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Dollars and Data:

A Look at PK-12 Funding and
Performance in Colorado

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ABOUT THE AUTHORS

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ABOUT COMMON SENSE INSTITUTE

Common Sense Institute is a non-partisan research organization dedicated to the protection and promotion of Colorado's economy. CSI is at the forefront of important discussions concerning the future of free enterprise in Colorado and aims to have an impact on the issues that matter most to Coloradans.

CSI's mission is to examine the fiscal impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI employs rigorous research techniques and dynamic modeling to evaluate the potential impact of these measures on the Colorado economy and individual opportunity.

Common Sense Institute was founded in 2010 originally as Common Sense Policy Roundtable. CSI's founders were a concerned group of business and community leaders who observed that divisive partisanship was overwhelming policymaking and believed that sound economic analysis could help Coloradans make fact-based and common sense decisions.

TEAMS & FELLOWS STATEMENT

CSI is committed to independent, in-depth research that examines the impacts of policies, initiatives, and proposed laws so that Coloradans are educated and informed on issues impacting their lives. CSI's commitment to institutional independence is rooted in the individual independence of our researchers, economists, and fellows.

At the core of CSI's mission is a belief in the power of the free enterprise system. Our work explores ideas that protect and promote jobs and the economy, and the CSI team and fellows take part in this pursuit with academic freedom. Our team's work is driven by data-driven research and evidence. The views and opinions of fellows do not reflect institutional views of CSI. CSI operates independently of any political party and does not take positions.

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Introduction

As the Covid-19 pandemic recedes, leaving in its wake declining public school student enrollment and achievement, local, state, and federal dollars continue to flow to the Colorado public education system in ever-larger amounts.

While some of this expansion in the most recent years can be attributed to the massive infusion of COVID-19 relief dollars, which will begin to dry up a year from now, it continues a trend that has been evident over a longer period of time. While some argue that Colorado's public schools are underfunded, the school system continues to receive larger contributions from local, state, and federal sources year after year.

At the same time, student enrollment steadily declined for many districts and is forecasted to continue a downward slide for the foreseeable future. The financial challenges specific schools will face will be exacerbated as federal relief funds will soon run out.

Student achievement, as reflected in the Colorado Measures of Academic Success (CMAS) results, made only a modest recovery in English Language Arts (reading and writing) in 2022 after a huge plunge in 2021, according to the admittedly imperfect and incomplete data collected last year. Math scores continued to slide, and fewer than four in 10 Colorado students can perform grade-level math proficiently.

Each year, the Colorado Department of Education releases a new set of data capturing the finances of Colorado's PK-12 public education system. This report summarizes several different dimensions of the financial data, and shows key trends of how the system of education funding and spending has changed over time.

Key findings

K-12 Enrollment has not recovered from the pandemic dip

- K-12 student enrollment in in the 2021–2022 school year dipped by 1,174 students. This was relatively flat after a plunge of almost 22,000 students the year before. Prior to 2021, K-12 enrollment grew every year since 2012, albeit at a declining rate.
 - Enrollment declines hit Denver metro area districts especially hard, but were also pronounced in the Pikes Peak and North Central regions.
 - The Northeast region gained students over the course of the pandemic, with enrollment growing from 14,825 in 2020 to 17,690 in 2022.

- After declining by 8,000 students in 2020, pre-school enrollment grew by nearly 4,500 students in 2021. When including PK enrollment, total PK-12 enrollment grew slightly from 2020 levels.

Funding for PK-12 education in Colorado did not suffer major cuts due to drops in local and state funding, but federal relief funds will soon be gone

- Because of a temporary increase in federal funding, budgets for PK-12 education across every region avoided major cuts, even as education continues to be crowded out of the state budget by spending on other areas.
 - Apart from the pandemic year (FY 2020), funding has been steadily increasing since 2013 when the state's economy began rebounding from the Great Recession.
 - Between 2011 and 2021, total revenue (local, state, and federal) to Colorado school districts increased by 52 percent.
- State inflation adjusted per-pupil revenue from all local, state, and federal sources has remained flat at between \$14,000 and \$15,000 since 2011.
- After three years of massive federal spending in education through Covid relief funds, federal funding will drop as the more than \$2.5 billion in relief funds are spent down. Hopefully the funds were deployed prudently and not used to create long-term financial commitments.
- For the first time in recent years—with fiscal year 2021 being defined by pandemic disruption—Colorado's General Fund appropriation decreased and, consequently, so did the education portion. However, since that low point, the Education General Fund appropriation grew by \$480M, while the total General Fund appropriation grew by \$2.61B. This means that education saw a 12 percent increase in appropriations over the last two budget cycles yet continued its trending decline as an overall share of the state's General Fund which grew by 23.3 percent.

A greater proportion of school district spending is taking place away from classrooms

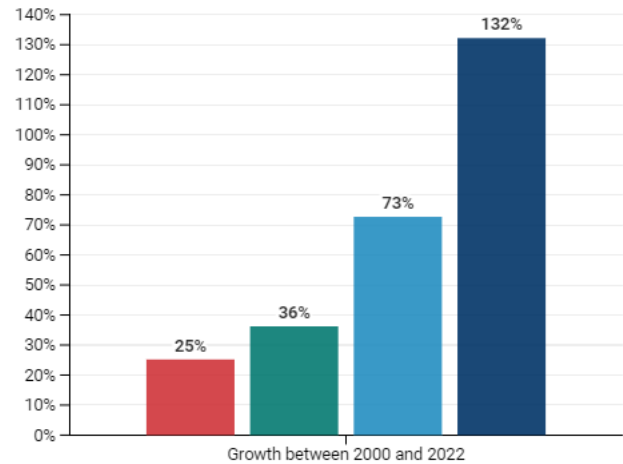
- There is a downward trend in the share of dollars being spent on instruction, and more specifically, on teacher salaries. Operations, school and district administration, and support for students all saw increases as a share of total spending from 2011 to 2021.

- The share of total spending being allocated to instruction, which covers teacher salaries, has decreased on average across the state between 2011 and 2021, from 45.4 percent to 39.1 percent.
- The growth in central office administrators—which has increased by 132 percent—has far outstripped student population growth over the past 22 years, as well as the growth in teachers. The number of building principals has also grown 73 percent, twice the rate of teachers (36%), and at three times the rate of student numbers (25%).

Public PK–12 Educational Staff Growth between 2000 and 2022

Since 2000, the number of students in Colorado has risen by a quarter. In that same time, the number of principals has grown almost three times faster and the number of administrative staff has grown over five times faster. There are now 6.85 students for every public school staff, whereas there were 8.65 students per staff in 2000.

■ Student Count ■ Teacher Count ■ Principal Count ■ Administrator Count



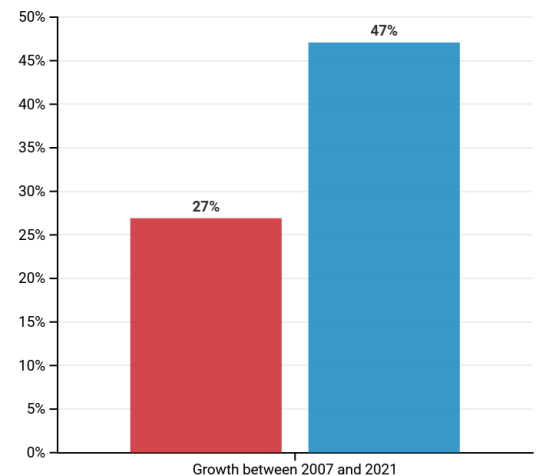
Teacher salaries continue to rise, but regional disparities are large in pay and turnover

- In 2021-22, the statewide average teacher salary was \$60,234. The state average, however, masks the wide variation in salaries that occurs at the regional and school district level.
- Over the last 14 years, the state’s funding per student has increased by 47 percent. Meanwhile, the average teacher salary has grown by 27 percent.
- Even as funding received by school districts continues to increase, there is not an equivalent rise in teacher pay, which hurts schools’ ability to recruit and retain teachers.
- Urban and suburban salaries outpace rural salaries even as the cost of living in the rural areas has increased. The average salary for the Metro region in 2021 was \$62,700, compared to the Southeast region’s average salary of \$41,365.

Growth of Teacher Salaries and Per-pupil Education Funding in Colorado from 2007 to 2021

Over the last 14 years, education revenue per pupil has increased by almost 50% and the average teacher salary has grown by only 30%.

■ Average Teacher Salary ■ Funding per Student



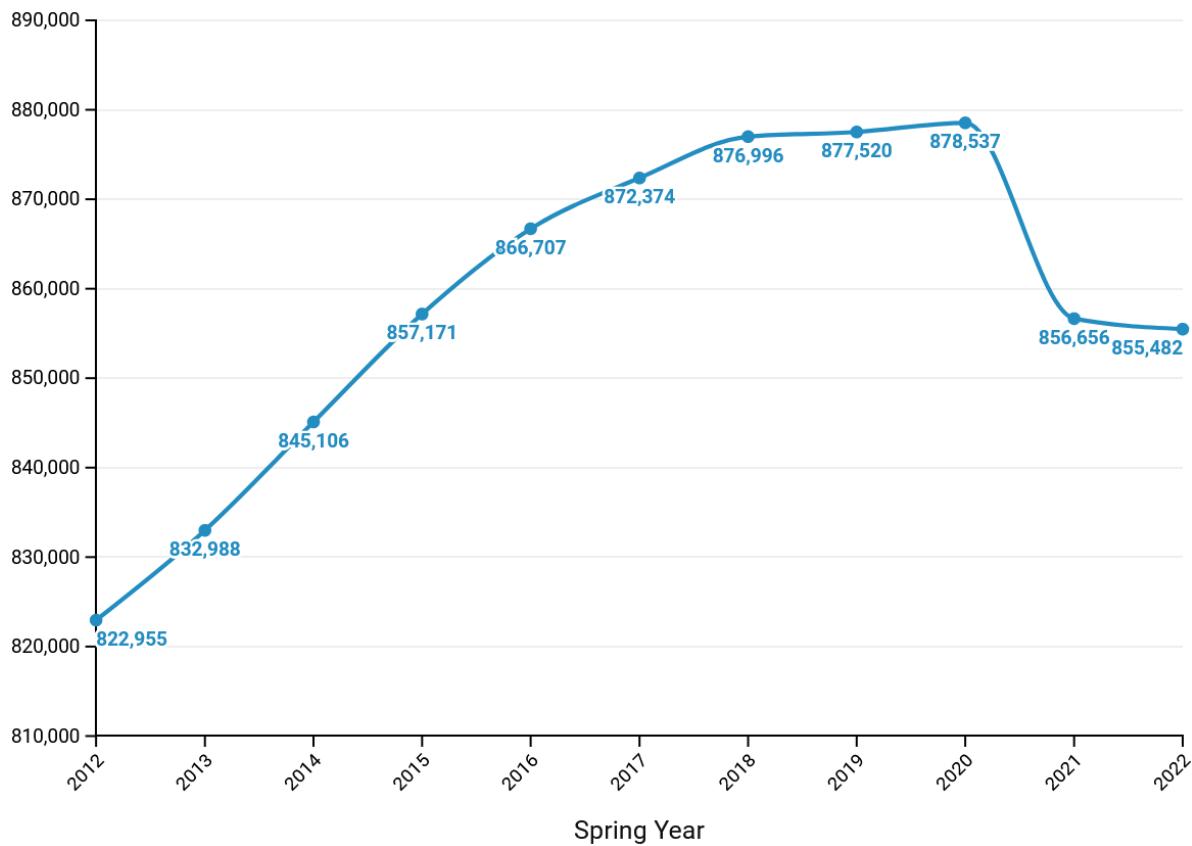
- Teacher turnover rates varied widely across Denver Metro Area districts. There was a strong correlation between higher salaries and lower turnover rates. In Littleton, for example, the teacher turnover rate was 9.3 percent and the average salary was \$73,196. In Clear Creek, at the other end of the Metro Area turnover spectrum, the turnover rate was 21.9 percent and the average salary was \$50,510.
- The average turnover rate in FY 2021 for Colorado employees in all other industries is 2.9 times the turnover rate for teachers—41.5 percent compared to 14.3 percent.

Part 1: Enrollment

Because funding is tied to student enrollment levels, it should generally mirror enrollment trends. Prior to the pandemic, enrollment was increasing year over year, but the rate of growth has been slowing over time (see Figure 1). From 2010 to 2015, the rate of growth was between a 1.1 and 1.6 percent increase. That rate slowed in 2016-17 and was down to a 0.1 percent increase in 2018. When COVID-19 hit in 2020, the public K-12 system lost over 30,000 students, representing a 3.3 percent decline in enrollment.

The Colorado Legislature passed a measure to keep funding levels for school districts based on the fall 2019 enrollment numbers rather than use the lower fall 2020 numbers. The fall 2021 student count, conducted last October, showed a continued enrollment decline of 1,174 K-12 students statewide.

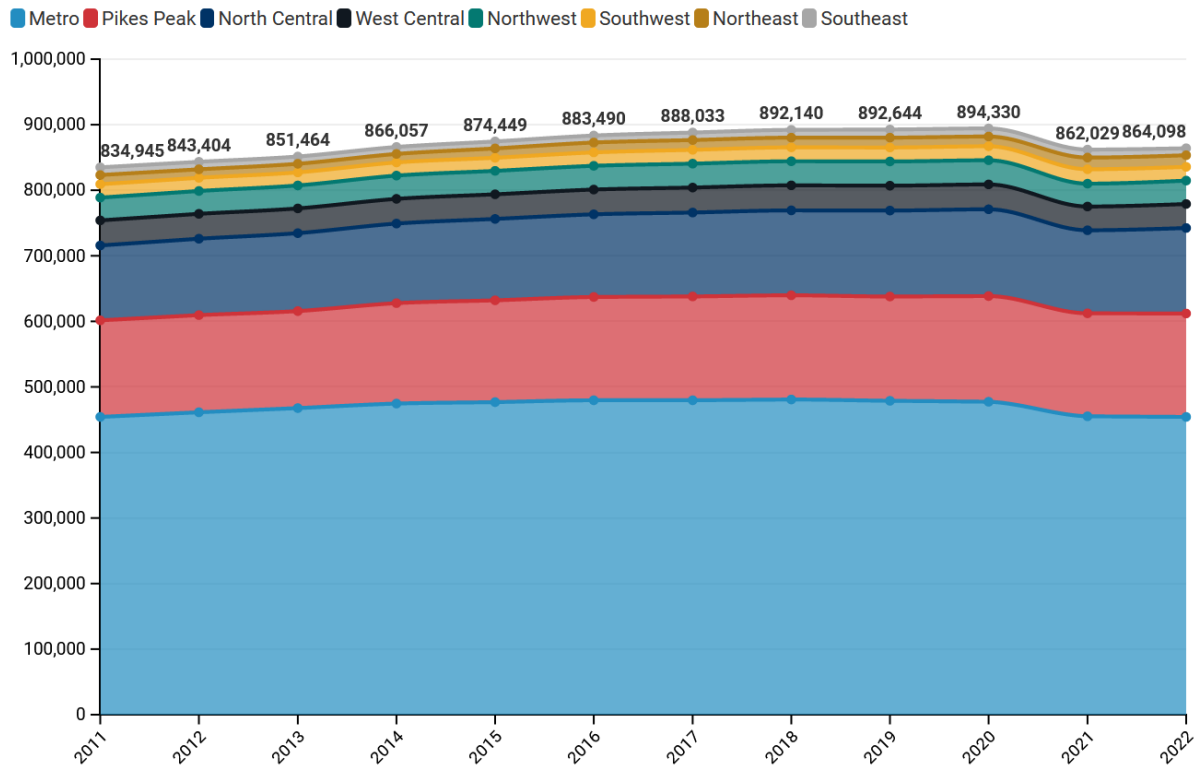
Figure 1: Colorado K-12 enrollment over time



Though enrollment declines in the fall of 2020 were widespread across Colorado regions, as shown in Figure 2, adding in pre-school enrollment shows that some parts of the state did see slight overall increases. Those regions with a net increase

in students from pandemic lows, when including pre-school enrollment, include North Central, Northwest, and West Central.

Figure 2: Pre-K-12 enrollment by region



Spring Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
West Central	38,241	37,976	37,732	37,678	37,545	37,788	38,124	38,171	37,954	37,929	36,211	36,620
Metro	454,228	461,313	467,667	474,578	476,809	479,636	479,623	480,787	478,764	477,355	455,175	454,200
Southwest	20,413	20,095	19,921	20,046	19,973	20,460	21,049	21,205	21,288	21,395	21,990	21,004
Southeast	11,707	11,499	11,074	10,665	10,670	10,674	11,446	11,888	12,373	12,352	12,183	10,700
Northwest	34,778	34,884	35,056	35,521	35,779	36,226	36,474	36,767	36,957	36,879	34,871	35,680
Pikes Peak	147,321	148,211	148,010	153,213	155,275	157,578	158,378	158,984	159,133	161,220	157,060	157,771
North Central	114,222	116,505	118,861	121,391	124,165	126,044	127,996	129,522	131,111	132,375	126,699	130,433
Northeast	14,035	12,921	13,143	12,965	14,233	15,084	14,943	14,816	15,064	14,825	17,840	17,690
Total	834,945	843,404	851,464	866,057	874,449	883,490	888,033	892,140	892,644	894,330	862,029	864,098

In an ill omen for the future, the steepest enrollment declines statewide between 2020 and 2022 were at the early childhood and elementary grades. Both the Pre-K and 4th grade cohorts have approximately 3,530 fewer students than pre-pandemic, but 5th grade is down 4,670 students and 6th grade is down by 5,230. Pre-kindergarten dropped by 10.3 % between 2020 and 2022, though Pre-k enrollment recovered half the losses between 2019-2020 and 2020-2021 in 2021-2022.

If these cohorts remain significantly lower, this would mean more budgetary pain in the future as those cohorts of students work through the system. The only grades that gained enrollment were grades 9-12. Pre-kindergarten dropped by 10.3 % between 2020 and 2022, though Pre-k enrollment recovered half the losses suffered between 2019-2020 and 2020-2021 in 2021-2022.

Figure 3: Enrollment changes by grade between the 2020 and 2022 school years

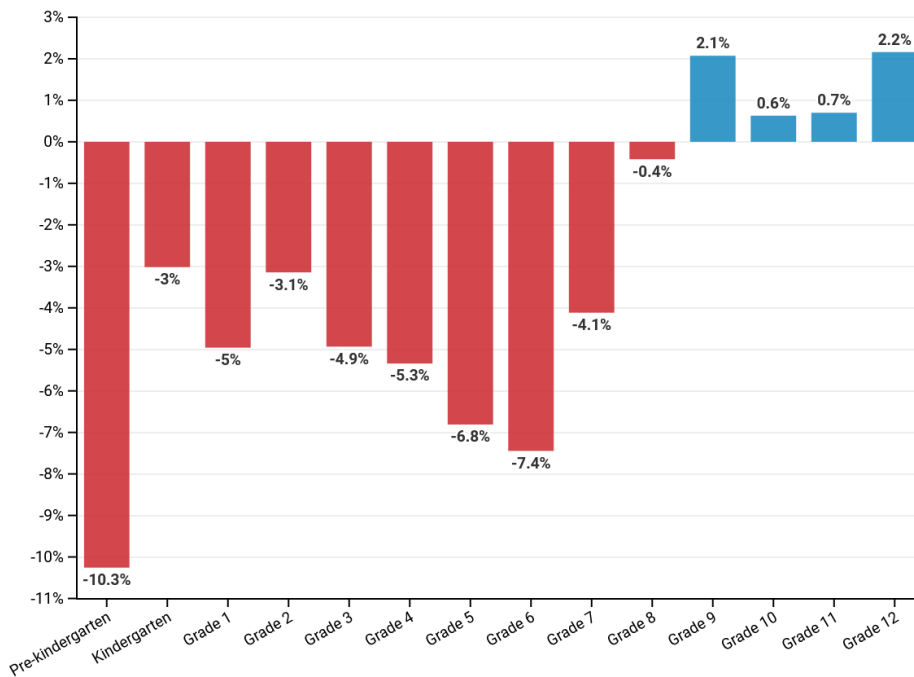


Figure 4: Pre-k–12 enrollment by grade (2020 through 2022)

Grade	2019-2020	2020-2021	2021-2022
Prekindergarten	34,425	26,416	30,894
Kindergarten	64,009	58,209	62,077
Grade 1	63,697	61,755	60,539
Grade 2	64,192	61,491	62,173
Grade 3	65,166	62,391	61,951
Grade 4	66,172	63,558	62,638
Grade 5	68,592	64,791	63,921
Grade 6	70,228	67,398	64,999
Grade 7	70,167	69,216	67,279
Grade 8	69,584	69,423	69,292
Grade 9	70,560	70,930	72,023
Grade 10	68,822	68,745	69,255
Grade 11	67,143	67,257	67,613
Grade 12	70,205	71,492	71,722
Total	912,962	883,072	886,376

Part 2: Revenue

K-12 public education revenue comes from four main funding sources: Local, State, Federal and Other. Local revenue stems from property tax, specific ownership tax and other funds produced within the boundaries of a school district for the purpose of public education. This category includes mill levy overrides and mills for bonded indebtedness. State revenue includes all funds collected by the state government that are then appropriated to school districts, including per pupil funding, program funding and other state grants and projects. Federal revenue is any money that is distributed to the school district from the federal government, whether directly or through an intervening agency such as the Colorado Department of Education.

Federal dollars typically come with specific regulations around how the money can be spent. Federal funding, for example, is used to support educational services for students with disabilities and English Language Learners and to fund programs at districts and schools that have a high proportion or number of low-income students.

How are Colorado Schools Funded?

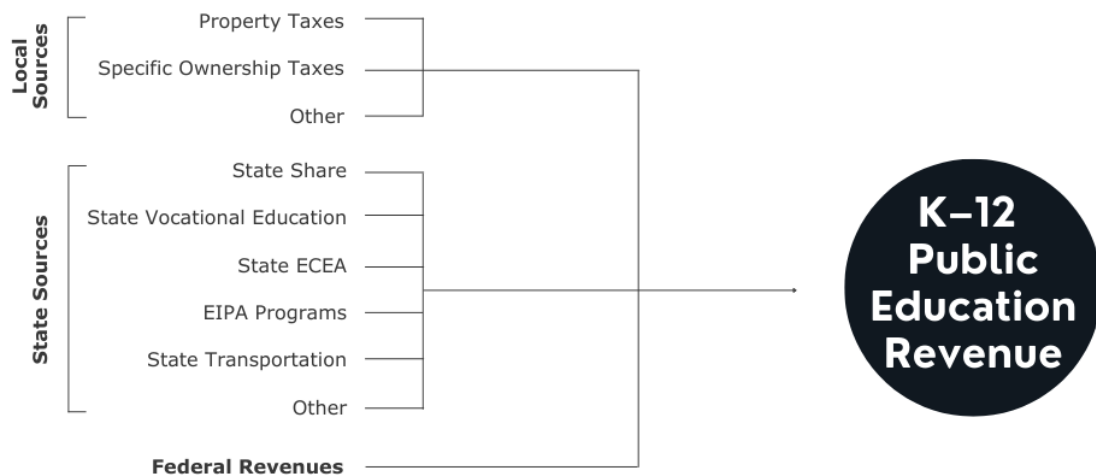


Figure 5: How are Colorado schools funded?

Year	Total Local Revenue	Total State Revenue	Total Federal Revenue	Total Revenue
2011	\$4,240,246,268	\$3,539,087,501	\$977,459,199	\$8,756,792,969
2016	\$4,997,873,976	\$4,467,697,066	\$712,621,605	\$10,178,028,321
2019	\$6,294,140,390	\$5,289,153,145	\$716,404,923	\$12,299,698,457
2020	\$6,782,160,381	\$5,542,604,770	\$817,804,640	\$13,142,569,780
2021	\$6,690,739,221	\$5,040,384,302	\$1,589,223,604	\$13,320,347,127

Local revenue

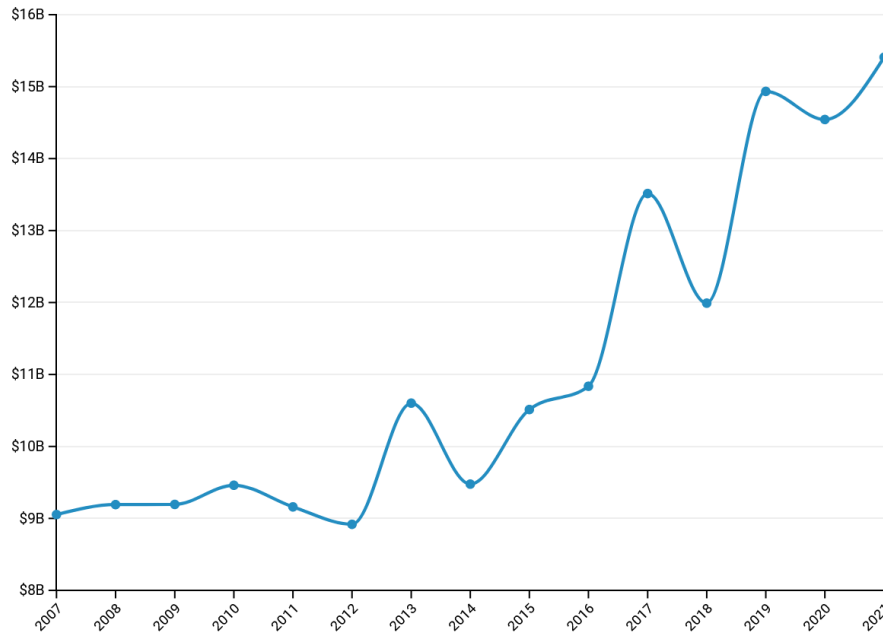
For most traditional school districts, property tax revenue from “total program” mills make up the largest source of local funding. This revenue goes towards a school district’s total program funding as set forth in the School Finance Act. The specific ownership tax, which is a tax levied on motor vehicles, makes up a small portion of local revenue and is also included as part of the total program funding. State law allows school districts to collect additional local revenue from voter approved mill levy overrides and bond redemption mills. Such revenue is not considered in the school finance formula and thus is above and beyond a district’s total program funding.

The amount of education revenue generated from property taxes varies widely across the state due to differing levels of total program mills and property wealth. HB 1164, enacted in 2021, addresses to a great extent these inequities in total program mill levies by requiring school districts to reset the mills to the lesser of (a) the level the school district was at when it de-Bruced, (b) the level needed to be fully funded locally, or (c) 27 mills.

The average increase in mills under HB21-1164 is 4.2 mills. There are 17 school districts, all rural, that will see steeper increases of 10 to 18 mills, which will be phased in over time as the bill limits the tax increase to no more than 1 mill per year. 125 of 178 districts will end up at 27 mills, up from only 39 districts currently.

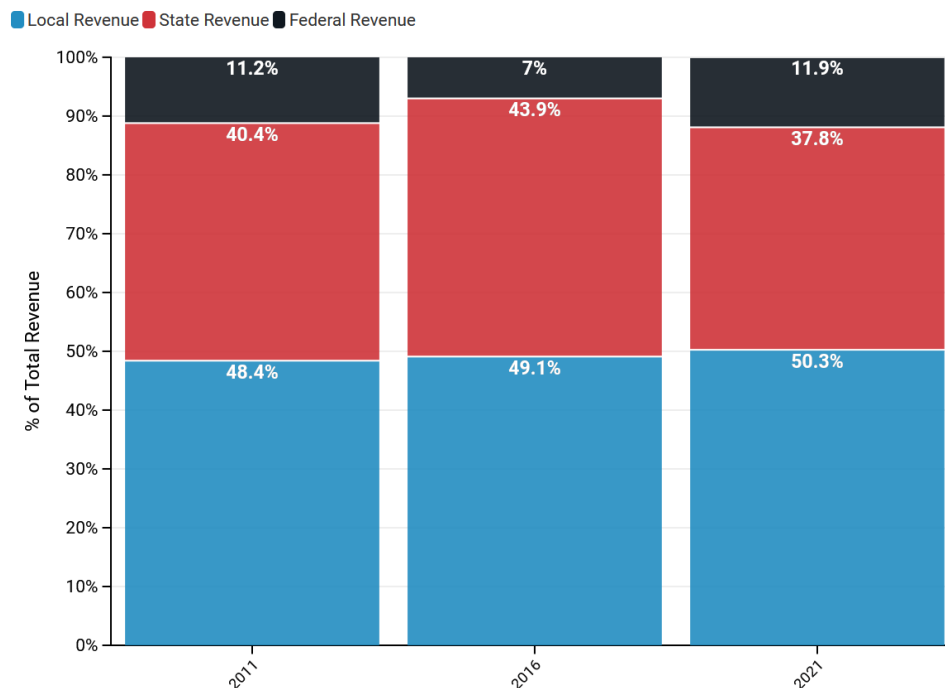
Local revenue has remained remarkably consistent over the last 10 years; federal revenue had been declining as a share of total revenue until 2021 when COVID-19 relief funds helped offset lower state revenue.

Figure 6: History of total revenue (including other sources)



As shown in Figure 7, the growth in the share of revenue coming from local sources that was so pronounced from 2015 to 2020 (see last year’s report) was far less notable between 2016 and 2021.

Figure 7: Major revenue sources for K-12 public education as shares of total (excluding other sources)



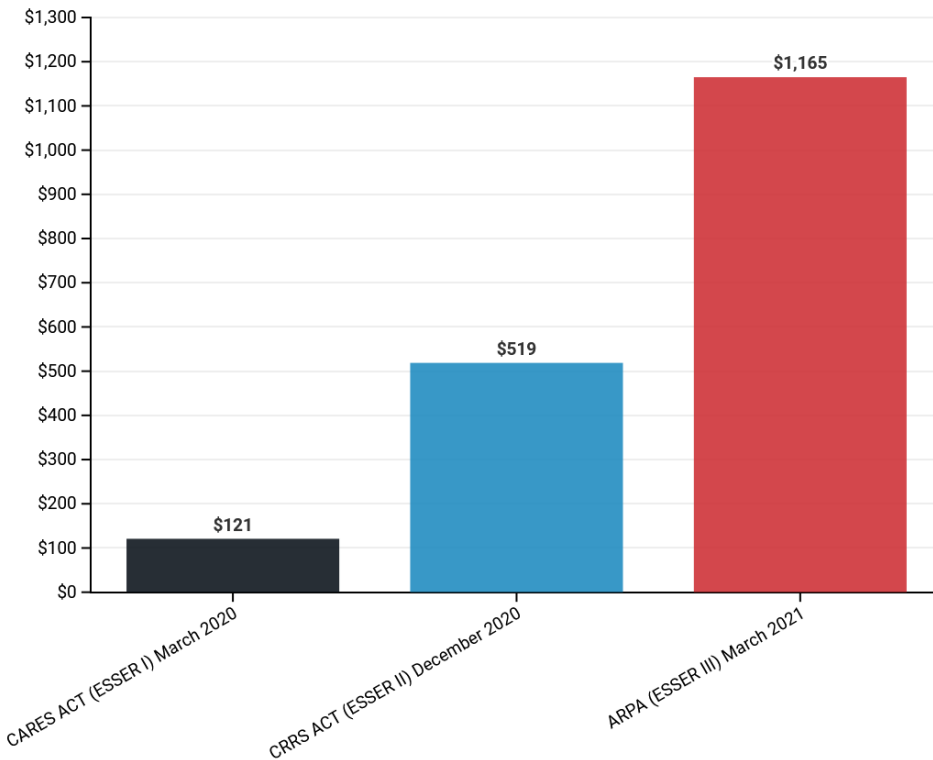
The state share of total revenue has fluctuated over time, however it declined by 6 percentage points between 2016 and 2021. This is consistent with the fact that appropriations from the state’s General Fund to Education, which are the primary source of “state revenue” for K-12 education, have not increased at the same rate as the overall budget. Increased health care spending among other competing state spending priorities, account for education’s declining percentage of the state budget.

Figure 8: Education as a share of Colorado general fund appropriations

Fiscal Year	Total General Fund Appropriation	Education General Fund Appropriation	Education's Share of Total
2007–08	\$7.26 billion	\$3.02 billion	41.7%
2012–13	\$7.6 billion	\$3.02 billion	39.7%
2017–18	\$10.61 billion	\$4.07 billion	38.4%
2018–19	\$11.42 billion	\$4.18 billion	36.6%
2019–20	\$12.05 billion	\$4.41 billion	36.6%
2020–21	\$11.18 billion	\$4.01 billion	35.9%
2021–22	\$12.5 billion	\$4.29 billion	34.4%
2022–23	\$13.79 billion	\$4.49 billion	32.6%

The local share of funding dropped in 2021 in part because federal spending increased markedly over the past two years, thanks to the infusion of \$2.5 billion federal COVID-19 relief funds to Colorado’s K-12 public schools to be spent between 2021 and 2024 shown in Figure 9.ⁱ

Figure 9: Per-pupil funding from COVID-19 relief funds by stimulus package

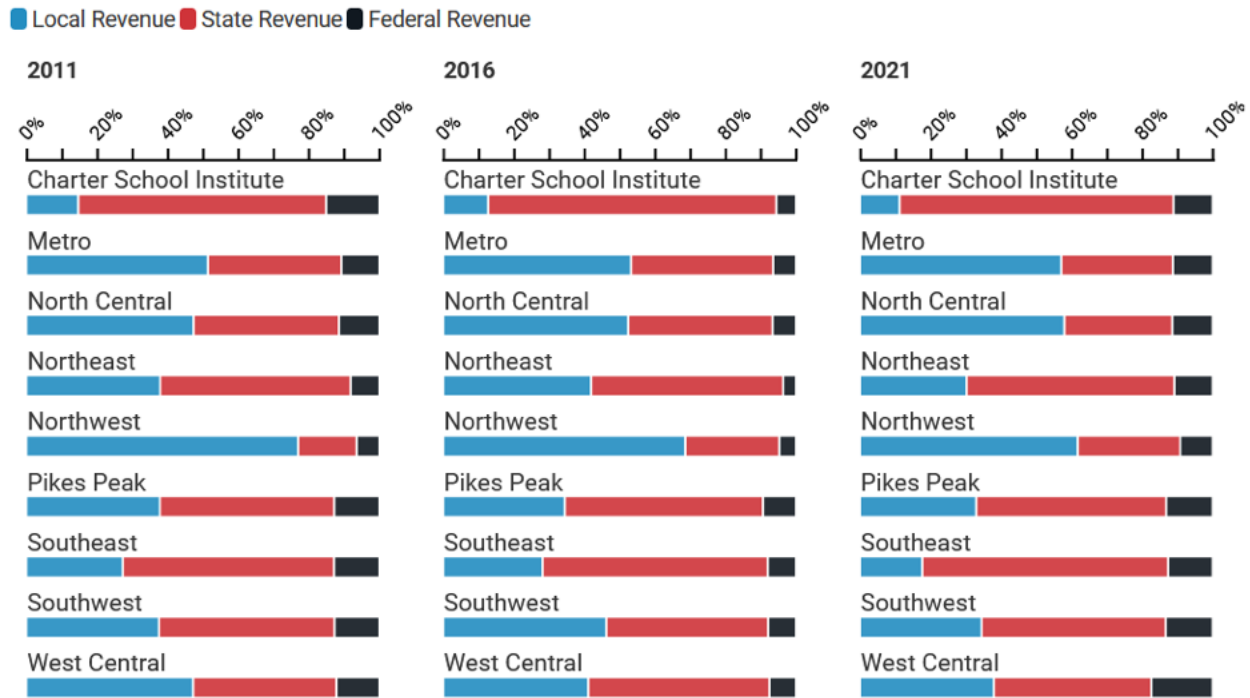


Revenue Across Different Regions of the State

Wealthier regions of Colorado—particularly Metro, North Central, and Northwest—get a higher percentage of their funding from local revenues, primarily due to high property values. Lower income regions – especially Southeast and Northeast – receive the vast majority of their funding from state and federal sources. Those trends have grown more pronounced since 2016.

Figure 10 presents the proportions of local, state and federal revenue by region. The Northwest region, which is comprised of school districts with higher total program mill levies, relies the most heavily on local property tax revenue. The region received nearly two-thirds of its total revenues through local sources (61.6 percent in 2021), and, correspondingly, the Northwest region has the smallest share of state funding of all regions (29%).

Figure 10: Local, state, and federal revenue as a share of total revenue by region



Given the Charter School Institute’s unique position as a statewide charter authorizer, its schools do not have taxing districts and thus do not collect any revenue from property taxes and rely largely on state appropriations. Aside from the Charter School Institute, the Southeast region receives the smallest proportion of revenue from local sources (17.5% in 2021). Accordingly, the Southeast’s share of revenue coming from state sources is the highest among the traditional school districts (69.8%).

Figure 11: Nominal and inflation-adjusted local, state, and federal revenue by region

Year and Region		Nominal (Millions \$)				Inflation-adjusted (Millions \$)			
		Total Local Revenue	Total State Revenue	Total Federal Revenue	Total Revenue	Total Local Revenue	Total State Revenue	Total Federal Revenue	Total Revenue
2011	West Central	\$171.759	\$148.171	\$44.574	\$364.505	\$226.207	\$195.142	\$58.704	\$480.053
2011	Southwest	\$98.027	\$130.623	\$33.495	\$262.145	\$129.101	\$172.031	\$44.113	\$345.246
2011	Southeast	\$35.523	\$78.481	\$16.850	\$130.854	\$46.784	\$103.359	\$22.191	\$172.335

2011	Pikes Peak	\$530.473	\$696.498	\$180.709	\$1,407.681	\$698.633	\$917.289	\$237.994	\$1,853.916
2011	Northwest	\$343.603	\$74.147	\$29.245	\$446.995	\$452.525	\$97.651	\$38.516	\$588.693
2011	Northeast	\$55.832	\$79.944	\$12.123	\$147.900	\$73.531	\$105.286	\$15.967	\$194.785
2011	North Central	\$536.853	\$468.610	\$130.964	\$1,136.428	\$707.035	\$617.160	\$172.480	\$1,496.675
2011	Metro	\$2,457.975	\$1,813.325	\$518.837	\$4,790.139	\$3,237.154	\$2,388.149	\$683.309	\$6,308.613
2011	State Total	\$4,240.246	\$3,539.087	\$977.459	\$8,756.792	\$5,584.404	\$4,660.978	\$1,287.313	\$11,532.696
2016	West Central	\$159.358	\$199.857	\$29.613	\$388.829	\$196.648	\$246.624	\$36.543	\$479.816
2016	Southwest	\$119.086	\$118.671	\$20.698	\$258.456	\$146.953	\$146.440	\$25.541	\$318.935
2016	Southeast	\$36.798	\$83.982	\$10.665	\$131.446	\$45.408	\$103.634	\$13.161	\$162.204
2016	Pikes Peak	\$547.282	\$896.383	\$150.933	\$1,594.599	\$675.346	\$1,106.137	\$186.252	\$1,967.736
2016	Northwest	\$343.090	\$133.161	\$24.387	\$500.639	\$423.374	\$164.320	\$30.094	\$617.789
2016	Northeast	\$73.108	\$95.268	\$6.599	\$174.976	\$90.215	\$117.561	\$8.143	\$215.920
2016	North Central	\$732.187	\$573.516	\$94.316	\$1,399.856	\$903.519	\$707.719	\$116.386	\$1,727.422
2016	Metro	\$2,969.699	\$2,254.633	\$367.602	\$5,591.935	\$3,664.609	\$2,782.217	\$453.621	\$6,900.448
2016	State Total	\$4,997.873	\$4,467.697	\$712.621	\$10,178.028	\$6,167.376	\$5,513.138	\$879.375	\$12,559.686
2021	West Central	\$190.122	\$224.634	\$88.170	\$502.927	\$190.122	\$224.634	\$88.170	\$502.927
2021	Southwest	\$122.653	\$186.933	\$48.102	\$357.690	\$122.653	\$186.933	\$48.102	\$357.690
2021	Southeast	\$40.075	\$160.189	\$29.306	\$229.570	\$40.075	\$160.189	\$29.306	\$229.570
2021	Pikes Peak	\$675.589	\$1,110.602	\$274.579	\$2,060.771	\$675.589	\$1,110.602	\$274.579	\$2,060.771
2021	Northwest	\$407.446	\$192.052	\$61.764	\$661.263	\$407.446	\$192.052	\$61.764	\$661.263
2021	Northeast	\$75.775	\$148.724	\$27.760	\$252.260	\$75.775	\$148.724	\$27.760	\$252.260
2021	North Central	\$1,113.038	\$590.662	\$223.168	\$1,926.869	\$1,113.038	\$590.662	\$223.168	\$1,926.869
2021	Metro	\$4,040.420	\$2,246.959	\$810.376	\$7,097.756	\$4,040.420	\$2,246.959	\$810.376	\$7,097.756
2021	State Total	\$6,690.739	\$5,040.384	\$1,589.223	\$13,320.347	\$6,690.739	\$5,040.384	\$1,589.223	\$13,320.347

Real total revenue rose in every region between 2011 and 2016 and between 2016 and 2021, though in many cases only because it was backfilled by high federal revenues in 2021.

Figure 12: Nominal and inflation-adjusted local, state, and federal revenue per pupil by region

Year	Region	Nominal				Inflation-adjusted			
		Local Revenue per Pupil	State Revenue per Pupil	Federal Revenue per Pupil	Total Revenue per Pupil	Local Revenue per Pupil	State Revenue per Pupil	Federal Revenue per Pupil	Total Revenue per Pupil
2011	West Central	\$4,713	\$4,066	\$1,223	\$10,002	\$6,207	\$5,355	\$1,611	\$13,173
2011	Southwest	\$4,860	\$6,477	\$1,661	\$12,998	\$6,401	\$8,530	\$2,187	\$17,118
2011	Southeast	\$3,071	\$6,785	\$1,457	\$11,312	\$4,045	\$8,935	\$1,918	\$14,898
2011	Pikes Peak	\$3,782	\$4,965	\$1,288	\$10,035	\$4,980	\$6,539	\$1,697	\$13,216
2011	Northwest	\$10,268	\$2,216	\$874	\$13,357	\$13,523	\$2,918	\$1,151	\$17,592
2011	Northeast	\$4,175	\$5,977	\$907	\$11,059	\$5,498	\$7,872	\$1,194	\$14,564
2011	North Central	\$4,975	\$4,343	\$1,214	\$10,531	\$6,552	\$5,719	\$1,598	\$13,870
2011	Metro	\$5,746	\$4,239	\$1,213	\$11,197	\$7,567	\$5,582	\$1,597	\$14,747
2011	State Total	\$5,310	\$4,432	\$1,224	\$10,965	\$6,993	\$5,836	\$1,612	\$14,441
2016	West Central	\$4,403	\$5,523	\$818	\$10,744	\$5,434	\$6,815	\$1,010	\$13,258
2016	Southwest	\$5,997	\$5,976	\$1,042	\$13,016	\$7,401	\$7,375	\$1,286	\$16,062
2016	Southeast	\$3,502	\$7,991	\$1,015	\$12,508	\$4,321	\$9,861	\$1,252	\$15,435
2016	Pikes Peak	\$3,620	\$5,930	\$998	\$10,549	\$4,468	\$7,317	\$1,232	\$13,017
2016	Northwest	\$9,912	\$3,847	\$705	\$14,464	\$12,232	\$4,747	\$869	\$17,849
2016	Northeast	\$5,123	\$6,676	\$462	\$12,262	\$6,322	\$8,239	\$571	\$15,132
2016	North Central	\$6,144	\$4,813	\$791	\$11,747	\$7,582	\$5,939	\$977	\$14,496
2016	Metro	\$6,555	\$4,976	\$811	\$12,342	\$8,088	\$6,141	\$1,001	\$15,231
2016	State Total	\$5,857	\$5,236	\$835	\$11,929	\$7,228	\$6,461	\$1,031	\$14,720
2021	West Central	\$5,239	\$6,190	\$2,430	\$13,859	\$5,239	\$6,190	\$2,430	\$13,859
2021	Southwest	\$5,400	\$8,230	\$2,118	\$15,749	\$5,400	\$8,230	\$2,118	\$15,749
2021	Southeast	\$3,182	\$12,719	\$2,327	\$18,228	\$3,182	\$12,719	\$2,327	\$18,228
2021	Pikes Peak	\$4,232	\$6,957	\$1,720	\$12,909	\$4,232	\$6,957	\$1,720	\$12,909
2021	Northwest	\$11,407	\$5,377	\$1,729	\$18,514	\$11,407	\$5,377	\$1,729	\$18,514
2021	Northeast	\$4,360	\$8,558	\$1,597	\$14,515	\$4,360	\$8,558	\$1,597	\$14,515
2021	North Central	\$8,770	\$4,654	\$1,758	\$15,182	\$8,770	\$4,654	\$1,758	\$15,182
2021	Metro	\$8,778	\$4,881	\$1,760	\$15,419	\$8,778	\$4,881	\$1,760	\$15,419
2021	State Total	\$7,508	\$5,656	\$1,783	\$14,948	\$7,508	\$5,656	\$1,783	\$14,948

Part 3: Expenditures

The source of funding for K-12 public education is reported in the different categories of revenue. The destination of those dollars is captured in state expenditure reports.

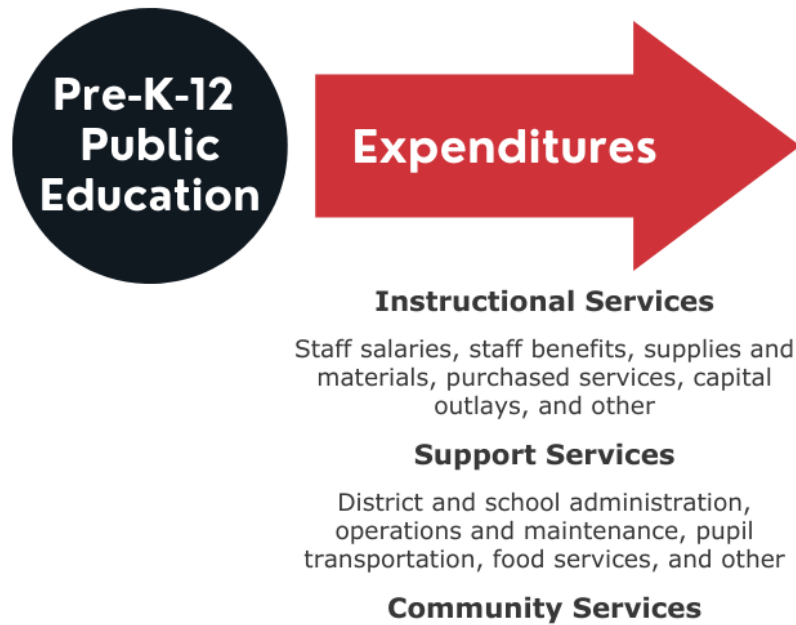
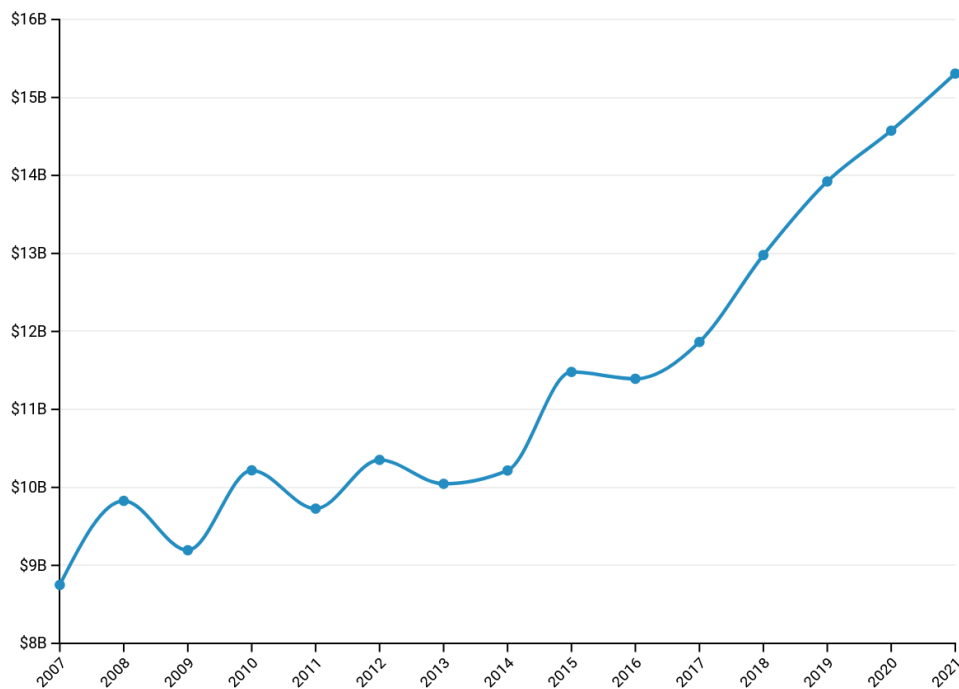


Figure 13: Total Annual Public Education Expenditures



As shown in Figure 14, instructional services accounted for 39 percent of total spending, while support services comprised 35.3 percent and other spending rounded out the remaining 23.2 percent. There has been a decrease in the share of spending on instruction and an increase in the share of spending on support services over the past 10 years.

Figure 14: Shares of major expenditures in public education

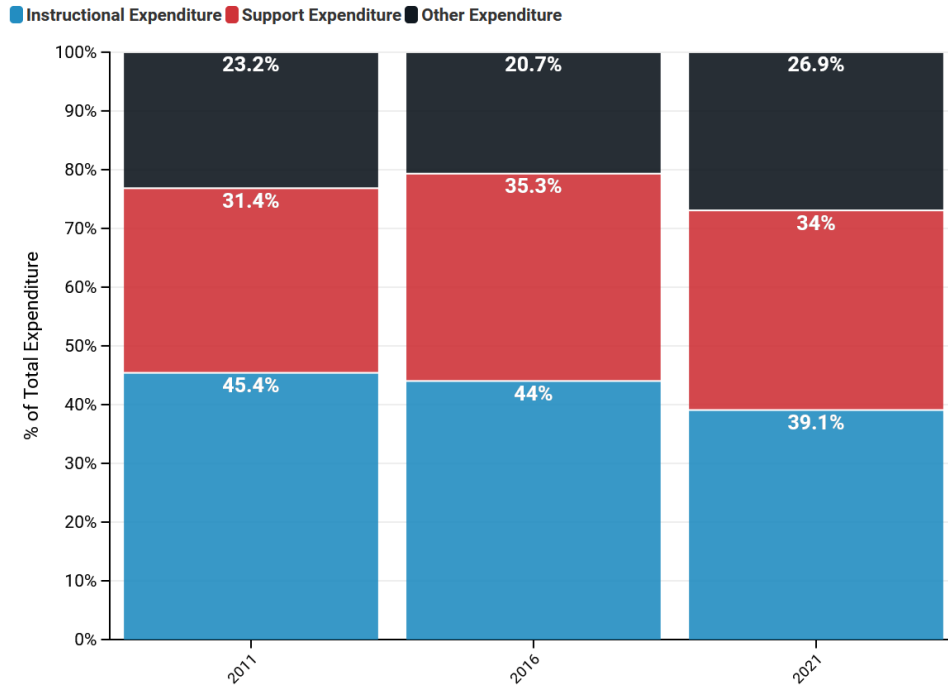


Figure 15: Growth in enrollment, funded pupil counts, and classroom expenditure since 2007

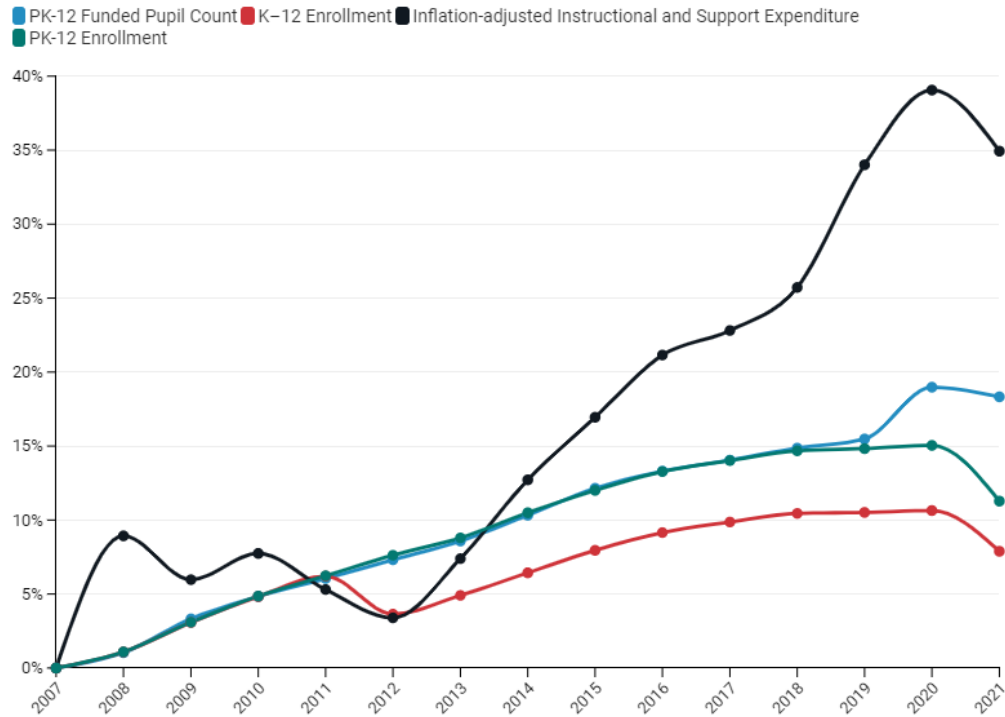


Figure 16 shows total expenditures by region for three selected years going back over a decade.

Figure 16: History of total expenditures by region

Region	Trend	FY 2011	FY 2016	FY 2021
Charter School Institute		\$71M	\$155M	\$253M
Metro		\$5,411M	\$6,286M	\$8,100M
North Central		\$1,265M	\$1,598M	\$2,406M
Northeast		\$141M	\$172M	\$264M
Northwest		\$471M	\$558M	\$779M
Pikes Peak		\$1,494M	\$1,696M	\$2,253M
Southeast		\$129M	\$130M	\$229M
Southwest		\$294M	\$273M	\$358M
West Central		\$382M	\$436M	\$586M
State Total		\$9,658M	\$11,305M	\$15,227M

Figure 17 illustrates per pupil spending on instruction and support by region for three years. Figure 18 provides a more granular look at spending by region in 2021. Variations by region are modest.

Figure 17: Instruction and support expenditures per pupil by region

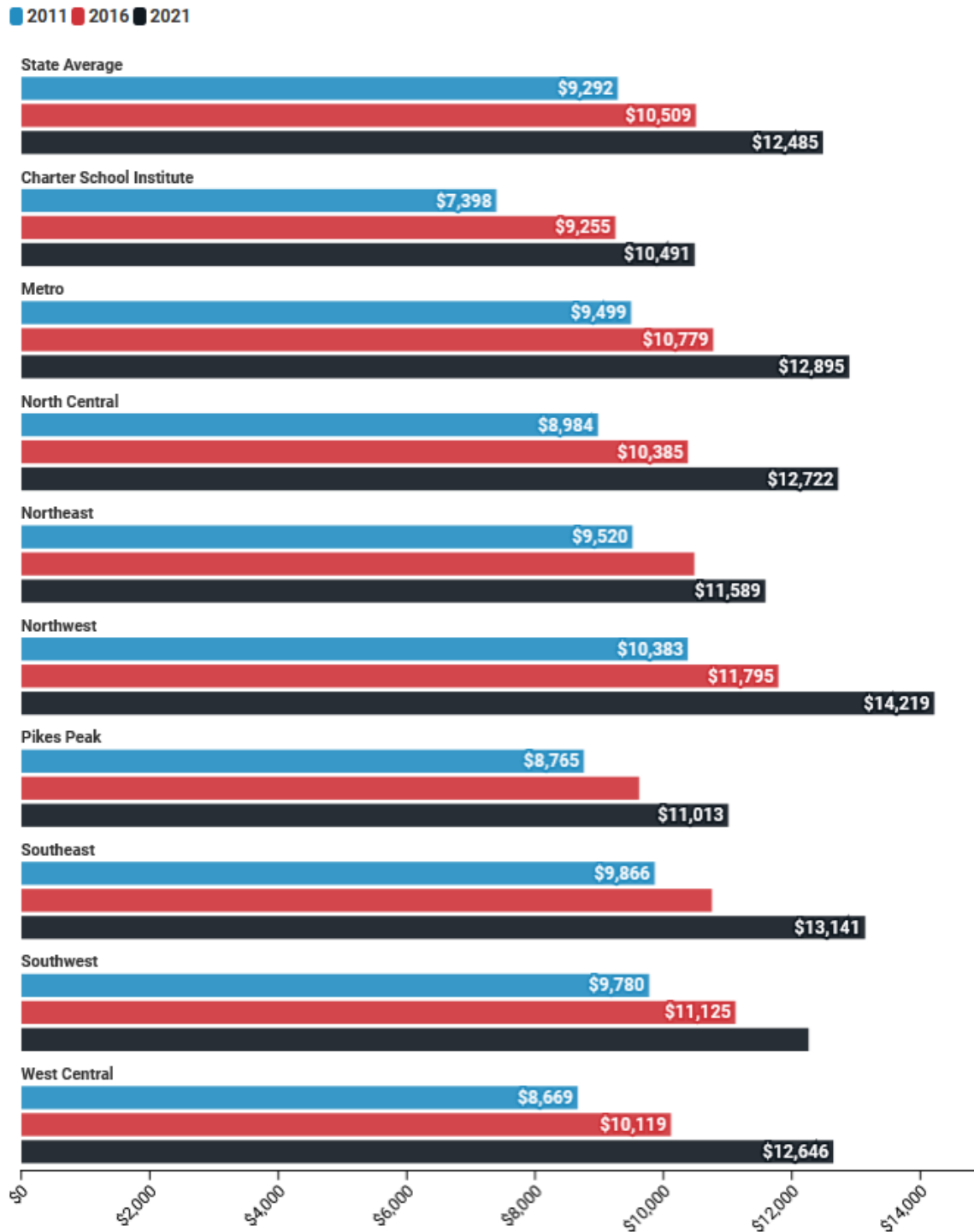


Figure 18: Regional shares of total instructional and support expenditure by category in 2021

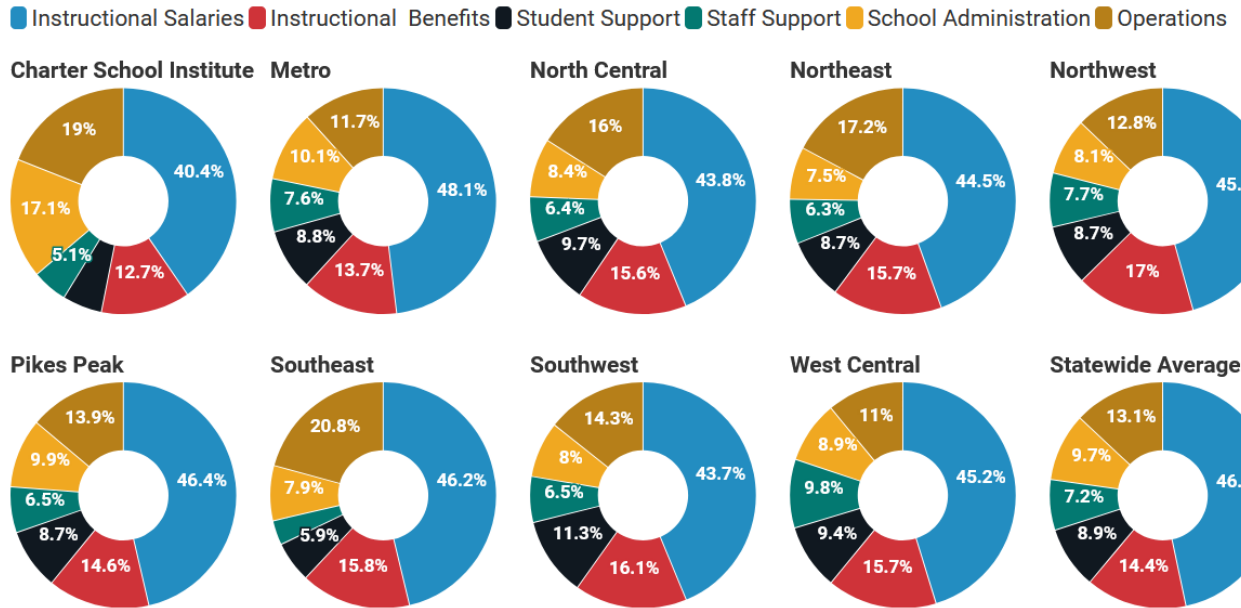
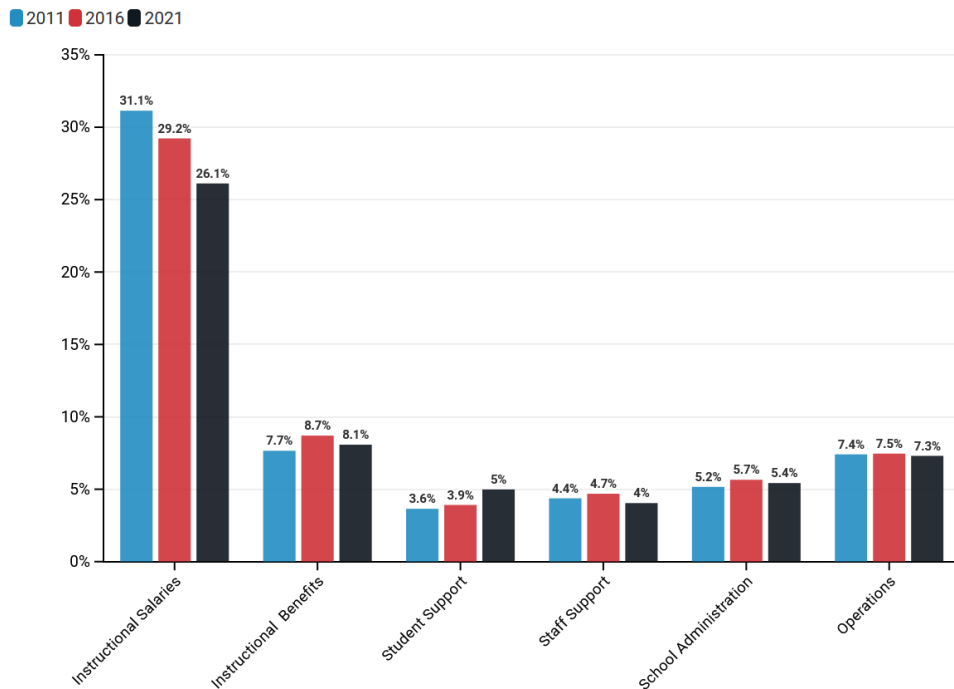


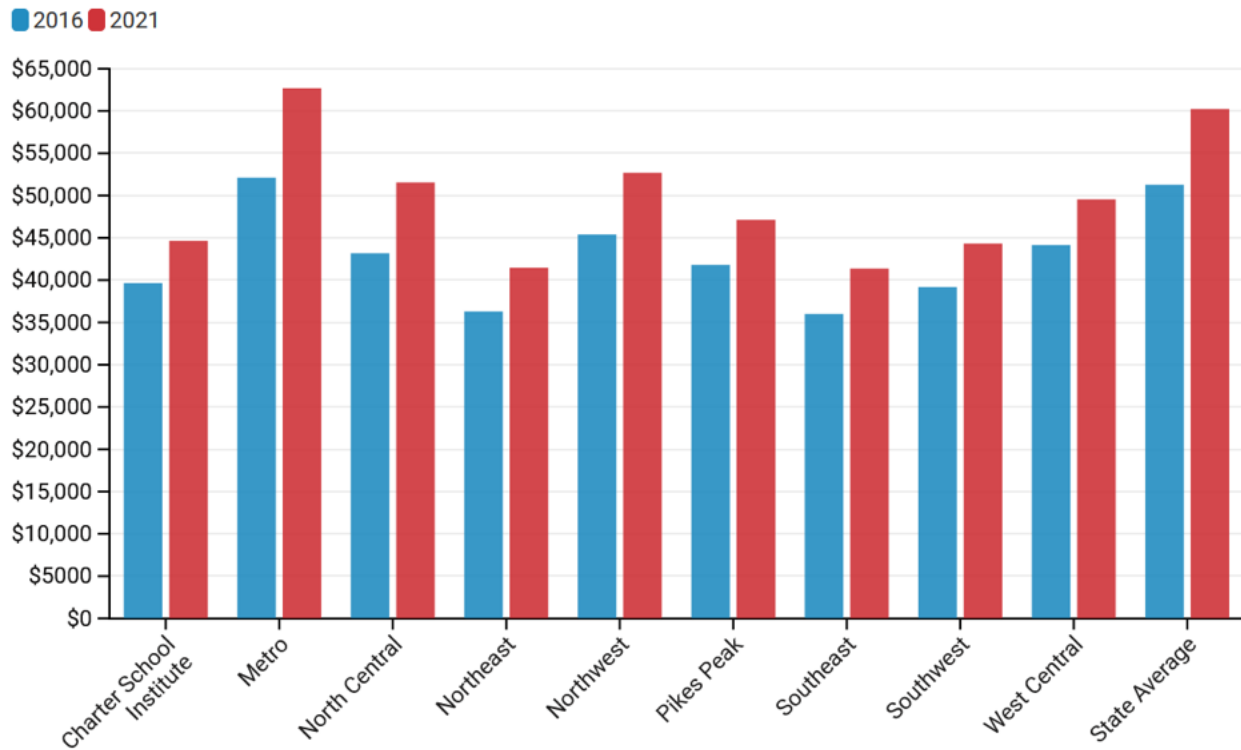
Figure 19: Statewide shares of total expenditure by instructional/support category



Part 4: Teacher salaries and turnover

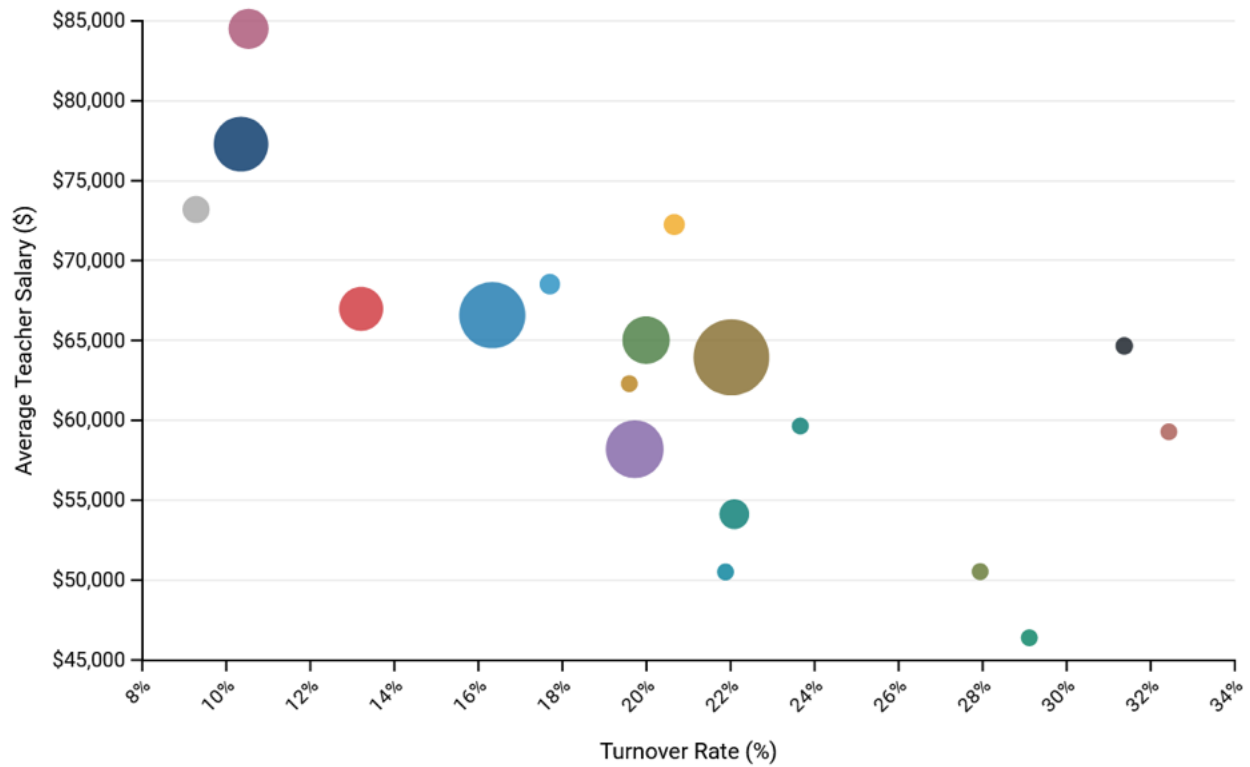
Statewide, the average salary topped \$60,000 in 2021, an increase of 17.5 percent increase since 2016. But there are significant disparities by region: The average teacher salary in the Southeast was \$41,365, while in the metro region it was \$62,700.

Figure 20: Average regional teacher salaries over time



As the scatter plot in Figure 21 shows, teacher turnover in the metro region is closely correlated with average pay. In Boulder Valley, where the average salary is almost \$85,000, teacher turnover was just 10.5 percent. In the semi-rural Elizabeth School District, where average pay is \$46,389, turnover was 29.1 percent.

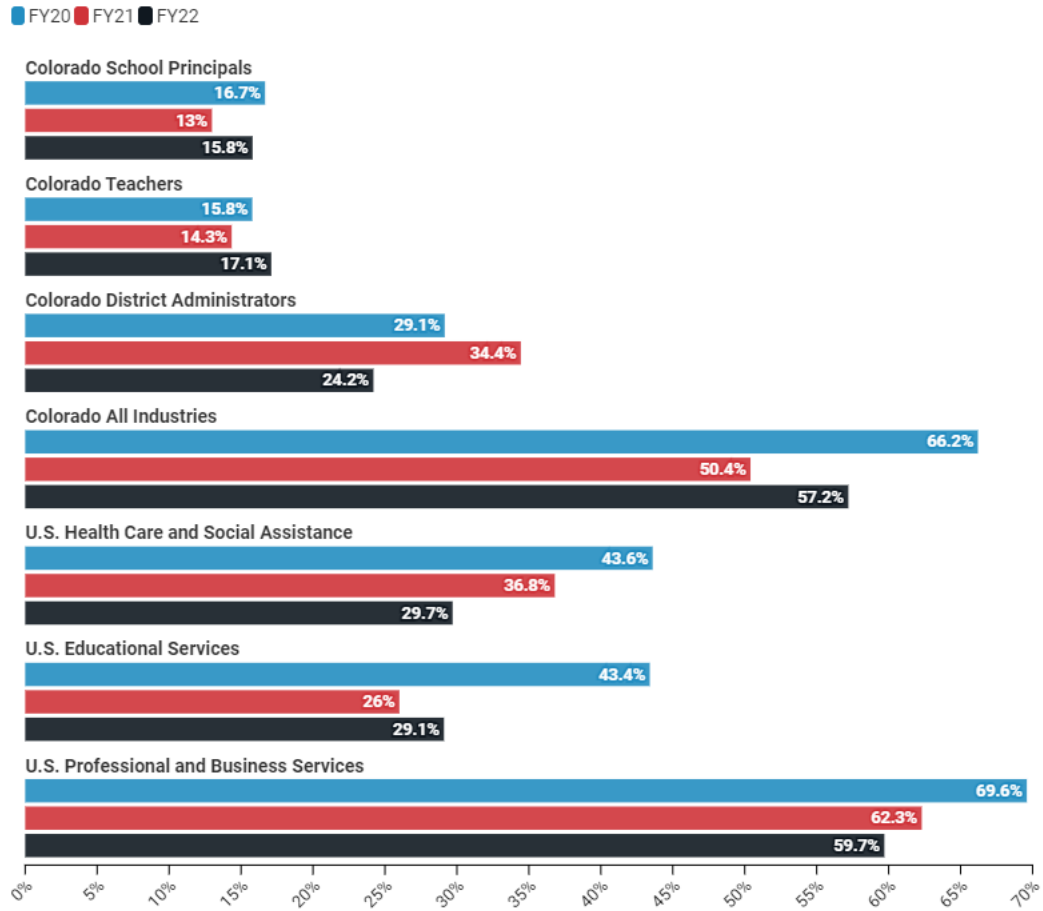
Figure 21: Average teacher salaries and turnover rate in the metro region



The data used to populate figure 21 is captured in the table below.

Organization Name	Average Teacher Salary (\$)	Turnover Rate (%)	Number of Teachers (FTE)
Mapleton 1	68,522	17.70%	457.0
Adams 12 Five Star Schools	66,981	13.21%	2,092.4
Adams County 14	64,656	31.37%	336.8
School District 27J	54,127	22.09%	961.1
Westminster Public Schools	72,253	20.66%	483.4
Englewood 1	62,297	19.59%	182.0
Sheridan 2	59,642	23.66%	83.4
Cherry Creek 5	77,282	10.35%	3,230.3
Littleton 6	73,196	9.28%	799.0
Adams-Arapahoe 28J	65,018	19.99%	2,416.1
Boulder Valley Re 2	84,505	10.53%	1,742.0
Clear Creek RE-1	50,510	21.88%	52.0
Denver County 1	63,938	22.02%	6,201.7
Douglas County Re 1	58,193	19.72%	3,600.2
Elizabeth School District	46,389	29.11%	149.6
Gilpin County RE-1	59,282	32.43%	32.7
Jefferson County R-1	66,586	16.33%	4,722.6
Platte Canyon 1	50,531	27.94%	55.0

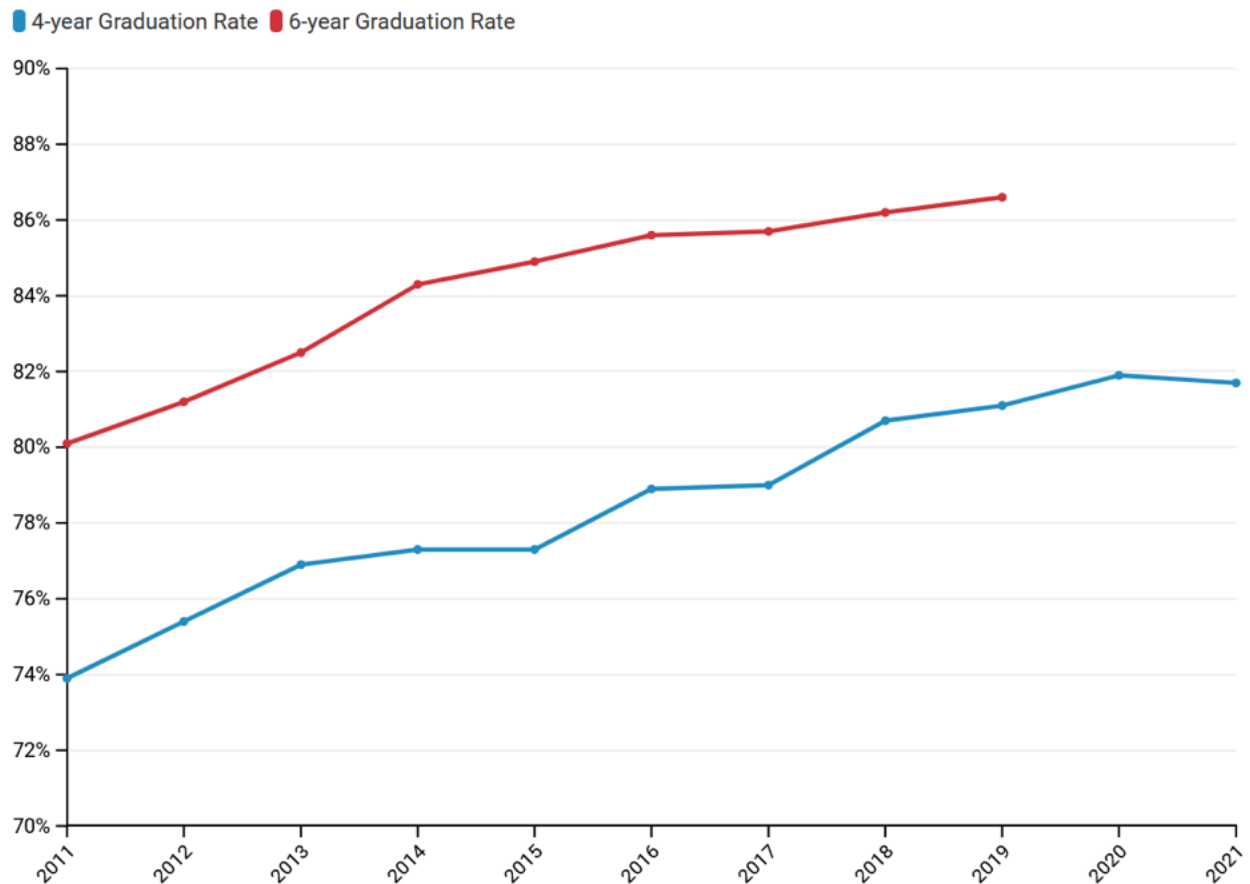
Figure 22: Average education staff turnover rates compared to other industries



Sources: CDE and JOLTS

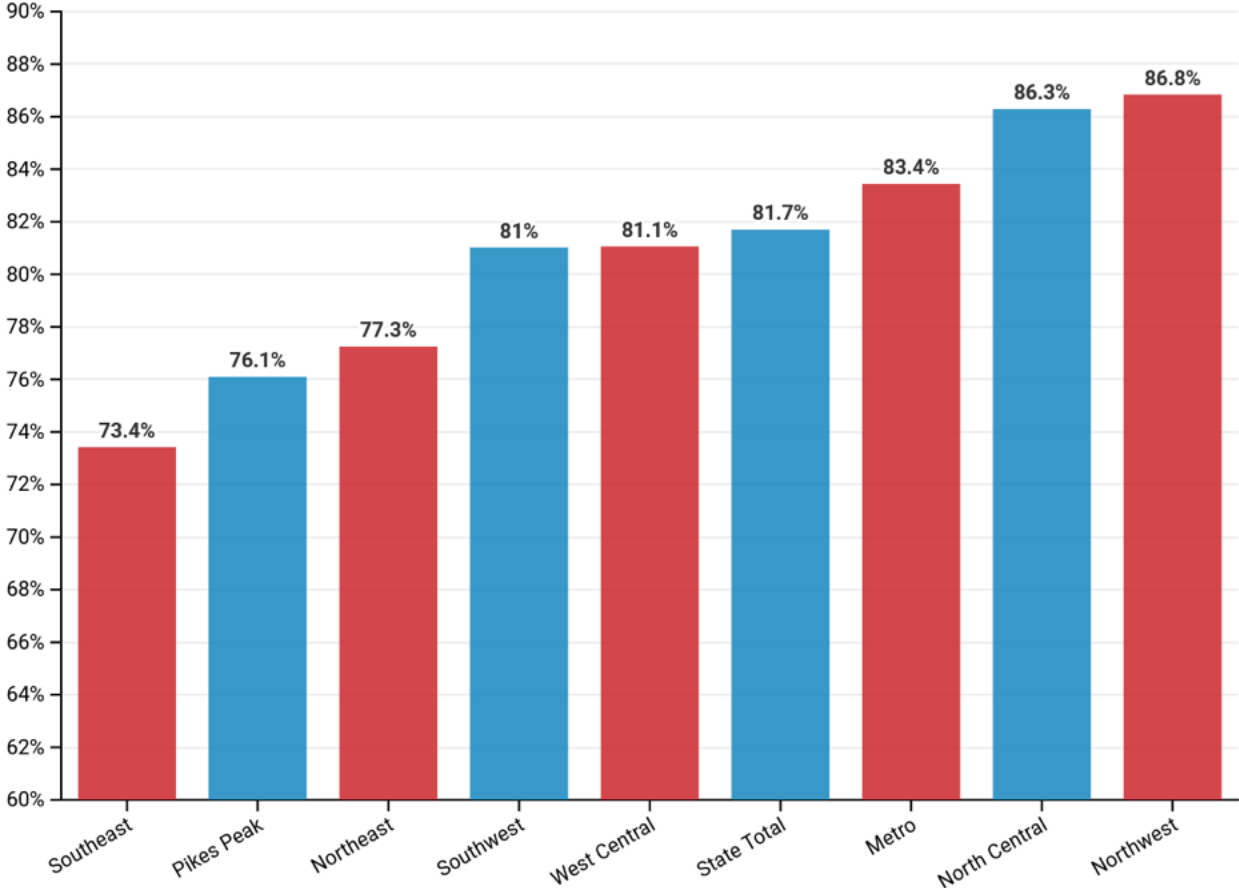
Part 5: Student performance

Figure 23: Four- and six-year graduation rates in Colorado



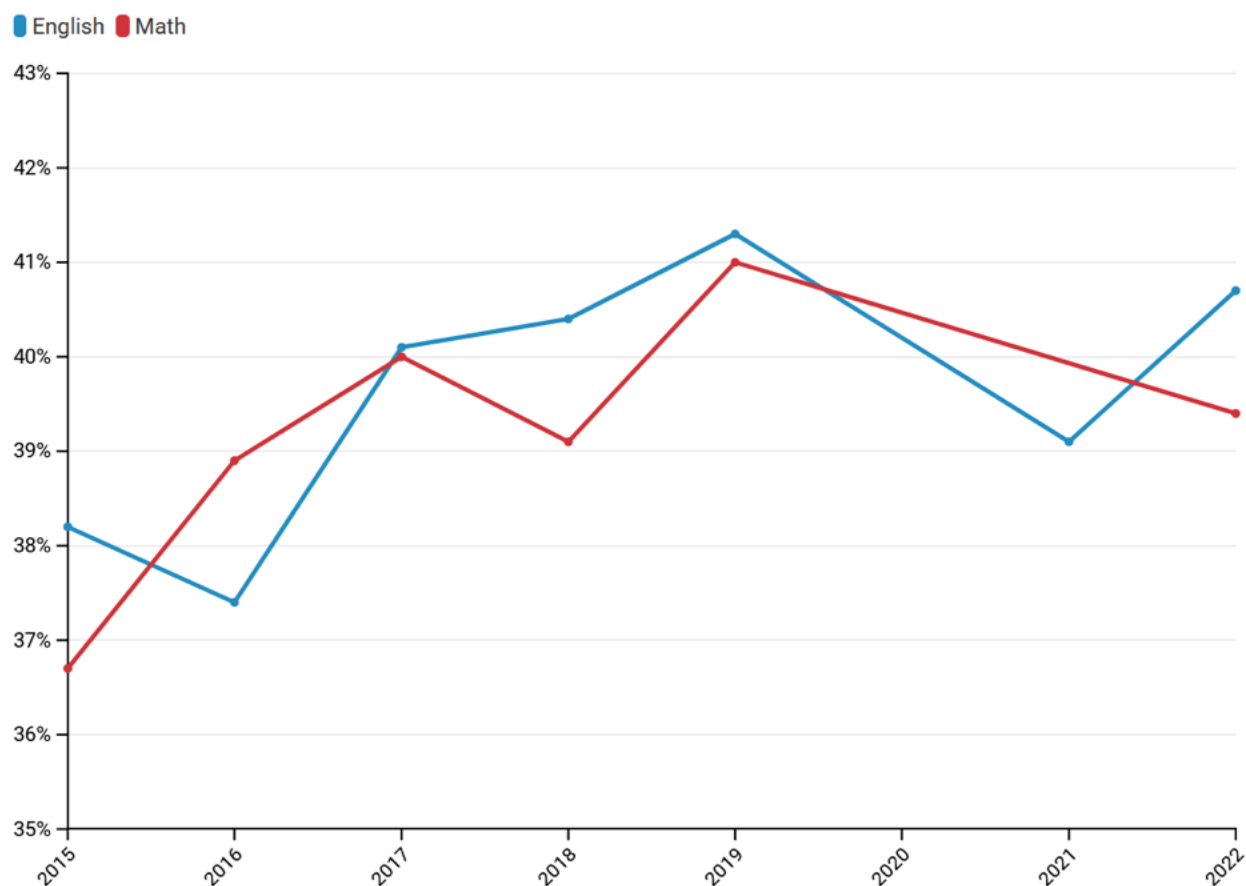
Colorado's graduation rate is measured by how many students enter the ninth grade and progress through the 12th grade—completing all academic requirements—in either four or six years. However, while Colorado's four- and six-year high school graduation rate have risen over time, it must be noted that these academic standards are not well aligned to college readiness standards, nor workforce readiness standards.

Figure 24: Four-year high school graduation rates by region (2021)



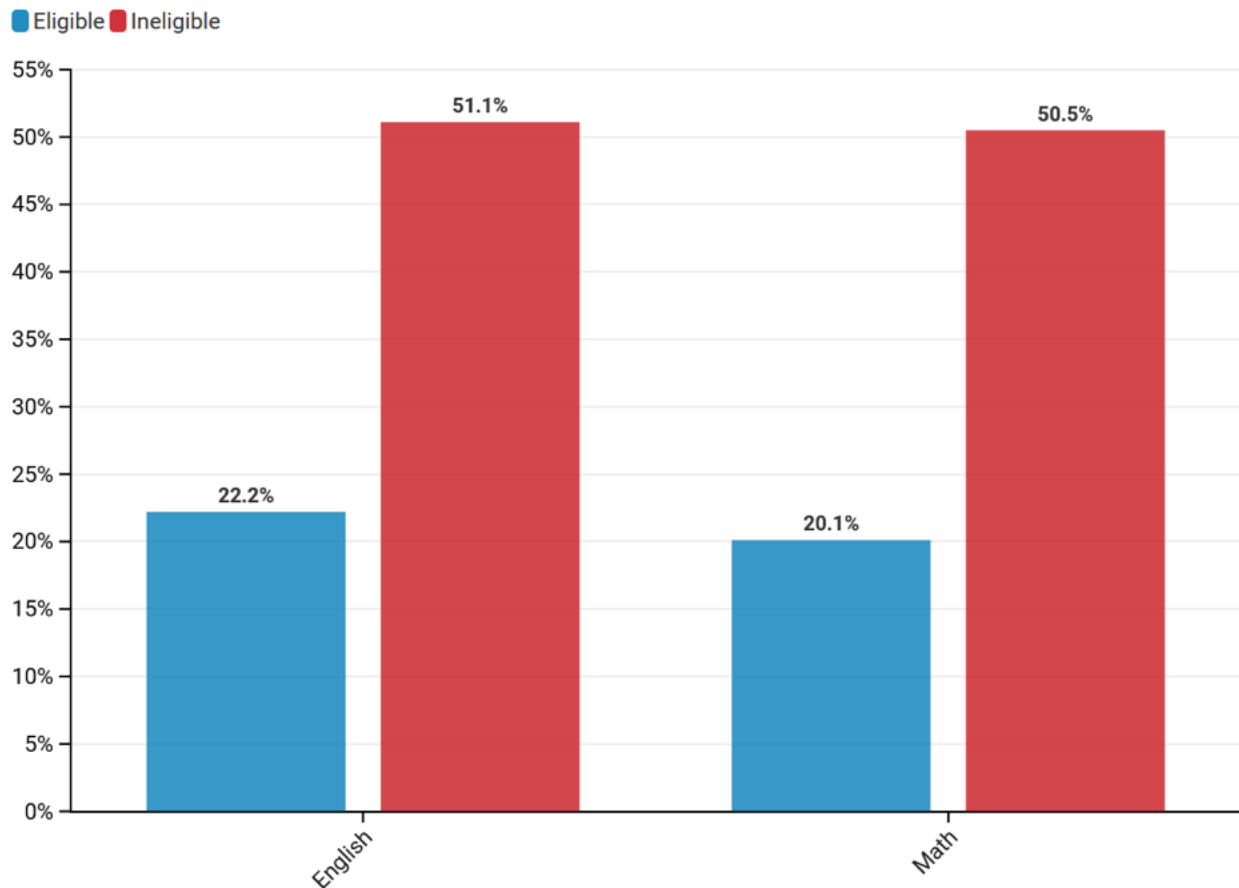
Despite some missing data for 2020 and 2021, Figure 25 shows that on a statewide average, third-grade math and English scores have mostly recovered from pandemic-related dips. But having only 41 percent of third graders reading at grade-level bodes ill for the futures of 60 percent of the state’s young students. Research shows that students not reading proficiently by the end of third grade face major obstacles to ever catching up. Math scores are similarly bleak, with just 39 percent of third graders performing at grade-level proficiency.

Figure 25: Third grade reading and math proficiency rates



Colorado, like other states, suffers from yawning achievement gaps separating low-income from non-low-income students. As Figure 26 shows, those gaps begin early. And they persist.

Figure 26: Third-grade reading and math proficiency rates by free or reduced-price lunch eligibility



Conclusion

This analysis of most recent data shows a continuation of Colorado’s longtime trends: increased spending on education, a growing share of resources moving out of the classroom, and overall student performance low and stagnant despite the increased spending. There are also persistent academic achievement gaps between low-income students and their more affluent peers.

The decrease in spending on instruction and an increase in spending on support services over the past 10 years is notable considering the well-documented difficulty schools are having finding the classroom teachers they need. While overall funding received by school districts continues to increase, there is not an equivalent rise in teacher pay, which impacts schools’ ability to recruit and retain teachers. At the same time, the data reveals a strong correlation between higher teacher pay and lower turnover rates.

As education spending steadily increases and student performance remains woefully low—with only 40 percent of the state’s third grade students proficient in reading—what does accountability look like to the tax paying public, to the parents who entrust their children to our public schools, and to the students receiving subpar educational services?

Other trends show that some districts, which are funded on a per pupil basis, are starting to recover from the enrollment loss suffered during the pandemic. But for other districts, especially those in more urban areas, enrollment is projected to continue declining.

The state’s high school graduation rate continues an upward climb, an important milestone for students at the end of their K-12 experience who are transitioning to their postsecondary pursuits.

There is opportunity for more forward progress. Colorado’s education officials—who are still coping with the disruptive ramifications of the Covid-19 pandemic—must wisely deploy the unprecedented influx of federal dollars that recently poured into local schools and then brace for fiscal year 2024 by when those funds must be spent and will not be renewed.

In an upcoming report, Common Sense Institute will calculate the economic impacts of Colorado’s educational underperformance and the resultant cost to individuals and the larger economy. We’ll also project the converse—what if Colorado prioritized and modernized the way we deliver K-12 education? It will be a timely exploration of the many ways in which structural improvements to the public education system could generate major benefits to all stakeholders and bring Colorado closer to the aspiration of being the greatest state in which to live, learn, work, and play.

Methodology and Data Sources

This study analyzes financial, workforce and student data across Colorado K-12 publicly funded school districts. See Appendix A for a list of school districts by region.

All the report's revenue and expenditure data, as well as funded pupil counts, are from the Colorado Department of Education's (CDE's) annual "School District Revenues and Expenditures" reports. The most recent school year data is for FY2021 and the public reports on CDE's website go as far back as FY2007.ⁱⁱ

CSI developed all of this report's regional figures by cross-referencing the county in which each school district operates with the CDE's eight Field Service Regions (while designating charter and BOCES schools separately).ⁱⁱⁱ

Per-pupil figures are developed entirely according to data provided in these reports, whereas headcount enrollment data, which is distinct from funded pupil counts, are available from FY2000 through FY2022 and come from CDE's "Pupil Membership" releases.^{iv}

Inflation adjustments, where they occur, are developed according to the U.S. Government's CPI-U data published by the Bureau of Labor Statistics (BLS).^v

Data concerning public-school staff counts, pay, and turnover are gathered from CDE's "School/District Staff Statistics" reports.^{vi}

Turnover data for professions beyond the CDE's remit are published by the BLS' "Job Openings and Labor Turnover Survey" program.^{vii}

Appendix A: School Districts by County and Region

District	County	Region
MAPLETON 1	Adams	Metro
ADAMS 12 FIVE STAR	Adams	Metro
ADAMS COUNTY 14	Adams	Metro
BRIGHTON 27J	Adams	Metro
BENNETT 29J	Adams	Northeast
STRASBURG 31J	Adams	Northeast
WESTMINSTER 50	Adams	Metro
ALAMOSA RE-11J	Alamosa	Southwest
SANGRE DE CRISTO RE-22J	Alamosa	Southwest

ENGLEWOOD 1	Arapahoe	Metro
SHERIDAN 2	Arapahoe	Metro
CHERRY CREEK 5	Arapahoe	Metro
LITTLETON 6	Arapahoe	Metro
DEER TRAIL 26J	Arapahoe	Northeast
ADAMS-ARAPAHOE 28J	Arapahoe	Metro
BYERS 32J	Arapahoe	Northeast
ARCHULETA COUNTY 50 JT	Archuleta	Southwest
WALSH RE-1	Baca	Southeast
PRITCHETT RE-3	Baca	Southeast
SPRINGFIELD RE-4	Baca	Southeast
VILAS RE-5	Baca	Southeast
CAMPO RE-6	Baca	Southeast
LAS ANIMAS RE-1	Bent	Southeast
MCCLAVE RE-2	Bent	Southeast
ST VRAIN VALLEY RE 1J	Boulder	North Central
BOULDER VALLEY RE 2	Boulder	Metro
BUENA VISTA R-31	Chaffee	Northwest
SALIDA R-32	Chaffee	Northwest
KIT CARSON R-1	Cheyenne	Northeast
CHEYENNE COUNTY RE-5	Cheyenne	Northeast
CLEAR CREEK RE-1	Clear Creek	Metro
NORTH CONEJOS RE-1J	Conejos	Southwest
SANFORD 6J	Conejos	Southwest
SOUTH CONEJOS RE-10	Conejos	Southwest
CENTENNIAL R-1	Costilla	Southwest
SIERRA GRANDE R-30	Costilla	Southwest
CROWLEY COUNTY RE-10J	Crowley	Southeast
CONSOLIDATED C-1	Custer	Pikes Peak
DELTA COUNTY 50(J)	Delta	West Central
DENVER COUNTY 1	Denver	Metro
DOLOROS COUNTY RE NO.2	Dolores	Southwest
DOUGLAS COUNTY RE 1	Douglas	Metro
EAGLE COUNTY RE 50	Eagle	Northwest
ELIZABETH C-1	Elbert	Metro
KIOWA C-2	Elbert	Pikes Peak
BIG SANDY 100J	Elbert	Pikes Peak
ELBERT 200	Elbert	Pikes Peak
AGATE 300	Elbert	Northeast
CALHAN RJ-1	El Paso	Pikes Peak
HARRISON 2	El Paso	Pikes Peak

WIDEFIELD 3	El Paso	Pikes Peak
FOUNTAIN 8	El Paso	Pikes Peak
COLORADO SPRINGS 11	El Paso	Pikes Peak
CHEYENNE MOUNTAIN 12	El Paso	Pikes Peak
MANITOU SPRINGS 14	El Paso	Pikes Peak
ACADEMY 20	El Paso	Pikes Peak
ELLCOTT 22	El Paso	Pikes Peak
PEYTON 23 JT	El Paso	Pikes Peak
HANOVER 28	El Paso	Pikes Peak
LEWIS0PALMER 38	El Paso	Pikes Peak
FALCON 49	El Paso	Pikes Peak
EDISON 54 JT	El Paso	Pikes Peak
MIAMI/YODER 60 JT	El Paso	Pikes Peak
CANON CITY RE-1	Fremont	Pikes Peak
FLORENCE RE-2	Fremont	Pikes Peak
COTOPAXI RE-3	Fremont	Pikes Peak
ROARING FORK RE-1	Garfield	Northwest
GARFIELD RE-2	Garfield	Northwest
GARFIELD 16	Garfield	Northwest
GILPIN COUNTY RE-1	Gilpin	Metro
WEST GRAND 1-JT	Grand	Northwest
EAST GRAND 2	Grand	Northwest
GUNNISON WATERSHED RE1J	Gunnison	West Central
HINSDALE COUNTY RE 1	Hinsdale	West Central
HUERFANO RE-1	Huerfano	Southeast
LA VETA RE-2	Huerfano	Southeast
NORTH PARK R-1	Jackson	Northwest
JEFFERSON COUNTY R-1	Jefferson	Metro
EADS RE-1	Kiowa	Southeast
PLAINVIEW RE-2	Kiowa	Southeast
ARRIBA-FLAGLER C-20	Kit Carson	Northeast
HI PLAINS R-23	Kit Carson	Northeast
STRATTON R-4	Kit Carson	Northeast
BETHUNE R-5	Kit Carson	Northeast
BURLINGTON RE-6J	Kit Carson	Northeast
LAKE COUNTY R-1	Lake	Northwest
DURANGO 9-R	La Plata	Southwest
BAYFIELD 10 JT-R	La Plata	Southwest
IGNACIO 11 JT	La Plata	Southwest
POUDRE R-1	Larimer	North Central
THOMPSON R-2J	Larimer	North Central

PARK (ESTES PARK) R-3	Larimer	North Central
TRINIDAD 1	Las Animas	Southeast
PRIMERO REORGANIZED 2	Las Animas	Southeast
HOEHNE REORGANIZED 3	Las Animas	Southeast
AGUILAR REORGANIZED 6	Las Animas	Southeast
BRANSON REORGANIZED 82	Las Animas	Southeast
KIM REORGANIZED 88	Las Animas	Southeast
GENOA-HUGO C-113	Lincoln	Northeast
LIMON RE-4J	Lincoln	Northeast
KARVAL RE-23	Lincoln	Northeast
VALLEY RE-1	Logan	Northeast
FRENCHMAN RE-3	Logan	Northeast
BUFFALO RE-4	Logan	Northeast
PLATEAU RE-5	Logan	Northeast
DE BEQUE 49JT	Mesa	West Central
PLATEAU VALLEY 50	Mesa	West Central
MESA COUNTY VALLEY 51	Mesa	West Central
CREEDE CONSOLIDATED 1	Mineral	Southwest
MOFFAT COUNTY RE:NO 1	Moffat	Northwest
MONTEZUMA-CORTEZ RE-1	Montezuma	Southwest
DOLORES RE-4A	Montezuma	Southwest
MANCOS RE-6	Montezuma	Southwest
MONTROSE COUNTY RE-1J	Montrose	West Central
WEST END RE-2	Montrose	West Central
BRUSH RE-2(J)	Morgan	North Central
FORT MORGAN RE-3	Morgan	North Central
WELDON VALLEY RE-20(J)	Morgan	North Central
WIGGINS RE-50(J)	Morgan	North Central
EAST OTERO R-1	Otero	Southeast
ROCKY FORD R-2	Otero	Southeast
MANZANOLA 3J	Otero	Southeast
FOWLER R-4J	Otero	Southeast
CHERAW 31	Otero	Southeast
SWINK 33	Otero	Southeast
OURAY R-1	Ouray	West Central
RIDGWAY R-2	Ouray	West Central
PLATTE CANYON 1	Park	Metro
PARK COUNTY RE-2	Park	Northwest
HOLYOKE RE-1J	Phillips	Northeast
HAXTUN RE-2J	Phillips	Northeast
ASPEN 1	Pitkin	Northwest

GRANADA RE-1	Prowers	Southeast
LAMAR RE-2	Prowers	Southeast
HOLLY RE-3	Prowers	Southeast
WILEY RE-13 JT	Prowers	Southeast
PUEBLO CITY 60	Pueblo	Pikes Peak
PUEBLO COUNTY RURAL 70	Pueblo	Pikes Peak
MEEKER RE1	Rio Blanco	Northwest
RANGELY RE-4	Rio Blanco	Northwest
DEL NORTE C-7	Rio Grande	Southwest
MONTE VISTA C-8	Rio Grande	Southwest
SARGENT RE-33J	Rio Grande	Southwest
HAYDEN RE-1	Routt	Northwest
STEAMBOAT SPRINGS RE-2	Routt	Northwest
SOUTH ROUTT RE 3	Routt	Northwest
MOUNTAIN VALLEY RE 1	Saguache	Southwest
MOFFAT 2	Saguache	Southwest
CENTER 26 JT	Saguache	Southwest
SILVERTON 1	San Juan	Southwest
TELLURIDE R-1	San Miguel	West Central
NORWOOD R-2J	San Miguel	West Central
JULESBURG RE-1	Sedgwick	Northeast
PLATTE VALLEY RE-3	Sedgwick	North Central
SUMMIT RE-1	Summit	Northwest
CRIPPLE CREEK-VICTOR RE-1	Teller	Pikes Peak
WOODLAND PARK RE-2	Teller	Pikes Peak
AKRON R-1	Washington	Northeast
ARICKAREE R-2	Washington	Northeast
OTIS R-3	Washington	Northeast
LONE STAR 101	Washington	Northeast
WOODLIN R-104	Washington	Northeast
WELD RE-1	Weld	North Central
EATON RE-2	Weld	North Central
KEENESBURG RE-3(J)	Weld	North Central
WINDSOR RE-4	Weld	North Central
JOHNSTOW-MILIKEN RE-5J	Weld	North Central
GREELEY 6	Weld	North Central
PLATTE VALLEY RE-7	Weld	North Central
WELD COUNTY S/D RE-8	Weld	North Central
AULT-HIGHLAND RE-9	Weld	North Central
BRIGGSDALE RE-10	Weld	North Central
PRAIRIE RE-11	Weld	North Central

PAWNEE RE-12	Weld	North Central
YUMA 1	Yuma	Northeast
WRAY RD-2	Yuma	Northeast
IDALIA RJ-3	Yuma	Northeast
LIBERTY J-4	Yuma	Northeast
CHARTER SCHOOL INSTITUTE	<i>Charter</i>	<i>State</i>
GLOBAL VILLAGE CHARTER COLLABORATIVE	<i>Charter</i>	<i>State</i>
CHARTER CHOICE COLLABORATIVE	<i>Charter</i>	<i>State</i>
JAMES IRWIN CHARTER COLLABORATIVE	<i>Charter</i>	<i>State</i>
ROCKY MOUNTAIN CHARTER COLLABORATIVE	<i>Charter</i>	<i>State</i>
EAST CENTRAL BOCES	<i>BOCES</i>	<i>State</i>
MOUNTAIN BOCES	<i>BOCES</i>	<i>State</i>
CENTENNIAL BOCES	<i>BOCES</i>	North Central
NORTHEAST BOCES	<i>BOCES</i>	<i>State</i>
PIKES PEAK BOCES	<i>BOCES</i>	<i>State</i>
SAN JUAN BOCES	<i>BOCES</i>	Southwest
SAN LUIS VALLEY BOCES	<i>BOCES</i>	<i>State</i>
SOUTH CENTRAL BOCES	<i>BOCES</i>	<i>State</i>
SOUTHEASTERN BOCES	<i>BOCES</i>	<i>State</i>
NORTHWEST BOCES	<i>BOCES</i>	<i>State</i>
ADAMS COUNTY BOCES	<i>BOCES</i>	<i>State</i>
RIO BLANCO BOCES	<i>BOCES</i>	<i>State</i>
EXPEDITIONARY BOCES	<i>BOCES</i>	Metro
GRAND VALLEY BOCES	<i>BOCES</i>	<i>State</i>
MT EVANS BOCES	<i>BOCES</i>	<i>State</i>
UNCOMPAHGRE BOCES	<i>BOCES</i>	<i>State</i>
SANTA FE TRAIL BOCES	<i>BOCES</i>	<i>State</i>
FRONT RANGE BOCES	<i>BOCES</i>	<i>State</i>
UTE PASS BOCES	<i>BOCES</i>	<i>State</i>
COLORADO DIGITAL BOCES	<i>BOCES</i>	Pikes Peak
COLORADO RIVER BOCES	<i>BOCES</i>	<i>State</i>

ⁱ <https://commonsenseinstitute.co.org/2-5-billion-in-covid-19-federal-relief-funding-to-colorados-k-12-education-system/>

ⁱⁱ <https://www.cde.state.co.us/cdefinance/revexp>

ⁱⁱⁱ <https://www.cde.state.co.us/cdeedserv/rgmapage>

^{iv} <https://www.cde.state.co.us/cdereval/pupilcurrent>

^v <https://www.bls.gov/cpi/>

^{vi} <https://www.cde.state.co.us/cdereval/staffcurrent>

^{vii} <https://www.bls.gov/jlt/>