



STUDENT-CENTERED BUDGETING CAPSTONE REPORT

Prepared for Cherry Creek School District 5

February 2022

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EXECUTIVE SUMMARY

INTRODUCTION

Cherry Creek School District 5 (CCSD) is in the process of implementing a new district funding model to ensure a distribution of funds focused on supporting students. To support this initiative, Cherry Creek has partnered with Hanover Research (Hanover) on a series of projects related to student-centered resource allocation (referenced in this report for clarity and consistency as Student-Centered Budgeting [SCB]). Hanover also participated in CCSD’s working group meetings to align its research with the district’s evolving needs and plans. Cherry Creek has used this work to develop a formula for the 2022-23 school year and is preparing a gradual implementation as it nears its budgeting phase. CCSD will continue to phase in more changes over the coming years, and the process and plans have been presented to the District Accountability Committee and the Board of Education. This capstone report synthesizes key findings and potential action items from the analyses to help guide Cherry Creek with next steps in communicating with district and community members and decision-makers.


This report is organized into two sections:



- **Section I** summarizes research provided by Hanover to the CCSD working group to inform their development of a student-centered budgeting framework.
- **Section II** outlines Cherry Creek’s framework for implementation during the 2022-23 budgeting process. This framework will continue to evolve over the coming school years.

METHODOLOGY

Hanover analyzed the data from a Best Practices report, a Benchmarking study, and a series of In-Depth Interviews to offer insight into the practices and implementation of student-centered budgeting models. This capstone summarizes the results from these studies with Figure ES 1 outlining each project along with guiding research questions and samples.

Figure ES 1: Summary of Research Projects

PROJECT	RESEARCH QUESTIONS	SAMPLE
 <p>Best Practices in Ratio-Based and Student-Centered Budgeting</p>	<ul style="list-style-type: none"> ▪ What is the difference between funding models (e.g., student-centered budget ratios, weighted student formulas, school-centered management, hybrid models)? ▪ How do these different funding models and resource allocation structures prioritize the student? ▪ Which student groups should school districts consider when deciding on weights or ratios? ▪ How should different student populations be weighted (e.g., special education, English learners)? ▪ How should different school characteristics be weighted (e.g., size, population mobility)? ▪ What are recommended professional development and training practices to ensure district and school administrators are well-informed of funding structures? 	<p>Publicly available research literature, district policy statements, and agency-produced documents related to various funding models</p>

PROJECT	RESEARCH QUESTIONS	SAMPLE
 <p>Benchmarking Student-Centered School Funding Allocation Models</p>	<ul style="list-style-type: none"> ▪ What are the reasons for pursuing a student-centered budgeting model? ▪ What are the overall key findings and recommendations identified in the previous Hanover projects? ▪ How will this new model impact schools across the district in the 2022-23 school year? 	<p>Five peer school districts: Boston Public Schools, Denver Public Schools, Fairfax County Public Schools, Metro Nashville Public Schools, Montgomery County Public Schools</p>
 <p>In-Depth Interviews and Analysis</p>	<ul style="list-style-type: none"> ▪ What are respondents' perceptions regarding implementation of WSF models? <ul style="list-style-type: none"> a. What are lessons learned from each phase of implementation? b. What revisions and changes have occurred since implementation? c. What advice do respondents offer for Cherry Creek as it progresses with implementation? ▪ How are weights related to and calculated based on identified student groups? <ul style="list-style-type: none"> a. How are center-based programs impacted (examples: centrally funded SPED services, district-wide reading interventions, EL programs)? b. What exceptions exist within the respondents' WSF models? ▪ How are weights identified, applied, and measured? <ul style="list-style-type: none"> a. What impacts in real terms have occurred regarding full-time equivalents and actual budgeted dollars at district campuses as a result of the WSF model? b. What key performance indicators measure impact in relation to district goals and strategic priorities? ▪ Discretionary / Non-discretionary: what freedoms and restrictions are granted to individual schools/principals? ▪ Impact on school salaries: Average (FTE) Vs. Actual? 	<p>Budget directors, fiscal officers, and CFOs representing 13 school districts: Atlanta Public Schools, Baltimore City Public Schools, Boston Public Schools, Cleveland Metro Public Schools, Denver Public Schools, Hawaii Public Schools, Indianapolis Public Schools, Jeffco Public Schools, Poudre Public Schools, Prince George's County Public Schools, San Francisco Unified Schools, Seattle Public Schools, Shelby County Schools</p>

SECTION I: RESEARCH SUMMARY ON STUDENT-CENTERED BUDGETING

KEY FINDINGS



The two most prevalent weighted school funding models are weighted student formula (WSF) and ratio-based staffing. However, WSF, the more common of the two, assigns weights to district-specific student populations and school characteristics, enabling districts to allocate resources to students with higher needs regardless of the schools they attend. This approach takes a more nuanced, student needs-driven approach than the basic student-centered budgeting formula. Alternatively, ratio-based staffing—which also uses a weighted formula—distributes funding and resources according to the amount of full-time equivalent (FTE) staff per school. Both WSF and ratio-based staffing use proportions to account for special populations and needs and promote fairness but differ in whether the formula is student-centered or staff-based.



Developing cohesive formulas can aid districts in assessing how factors work together to support student and school needs. Student-Centered Budgeting formulas typically include a combination of student population and student-focused school and community characteristics that result from district and stakeholder discussions and data-based decision-making. Moreover, WSF models appear to align student and community demographics successfully with weights. For example, common student populations identified by districts include English Learners, students with disabilities, low- and high-performing students, grade level, and students in poverty. Other notable but less prevalent student factors include mobility, homelessness, and vocational students. Formulas also typically include school and community characteristics that translate into student-based weights. These characteristics may include crime or poverty rates where students live. Additionally, districts weigh each component from local discussions and reflection, data analysis, and formula simulations.



Districts maintain centralized control over programs critical to their strategies or student health and safety by keeping their funds mostly or entirely centrally managed and requiring schools to account for their spending. This new funding model enables school principals to have greater control and flexibility in spending their funding dollars to meet the needs of their students, while the district still controls centralized program funding for key initiatives that need to remain consistent across the district. In most cases, special education-related weights are relatively small, intended only to supplement materials or provide additional staffing options.

→ Principal survey data show that districts typically provide information on school funding approaches, but districts and certification programs do not prepare principals with key budgeting skills. Principals and district staff often don't understand their district's school funding model; hence additional training and long-term development may enable them to increase resource allocation capacity. Additionally, district leaders do not follow standard school funding development approaches and call for more strategic focus among principals, peer collaboration, and long-term planning. Districts can use professional development plans that specify aspects of professional development (i.e., who, what, when, how) to support this planning and professional development implementation.



Strategies that promote transparent and detailed messaging around budgeting and changes to funding models will enable a greater understanding of the budgeting process and its philosophy. Best practices for messaging include developing and implementing a communication strategy comprised of three elements: an overview of the budgeting process, a plan for stakeholder engagement, and an explanation of district decisions. These messages are highly important for those most impacted by changes in school funding distribution (e.g., principals). Additionally, district leaders must approach communication with caution, particularly when sharing information on changes that impact allocations, formula components, principal autonomy, and unequal—though not necessarily inequitable—distribution. Leaders must also clarify any associated changes in expectations.

RESEARCH ON STUDENT-CENTERED BUDGETING

In this section, Hanover synthesizes the research findings related to the rationales, strategies, obstacles, and lessons learned when districts choose to move toward student-centered budgets. Hanover conducted In-depth interviews with budget directors, fiscal officers, and CFOs representing 13 school districts who use a form of this budgeting strategy. Hanover also conducted a best practices literature review and a benchmarking study of peer districts to gain empirical insights on pursuing a student-centered budget model.



Districts aim to address nuanced needs. In-depth interview participants highlight that students at different levels of development require varying levels and types of services. For example, younger students in Grades K-3 tend to need smaller class sizes, whereas high school students may need more support to ensure on-time graduation. A common weighting dynamic shared among most participants is including grade-based weights that focus on the early grades, whereas higher grades are unweighted or weights tend to decrease at the middle and high school levels incrementally.

“We no longer fund adults, we no longer fund programs, we no longer fund individual schools. We fund students and that funding is based on their needs.’ This was our mantra.”

- Peer District CFO



Districts address the need to ensure transparency. In-depth interview participants repeatedly cite the need to present communities and schools with a transparent budgeting process that enables people to see exactly where district money (and tax dollars) are directed. By partnering more intentionally with campus leaders, the district can assure community members that undue funds are not allocated for central administrative purposes.

“Our main goal when we developed the model was to be able to have it be very intuitive to the end user. We didn't want to have a convoluted, confusing process. We also wanted it to be pretty transparent to our community on how we were coming up with the model.”

- Peer District CFO



Districts seek to enhance site autonomy. The majority of district leaders interviewed implement student-centered budgeting models from a team approach. Many districts have committees comprised of budget experts, educators, and community members who collaborate to decide how weighted funding dollars will be spent.

"We have a committee that discusses any needs or changes. It's had a great impact on equity because everyone has a say in where the money is going"

- Peer District Budget Director



Districts use these formulas to confront poverty and enrollment changes. In-depth interview participants report that districts implement weighted funding models to ensure that schools with large proportions of impoverished and/or lower-performing students have access to more resources to improve academic and socio-emotional outcomes. Previous models that allocated funds based on enrollment numbers and FTE rations created severe inequities for smaller schools, particularly those with larger proportions of economically disadvantaged students.

RESEARCH ON FORMULATING AND IMPLEMENTING A STUDENT-CENTERED BUDGETING FRAMEWORK

The research identifies the most challenging aspects of implementing an SCB framework: the communication and planning required at the outset to ensure stakeholder buy-in and adequate training for all decision-makers at the district. Based on these findings, CCSD took a deliberate approach by creating a cross-team working group to address issues, pose questions, and provide feedback during the SCB framework development.

Figure 1.1 presents action items identified during the research phase for districts to consider when formulating and implementing a student-centered budget, factoring in best practices and key findings from peer districts in the benchmarking and in-depth interview studies implementing a WSF system. The items marked with a checkmark were practices that CCSD identified, adopted, and completed as part of their ongoing process. These findings helped CCSD leadership make informed, local decisions in developing the CCSD SCB framework.

Figure 1.1: Student-Centered Budget Formulation and Implementation Action Items

	<p>Action Items</p> <ul style="list-style-type: none">✓ Brainstorm and gather stakeholder perspectives on which student populations and associated programs to include as components to determine which appear in the school funding formula.¹✓ Identify which student population formula components will independently and collectively meet school needs.² Moreover, consider how factors (e.g., correlation among component weights, funding to support weights) work together to cohesively support student and school needs.✓ In addition to the student population formula components, consider school and community characteristics (i.e., poverty or student need concentration, community needs, special programs, and small schools) when determining formula components. Certain schools may require support beyond student population-based needs.³✓ Use data-based weights to construct formulas, then explore how versions of the formula impact schools and students in hypothetical exercises to test weight effectiveness.⁴ Review weight magnitudes and assess whether formulas comprise best-fit weights for each component.✓ Devise policies and solutions that aim to protect schools with low or declining enrollments and guidelines that specify how staff salaries impact calculations (i.e., actual or average salaries) and explain how the district provides supplemental funding for required positions and essential services.✓ Ensure models have undergone several revisions to continually assess the weighting model. Revisions to iterate include reducing or increasing weights, adding or removing weights, and reasserting centralized control.✓ Provide transition measures and other compensations for schools that will lose funding. Creating a smooth transition plan to ensure a gradual loss and providing supplemental centrally allocated funds helps to ensure that schools are held harmless and alleviates concerns.✓ Provide professional development for school and district leaders that informs participants of the district's funding model, their role in the funding process, the skills needed in their role (e.g., budget book use, leadership practices), and why and how certain decisions took place to ensure that key stakeholders fully understand, buy into, and implement the model.
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Specifically, SCB starts with a base amount of funding for general education students, identifies student groups that require additional resources, and determines school funding using a formula that weighs each student group based on resource needs. Although formulas vary based on district priorities and characteristics, commonalities for SCB frameworks typically include the components shown in Figure 1.2. Notably, a 2020 study published in Public Budgeting & Finance finds no standard SCB model due to specific district needs and characteristics.⁵

¹[1] "Fair Student Funding Summit: Conference Proceedings and Recommendations for Action." Education Resource Strategies. p. 9\
<https://www.erstrategies.org/cms/files/1022-fair-student-fundingsummit.pdf> [2] "Transforming School Funding for Equity, Transparency, and Flexibility: A Nuts-and-Bolts Guide to Implementing Student-Based Budgeting," Op. cit., pp. 28–29.

² Ibid., pp. 30–31.

³ Ibid., p. 30.

⁴ "Transforming School Funding for Equity, Transparency, and Flexibility: A Nuts-and-Bolts Guide to Implementing Student-Based Budgeting," Op. cit., p. 34.

⁵ "Funding Formula Guidebook: A Framework for Equitable School Funding and a New School Finance System for Connecticut's Public Schools." Connecticut School Finance Project, November 2016. pp. 4, 9. <http://ctschoolfinance.org/assets/uploads/files/Funding-Formula-Guidebook-2016.pdf>

Figure 1.2: Components of a Student-Centered Budgeting Model

COMPONENT	DESCRIPTION
Foundation	A foundation or core instructional amount based on verifiable data analysis and provides sufficient resources to educate students to a constitutionally adequate standard.
Weights	Weights allocate sufficient resources to students who require greater resources to learn and achieve at similar levels to their non-need peers.
Hold Harmless Strategies	Provisions to limit the amount of funding losses that a school could experience from year to year.
Enrollment Outlook	Enrollment trends are factored into budget analysis to identify needs at specific campuses.
Small School Provisions	Formula considerations to provide additional funds to small schools to help cover the basic operational costs of running a school.
Cost	The formula has a realistic implementation schedule, such that the formula meets district budgeting parameters year to year.

Source: Connecticut School Finance Project⁶

From Hanover’s in-depth interviews with budget directors, fiscal officers, and CFOs representing 13 school districts, participants iterate perspectives on weighting that can enable meeting different levels of student needs and supporting services that correspond to meeting those needs. For example, English learners at higher proficiency levels require less support than those at beginner or intermediate levels. Grade-based weights are prominent among participants, specifically those focused on the early grades, given the need for smaller class sizes. However, participants mention giving high schools special weights to address subject specialization and multiple classes needs in several cases. Special high school weights are also applied when career and technical education are included in the weighting model.

*Depending on **different levels of special education**, students are going to need more support. Same with English learners and students in KO to 1. **Having that differentiation is really important** and making sure that schools with a larger number of those students **have the resources they need is essential**. And it takes away that lobbying factor.”*

– Peer District Budget Director

*“In high school, students move from class to class, and you have teachers who specialize in different subjects. Things like that create a need for greater staffing needs as well as the broadness of the programs. You have **technology and other things that aren't as seen across the board**. So that all being said, we do have a high school supplement.”*









–Peer District Budget Director

⁶ Figure text reproduced verbatim from: Ibid., p. 9.

RESEARCH ON COMPONENT WEIGHT CONSIDERATIONS

Data enables districts to review weight magnitudes and assess whether formulas comprise best-fit weights for each component. Hence, districts must carefully assess how formula modifications affect all populations and consider common challenges in selecting school funding formula weights presented in Figure 1.3.⁷

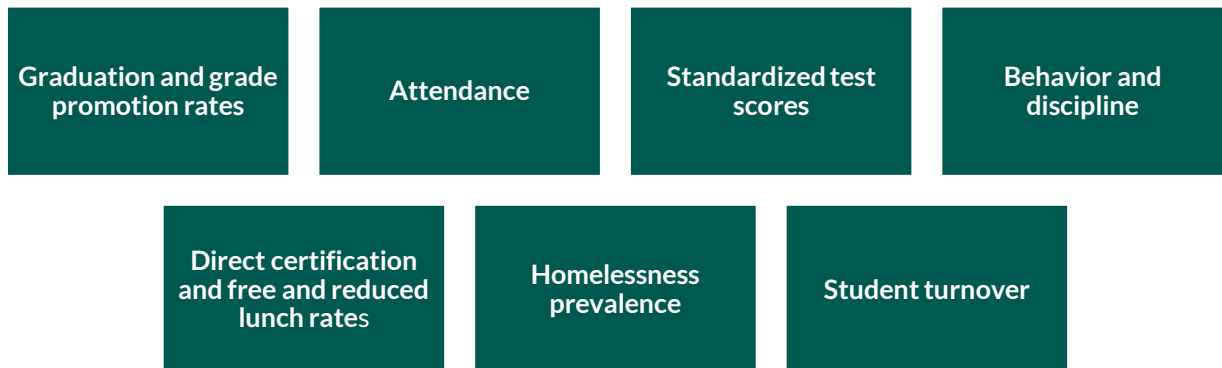
Figure 1.3: Common Challenges in Choosing Formulas

	The conflicting needs of different student groups		Compensating for schools that cannot raise funds externally
	Being able to design formulas based on desired programs rather than on budget realities		Establishing the right incentives through weights (to avoid restrictive and expensive programs)
	How quickly formulas can become overly complicated		Finding the right balance of funding across diverse and varied campuses.
	Adapting formulas to changing fiscal and school environments		Making sure that weights/funding covers the costs of educating different types of students and that schools are actually providing appropriate programs and services (i.e., implementing accountability and performance management systems)

Source: Education Resource Strategies⁸

From Hanover’s in-depth interviews, participants cite a variety of measures that they use to establish formulas and ensure that their model is working in a manner that aligns with the district’s strategic priorities. Socio-demographic patterns are often examined to further ensure equity. Figure 1.4 lists measures used to determine and evaluate weights.

Figure 1.4: Measures to Track Performance




⁷ [1] “Transforming School Funding for Equity, Transparency, and Flexibility: A Nuts-and-Bolts Guide to Implementing Student-Based Budgeting,” Op. cit., p. 32. [2] “Fair Student Funding Summit: Conference Proceedings and Recommendations for Action,” Op. cit., p. 10.

⁸ Figure text reproduced verbatim from: “Fair Student Funding Summit: Conference Proceedings and Recommendations for Action,” Op. cit., p. 10.

STUDENT POPULATIONS

Common student populations weighted in student-centered budgeting models include English Learners, students with disabilities, low- and high-performing students, grade level, and students in poverty. Among large urban districts, poverty, grade level, and low- and high-performing students comprise the most weighted factors. Although less frequent, districts may consider homelessness, mobility, vocational students, and other district-specific populations. **Engaging stakeholders for perspectives on which student populations and associated programs to include will inform decisions on determining which appear in the school funding formula.**⁹ Figure 1.5 lists standards through which student population formula components can be gauged for effectiveness in independently and collectively meeting school needs.

Figure 1.5: Student Population Component Standards



- Relevant: Tied to a real student need that typically requires additional resources to be addressed effectively;
- Measurable: Objective, quantifiable, and from a data source that is widely considered to be accurate and reliable;
- Independent: Not something that schools can control. Otherwise, weights can create unintentional (and sometimes perverse) incentives;
- Significant: Present in at least three to five percent of the student population without applying to all students; and
- Diversified: Present at more than one school and has significant variation across schools.

Education Resource Strategies¹⁰

SCHOOL AND COMMUNITY CHARACTERISTICS

Districts must also consider school and community characteristics when determining formula components, as certain schools may require support beyond student population-based needs. Figure 1.6 presents five common characteristics that highlight the importance of accounting for non-student factors in funding formulas. These characteristics pertain to school factors (e.g., programs offered, size) and community factors (e.g., poverty, crime).¹¹

Figure 1.6: School and Community Formula Factors

CHARACTERISTIC	RATIONALE	KEY CONSIDERATIONS
Poverty or Student Need Concentration	Allocating funding towards students in high-poverty areas allows districts to account for the impact of low-income households on student outcomes.	Districts should avoid poverty concentration funding with sharp cutoffs as these can create disparities in similar schools and large differences in year-to-year funding when schools cross cutoff marks.
Community Needs	Schools may benefit from funding when impacted by neighborhood-specific factors. For example, schools in areas with higher crime rates may need additional resources to support students experiencing more trauma.	Districts may address community-related factors by applying funds to students based on their neighborhood. This approach enables districts to support students who live in underserved areas and live in underserved areas but attend school in another neighborhood.

⁹ [1] “Fair Student Funding Summit: Conference Proceedings and Recommendations for Action.” Education Resource Strategies. p. 9\.
<https://www.erstrategies.org/cms/files/1022-fair-student-fundingsummit.pdf> [2] “Transforming School Funding for Equity, Transparency, and Flexibility: A Nuts-and-Bolts Guide to Implementing Student-Based Budgeting,” Op. cit., pp. 28–29.

¹⁰ Bulleted text reproduced nearly verbatim from: Ibid., p. 31.

¹¹ Ibid., p. 30.

CHARACTERISTIC	RATIONALE	KEY CONSIDERATIONS
Special Programs	Schools may require funding to run specific programs (e.g., career and technical education, International Baccalaureate).	Providing funding for special programs causes inequitable funding because it ensures that certain schools have more enriching offerings unrelated to student needs. However, such funding may expand opportunities for all students and be beneficial if schools carefully review program access.
Small Schools	Small schools may need additional resources due to high fixed costs and less per-student funding.	Small schools must manage typical fixed costs to operate their building but receive less funding due to lower enrollments. Therefore, districts may allocate additional resources to keep small schools functioning. However, this solution reduces equity across schools because schools with similar student populations receive different funding levels.
Enrollment Projections	Schools may see large swings in their allocated budget from one year to the next due to increasing or declining enrollment at the specific campus and/or across the district as a whole.	The stability of the budget is directly tied to the stability of student enrollment at both the district and the school levels. A district's demographic shifts and population changes in the geographic area lead to declines in enrollment as well as shifts in the types of students whom the districts and campuses serve.

Source: Education Resource Strategies¹²

In-depth interview participants note schools that implemented previous models that allocated funds based on enrollment numbers and weighted FTE ratios lacked the ability to provide sufficient academic and socio-emotional support to mitigate the impacts of poverty on students, such as attendance and behavioral issues, and grade promotion and graduation rates. **Thus, districts implement student-centered budgeting frameworks to ensure that schools with large proportions of impoverished and/or lower-performing students have access to more resources to improve academic and socio-emotional outcomes.**

Let's say one school has very low poverty, maybe 20% of the students are free and reduced lunch and you have another school, same size, but 80% of the students are of free and reduced lunch and you have very different graduation rate or reading proficiency rates. In the funding model we had before, those schools would be funded similarly, maybe with the one exception being the small amount of money from Title I. When you switch the funding models to weight things like poverty, then the resources at the school with higher poverty would get more, and so you'd be able to purchase more resources for students. Maybe you would do an extra counselor or more teachers or more school leadership or more engagement for students.

– Peer District CFO

COMMUNITY ENGAGEMENT

Educating and involving community members ranks as the number one piece of advice across interviewed districts. Many districts involve local communities and school staff in model development and revisions. Community and teacher input may be obtained through public meetings and multi-stakeholder committees. Several districts also regularly use surveys and similar opinion-gathering tools, including presenting competing proposals for weighting strategies. Nevertheless, participants highlight that every WSF formula

¹² Figure design reproduced verbatim with text adapted from: Ibid.

results in winners and losers. Districts must maintain a clear, transparent process that educates stakeholders and enables them to provide input.

Community engagement is a huge part of it. Engaging stakeholders and making sure they feel like they have input into the process is crucial to the successful implementation of the model. Someone's always going to feel like they're losing in the model. You have to anticipate that and figure out how you can engage them as to why that is the case or how it benefits the district as a whole."

- Peer District Budget Director

Moreover, districts must develop a communication strategy to ensure that stakeholders understand the funding process, what will happen, and the reasons for decisions. Communication strategies should include the three elements described in Figure 1.7. Districts must also identify who communicates and receives information, methods for communication, and methods for receiving feedback.¹³

Figure 1.7: Elements of a Communication Strategy

ELEMENT	DESCRIPTION
<p>Process Overview</p>	<ul style="list-style-type: none"> ▪ Describe how the district develops its budget (e.g., important dates, deadlines) ▪ Describe the decision-making process ▪ Present the principles and strategic priorities that guide budgeting, and consider supporting this information with a mission, vision, or value statement or Theory of Action and a set of goals or improvement areas ▪ Provide information on past performance to demonstrate a need for change
<p>Stakeholder Engagement</p>	<ul style="list-style-type: none"> ▪ Create a process for involving stakeholder perspectives ▪ Ensure stakeholders have a clear understanding of the challenges that the district is addressing with stakeholder input (e.g., communicating changes, involving stakeholders in decision-making) ▪ Align actions to involve stakeholders (e.g., encourage participation if interested in using stakeholder feedback to make changes)
<p>Explanation of Decisions</p>	<ul style="list-style-type: none"> ▪ Convey budget decisions clearly and how they differ from previous plans ▪ Provide context for the change in models ▪ Present information in a way that any audience member can understand ▪ Include rationale, tradeoffs considered, and guiding principles used in the decision-making process


Source: Government Finance Officers Association¹⁴

¹³“1D. Plan and Prepare: Identify Communications Strategy.” Government Finance Officers Association. pp. 19-20. https://smarterschoolspending.org/sites/default/files/resource/file/GFOASchoolBudgetBP-1D-IdentifyCommunicationsStrategy_2017FINAL.pdf

¹⁴ Figure adapted from: Ibid., pp. 18-19.

Once districts distribute funding and resources, leaders can also tailor key messages to specific stakeholder groups, such as principals, and share information community-wide. Figure 1.8 lists actions that leaders should take after determining the budget formula.

Figure 1.8: Budget Formula Communication Action Items

	<p>Action Items</p> <ul style="list-style-type: none"><input type="checkbox"/> <i>Share final design decisions</i> (including total dollars in the pool, selected student characteristics to weight, and related policy decisions) with broader district stakeholders, principals, community members, and the board through town hall meetings, FAQs, or other venues.<input type="checkbox"/> <i>Articulate how school budgets will change</i> and what other factors, such as revenue and enrollment changes, impact budgets.<input type="checkbox"/> <i>Meet with stakeholders for those communities most impacted by the funding change</i>, including principals, principal supervisors, and board members (i.e., the schools experiencing large losses and/or large gains due to the formula).<input type="checkbox"/> <i>Communicate key budgeting timeline changes and new supports to principals for the upcoming budget process.</i><input type="checkbox"/> <i>Clarify principal and district office roles and expectations for the upcoming budget process.</i>
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Source: Education Resource Strategies¹⁵

¹⁵ Figure text reproduced verbatim from: "Transforming School Funding for Equity, Transparency, and Flexibility: A Nuts-and-Bolts Guide to Implementing Student-Based Budgeting," Op. cit., p. 53.

SECTION II: CHERRY CREEK’S STUDENT-CENTERED BUDGETING FRAMEWORK

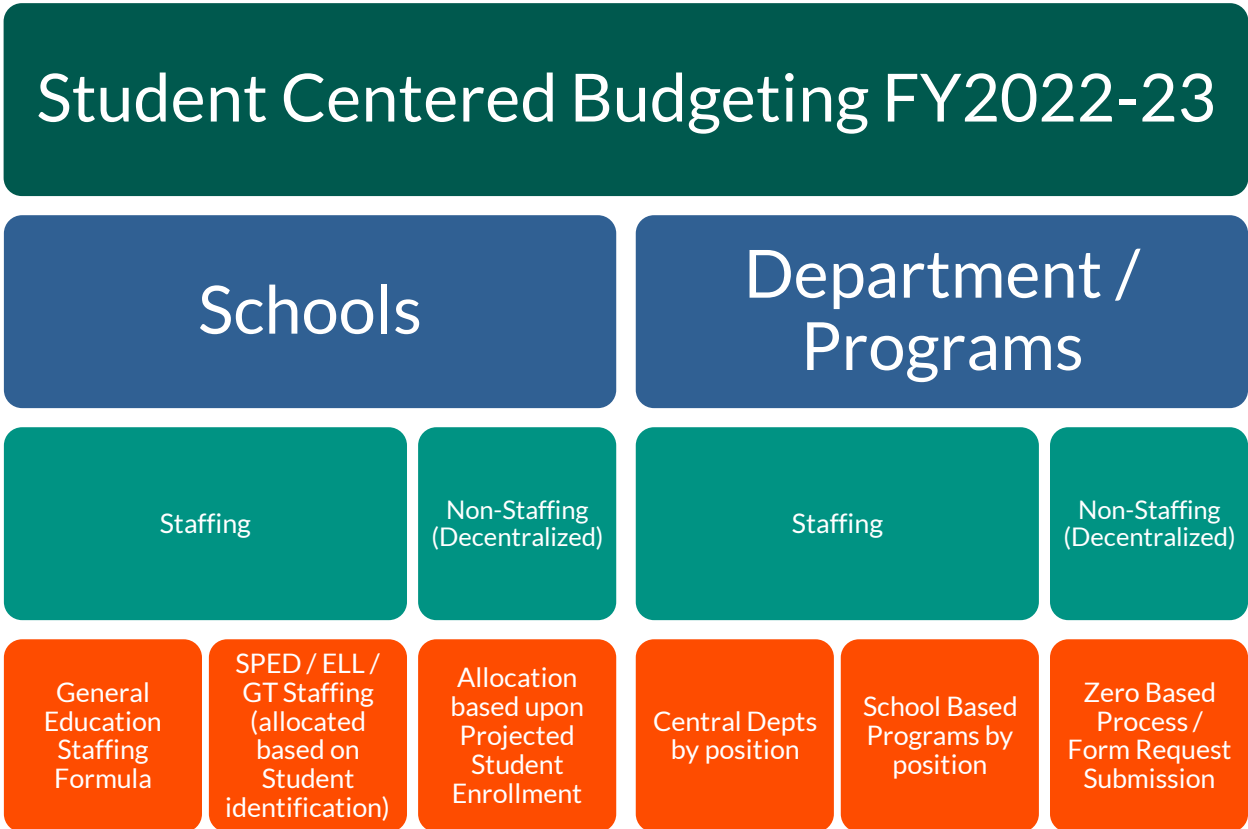
STUDENT-CENTERED BUDGETING: SUPPORTING CCSD STUDENT AND SCHOOL NEEDS

Based on the research outlined in the previous section, CCSD began action planning in January 2021 to develop a framework and formula for initial implementation in the 2022-23 school year. This section outlines the steps and decision points CCSD took during the process. Cherry Creek School District provided all data and details presented in this section. The district’s overall goal was to provide a transparent methodology across the district that demonstrates how CCSD allocates budget resources, both staffing and non-staffing, to educate and serve the students while meeting the standards of excellence as defined by our Values and Strategic Plan.

GENERAL FRAMEWORK

CCSD’s student-centered budgeting framework for initial implementation in the 2022-23 school year. Figure 2.1. outlines the key components.

Figure 2.1: Framework Components



BEST PRACTICE: Brainstorm and gather stakeholder perspectives

CCSD created a cross-functional group of district leaders and representatives to explore three areas of focus outlined in Figure 2.2. The focus areas will guide implementation and planning throughout the full life of the project.

Figure 2.2: Focus Areas

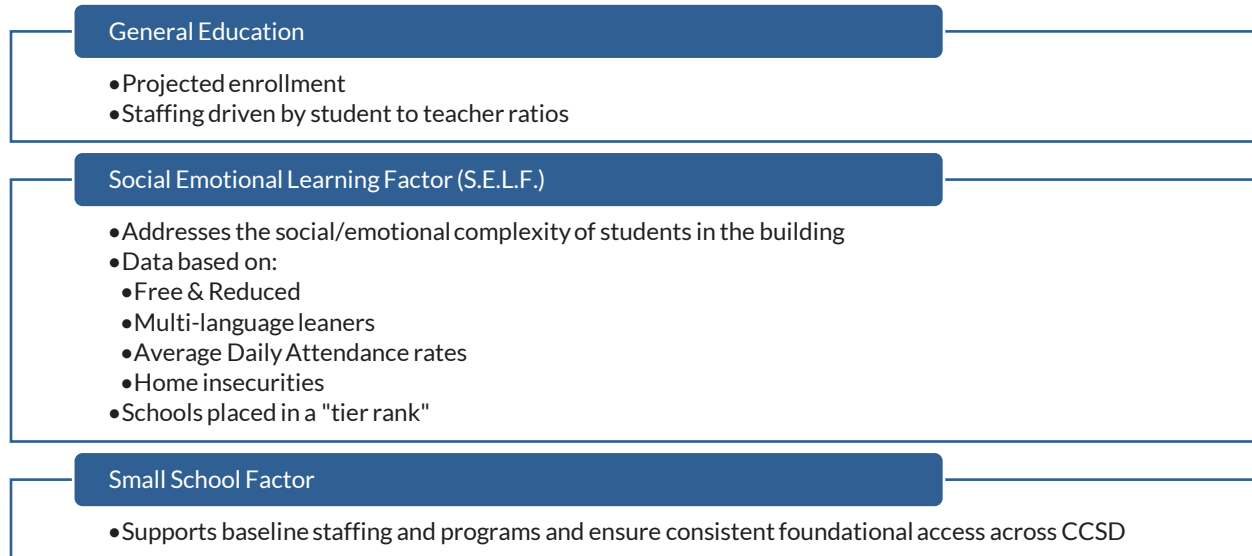


This **multi-year project** aims to ensure the budgeting framework directs the district’s funding and resources **to meet students where they are** when they come to CCSD schools. The working group began by defining minimum standards of access by school level. These standards are the minimum programmatic and enrichment opportunities that all CCSD students should have access to, regardless of school, to ensure CCSD standards of excellence. The group then examined staffing across schools, by level, for both consistency of access and equity to identify additional staffing needs where greater resources are identified or anticipated as well as how shifts in predicted enrollment may impact staffing in relationship to those needs. The district team also collaborated internally and with external partners to identify historically marginalized student groups, including identifying additional student groups in CCSD facing systemic and structural challenges.

BEST PRACTICE: Identify which formula components will meet schools and district needs and consider school and community characteristics

CCSD strove to **prioritize and address the whole well-being of district students**. Figure 2.3 outlines the components identified and adopted to ensure the methodologies align with district priorities.

Figure 2.3: Staffing Formula



BEST PRACTICE: Use data-based weights to construct formulas and devise strategies to protect schools with declining enrollment

CCSD developed S.E.L.F. tier rankings and declining enrollment averaging as mechanisms that will be evaluated and refined over the next few years but serve to support schools during the initial transition to the new framework and formula. In addition, the district has developed a Hold Harmless framework to provide additional continuity in the short term. Figures 2.4 - 2.6 demonstrate these calculations.

Figure 2.4: S.E.L.F. Tier Ranks

Free and Reduced Lunch				Average Daily Attendance (ADA)			
	Elementary	Middle School	High School		Elementary	Middle School	High School
Tier 1	0% - 20%	0% - 20%	0% - 20%	Tier 1	Above 94%	Above 94%	Above 92%
Tier 2	20% - 40%	20% - 40%	20% - 40%	Tier 2	93% - 94%	93% - 94%	91% - 92%
Tier 3	40% - 50%	40% - 50%	40% - 50%	Tier 3	92% - 93%	92% - 93%	90% - 91%
Tier 4	Above 50%	Above 50%	Above 50%	Tier 4	Below 92%	Below 92%	Below 90%
English Language Learners				Home Insecurities (Homeless)			
	Elementary	Middle School	High School		Elementary	Middle School	High School
Tier 1	0% - 15%	0% - 10%	0% - 10%	Tier 1	Below 0.5%	Below 0.5%	Below 0.5%
Tier 2	15% - 20%	10% - 15%	10% - 15%	Tier 2	0.5% - 1%	0.5% - 1%	0.5% - 1%
Tier 3	20% - 40%	15% - 35%	15% - 30%	Tier 3	1% - 2%	1% - 2%	1% - 2%
Tier 4	Above 40%	Above 35%	Above 30%	Tier 4	Above 2%	Above 2%	Above 2%

Each component is ranked in a tier for each school, as demonstrated in Figure 2.4. The total S.E.L.F. tier rank for the school is an average across all four components. Based on a school S.E.L.F. average tier ranking, the staffing that is added is as follows:

- Elementary schools – multiply by 0.25
- Middle schools – multiply by 0.5
- High schools – multiply by 1.0

In Figure 2.5, the example illustrates why overall staffing in FY2022-23 will be 0.56 FTE higher than the previous formula despite declining enrollment.

Figure 2.5: Declining Enrollment Averaging – Elementary School Example

	Old Formula	New Formula
FY2021-22 Projected Enrollment	475	475
FY2022-23 Projected Enrollment	442	442
Enrollment Used for Staffing	442	459
Student / Teacher Ratio	18.50	18.50
Calculated Staffing	23.89	24.78
Add for Small School Staffing	-	-
Enrollment Based Staffing	23.89	24.78
Prior Alternate Allocations	0.77	-
S.E.L.F. Tier Score		1.75
S.E.L.F. Tier Staffing		0.44
FY2022-23 Gen Ed Staffing with New Formula	24.66	25.22

School is seeing the benefit of the declining enrollment averaging

For certain schools, the old formula may have provided more staffing. These schools will be held harmless during the transition by applying the previous formula, as demonstrated by the example in Figure 2.6.

Figure 2.6: Hold Harmless – Elementary School Example

	Old Formula	New Formula
FY2021-22 Projected Enrollment	439	439
FY2022-23 Projected Enrollment	432	432
Enrollment Used for Staffing	432	436
Student / Teacher Ratio	18.50	18.50
Calculated Staffing	23.35	23.54
Add for Small School Staffing	-	-
Enrollment Based Staffing	23.35	23.54
Prior Alternate Allocations	1.28	-
S.E.L.F. Tier Score		1.75
S.E.L.F. Tier Staffing		0.44
FY2022-23 Gen Ed Staffing with New Formula	24.63	23.98

BEST PRACTICE: Ensure models have undergone several revisions and provide transition measures along with professional development for school and district leaders

CCSD has applied the framework and formulas across all campuses using the best available data to measure impact. As outlined in the examples above, district leaders then made adjustment decisions and worked with campus leaders in developing resources and training for applying the new formulas. The district has and will continue to work with individual campus leaders to better understand implementation. Based on preliminary estimates, for FY2022-23, if the district had stayed with the previous formula, staffing would have decreased

by 127 positions. With the new funding formula, 61 of those positions should be preserved, though final decisions and staffing levels are subject to change during the budgeting process.

- 37 positions at the Elementary Level
- 22 positions at the Middle School Level
- 2 Positions at the High School Level.

In summary, Figure 2.7 demonstrates the total impact on district funding when comparing the new formula with the old formula. In total, district campuses will see an increase of over \$6,000,000 in funding.

Figure 2.7: Preliminary General Education Staffing Summary*

	Elem	Middle	High	Total
FY2022-23 (Old Formula)	90,668,061	50,660,228	78,458,036	219,786,325
FY2021-22 (Old Formula)	99,146,703	53,600,110	77,946,592	230,693,406
Variance	\$ (8,478,642)	\$ (2,939,882)	\$ 511,444	\$ (10,907,081)
FY2022-23 (New Formula)	93,840,376	52,548,391	78,643,831	225,032,598
FY2022-23 (Old Formula)	90,668,061	50,660,228	78,458,036	219,786,325
Preserved Staffing	\$ 3,172,315	\$ 1,888,164	\$ 185,794	\$ 5,246,273
	Elem	Middle	High	Total
Ratio Based (Current Proj Enrollment)	87,291,898	49,556,052	76,046,736	212,894,686
Declining Enrollment	4,350,882	1,524,978	257,985	6,133,845
Small School	255,661	244,226	558,968	1,058,854
S.E.L.F.	1,596,282	956,694	1,053,439	3,606,415
Hold Harmless	345,653	266,441	726,703	1,338,798
Total New Formula Allocations	6,548,479	2,992,339	2,597,094	12,137,912
FY2022-23 (New Formula)	\$ 93,840,376	\$ 52,548,391	\$ 78,643,831	\$ 225,032,598

This shows the incremental financial impact by lever of the new formula

* enrollment projections change throughout the process; final numbers to be determined

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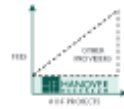
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