



Legislative Council Staff
Nonpartisan Services for Colorado's Legislature

Memorandum

Room 029 State Capitol, Denver, CO 80203-1784
Phone: (303) 866-3521 • Fax: (303) 866-3855
lcs.ga@state.co.us • leg.colorado.gov/lcs

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TO: Legislative Interim Committee on School Finance
FROM: Anna Gerstle, Senior Fiscal Analyst, 303-866-4375
Marc Carey, Chief School Finance Officer, 303-866-4102
SUBJECT: Cost of Living Factor Overview and Update

Summary

This memorandum provides an overview of the cost of living factor in the school finance formula, a discussion of how the school district cost of living factors are determined, and an update on the progress of the 2021 Cost of Living Study.

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What is the cost of living factor?

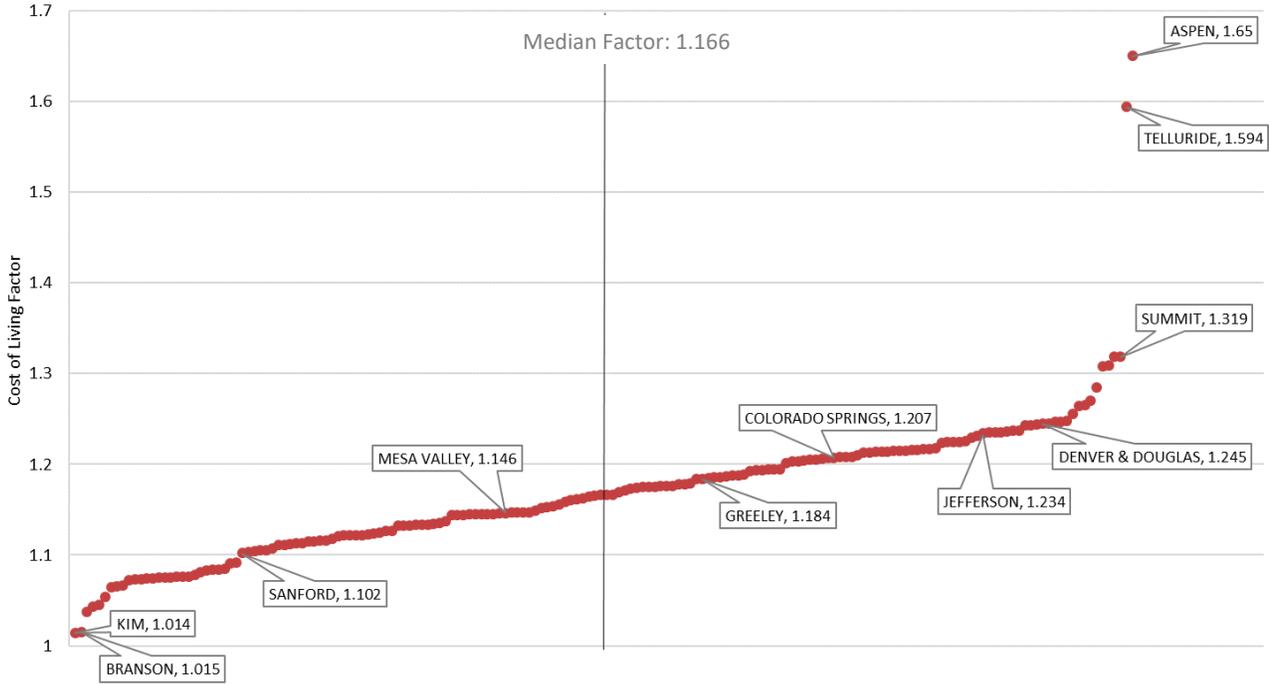
The school finance formula provides an increase in the base per pupil funding for districts with a higher cost of living. Each school district is assigned a factor to indicate the cost of living in the district relative to the cost of living in other districts in the state. The formula recognizes that differences in the cost of living primarily affect the salaries that must be paid to hire and retain qualified personnel. Therefore, the cost of living factor is applied only to the portion of the base that relates to personnel, as defined by the personnel costs factor. The formula for preliminary per pupil funding is below. This calculation occurs prior to the addition of funding for at-risk students, English language learners, online students, and ASCENT students.

$$\text{Preliminary Per Pupil Funding} = \frac{[(\text{Base} \times \text{personnel costs factor} \times \text{cost of living factor}) + (\text{Base} \times (1 - \text{personnel cost factor}))]}{\text{x Size Factor}}$$

What are the district factors?

For FY 2020-21 and FY 2021-22, the cost of living factors for school districts range from about 1 percent to 65 percent. Figure 1 shows the distribution of the cost of living factors. A list of district factors is available upon request. These factors will be updated this winter with the completion of the 2021 Cost of Living Study.

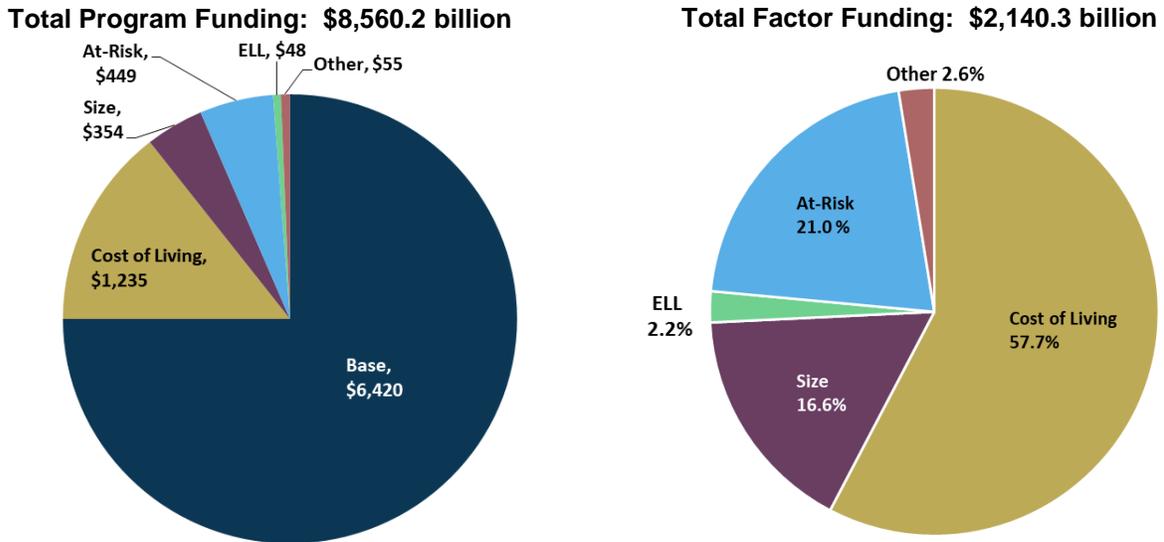
Figure 1
Current Cost of Living Factor Distribution



How much money is allocated through the cost of living factor?

Statewide, an estimated \$1.2 billion in FY 2021-22 in school finance funding is attributed to the cost of living factor, or 14.4 percent of total program funding, before application of the budget stabilization factor. Figure 2 shows the portion of the school finance formula attributable to each factor in the formula on the left and the allocation of total factor funding (excluding the base) on the right. The cost of living factor accounts for \$1.2 billion in FY 2021-22, making up 57.7 percent of total factor funding.

Figure 2
School Finance Funding Elements, FY 2021-22
Before application of budget stabilization factor, millions of dollars



How are district cost of living factors determined?

Section 22-54-104 (5)(c)(III), C.R.S. requires that Legislative Council Staff conduct a study of the cost of living in each school district every two years to update the cost of living factors used in the school finance funding formula. The first study was conducted in 1993, and a study has been conducted during the summer and fall of each odd-numbered year since. The 2019 study results are used to determine school district cost of living factors for FY 2020-21 and FY 2021-22. The 2021 study, which will determine the factors for FY 2022-23 and FY 2023-24, is currently ongoing. Corona Insights completed the 2019 study and is currently working on the 2021 study.

How does the study work?

Market basket. The cost of living measure for each school district examines the cost of purchasing a similar market basket of housing, goods and services, transportation, and other items in a school district. The 2019 study used representative purchases made by a three-person household earning an average teacher's salary of \$56,547 per year. This amount reflects the average salary for a teacher with a bachelor's degree and ten or more years of teaching experience.

The items included were based on the latest Consumer Expenditure Survey for this type of household, prepared by the U.S. Bureau of Labor Statistics. Table 1 illustrates the composition of those purchases in broad categories. Housing was the largest category of spending at 32.3 percent of household income, in the 2019 study.

Table 1
Market Basket for Benchmark Household
2019 Cost of Living Study

Expenditure Category	Items Included	Share of Income	Spending Amount
Housing	Mortgage or rental payment, property taxes, interest, home insurance, utilities, household expenses	32.3%	\$18,270
Goods and services	Foot at home, food away from home, apparel, entertainment, health care, alcohol, cigarettes, personal care products, sales taxes	27.7%	\$15,673
Transportation	Car payment, gasoline, vehicle insurance, car maintenance and repairs	17.0%	\$9,581
Other	Charitable donations, savings, life insurance, federal and state income taxes	23.0%	\$13,023
TOTAL		100%	\$56,547

Housing information. As part of its contract for the statewide property tax audit, Wildrose Appraisal, Inc. provides the housing value data for each school district that is used for the housing component of the Cost of Living Study market basket. In 2019, Corona Insights also collected information on the housing rental market for each school district. Rental costs were primarily based on median gross rent estimates for a two- or three-bedroom home.

Shopping patterns. The Cost of Living Study recognizes that not all items in the market basket are purchased within the school district for which the cost of living is being measured. Individuals travel outside school district boundaries to make purchases for a number of reasons, including availability of goods, price, selection, and convenience. A geographic shopping pattern survey was first conducted in 1997, and was partially or fully updated in 2007, 2009, and 2011.

In 2019, Legislative Council Staff prioritized creating an updated shopping patterns model. Corona Insights conducted a survey of residents in each district to gather input about where they most recently purchased a series of goods. Data from these surveys, in conjunction with mathematical modeling methods, were used to construct an updated geographic shopping matrix, describing where the residents of each district typically purchase particular products (i.e., what proportion of purchases were made in the home district, neighboring districts, online, etc.).

Study results. The 2019 study found that the cost to a typical household of purchasing items consistent with an average teacher salary ranged from a low of \$49,024 to a high of \$73,707 in Colorado school districts. The full text of the report submitted by Corona Insights is available here: http://leg.colorado.gov/sites/default/files/2019_corona_insights_cost_of_living_report.pdf

Factor calculation. Legislative Council Staff uses the study results to calculate new district cost of living factors for the following two fiscal years. Under state law, a district's factor may not decrease. A district's factor from the prior two-year cycle is increased when the cost of living in the district increases by a greater percentage than the increase in the benchmark teacher salary used in the study. For the 2019 study, the benchmark salary of \$56,547 represented a 6.46 percent increase over the benchmark salary used in the 2017 study; as a result, a district's cost of living needed to increase by at least 6.46 percent for the district to see an increase in their factor. In the 2021 study, a benchmark salary of \$59,834 is used, implying a threshold of 5.81% in order for a district's factor to increase.

When the change in a district's cost of living meets the standard for an increase, its factor is the prior year's factor plus an amount equal to its percentage increase in cost of living divided by the increase in teacher salary (6.46 percent in 2019) divided by 1,000.

Based the 2019 cost of living study, 75 districts saw no change in their cost of living factors for FY 2020-21 and FY 2021-22, while 103 saw increases of either .001 (93 districts) or .002 (10 districts).

Progress on 2021 Cost of Living Study

Legislative Council Staff contracted with Corona Insights to complete the 2021 Cost of Living Study. Progress on the study is ongoing, and is due to be completed by December 13, 2021. Staff will calculate new factors in the winter of 2022, and must certify these new factors to the Colorado Department of Education by April 15, 2022.