDE does not track the actual scores that students earn. Instead, as part of its federal reporting, CDE tracks the percentage of students in foster care whose scores on the Colorado Measures of Academic Success (CMAS) aligned with expectations for those tests. As shown in Exhibit 1.7, CDE uses scales to define expectations for scores on CMAS tests.

Exhibit 1.7
Scale Score Ranges for CMAS Tests

CMAS Science—Overall Scale Score Ranges				
Grade Level	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4
Grade 5	300-545	546-649	650-770	771-900
Grade 8	300-555	556-651	652-784	785-900
High School	300-542	543-672	673-773	774-900

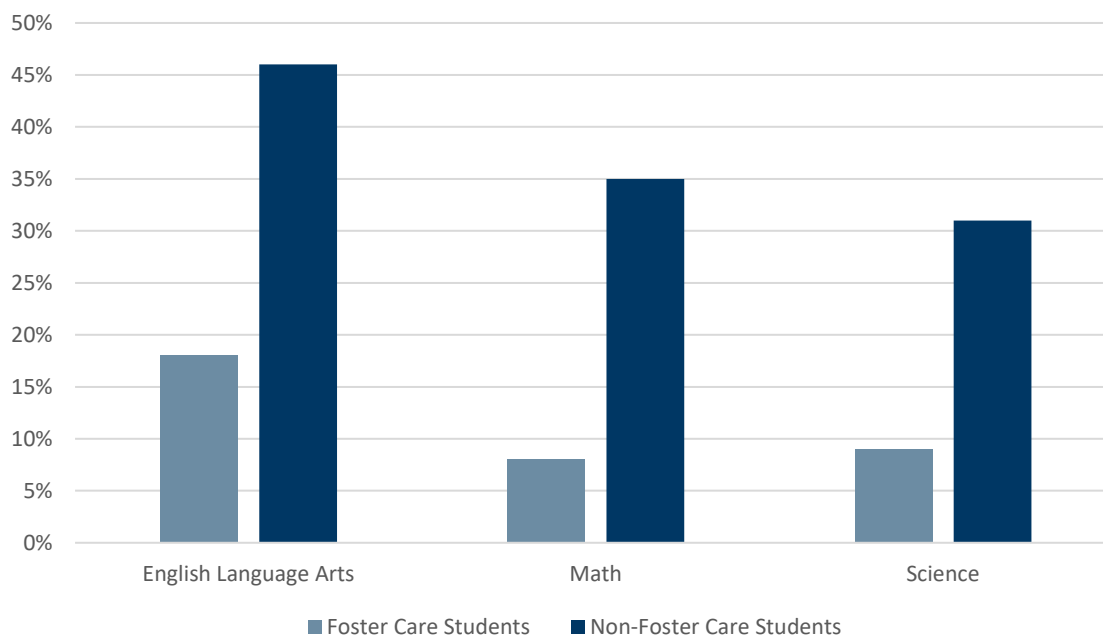
CMAS Mathematics—Overall Scale Score Ranges					
Grade Level/ Content	Does Not Yet Meet Expectations	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4	Level 5
Grade 3	650-699	700-724	725-749	750-789	790-850
Grade 4				750-795	796-850
Grade 5				750-789	790-850
Grade 6				750-787	788-850
Grade 7				750-785	786-850
Grade 8				750-800	801-850

CMAS English Language Arts—Overall Scale Score Ranges					
Grade Level	Does Not Yet Meet Expectations	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4	Level 5
Grade 3	650-699	700-724	725-749	750-809	810-850
Grade 4				750-789	790-850
Grade 5				750-798	799-850
Grade 6				750-789	790-850
Grade 7				750-784	785-850
Grade 8				750-793	794-850

Source: Colorado Department of Education.

In its January 2019 State Report Card required by the federal Every Student Succeeds Act, CDE reported that a lower proportion of students in foster care met or exceeded expectations on CMAS tests compared to all students, as shown in Exhibit 1.8.

Exhibit 1.8
Percentage of Students Who Met or Exceeded Expectations on CMAS Tests
2018-2019 School Year



Source: Colorado Department of Education data.

Since CDE does not track actual test scores for any students, including those in foster care, we analyzed those scores on the CMAS science, math, and English language arts tests and found that, from the 2014-2015 through 2018-2019 school years, students in foster care consistently scored lower than the general student population.

Science. CMAS science scores can range from 300 to 900. CDE considers students to be meeting or exceeding expectations if they score at least 650, 652, or 673 on the tests for 5th graders, 8th graders, and high school students, respectively. On the CMAS science test, students in foster care, on average, scored about 100 points lower than other students. In addition, over the 5-year period we reviewed, the average scores among students in foster care declined at a faster rate compared to other students, as shown in Exhibit 1.9.

Exhibit 1.9
Average CMAS Science Scores
2014-2015 through 2018-2019 School Years

	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	% Change
Foster Care Students	500 <i>Partially Met Expectations</i>	503 <i>Partially Met Expectations</i>	491 <i>Partially Met Expectations</i>	491 <i>Partially Met Expectations</i>	491 <i>Partially Met Expectations</i>	-2%
Non-Foster Care Students	593 <i>Approached Expectations</i>	592 <i>Approached Expectations</i>	590 <i>Approached Expectations</i>	590 <i>Approached Expectations</i>	588 <i>Approached Expectations</i>	-1%

Source: Office of the State Auditor analysis of CMAS science data for the 2014-2015 through 2018-2019 school years.

Math. CMAS math scores can range from 650 to 850. CDE considers students to be meeting or exceeding expectations if they score 750 or higher. On the CMAS math test, students in foster care, on average, scored about 20 to 30 points lower than other students. In addition, over the 5-year period we reviewed, average scores among students in foster care remained steady, while average scores among other students increased slightly, as shown in Exhibit 1.10.

Exhibit 1.10
Average CMAS Math Scores
2014-2015 through 2018-2019 School Years

	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	% Change
Foster Care Students	707 <i>Partially Met Expectations</i>	709 <i>Partially Met Expectations</i>	708 <i>Partially Met Expectations</i>	710 <i>Partially Met Expectations</i>	709 <i>Partially Met Expectations</i>	0%
Non-Foster Care Students	732 <i>Approached Expectations</i>	734 <i>Approached Expectations</i>	741 <i>Approached Expectations</i>	735 <i>Approached Expectations</i>	736 <i>Approached Expectations</i>	1%

Source: Office of the State Auditor analysis of CMAS math data for the 2014-2015 through 2018-2019 school years.

English Language Arts. CMAS English language arts scores can range from 650 to 850. CDE considers students to be meeting or exceeding expectations if they score 750 or higher. On the CMAS English language arts test, students in foster care, on average, scored about 20 to 30 points lower than other students. In addition, over the 5-year period we reviewed, average scores among students in foster care increased slightly and at the same rate as other students, as shown in Exhibit 1.11.

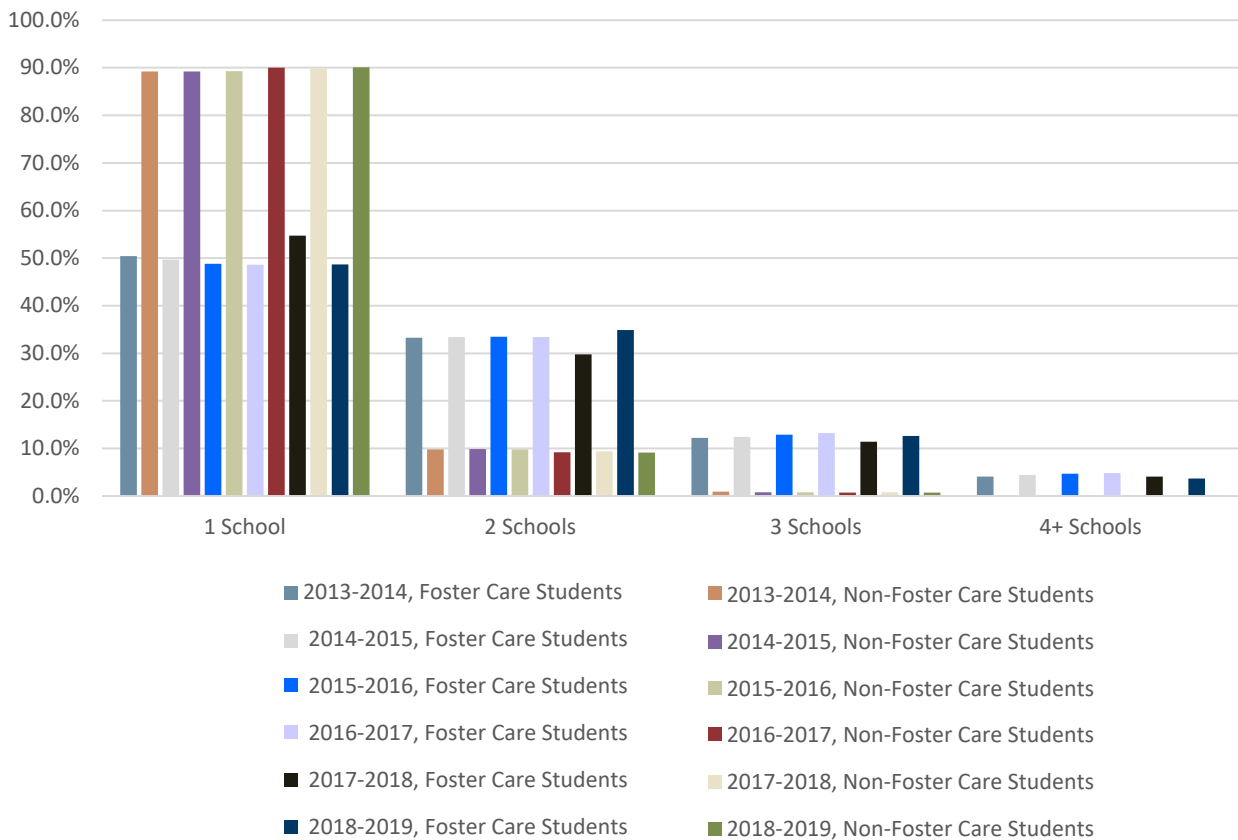
Exhibit 1.11
Average CMAS English Language Arts Scores
2014–2015 through 2018–2019 School Years

	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	% Change
Foster Care Students	710	714	715	717	716	1%
	<i>Partially Met Expectations</i>	<i>Partially Met Expectations</i>	<i>Partially Met Expectations</i>	<i>Partially Met Expectations</i>	<i>Partially Met Expectations</i>	
Non-Foster Care Students	739	740	741	743	744	1%
	<i>Approached Expectations</i>	<i>Approached Expectations</i>	<i>Approached Expectations</i>	<i>Approached Expectations</i>	<i>Approached Expectations</i>	

Source: Office of the State Auditor analysis of CMAS English Language Arts data for the 2014-2015 through 2018-2019 school years.

School Stability. CDE does not track and publicly report on the number of schools that students in foster care attend each year, even though this metric could provide insight about a factor that can affect a student’s academic achievement. As the General Assembly declared, “Multiple school transitions create gaps in a student’s knowledge and create barriers to educational attainment” [House Bill 18-1306]. We analyzed available data and found that from the 2014-2015 through 2018-2019 school years, a higher proportion of students in foster care attended more schools within the same year than other students, as shown in Exhibit 1.12.

Exhibit 1.12
Number of Schools Students Attended During the Same Year
2013–2014 through 2018–2019 School Years



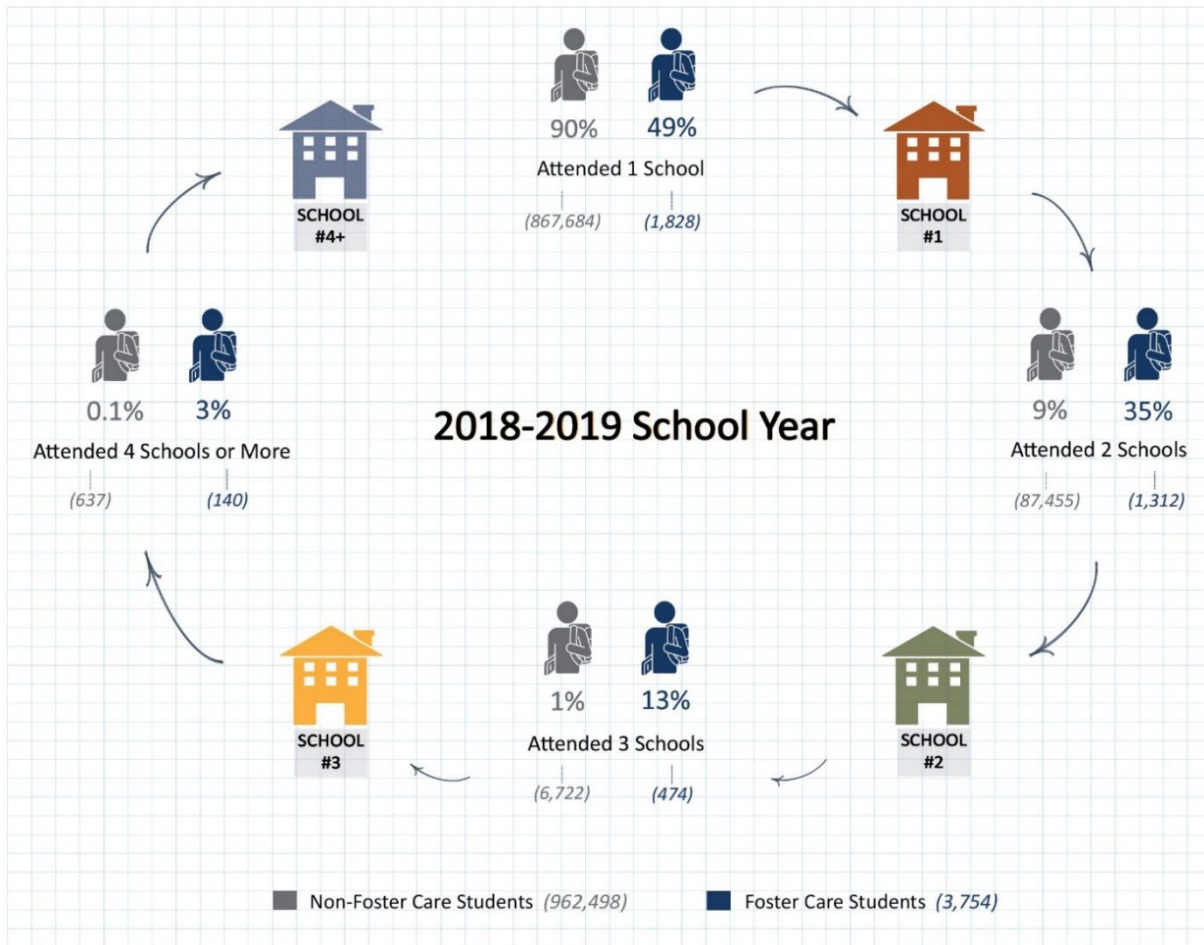
Source: Office of the State Auditor analysis of CDE’s educational data for the 2014-2015 through 2018-2019 school years.

During the 2018-2019 school year, some students in foster care changed schools frequently, including:

- 474 students who attended three different schools
- 106 students who attended four different schools
- 27 students who attended five different schools
- 5 students who attended six different schools
- 2 students who attended seven different schools.

These school changes are depicted in Exhibit 1.13.

Exhibit 1.13
Number of Schools Students Attended During the Same Year
2018–2019 School Year



Source: Office of the State Auditor analysis of CDE’s educational data for the 2018-2019 school year.

Aspirational Goal: Complete Courses

Although CDE maintains data on specific courses that students take during each school year and their course completion status, CDE does not track the extent to which students in foster care complete individual courses and grade levels. Therefore, CDE cannot report its progress toward meeting this goal.

Aspirational Goal: Advance to the Next Grade Level

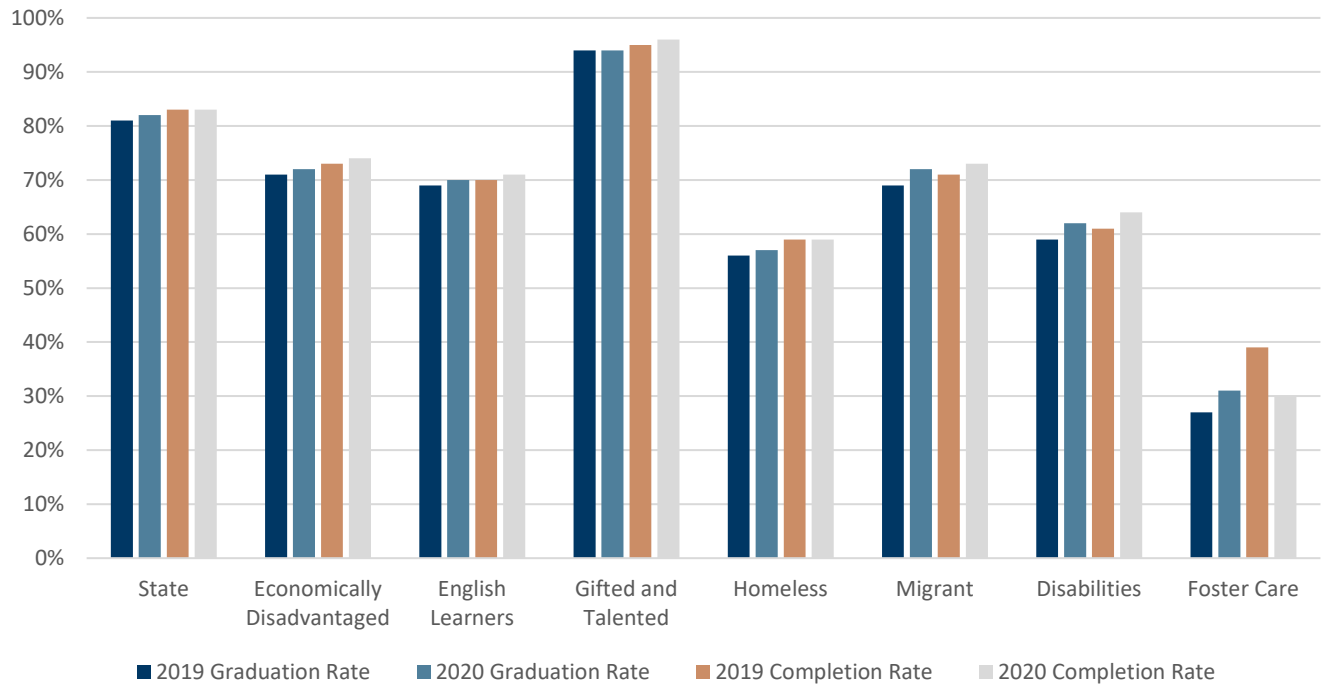
CDE does not analyze how many students in foster care complete individual grade levels, so CDE cannot track its progress in helping those students advance to the next grade level. CDE tracks the overall dropout rate among students in foster care, which provides some indication of how many students are still in school and, therefore, could potentially advance to the next grade level in the subsequent school year. For the 2019-2020 school year, 6.4 percent of students in foster care dropped out, which was higher than the statewide dropout rate of 1.8 percent, and also higher than the dropout rate among all other student groups tracked by CDE (economically disadvantaged, English learners, migrants, homeless, gifted-talented, disabled). CDE is required to track various grade-level data for these other student groups as part of Colorado's statutorily required Statewide System of Education Accountability [Section 22-11-102, C.R.S., et seq.]. However, CDE does not track dropout rates among students in foster care at individual grade levels since it is not required to do so.

Aspirational Goal: Continue on a Path to Post-Secondary Success

CDE tracks some metrics that provide insight about the readiness of students in foster care to continue on a path to post-secondary success. As part of our audit, we conducted additional analyses to augment CDE's information. Overall, CDE's and our analyses suggest that the Foster Care Education Initiative is not progressing toward meeting its aspirational goal to help students in foster care achieve post-secondary success.

Graduation and Completion Rates. CDE tracks graduation rates as well as completion rates, which reflect the number of students who receive a high school equivalency diploma. These metrics provide insight about how many students complete high school-level education in order to continue on to post-secondary education. For the 2018-2019 and 2019-2020 school years, students in foster care had the lowest graduation and completion rates compared to the general student population and other student groups (economically disadvantaged, English learners, migrants, homeless, gifted-talented, disabled), as shown in Exhibit 1.14.

Exhibit 1.14
Graduation and Completion¹ Rates
2018-2019 and 2019-2020 School Years



Source: Colorado Department of Education.

¹ Completion rates reflect the number of students who receive a high school equivalency diploma or other designation of high school completion.

College Entrance Exams. CDE does not track PSAT¹ scores for students in foster care. Scores on college entrance exams provide insight about students’ readiness for post-secondary education and success. The PSAT is a standardized test that 9th and 10th graders in Colorado take to measure their knowledge and skills in reading, writing, and math. According to the College Board, which administers the PSAT, these skills are necessary for a student to succeed in college and a career. PSAT scores range from 320 to 1520.

We analyzed available data and found that from the 2016-2017 through the 2018-2019 school years, students in foster care consistently scored lower on the PSAT than other students. In addition, over that 3-year period, average PSAT scores among students in foster care declined at a faster rate than average scores among other students, as shown in Exhibit 1.15.

Exhibit 1.15
Average PSAT Scores
2014-2015 through 2018-2019 School Years

		2016–2017	2017–2018	2018–2019	% Change
Foster Care Students	9th Graders	N/A	732	736	N/A
	10th Graders	818	781	765	-6%
Non-Foster Care Students	9th Graders	N/A	903	906	N/A
	10th Graders	948	945	938	-1%

Source: Office of the State Auditor analysis of PSAT data for the 2016-2017 through 2018-2019 school years.

The SAT is a standardized college entrance exam. According to the College Board, which administers the test, the SAT assesses knowledge and skills that students learn in the classroom and that are key to their success in college and career. SAT scores range from 400 to 1600.

As part of its required reporting under the federal Every Student Succeeds Act, CDE reported that, for the 2018-2019 school year, 71 percent of students in foster care scored below the benchmark of 480 on the evidence-based reading and writing component of the test, compared to 42 percent of all students who took the test. Similarly, 94 percent of students in foster care scored below the benchmark of 530 on the math component of the test, compared to 61 percent of all students. CDE’s report did not include actual SAT scores.

Our analysis of SAT scores found that, on average, students in foster care scored lower than students who were not in foster care, as shown in Exhibit 1.16. In addition, average SAT scores among students in foster care have been declining at a faster rate than those of other students. Collectively, these results suggest that the Foster Care Education Initiative is not making progress on its aspirational goal to help students in foster care continue on a path to post-secondary success.

Exhibit 1.16
Average SAT Scores
2016-2017 through 2018-2019 School Years

	2016–2017	2017–2018	2018–2019	% Change
Foster Care Students	849	837	822	-3%
Non-Foster Care Students	1016	1015	1001	-1%

Source: Office of the State Auditor analysis of SAT data for the 2016-2017 through 2018-2019 school years.

Post-Secondary Enrollment. CDE tracks post-secondary enrollment rates for all students as part of its federal reporting, but does not separately track this data for students in foster care because it is not required to do so. In addition, CDE did not provide us post-secondary enrollment data that we could analyze. As a result, we were unable to determine the extent to which students in foster care enrolled in post-secondary education.

Why did these problems occur?

Neither the General Assembly nor CDE has defined what CDE is supposed to accomplish by obtaining foster care data from DHS, nor to what extent CDE should track and report on educational data for students in foster care as part of the Foster Care Education Initiative. As a result, the purpose and value the Initiative was intended to provide for students in foster care are not clear, as we discuss in more detail.

The statutory intent for CDE to obtain data on which students are in foster care has not been defined and is not clear. Although aspects of the Foster Care Education Initiative were enacted in state law in response to federal requirements (e.g., creation of the Foster Care Education Coordinator, coordination among education and child welfare agencies to transport students in foster care to their school of origin), the General Assembly further specified that CDE and DHS must share data for purposes of accountability, program improvement and research. However, the General Assembly did not define these concepts or explain what it hoped CDE would accomplish through its analyses of data about students in foster care.

When we asked CDE how it defines the three statutory purposes for its data sharing with DHS, staff told us that data sharing for accountability “demonstrates the correlations needed to establish accountability,” data sharing for program improvement “produces the correlations needed to be able to make improvements to the program,” and data sharing for research “provides the understanding

and supporting data to develop and conduct further research.” These responses suggest that CDE has not developed meaningful definitions of each purpose or identified practical ways that CDE can demonstrate how it will fulfill these requirements. CDE reported that its foster care education coordinator uses data on foster care students to determine future technical assistance for local Child Welfare Education Liaisons and as part of preparing a statutorily-required report for the Education Stability Grant program. However, CDE has not leveraged its data to help inform systemic changes intended to improve educational outcomes for students in foster care. CDE staff told us that they only analyze educational data when state or federal laws specifically mandate them to do so.

As of the end of our audit in December 2021, CDE reported that it was in the process of hiring a new staff member with a Doctorate in Evaluation whose responsibilities would include assessing the Foster Care Education Initiative and creating an evaluation design plan that involves further improvement and research work. These efforts could provide an opportunity for CDE to clarify how it defines and practically implements the statutory purposes for its data sharing with DHS.

CDE does not routinely analyze and report on academic outcomes for students in foster care. When we asked CDE staff why they do not leverage all of their available data to report about students in foster care, such as comparing those students’ performance on standardized tests to the general student population, staff told us that CDE only produces reports in response to state or federal mandates. For example, federal and state law require CDE to report high school graduation rates, including for students in foster care [20 USC 6311(h)(1)(C)(iii)(II) and Section 22-14-111, C.R.S.]. Therefore, CDE releases a State Policy Report for Dropout Prevention and Student Engagement annually that includes graduation rate data for foster youth. The most recent report stated that 30.5 percent of students in the class of 2020 who were in foster care graduated, and an additional 29.5 percent of those students received a high school equivalency diploma.

Similarly, although CDE previously established specific aspirational goals for the Foster Care Education Initiative, CDE does not analyze its data and report progress toward fulfilling those goals since neither state nor federal law requires it. Our analyses provide examples of how CDE could potentially leverage its data to monitor progress toward achieving these aspirational goals. For example, analyzing PSAT and SAT test scores could provide insight about whether students in foster care are well-prepared to continue “on a path to postsecondary success,” which is an aspirational goal for the Initiative. CDE staff reported that they utilize data from research conducted by the University of Northern Colorado and the Colorado Evaluation and Action Lab at the University of Denver to analyze educational outcomes for students in foster care and to inform technical assistance and professional development trainings. While examples of this research that CDE provided address issues affecting academic outcomes for students in foster care, such as school stability, the research does not provide a mechanism for ongoing, routine monitoring of educational outcomes among those students.

Why do these problems matter?

For all youth, being academically successful and graduating from high school plays a significant role in shaping independence and positive life prospects upon entering adulthood, including greater employment opportunities, higher-paying jobs, better health, and decreased participation in criminal activity. Yet the disparity in the achievement of youth in foster care compared to the general student population has been shown in various studies. For example, the average 17- to 18-year old in foster care is reported to be reading at a seventh-grade level, while only 44 percent of those students are reading at a high school level. In addition, 33 percent of students in foster care have failed a grade or have been retained in school [Somers CL, Goutman RL, Day A, Enright O, Crosby S, Taussig H., 2020]. If CDE does not routinely track and report data related to the Foster Care Education Initiative's aspirational goals, CDE cannot effectively demonstrate accountability for making progress toward fulfilling those goals, which seem intended to help improve educational outcomes among children in foster care. Similarly, CDE cannot effectively identify and implement initiative improvements or determine what new research could provide useful information for the stakeholders who support those students.

Conducting more robust analyses of its data could also help CDE determine whether the educational and child welfare systems are effectively addressing factors known to affect the academic success of students in foster care. For example, children involved in the foster care system are more likely to have low school engagement, and when those youth experience numerous school changes, they are less likely to develop supportive relationships with school staff and peers. One study of at-risk biologically-reared sixth-graders found that those with stronger feelings of school connectedness were more likely to earn higher grades, suggesting that school connectedness might serve as a protective factor for academic success [Neihaus, Rudasill, & Rakes, 2012]. Analyzing how many different schools students in foster care attend each year could enable CDE and schools to monitor trends in school stability and help identify students who have changed schools frequently and may need greater support.

Recommendation 1

The Colorado Department of Education (CDE) should leverage the educational data it maintains to help increase awareness and understanding of educational outcomes for students in foster care by:

- A. Working with the General Assembly to clarify its intent in requiring CDE to track and report data on students in foster care, define practical ways that CDE may fulfill the statutory purposes of data sharing with the Department of Human Services (DHS) (i.e., accountability, program improvement, and research), and pursue legislation to specify any requirements in statute.
- B. Identifying metrics that would provide meaningful insight about students in foster care, and then working with the General Assembly to pursue legislation that requires ongoing, routine tracking and reporting of that information.

Response

Department of Education

A. Agree

Implementation Date: February 2023

The Colorado Department of Education (CDE) will provide the General Assembly with information on the educational data for students in foster care. Specifically, the Department will offer to provide a presentation to the House and Senate Education Committees on the current data sharing with the Department of Human Services (DHS) and the educational outcomes of students in foster care. CDE will provide any requested information to facilitate the development and pursuit of legislative changes identified by the General Assembly.

CDE has identified an implementation date of February 2023 out of deference to the busy schedule of the General Assembly. In the event the House and Senate Education Committees are unable to schedule a separate meeting with CDE to discuss this topic, CDE will incorporate this topic into the SMART Government Act presentation at the beginning of the 2023 legislative session.

B. Agree

Implementation Date: February 2023

The Colorado Department of Education (CDE) will work to research and identify metrics that would provide meaningful insight about students in foster care. These metrics will be included in the presentation offered to members of the General Assembly. Based upon input and direction from the House and Senate Education Committees and/or subsequent legislation, CDE will adjust the metrics that are tracked and reported on students in foster care.

As stated above, the implementation date was set to allow for this discussion during CDE's SMART Government Act presentation at the beginning of the 2023 legislative session in the event that a separate presentation cannot be scheduled prior to that time.

Finding 2—Data Sharing to Identify Students in Foster Care

Since DHS maintains data on children in foster care, DHS must share certain information about the identity of those children with CDE so that CDE can identify those students in its educational data. CDE identifies foster students in order to fulfill its statutory responsibilities for the Foster Care Education Initiative, which include using student-level data for accountability, program improvement, and research, and performing other activities to coordinate with child welfare education liaisons who work with students in foster care [Section 22-32-138, C.R.S.]. According to CDE, in 2013, the departments executed a Memorandum of Understanding (MOU) to share data about students in foster care. Since then, the MOU has been revised several times. House Bill 18-1306 later codified a requirement for DHS and CDE to have an interagency data sharing agreement in place [Section 22-32-138(9), C.R.S.].

Two versions of the MOU were in effect during the period we reviewed: one version that was effective from December 12, 2017, through May 30, 2020, and a revised version that the departments entered into on May 31, 2020. Under both MOUs, DHS is required to transfer certain identifying information about children in foster care, including names and birthdates, from its child welfare information system, Trails, to CDE. Based on that information, CDE uses a combination of automated and manual processes to identify and flag children who are in foster care, are enrolled in public school, and have records in its data storage system, Data Warehouse.

How were results of the audit work measured, what was the purpose of the audit work, and what work was performed?

The MOU between CDE and DHS that was executed in 2017 and effective through May 30, 2020, stated that one goal of the departments' data sharing was to improve the rate of quality matches between DHS' foster care student data and CDE's educational data [MOU, Appendix C, Section 1(D)(1)].

The purpose of the audit work was to determine whether CDE has appropriately identified students in foster care in its Data Warehouse, based on information provided by DHS.

We obtained educational data for students that CDE identified as being in foster care from July 1, 2018, through June 30, 2019 (Fiscal Year 2019), based on data that CDE had received from DHS. CDE's data included identifying information for individual students, including first name, middle name, last name, and date of birth. In CDE's system, each student is assigned two different unique identification numbers: one that is a masked/encrypted identification number that CDE uses to share individual-level data with external parties so they can match student data across years and datasets, and one that is unmasked, called the State Assigned Student Identification Number (Student Identification Number), that CDE uses to track students within its systems. Student Identification Numbers are personally identifiable information that CDE can share with other state agencies, under appropriate data sharing agreements, to facilitate required data sharing.

We also obtained two sets of DHS data. First, we obtained records from Trails for all children who were in foster care from 2001 through 2019. From that data set, we extracted records for children who were in foster care for at least 1 day during Fiscal Year 2019. Second, we obtained the foster care data that DHS provided to CDE, pursuant to the terms of the MOU between the two agencies, listing children who were in foster care during Fiscal Year 2019. That data contained identifying information including first name, middle name, last name, date of birth, and a unique identifier known as the “Client ID,” which was assigned by DHS.

Using data analysis software, we compared demographic fields in both sets of DHS’ data to similar fields in CDE’s data to determine how many student records matched in the data sets. To identify matching records while accounting for data entry errors, we did not attempt to match every field in the data sets exactly. Rather, we searched for exact matches of a child’s date of birth in combination with partial matches of name fields (e.g., first three letters of the last name).

What problem did the audit work identify?

Overall, we found that in its educational data CDE has flagged a majority of the school-aged children that DHS reported as being in foster care during Fiscal Year 2019. However, we did identify two areas where DHS and CDE could improve their data sharing process to ensure that all foster care children are identified.

First, we compared the foster care data that we obtained directly from DHS’ Trails system to the foster care data that DHS provided to CDE, which should have listed all children who were in foster care during Fiscal Year 2019. We found that the data DHS provided to CDE did not include all children who were identified in Trails as being in foster care during that year. Specifically, the Trails data that we obtained directly from DHS included 8,457 children in foster care during Fiscal Year 2019 compared to the 6,038 (71 percent) foster care children included in the data that DHS provided to CDE. This means that DHS did not provide CDE with a complete list of all children in foster care during the year.

Second, we compared the foster care data that DHS provided to CDE to the list of children that CDE staff flagged in CDE’s Data Warehouse system as being in foster care during Fiscal Year 2019. We found that CDE did not flag at least 273 children in its system as being in foster care even though they were between the ages of 6 to 16 years, which are the ages that children are required by law to be in school. In addition, we identified 149 foster care children aged 4 and 5 years old, and 104 foster care children from 17 through 21 years old, who CDE did not flag in its system, but who could also be attending school or receiving services through the public school system. According to CDE, children in the 4 to 5 year age range can attend public schools for kindergarten although it is not required. Children 17 years and older are not required to attend school, but most students are at least 17 years old when they graduate from high school. Data indicate that children in foster care

often take more than 4 years to graduate, so it is reasonable that some of these older foster care children would still be attending public school. Exhibit 1.17 shows the results of our comparison.

Exhibit 1.17. Ages of Students in DHS’ Foster Care Data Who Were Not Identified as Foster Care Students in CDE’s Data System, Fiscal Year 2019

Student Age Ranges	Number of Unmatched Students	Percentage of Unmatched Students
4-5	149	28%
6-16	273	52%
17-18	87	17%
19-21	17	3%
Total	526	100%

Source: Office of the State Auditor analysis of foster care data that DHS provided to CDE.

In addition, we found that CDE had flagged 164 children as being in foster care even though they did not appear to be listed in the DHS data.

Why did this problem occur?

Query of Foster Care Data. The query methodology that DHS uses, in combination with CDE’s process for updating its records, could have contributed to some of the discrepancies we found. Each data set that DHS provides to CDE includes only records for children who enter foster care during the year for which DHS is providing data, not children who were placed in foster care during prior years. For the year we analyzed, DHS only provided CDE records for children who were placed in foster care on or after July 1, 2018, which was the first day of Fiscal Year 2019.

DHS staff told us that this approach is intentional, and that they rely on CDE to update its records based on historical data sets that DHS previously provided. However, CDE staff reported that they do not update CDE’s records each year based on historical data from DHS, such as to remove the flags for any children who are no longer in foster care. CDE staff told us it would be helpful if DHS modified its query and routinely provided a complete set of data for all children currently in foster care, regardless of their placement date.

Data-Matching Process. CDE and DHS have not established a data-matching process that successfully matches all foster care students. According to the 2017 MOU, after receiving a list of children in foster care from DHS each month, CDE was supposed to add the Student Identification

Number to individual student records, if needed, and then send the list back to DHS so staff could update the Student Identification Numbers in DHS' data. The 2020 MOU contained a similar provision. However, even though CDE reported that it sends data back to DHS with Student Identification Numbers added, the departments' data do not contain a common Student Identification Number that they can use to identify specific children in both data sets. DHS staff also told us that the Trails database cannot include the Student Identification Numbers because there is no field to contain it. Staff from both agencies acknowledged that the provision was included in both 2017 and 2020 MOUs to reflect the best intentions of the agencies to improve their data matching even though, in practice, they do not actually use the Student Identification Numbers as part of the matching process.

Rather than relying on the process detailed in the MOU, the departments assign different identifiers to identify specific students within their respective databases. The absence of a common numerical identifier makes matching students in each dataset difficult. As a result, CDE staff use an automated process combined with some manual review to match demographic information, such as date of birth and name fields, to identify students who are in foster care. However, this process has limitations, because we observed, and staff at both departments acknowledged, that the data could have errors, such as misspelled names and inaccurate dates of birth.

As a result, staff might not recognize records with data entry errors as possible matches. Examples we found included a child with the same first and last name in both data sets that had a birth date of 11/2/2003 in CDE's data and a birth date of 11/20/2003 in DHS' data; it is probable that these records referred to the same child. Similarly, another child with matching first and last names had a birth date entered as 3/21/12 in CDE's data and 3/12/12 in DHS' data. Some data entry errors affected name spellings, such as a child listed as "Issac" in one data set and "Isaac" in the other data set. Other discrepancies are due to minor differences such as a last name that has a hyphen in one department's data and a space, rather than a hyphen, in the other department's data. Although staff reported that CDE has a process to standardize data it receives from different schools, such as replacing hyphens with spaces and removing apostrophes from names, CDE and DHS do not have a similar process.

CDE staff told us that they assume the data from DHS is accurate and do not check the data for errors. Both CDE and DHS staff told us that they occasionally contact caseworkers at county departments of human/social services or school staff to determine the accurate dates of birth and rectify spelling errors. However, DHS and CDE staff acknowledged that they do not perform these types of checks for every student due to time constraints, nor do they communicate with each other if they find data errors.

Frequency and Method of Data Sharing. DHS does not provide foster care data to CDE throughout the year, even though the departments' MOU requires data sharing on a monthly basis and routine, ongoing data sharing could help ensure that CDE has up-to-date information about which students are in foster care. The 2017 MOU required CDE to request data from DHS on a

monthly basis and in late September each year, and the data from DHS was to include identifying information for students in foster care from July 1 through the current day (for data provided each month) and students in foster care during the preceding fiscal year (for data provided annually in the fall).

The method to initiate data transfers changed in the 2020 version of the MOU. Previously, the MOU stated, “Data is requested from CDHS by CDE on a monthly basis,” which put the onus on CDE to initiate the data-sharing process. The 2020 MOU changed this provision to state, “CDHS will provide the Data...on a monthly basis.” However, according to both departments, DHS does not send foster care data to CDE automatically on a monthly basis. As of January 2022, CDE staff reported that, since Fiscal Year 2021, DHS only provided foster care data to CDE four times a year. Since the departments have not shared data as frequently as contemplated when they first executed the MOU, they have not maintained up-to-date records on children in foster care, which could explain some of the discrepancies we found.

Why does this problem matter?

Maintaining incomplete data on students in foster care could affect the accuracy and validity of data CDE is required to report on that population. For example, CDE is statutorily required to report dropout, graduation, and completion data for students in foster care as part of its annual state policy report on dropout prevention and student engagement [Section 22-14-111, C.R.S.]. CDE also reports information about students in foster care in its annual state report card required under the federal Every Student Succeeds Act. Because CDE does not have a complete, accurate list of students in foster care, these reports do not reflect complete data about that population.

Recommendation 2

The Colorado Department of Education (CDE) and Department of Human Services (DHS) should work together to improve CDE’s tracking of students who are in foster care by:

- A. Ensuring that the data DHS provides to CDE is based on a methodology that includes all children who were in foster care during a given year, regardless of when they were placed in foster care.
- B. Developing and documenting a more robust data-matching process, including specifying which fields the departments will use to match records and how they can identify records associated with the same child despite data entry differences that may be present between their data systems.
- C. Ensuring that each department provides data to one another on the frequency required by the departments’ memorandum of understanding (MOU).

- D. Updating the MOU to reflect the departments' actual data-sharing process, which could include a reference in the MOU to a separate document that outlines the data-matching algorithm developed in response to Part A.

Response

Department of Education

- A. Agree

Implementation Date: January 2023

The Colorado Department of Education (CDE) will work in partnership with the Department of Human Services (DHS) to better coordinate the data sharing and matching process. Specific to this Recommendation 2, Part A, CDE will work with DHS to obtain files which contain all children who were in foster care during a given period, regardless of start date, to ensure CDE can flag all students who were in foster care during each school year. CDE will also work with DHS to determine how to identify students who have exited foster care and who should not be flagged in following school years. CDE anticipates it will receive the first file from DHS with the new format and data no later than June 2022. CDE will then need time to adjust internal processes and data systems to accommodate the new file format and data. As part of adjusting the internal processes, CDE will need to make modifications to the Student October and Student End of Year data collections. The January 2023 implementation date was selected because the validation of the changes rely on the Student October and Student End of Year data, which are received from school districts in the fall. This data is released in the month of January each year.

- B. Agree

Implementation Date: August 2022

The Colorado Department of Education (CDE) will improve the documentation for the matching process and also share this documentation with the Department of Human Services (DHS) so both agencies have input about and clarity with the matching process. This will include documenting the fields, logic, and processes used to match the records between DHS and CDE. CDE will update the documentation to reflect that CDE only has access to students reported by districts in the public school system. CDE will continue its ongoing effort to explore potential improvements upon the current match rate which we are seeing today. The matching improvements will involve working with DHS on data quality concerns and collaborating on the best way to standardize the data between the two departments. CDE will monitor these improvements working with DHS to perform a comparison of the improved solutions using a common data set which is shared between both departments. As mentioned in Recommendation 2, Part A, CDE anticipates receiving the first updated file from DHS by June

2022. CDE will then need time to test the updated matching process with the new file to ensure the updated process works and determine if additional adjustments are necessary.

C. Agree

Implementation Date: June 2022

The Colorado Department of Education (CDE) will work with the Department of Human Services (DHS) to adhere to the terms of the MOU, including the frequency of data sharing required by the MOU.

D. Agree

Implementation Date: March 2023

The Colorado Department of Education (CDE) will work with the Department of Human Services (DHS) to update the MOU to reference documentation once CDE and DHS have collaboratively developed and finalized the data processing and sharing documentation referenced in Recommendation 2, Parts A-C. Given the many steps involved in the data processing and matching, the minute and technical details of data processing logic, and the likely need for data analysis to occasionally update components of the documentation, CDE believes the most efficient way to ensure compliance with the documented process is to store the document in a shared location with DHS and reference the document in the MOU. CDE will work with DHS to ensure the documentation is in a shared location which data analysts from both agencies can access and that the documentation also includes a clear communication plan between agencies when updates need to be made. CDE plans that all updated documentation for the data processing and sharing will be complete as of January 2023 (see response to Recommendation 2, Part A). In addition to a dependency on the receipt of the DHS data file scheduled for June (Recommendation 2, Part A), CDE utilizes data submitted in the annual Student October (for the current school year) and Student End of Year data collections (for the preceding school year). The March 2023 implementation date was selected because the validation of the changes rely on these data. Each collection must go through a multi-month verification process. These data are released in the month of January each year. Therefore, the MOU update, which references that final documentation, should be complete by March 2023.

Response

Department of Human Services

A. Agree

Implementation Date: June 2022

The Department will modify its query to include both services that started before and occurred during the fiscal year as well as new services that started during the fiscal year. The Department will also expand its query to include youth that are in independent living, youth that are in

detention, and youth that are involved in child welfare within a Division of Youth Services facility setting. This may not increase the match percentage but will allow the largest population to be matched against.

B. Agree

Implementation Date: June 2022

The Department will provide the Department of Education a sample of a data-matching algorithm, to improve the data-matching process in the short term and will work with the Department of Education to document and improve the data-matching process and to account for differences in each Department's databases.

C. Agree

Implementation Date: June 2022

The Department will work with the Department of Education to adhere to the terms of the MOU regarding the data-sharing process, including the frequency of data shared.

D. Agree

Implementation Date: June 2022

The Department will work with the Department of Education to update the MOU to reflect the departments' actual data-sharing process and to reflect the use of a data matching algorithm.

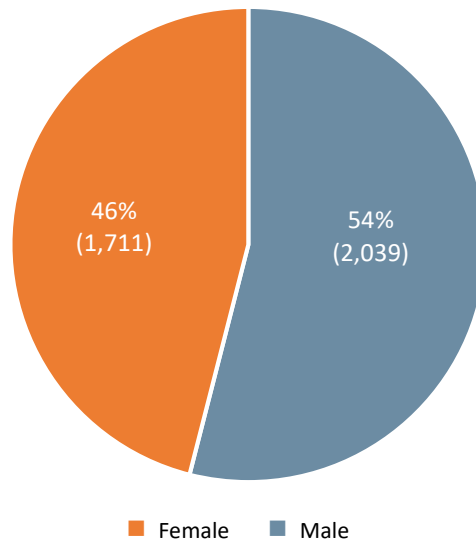
Appendix A

Comparison of Foster Care Students to Non-Foster Care Students

We analyzed student-level educational data for all students, including those in foster care, for the 2013-2014 through 2018-2019 school years. Highlights from our analyses appear in the sections below.

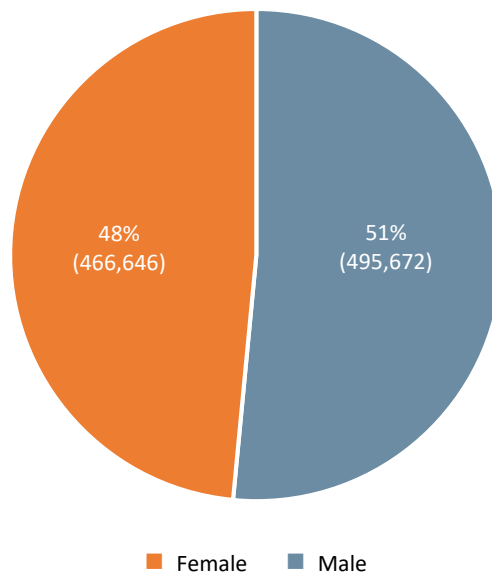
GENDER

Foster Care Students by Gender, 2018-2019



Source: Office of the State Auditor analysis of CDE data.

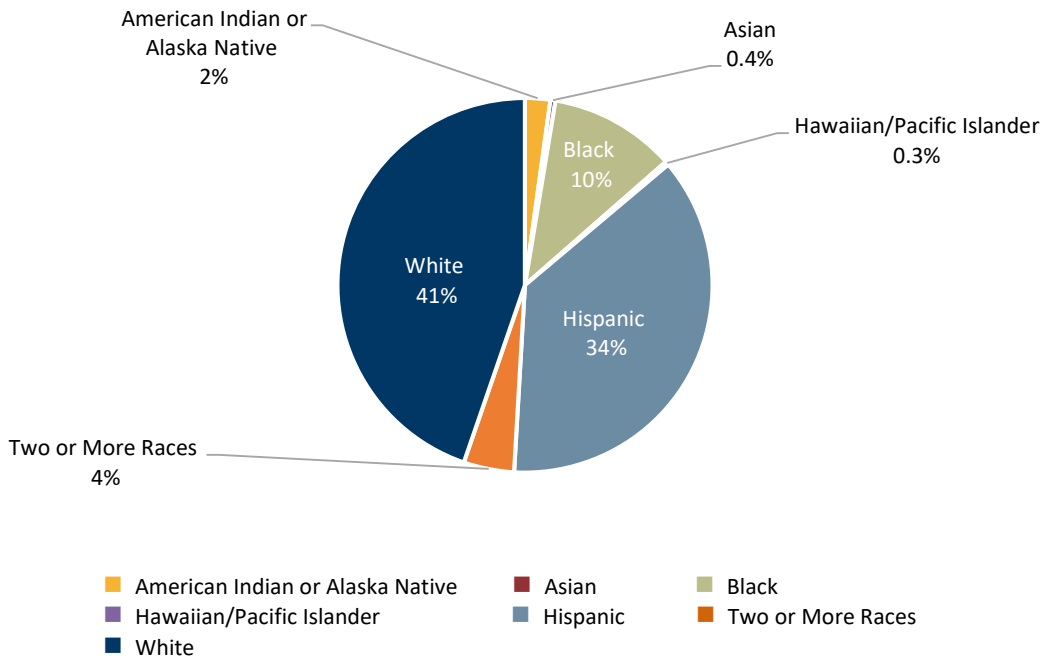
Non-Foster Care Students by Gender, 2018-2019



Source: Office of the State Auditor analysis of CDE data.

ETHNICITY

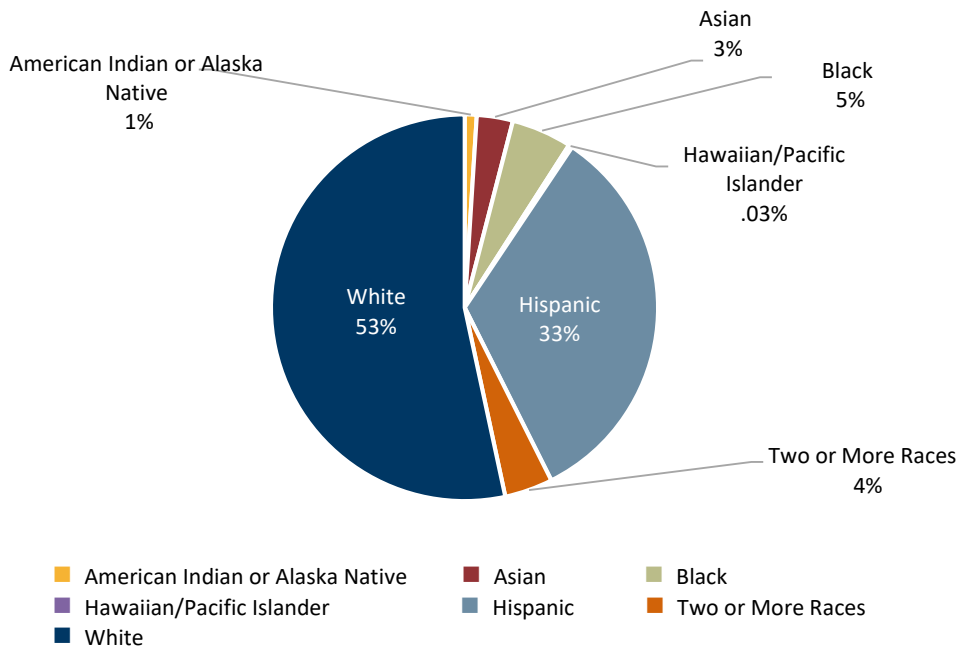
Foster Care Students by Ethnicity¹, 2018-2019



Source: Office of the State Auditor analysis of CDE data.

¹ CDE’s data categorized 8 percent of students in foster care as having more than one of the ethnicities listed above (White, American Indian or Alaska Native, Asian, Black, Hawaiian/Pacific Islander, Hispanic, or Two or More Races). These students are not reflected in the exhibit.

Non-Foster Care Students by Ethnicity¹, 2018-2019

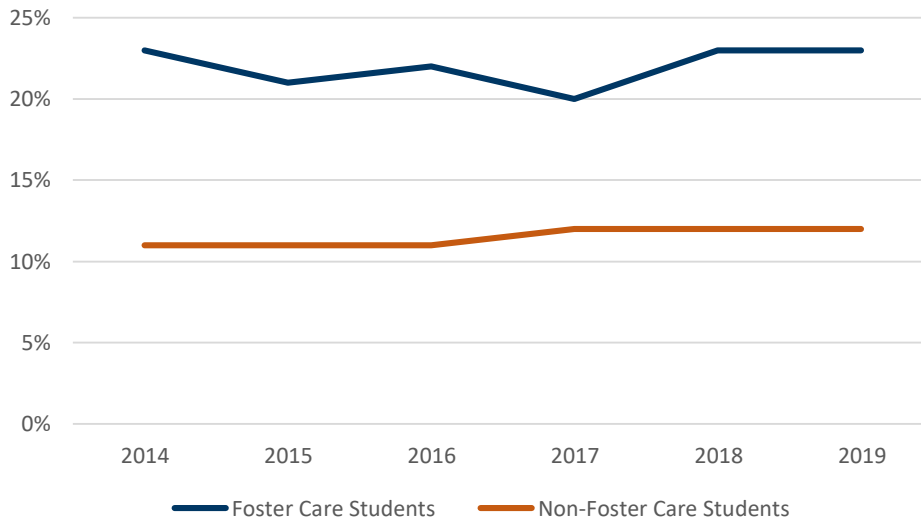


Source: Office of the State Auditor analysis of CDE data.

¹ CDE’s data categorized 1 percent of non-foster care students as having more than one of the ethnicities listed above (White, American Indian or Alaska Native, Asian, Black, Hawaiian/Pacific Islander, or Hispanic). These students are not reflected in the exhibit.

SPECIAL EDUCATION

Foster Care and Non-Foster Care Students in Special Education¹, 2014-2019



Source: Office of the State Auditor analysis of CDE data.

¹ Special education refers to students with exceptional educational needs due to a disability, or learners who are culturally and/or linguistically diverse or have some other special need.

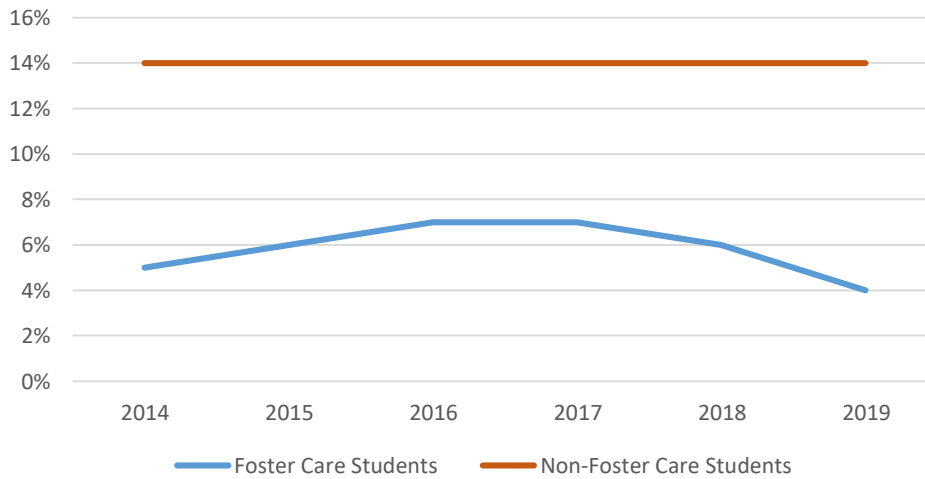
Students in Special Education

	2014	2015	2016	2017	2018	2019
Foster Care Students	1,112	1,052	1,106	871	1,363	863
% of Foster Care Students	23%	21%	22%	20%	23%	23%
Non-Foster Care Students	101,942	103,585	106,939	111,059	114,399	119,018
% of Non-Foster Care Students	11%	11%	11%	12%	12%	12%

Source: Office of the State Auditor analysis of CDE data.

ENGLISH LANGUAGE LEARNERS

Foster Care and Non-Foster Care Students English Language Learners¹, 2014-2019



Source: Office of the State Auditor analysis of CDE data.

¹CDE defines English language learners as students who are linguistically diverse and who are identified using the State-approved English language proficiency assessment and a body of evidence as having a level of English language proficiency that requires language support to achieve standards in grade-level content in English.

English Language Learner Students

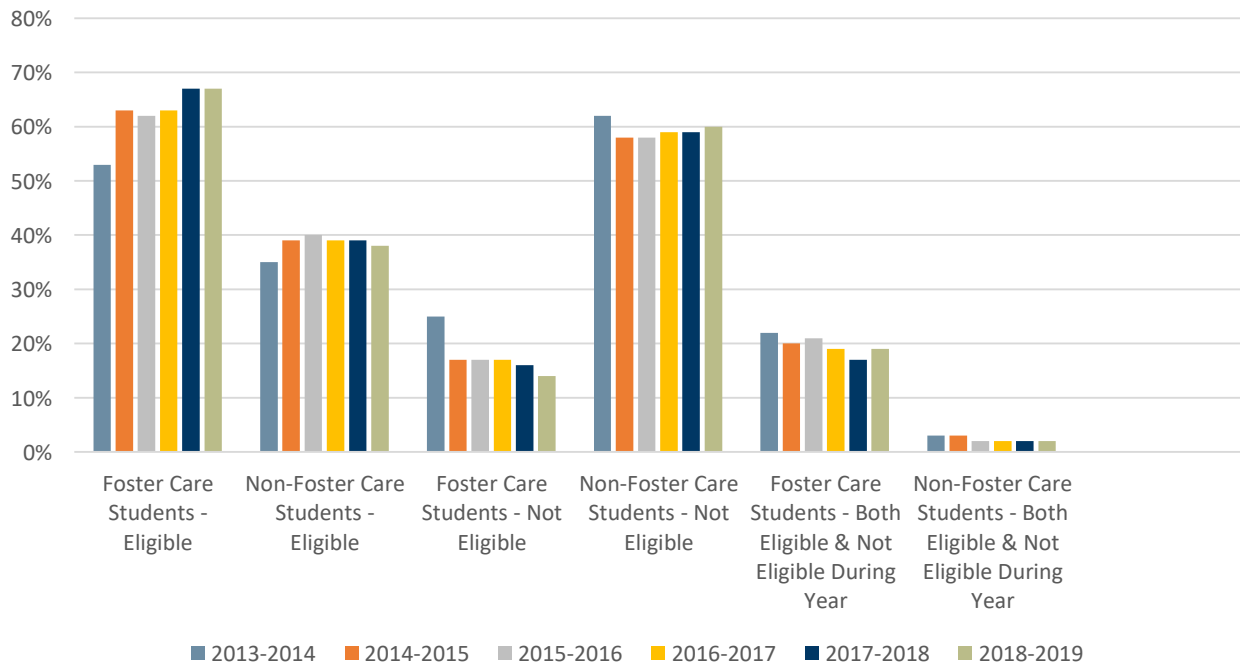
	2014	2015	2016	2017	2018	2019
Foster Care Students	255	310	332	297	356	149
% of Foster Care Students	5%	6%	7%	7%	6%	4%
Non-Foster Care Students	132,234	135,834	137,128	135,423	133,962	131,262
% of Non-Foster Care Students	14%	14%	14%	14%	14%	14%

Source: Office of the State Auditor analysis of CDE data.

FREE AND REDUCED SCHOOL LUNCHES

CDE is required by federal law to provide supplemental supports to foster care students, such as free or reduced-cost school lunches and transportation, which can help increase their chance for academic success. In some cases, CDE’s data showed that students could be both eligible and ineligible for free or reduced lunches during the same school year. For example, students who were ineligible for free or reduced lunch at the beginning of a school year could have become eligible if they were placed into foster care partway through the year.

Foster Care and Non-Foster Care Students Free & Reduced Lunch Eligibility, By Percentage 2014-2019



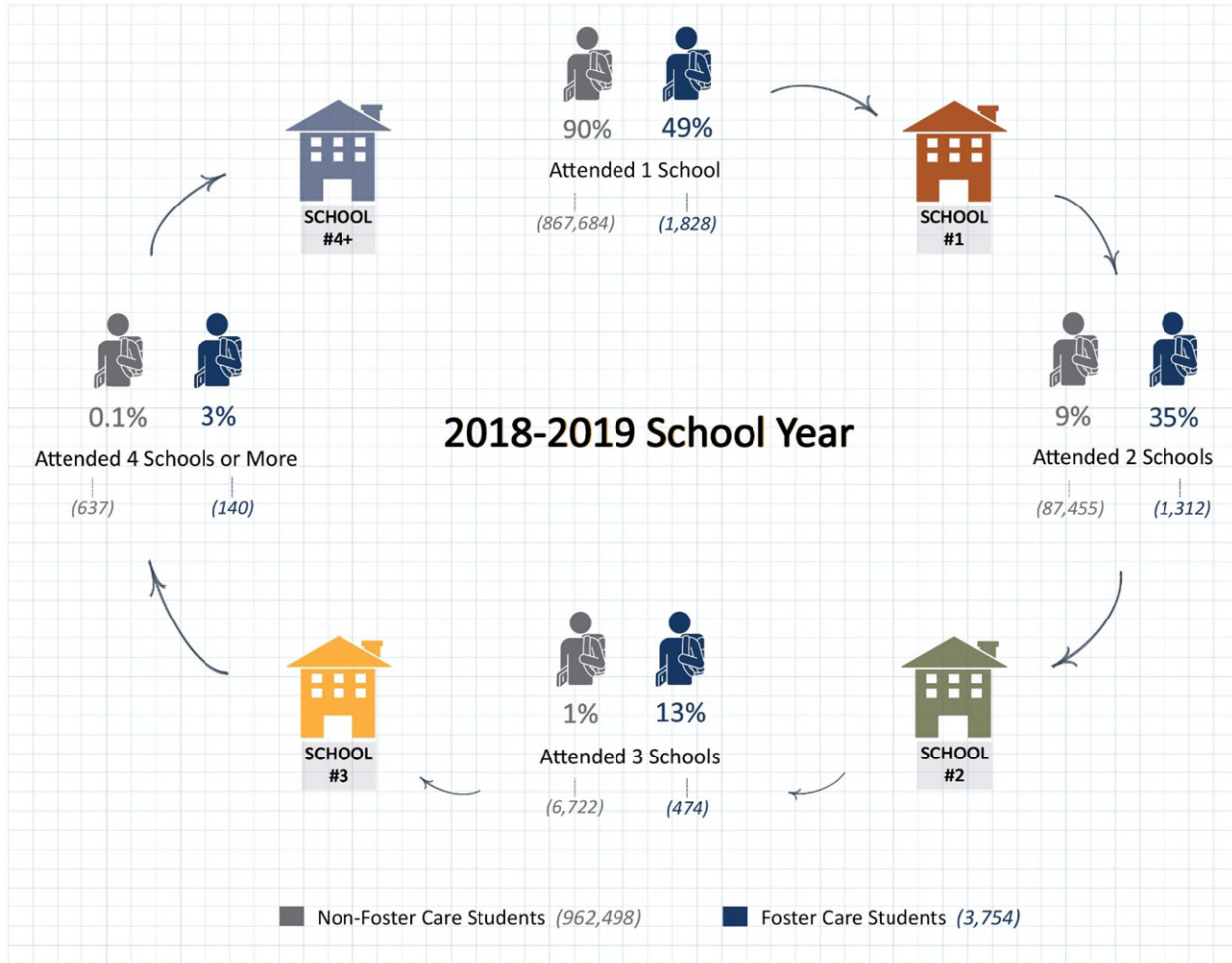
Source: Office of the State Auditor analysis of CDE data.

**Foster Care and Non-Foster Care Students
Free & Reduced Lunch Eligibility
2014-2019**

	Eligible				Not Eligible				Both Eligible and Not Eligible During the Year			
	Foster Care Students		Non-Foster Care Students		Foster Care Students		Non-Foster Care Students		Foster Care Students		Non-Foster Care Students	
2014	2,567	53%	323,103	35%	1,212	25%	577,877	62%	1,051	22%	25,846	3%
2015	3,121	63%	370,137	39%	825	17%	547,039	58%	1,010	20%	23,765	3%
2016	3,145	62%	377,539	40%	882	17%	547,811	58%	1,046	21%	23,686	2%
2017	2,825	63%	372,871	39%	764	17%	560,049	59%	868	19%	21,987	2%
2018	3,908	67%	372,769	39%	944	16%	565,923	59%	994	17%	21,076	2%
2019	2,503	67%	369,261	38%	544	14%	572,766	60%	707	19%	20,471	2%

Source: Office of the State Auditor analysis of CDE data.

NUMBER OF SCHOOLS ATTENDED



Source: Office of the State Auditor analysis of CDE data.

CMAS SCORES

Colorado Measures of Academic Success (CMAS) is the state summative assessment for English language arts, math, science, and social studies and is designed to gauge how well students are mastering the standards and are prepared for their next grade. Currently, CMAS Math and English language arts are administered to grades 3-8, while CMAS Science is administered to grades 5, 8, and 11. CDE uses the following scales to define expectations for scores on CMAS tests.

Scale Score Ranges for CMAS Tests

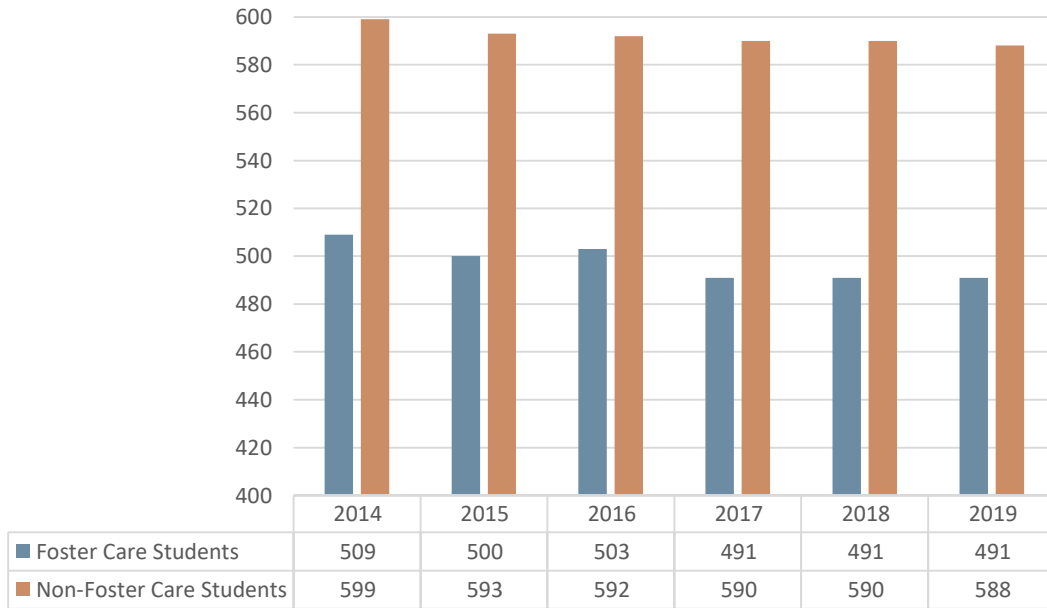
CMAS Science—Overall Scale Score Ranges				
Grade Level	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4
Grade 5	300-545	546-649	650-770	771-900
Grade 8	300-555	556-651	652-784	785-900
High School	300-542	543-672	673-773	774-900

CMAS Mathematics—Overall Scale Score Ranges					
Grade Level/ Content	Does Not Yet Meet Expectations	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4	Level 5
Grade 3	650-699	700-724	725-749	750-789	790-850
Grade 4				750-795	796-850
Grade 5				750-789	790-850
Grade 6				750-787	788-850
Grade 7				750-785	786-850
Grade 8				750-800	801-850

CMAS English Language Arts—Overall Scale Score Ranges					
Grade Level	Does Not Yet Meet Expectations	Partially Met Expectations	Approached Expectations	Met Expectations	Exceeded Expectations
	Level 1	Level 2	Level 3	Level 4	Level 5
Grade 3	650-699	700-724	725-749	750-809	810-850
Grade 4				750-789	790-850
Grade 5				750-798	799-850
Grade 6				750-789	790-850
Grade 7				750-784	785-850
Grade 8				750-793	794-850

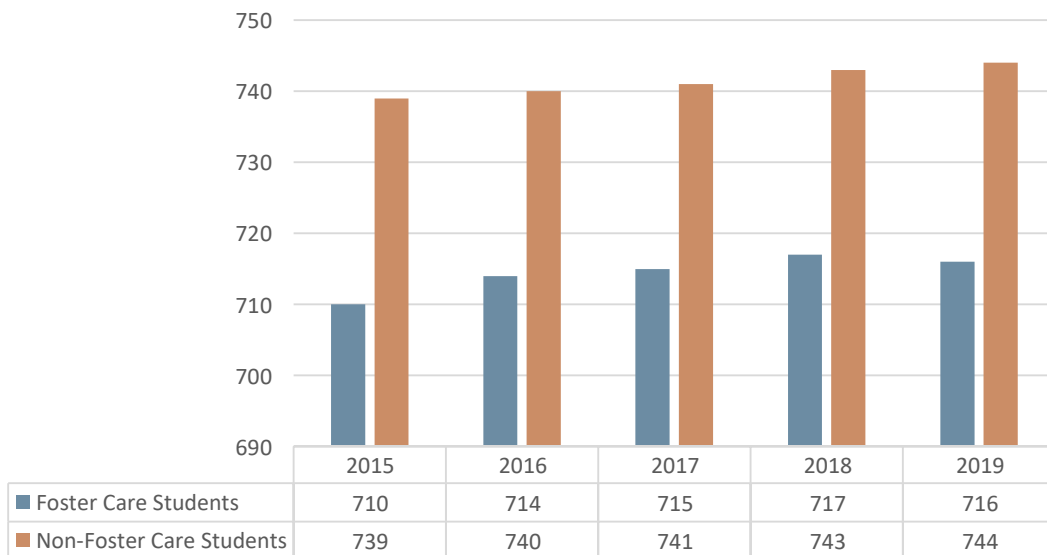
Source: Colorado Department of Education.

**Foster Care and Non-Foster Care Students
CMAS Science Average Scores,
2014-2019**



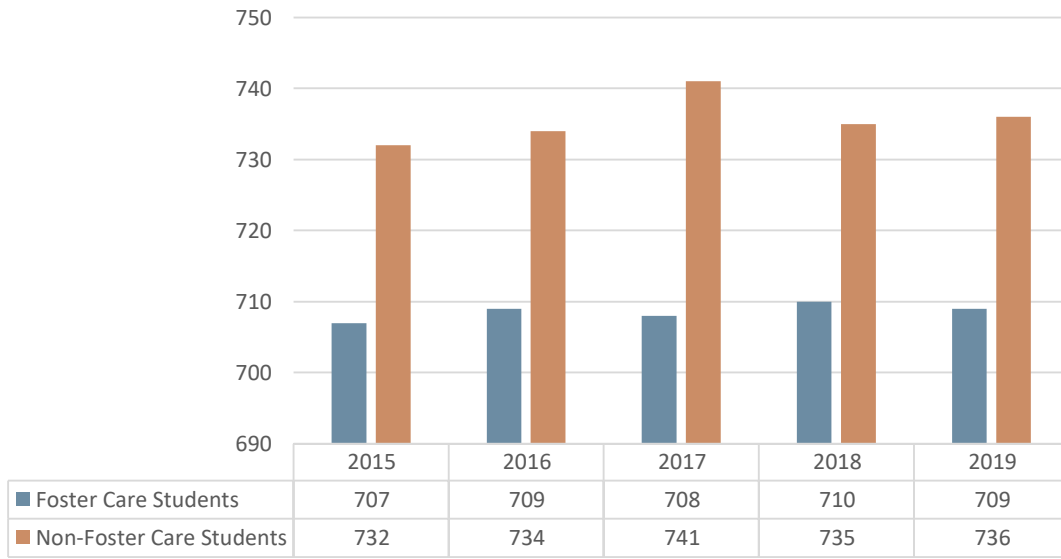
Source: Office of the State Auditor analysis of CDE data.

**Foster Care and Non-Foster Care Students
CMAS English Language Arts Average Scores,
2015-2019**



Source: Office of the State Auditor analysis of CDE data.

**Foster Care and Non-Foster Care Students
CMAS Math Average Scores,
2015-2019**



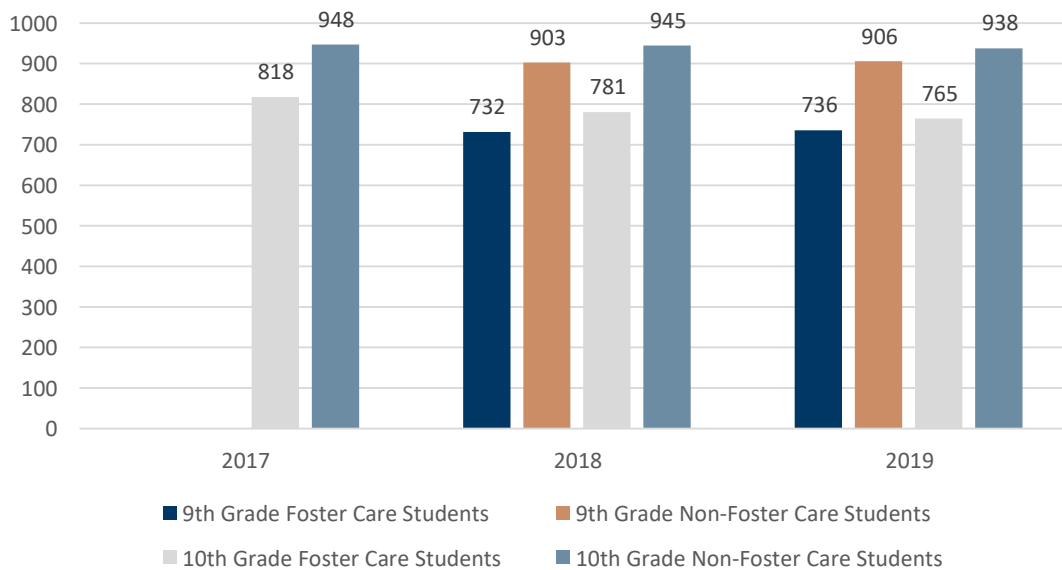
Source: Office of the State Auditor analysis of CDE data.

PSAT SCORES

The PSAT, or Preliminary Scholastic Aptitude Test, is the ninth and tenth grade Colorado state summative assessment for language arts and mathematics. Created by College Board, the PSAT is aligned to the Colorado Academic Standards and measures a student’s mastery of the standards in reading, writing and language, and math. Ninth grade students take the PSAT 9. Tenth grade students take the PSAT 10.

The PSAT helps students prepare for the SAT (Scholastic Aptitude Test), an important college entrance exam taken by all Colorado eleventh graders. Since the SAT is used by most colleges to accept students and grant scholarships, taking the PSAT is a key step for students preparing to go to college. Students will receive scores between 320 and 1520. This score represents the combined score of student progress in the math section and the reading and writing section.

Foster Care and Non-Foster Care Students PSAT Average Scores, 2017-2019¹



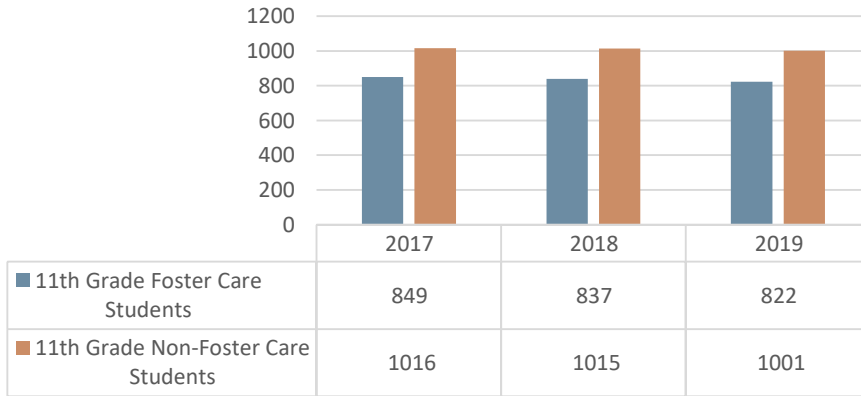
Source: Office of the State Auditor analysis of CDE data.

¹ CDE did not have data showing PSAT scores for 9th grade foster care students during the 2017 school year.

SAT SCORES

The SAT, or Scholastic Aptitude Test, is an important state summative assessment taken by all Colorado eleventh grade students. Created by College Board, the SAT measures a student’s academic progress through 11th grade and assesses their level of preparedness for college and career. The SAT is used by most colleges and universities for admission and scholarship opportunities. Students will receive scores between 400 and 1600. This score represents the combined score of student progress in the math section and the reading and writing section.

Foster Care and Non-Foster Care Students Average SAT Scores, 2017-2019

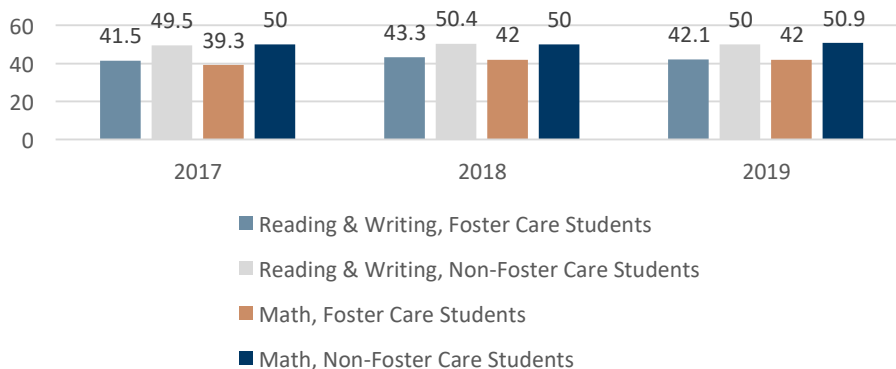


Source: Office of the State Auditor analysis of CDE data.

SAT Growth

A student growth percentile defines how much relative growth a student made. The Colorado Growth Model serves as a way for educators to understand how much growth a student makes relative to a student’s academic peers. More specifically, the Colorado Growth Model essentially compares each student’s current achievement to students in the same grade throughout the state who had similar assessment scores in past years. The model then produces a student growth percentile.

Foster Care and Non-Foster Care Students Average SAT Growth Percentile, 2017-2019



Source: Office of the State Auditor analysis of CDE data.



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