



Legislative Council Staff *Nonpartisan Services for Colorado's Legislature*

Demographic Note

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BILL TOPIC: STUDENT EQUITY EDUCATION FUNDING PROGRAMS

Demographics Analyzed:

- Socioeconomic Status
- Geography
- Race/Ethnicity

Direct Impact(s):

☒ Economic	☐ Health	☐ Public Safety
☐ Employment	☒ Education	

Bill Impact: This bill improves economic outcomes for parents by providing educational payments to their school-age children. The bill may reduce economic and education disparities by race/ethnicity and geography through these educational payments to families. However, by reducing available public school funding, the bill may indirectly reduce education outcomes for public school students, offsetting the direct impact of the bill for other students.

Report Status: This demographic note reflects the introduced bill.

Demographic Impact Summary

This demographic note¹ analyzes potential impacts of SB 21-037 on disparities in economic and educational outcomes by geography, race and ethnicity, and socioeconomic status.² SB 21-037 requires local education providers, including public school districts and Charter School Institute schools, to implement a student equity funding program that provides education payments to families impacted by school closures. Payments are made to affected families in amounts equal to the state share of per pupil funding for each of the parent's eligible students. As a result of these payments, economic and education outcomes for families with school-age children in affected districts will improve, potentially decreasing economic and education disparities by race/ethnicity and by geography. Based on school closures during the 2020-21 academic year, demographic characteristics

¹Pursuant to Section 2-2-322.5, C.R.S., this demographic note uses available data to outline the potential impacts of proposed legislation on disparities within the state. Disparities are defined by statute as the difference in economic, employment, health, education, or public safety outcomes between the state population as a whole and subgroups of the population, as defined by socioeconomic status, race, ethnicity, sex, gender identity, sexual orientation, disability, geography, or any other relevant characteristic for which data are available. It is beyond the scope of this analysis to examine each of the varied causes contributing to a given disparity. For further information on the contents of demographic notes, see "Demographic Notes Overview" Memorandum available at https://leg.colorado.gov/sites/default/files/images/lcs/demographic_notes_overview.pdf.

² While income is often used as a proxy for socioeconomic status, it is a complex confluence of factors including, but not limited to, education and occupation in addition to income. Due to data limitations, income is largely used as a proxy for socioeconomic status in this analysis.

of students in impacted districts suggest that minority students living in certain regions, including metropolitan areas and mountain resort communities, as well as some areas in the south and west of the state, are more likely to be impacted by SB 21-037 through payments made in FY 2021-22.³ Impacts of school closures beyond the 2020-21 school year cannot be determined at this time and are not considered in the analysis.

By reducing public school funding in affected districts by the amount of the payments to affected families, the bill may have indirect impacts on educational outcomes for students attending affected public schools depending on the funding decisions made at the local level. These indirect impacts may offset the income and educational outcomes resulting from the payments made to families or may increase existing disparities for public school students. Potential indirect impacts due to shifting of resources from public to private educational services cannot be determined at this time as school funding decisions cannot be known.

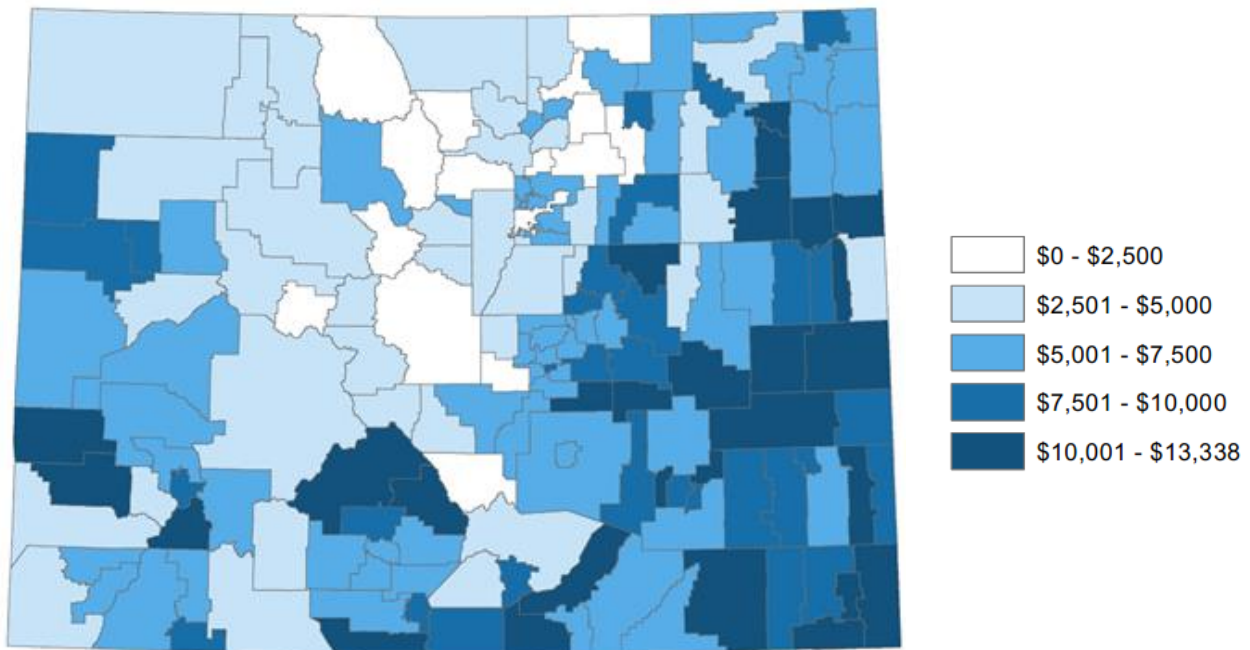
Key Provisions Impacting Demographic Disparities

Beginning with the 2021-22 school year, the bill requires that each school district and Charter School Institute school that was closed to in-person instruction for 30 or more school days in the prior school year implement a student equity education funding program for the purchase of educational services and supplies for eligible students. The program pays parents the state share portion of the education provider's per pupil revenue for each of the parent's eligible students. A parent is paid for each student that was either enrolled in the school district the prior year, or was not enrolled either in public or private school but resided in the geographic boundaries of the district in the prior year. For further background, consult the fiscal note for SB 21-037.

Legislative background. Under the School Finance Act, public school funding comes from a combination of state and local sources. Each school district's local share is calculated first, and state aid makes up the difference between the local portion and the total funding identified through the school finance formula. The state share of revenue per pupil varies widely across school districts, as shown in Figure 1. Forecast values for FY 2021-22, the first year to which the bill is applicable, range from a low of \$0 for districts that are 100 percent locally funded, to \$13,338 for FY 2021-22, after the budget stabilization factor is applied. The statewide average state share is expected to be \$4,888 per pupil. This bill will reflect these existing geographical disparities in the amount of funding provided to parents of students eligible for the equity education programs.

³ Terminology used to distinguish demographic groups (e.g., black/African American, Hispanic or Latina/Latino) is based on the terminology used in the data sources referenced. These terms may differ from the self-identification of these populations.

Figure 1
Estimated State Share of Revenue per Pupil by District, FY 2021-22



Source: Legislative Council Staff.

Analysis and Findings

The following analysis compares the population affected by the bill to the statewide population across different demographic groups, as required by statute.⁴ In this case, the affected population is defined as students in school districts in which in-person learning was suspended for at least 30 days during the 2020-21 school year. The comparison population is the statewide population of students. For informational purposes, data are also reported on students in the districts where in-person learning was not suspended or was suspended for less than 30 days. This analysis identifies potential effects of the bill on existing disparities based on demographic differences between affected and statewide populations. For detailed information on the data used, see Appendices A and B.

Background

Existing disparities in educational attainment. Educational achievement gaps in the U.S. by socioeconomic status and race/ethnicity are well-documented. Studies find that these gaps are large and persistent. For example, one study found large and persistent achievement gaps by socioeconomic status, with students in the lowest groups three to four years behind students in the highest groups.⁵ While race and ethnicity are correlated with income, with black/African American

⁴ See Section 2-2-322.5, C.R.S.

⁵ Hanushek, E., et. al. 2019. "The Unwavering SES Achievement Gap: Trends in U.S. Student Performance." NBER Working Paper. Available at: https://www.nber.org/system/files/working_papers/w25648/w25648.pdf.

and Hispanic/Latinx families more likely to belong to lower-income groups, achievement gaps exist between white students and students of color, even if income is held constant. Black/African American and Hispanic/Latinx students are roughly two years behind the average white student.⁶

COVID-19-related impacts on existing disparities. While it is too soon to measure long-term impacts on educational achievement, school closures in response to the COVID-19 pandemic may contribute to increasing existing achievement gaps. Available evidence suggests that pandemic-related educational and economic disruptions have disproportionately impacted low-income, black/African American, Hispanic/Latinx, and other nonwhite families as well as families with children, both in the U.S. and Colorado.⁷ Interactions between income inequality and education achievement gaps are likely to exacerbate these impacts.

Demographic Comparisons

FY 2020-21 learning modes. The Colorado Department of Education (CDE) maintains data on the learning environment in each of Colorado's 178 public school districts during the 2020-21 school year. These data are collected once monthly, and provide a snapshot of learning conditions on the first day of each month, reflecting data collected during the previous month. For a list of school districts by learning mode, see Appendix A.

Table 1 presents district information by learning mode. Almost half of districts experienced at least two months of either remote or hybrid learning or both in either elementary or middle school or both during the 2020-21 school year, accounting for the majority of students. Data are not available for two districts, accounting for 0.01 percent of students. Hybrid learning procedures vary across the state, with students learning in-person from one to three days per week. Omitting hybrid-only schools does not substantially alter the demographics, and including them provides an upper-bound estimate of impacted students.

⁶ Dorn, E., et. al. 2020. "COVID-19 and Student Learning in the United States." McKinsey and Company. Available at: <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime>.

⁷ Armentier, O. et. al. "The Disproportionate Effects of COVID-19 on Households with Children." 2020. Federal Reserve Bank of New York. Available at: <https://libertystreeteconomics.newyorkfed.org/2020/08/the-disproportionate-effects-of-covid-19-on-households-with-children.html>; Choi, D. and Briggs, J. "The Reopening of Schools." 2020. Goldman Sachs; Dorn, E. et. al. "COVID-19 and Learning Loss." McKinsey and Company. Available at: <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-learning-loss-disparities-grow-and-students-need-help#>; Legislative Council Staff. "Income Inequality in Colorado and COVID-19 Impacts." 2021. Available at: <https://leg.colorado.gov/publications/income-inequality-colorado-and-covid-19-impacts>; Smith, E. and Reeves, R. "Students of Color Most Likely to Be Learning Online." Brookings Institute. 2020. Available at: <https://www.brookings.edu/blog/how-we-rise/2020/09/23/students-of-color-most-likely-to-be-learning-online-districts-must-work-even-harder-on-race-equity/>.

Table 1
District Information by Learning Mode

	Remote/ Hybrid ¹	In-Person	Statewide
Number of Districts ²	83	93	178
Funded Pupil Count ³	776,631	111,819	888,556
Share of Statewide Funded Pupil Count	87.4%	12.6%	100%
State Share per Funded Pupil Count ⁴	\$4,764	\$5,749	\$4,888
Average Funded Pupil Count per District	9,357	1,202	4,992

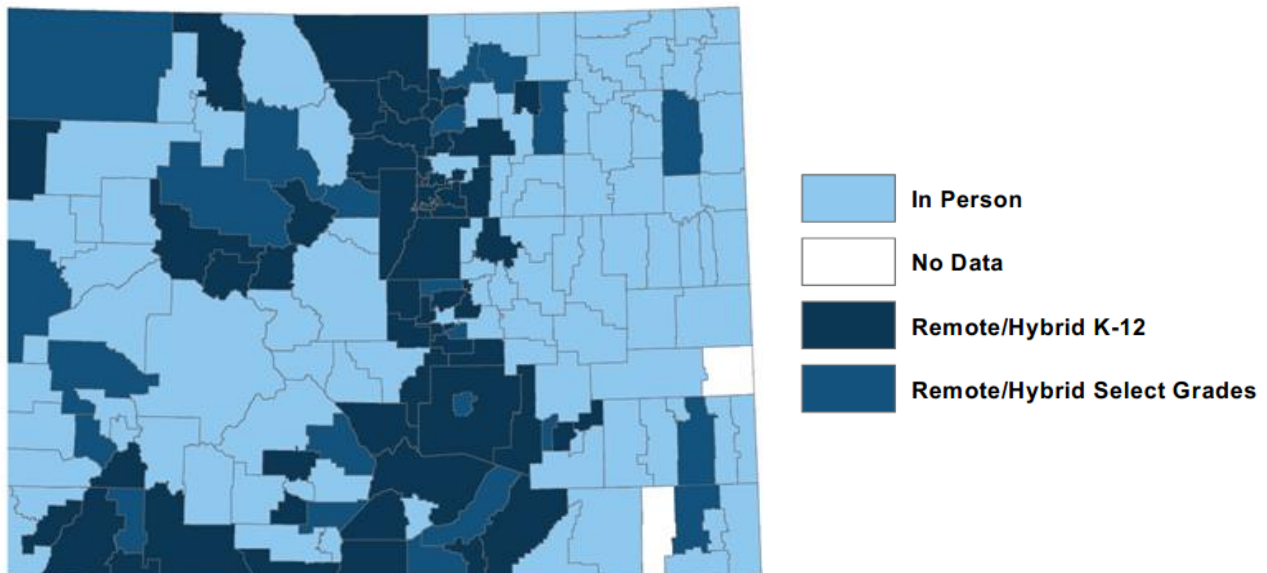
¹Districts in which either elementary or middle/high school or both were closed to in-person instruction for two or more months.

² Legislative Council Staff calculations based on Colorado Department of Education information; based on learning conditions September 1, 2020 to February 1, 2021.

³ Legislative Council Staff, December forecast for FY 2021-22.

Learning modes by geographic location. Geographic location of districts by learning mode is presented in Figure 2. As shown, in-person-only districts tend to be located in rural areas, and have fewer students, which accounts for the higher state share per pupil, as these districts receive additional state funding through the size factor. Remote/hybrid districts are clustered around metropolitan areas and mountain resort communities, as well as some relatively economically disadvantaged areas in the south and west of the state.

Figure 2
School Districts by Learning Mode, 2020-21

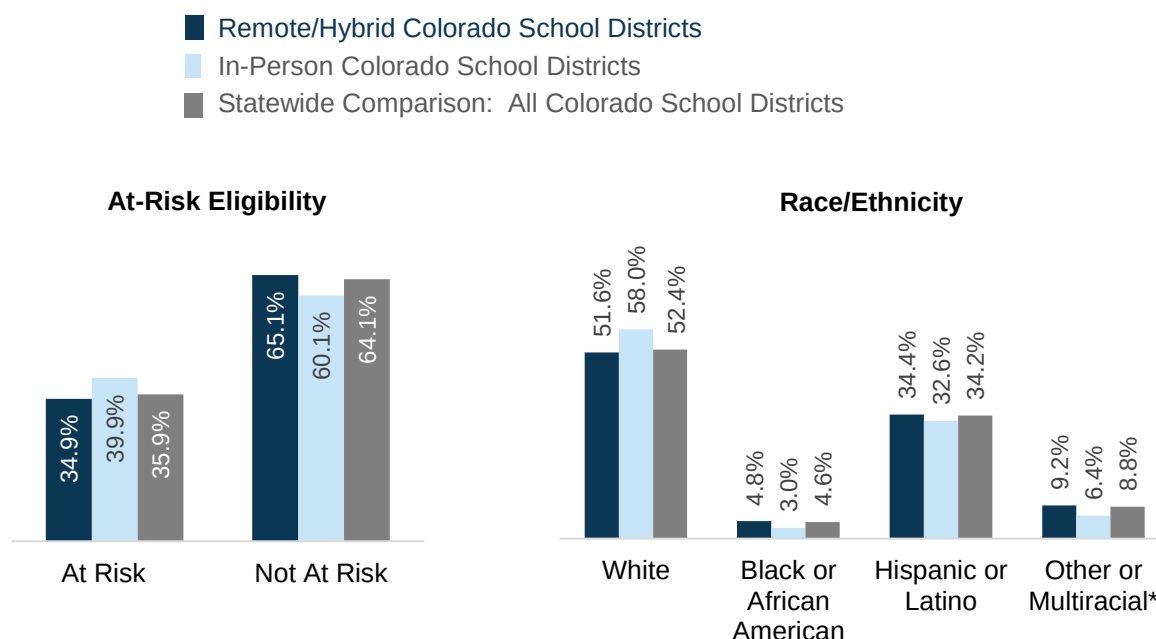


Source: Legislative Council Staff calculations based on Colorado Department of Education information; based on learning conditions September 1, 2020 to February 1, 2021.

District at-risk and race/ethnicity compositions. Figure 3 provides a comparison of student populations by learning mode and by race/ethnicity and by at-risk status as a proxy for income for the 2020-21 school year.⁸ There is a lower share of at-risk students in remote/hybrid learning modes (34.9 percent) than among the statewide population (35.9 percent) and in-person learners (39.9 percent). This is likely partially due to the high representation of at-risk learners in rural districts, many of which remained learning in-person during the 2020-21 school year.

The data also suggest that remote/hybrid districts have a higher proportion of minority and multiracial students compared to the state as a whole and to in-person districts. The aggregated data may mask conditions within some remote/hybrid districts: over one-third of remote/hybrid districts have a population of at-risk learners of 50 percent or more, compared to 14 percent among in-person districts.

Figure 3
Population Comparisons
Share of Total Population



Sources: Legislative Council Staff calculations based on Colorado Department of Education data; Colorado Department of Education.

* "Other" races include American Indian or Alaskan Native, Asian, and Native Hawaiian or Other Pacific Islander.

Figures 4 and 5 show the geographic dispersion of at-risk students and minority students. Districts with a larger share of at-risk students are in urban districts and scattered across rural districts throughout the state, including in the south, west and eastern plains. Minority students are likewise concentrated in urban districts as well as in mountain resort communities and some rural communities, particularly in the San Luis Valley and southwest mountain regions. While at-risk and

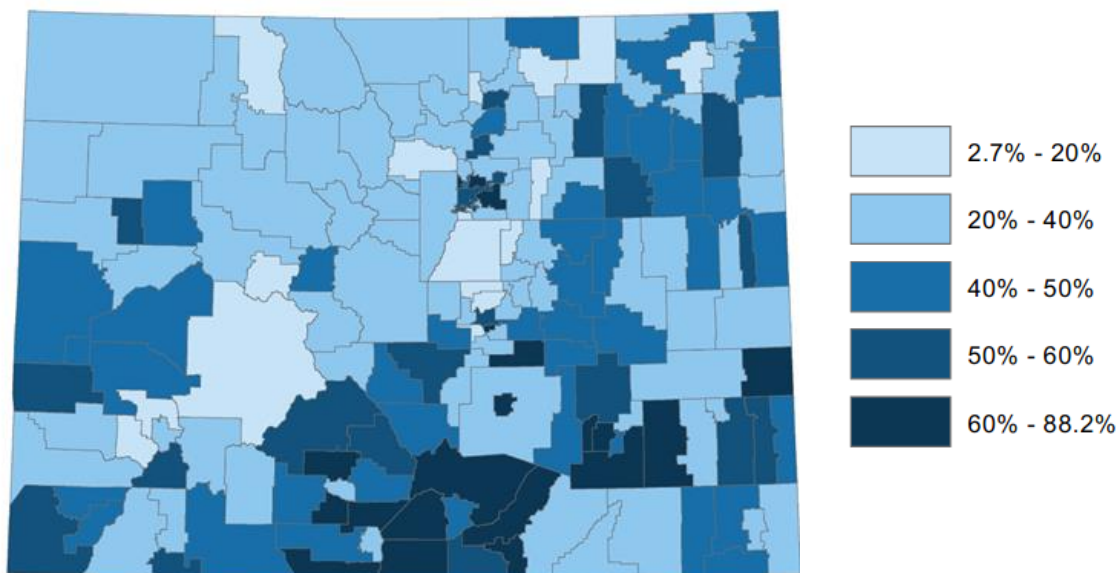
⁸ At-risk pupils are defined as students from low-income families, as measured by eligibility for free lunches under the National School Lunch Act. At-risk students also includes a limited number of non-English-speaking students.

minority students are similarly distributed in metropolitan and southern regions, notable differences include concentrations of minority students in the mountain resort areas, which have lower shares of at-risk students, as well as concentrations of at-risk students in the eastern plains districts, which have lower shares of minority students.

Data limitations. The CDE data provides only an approximation of schools closed to remote learning for 30 or more school days during the 2020-21 school year, based on public websites and releases by each district and updated once monthly. The data do not include students enrolled in Charter School Institute schools, BOCES schools, Colorado School for the Deaf and Blind, or the Colorado Detention Center. Together, these schools account for 26,880 students (3.0 percent) in the 2020-21 school year.

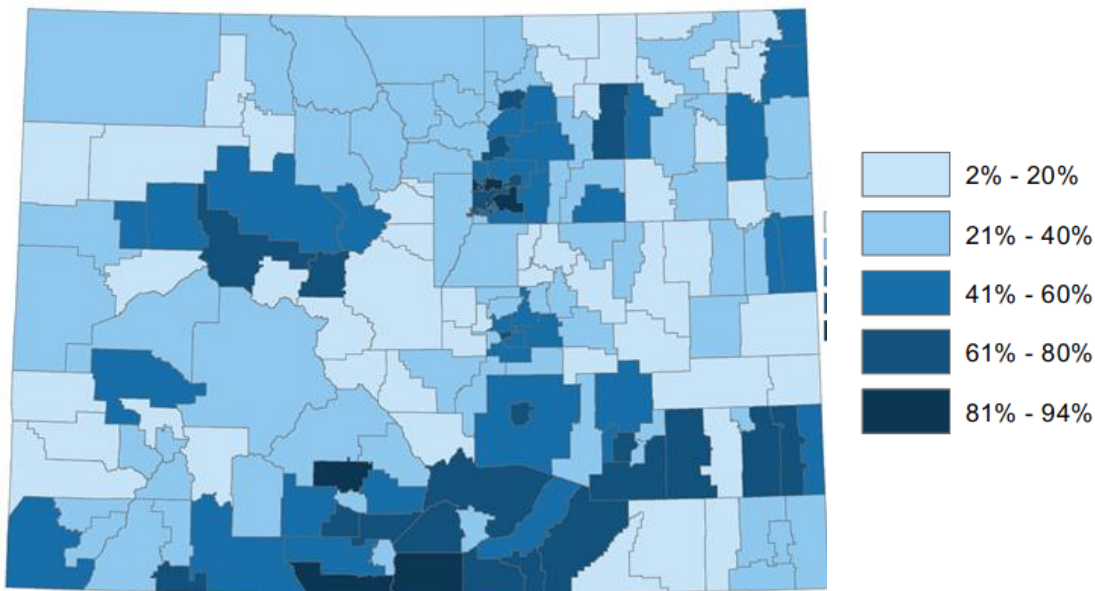
In addition, data do not include home-schooled students, who may be eligible to participate in the student equity education program if they live in an affected district. According to the CDE, in the 2020-21 school year, there are 15,773 home-schooled students statewide (1.8 percent), up from an average of 7,371 from 2009 through 2019. Omitted students account for 4.7 percent of the statewide student population.

Figure 4
School Districts by Share of At-Risk Students, FY 2021-22



Source: Legislative Council Staff.

Figure 5
School Districts by Share of Minority Students, FY 2020-21



Source: Legislative Council Staff.

Direct Impacts

SB 21-037 may have direct impacts on economic and educational outcomes for affected populations and indirect impacts on educational and employment outcomes for public school students in impacted districts. By providing direct payments to parents of students affected by school closures, economic outcomes for families with school-age children in affected districts will improve. However, possible indirect impacts due to the shifting of resources from public to private educational services may be offsetting. These impacts would be the result of parents' decisions to participate in the program, the spending decisions made by these parents, and any resulting shifts in school funding and cannot be known at this time.

Economic and educational outcomes by race/ethnicity. Based on a comparison between the statewide and affected populations, this analysis suggests that by providing direct payments to parents in FY 2021-22, SB 21-037 may reduce economic disparities, particularly for families with black/African American, Hispanic/Latinx, or multiracial students and nonwhite students of other races, assuming parents of eligible students choose to participate in the program. Based on the analysis above, minority students are more likely than the statewide population to be affected by the bill because they account for a larger share of students in remote/hybrid districts (48.4 percent) than they do in in-person districts (42.0 percent) or in the statewide population as a whole (47.6 percent). To the extent that economic outcomes are improved for families of minority students, this may result in improved educational outcomes for these students through increased access to private educational services.

Economic and educational outcomes by geography. Impacts on economic and education disparities by geography are less clear. Under current law, the state share of school funding varies considerably across school districts, and this bill will reflect those geographical disparities in the amount of funding that is provided to parents who participate in the program. Based on school closures during the 2020-21 school year, some affected districts are clustered in relatively economically disadvantaged regions of the state, including the southwest mountain, San Luis Valley, and southern mountain regions. To the extent that these areas experience improved economic and educational outcomes, this bill may reduce existing geographic disparities.

Other Indirect Impacts

Employment and educational trade-offs across the public and private sector. This bill may result in offsetting indirect impacts on public education providers and public school students in affected districts. These impacts cannot be determined prior to the implementation of the program and depend on who participates and the resulting shifts in resources and funding between public and private educational service providers. For example, private educational outcomes and opportunities may improve for some students, while public educational outcomes and opportunities may be reduced, depending on which families opt into the program and how it is implemented and funded. Likewise, employment opportunities for providers of private educational services would likely improve, while those for public educational providers might decline.

Demographics Not Analyzed

Some demographic groups have not been included in the analysis due to data limitations. Data on the relevant populations delineated by sexual orientation, gender identity, and disability were not available at the time of the analysis. Should data become available, this analysis may be updated. Data on students populations delineated by sex was available, but shares of males and females in affected and statewide populations do not differ from each other.

Data Sources and Agencies Contacted

Education

**Appendix A
School Districts by Learning Mode**

Remote/Hybrid K-12	Remote/Hybrid K-12 (continued)	Remote/Hybrid Select Grades (continued)	In-Person (continued)	In-Person (continued)	In-Person (continued)
Academy 20	Lake County R-1	Eaton RE-2	Canon City RE-1	Kit Carson R-1	Swink 33
Adams 12 Five Star Schools	Littleton 6	Fort Morgan Re-3	Cheyenne County Re-5	La Veta Re-2	Upper Rio Grande C-7
Adams County 14	Mancos Re-6	Lamar Re-2	Colorado Springs 11	Las Animas RE-1	Valley RE-1
Adams-Arapahoe 28J	Manitou Springs 14	Lewis-Palmer 38	Cotopaxi RE-3	Liberty J-4	Vilas RE-5
Archuleta County 50 Jt	Mapleton 1	Manzanola 3J	Creede School District	Limon RE-4J	Walsh RE-1
Aspen 1	Monte Vista C-8	Mesa County Valley 51	Crowley County RE-1-J	Lone Star 101	West End RE-2
Bennett 29J	Poudre R-1	Moffat 2	De Beque 49JT	McClave Re-2	Wiggins RE-50(J)
Boulder Valley Re 2	Pueblo County 70	Moffat County RE: No 1	Deer Trail 26J	Meeker RE-1	Wiley RE-13 Jt
Centennial R-1	Rangely RE-4	Montrose County RE-1J	Delta County 50(J)	Miami/Yoder 60 JT	Woodlin R-104
Center 26 JT	Roaring Fork RE-1	Primero Reorganized 2	Dolores County RE No.2	Montezuma-Cortez RE-1	Wray RD-2
Cheraw 31	Rocky Ford R-2	Pueblo City 60	Dolores RE-4A	Mountain Valley RE 1	
Cherry Creek 5	Sheridan 2	Springfield RE-4	Eads RE-1	North Conejos RE-1J	No Data
Cheyenne Mountain 12	Sierra Grande R-30	Telluride R-1	East Grand 2	North Park R-1	Plainview RE-2
Cripple Creek-Victor RE-1	Silverton 1	Weld County RE-1	East Otero R-1	Norwood R-2J	Pritchett RE-3
Custer County School District C-1	South Conejos RE-10	West Grand 1-JT	Edison 54 JT	Otis R-3	
Denver County 1	St Vrain Valley RE1J	Widefield 3	Elbert 200	Ouray R-1	
District 49	Steamboat Springs RE-2	Yuma 1	Elizabeth School District	Park County RE-2	
Douglas County Re 1	Summit RE-1		Ellicott 22	Pawnee RE-12	
Durango 9-R	Thompson R2-J	In-Person	Frenchman RE-3	Peyton 23 Jt	
Englewood 1	Trinidad 1	Agate 300	Garfield 16	Plateau RE-5	
Estes Park R-3	Weld County School District RE-3J	Akron R-1	Garfield Re-2	Plateau Valley 50	
Fountain 8	Weld Re-8 Schools	Arickaree R-2	Genoa-Hugo C113	Platte Canyon 1	
Fowler R-4J	Weldon Valley RE-20(J)	Arriba-Flagler C-20	Granada RE-1	Platte Valley RE-7	
Fremont RE-2	Westminster Public Schools	Ault-Highland RE-9	Gunnison Watershed RE1J	Prairie RE-11	
Gilpin County RE-1	Windsor RE-4	Bethune R-5	Haxtun RE-2J	Revere School District	
Greeley 6	Woodland Park Re-2	Big Sandy 100J	Hayden RE-1	Ridgway R-2	
Hanover 28		Branson Reorganized 82	Hinsdale County RE 1	Salida R-32	
Harrison 2	Remote/Hybrid Select Grades	Brush RE-2(J)	Hi-Plains R-23	Sanford 6J	
Hoehne Reorganized 3	Aguilar Reorganized 6	Buena Vista R-31	Holly RE-3	Sangre De Cristo Re-22J	
Huerfano Re-1	Alamosa RE-11J	Buffalo RE-4J	Holyoke Re-1J	Sargent RE-33J	
Ignacio 11 JT	Bayfield 10 Jt-R	Burlington RE-6J	Idalia RJ-3	School District 27J	
Jefferson County R-1	Briggsdale RE-10	Byers 32J	Julesburg Re-1	South Routt RE 3	
Johnstown-Milliken RE-5J	Clear Creek RE-1	Calhan RJ-1	Karval RE-23	Strasburg 31J	
Kiowa C-2	Eagle County RE 50	Campo RE-6	Kim Reorganized 88	Stratton R-4	

Source: Legislative Council Staff calculations based on Colorado Department of Education data.

**Appendix B
Population Data Used in Analysis**

At-Risk Students in Colorado School Districts, FY 2021-22

At-Risk Students	Remote/Hybrid		In-Person		All Districts and Learning Modes	
	Population	Share	Population	Share	Population	Share
At-Risk	264,027	34.9%	43,367	39.9%	307,452	35.9%
Not At-Risk	493,305	65.1%	65,322	60.1%	548,867	64.1%
TOTAL	757,332	100.0%	108,689	100.0%	856,319	100.0%

Sources: Legislative Council Staff and Colorado Department of Education.

Students by Race/Ethnicity in Colorado School Districts, FY 2020-21

Race/Ethnicity	Remote/Hybrid		In-Person		All Districts and Learning Modes	
	Population	Share	Population	Share	Population	Share
White	387,539	51.6%	61,106	58.0%	448,734	52.4%
Black or African American	36,175	4.8%	3,184	3.0%	39,360	4.6%
Hispanic or Latino	258,261	34.4%	34,378	32.6%	292,653	34.2%
Other or Multiracial*	68,880	9.2%	6,692	6.4%	75,572	8.8%
TOTAL	750,855	100.0%	105,360	100.0%	856,319	100.0%

Sources: Legislative Council Staff and Colorado Department of Education.

* "Other" races include American Indian or Alaskan Native, Asian, and Native Hawaiian or Other Pacific Islander.