



Pennsylvania Association of School Business Officials

Testimony to the Basic Education Funding Commission

September 28, 2023

Hannah Barrick, Executive Director

Good morning. My name is Hannah Barrick, and I am the executive director of the PA Association of School Business Officials (PASBO). Thank you for the opportunity to be here today to discuss the Basic Education Funding (BEF) formula, how it can be improved after nine years of implementation, and how it fits into a much larger conversation about state education funding.

As we have listened to the testimony over the previous four hearings, we agree with many testifiers that the state must make a significant additional investment in education. That said, we recognize the complexity of the challenge, and it's not as simple as adding state funds to the existing system—to do so undermines and compounds the underlying student and taxpayer inequity that is at the heart of the larger school funding conversation.

In our current education funding system, billions of dollars in mandated costs drive school district expenditures across widely disparate local tax bases and define the educational opportunity, supports, and facilities across 500 school districts. Those billions have grown at rates exceeding most local tax base sustainability and capacity, and the growth of those mandated costs have impacted the efficacy and effectiveness of the BEF formula for the past nine years. While many districts have seen record increases in BEF funding recently, half or more of those increases in too many districts went to pay for special education, charter school tuition, transportation, or pension costs.

Without thoughtful consideration given to the diversity across districts, the needs of school districts from a predictability and sustainability perspective, and the careful balance between student and taxpayer equity, simply increasing the state share or consolidating funding could worsen the gaps between the haves and the have nots. In this complex environment it is going to require a carefully calibrated long-term approach across all components of the existing school finance system, and while BEF is a major component of that system, it is simply one component.

Our testimony today focuses primarily on examining the BEF formula, how it has been working, and how it could be adjusted to mitigate issues observed over the past nine years of implementation. Making adjustments to the BEF formula is an important step in ensuring that BEF is distributed most effectively and predictably to school districts across the Commonwealth.

PASBO comes to this conversation having been engaged in the work of the original BEF Commission and the development of the existing BEF formula. Since the formula's implementation in 2015-16, PASBO has studied the formula, reviewed trends in the individual data elements from year to year, built and

rebuilt models, conducted workshops for school leaders across the Commonwealth, and highlighted areas for adjustment.

Basic Education Funding Subsidy

The BEF subsidy is the largest single state subsidy provided to schools; it funds 500 school districts and the nearly 1.7 million students those districts are financially responsible for educating. For 2023-24, the BEF appropriation makes up more than 50% of the total state funds available for school districts. At \$7.8 billion for this fiscal year, the BEF subsidy is more than 2.6 times larger than the nearly \$3 billion PSERS reimbursement appropriation and about 5.7 times larger than the \$1.3 billion special education funding subsidy. From an expenditure perspective, the BEF subsidy equates to about 20% of total school district expenditures.

BEF subsidy, unlike other state funding, is not tied to school district expenditures. BEF subsidy is flexible, and it can be spent on any aspect of k-12 education and operation. Unlike special education funding, pupil transportation, PSERS, or Social Security reimbursements, there is no BEF expenditure category, and BEF dollars are used to support all areas of school district operations—from student programming, to staff salaries and curriculum, to facilities construction and renovation, charter school tuition, transportation, special education, and everything in-between. For many districts, the most common use of BEF dollars is to backfill needs in special education and charter school tuition expenditures.

Components of BEF

For the past nine years, the BEF subsidy school districts receive each year is broken into two pieces. One component of the subsidy is the stable base—statewide this accounts for nearly 75% of the total BEF subsidy in 2023-24 (if Level-Up funds are not included, the base accounts for about 74% of the total BEF subsidy in 2023-24). Across the Commonwealth, the base accounts for 30% to nearly 94% of school districts' total BEF subsidy (when Level-Up is included). The other component is the dynamic formula—this accounts for about 25% of the total BEF subsidy, and this amount has grown from less than 3% in 2015-16.

The stable base is, for most districts, the amount of BEF subsidy they received in 2014-15. This amount represents the outcome of a collection of state funding formulas that targeted different priorities and represented varying funding policies across decades. For some periods of time, state formulas worked to drive money to districts based on student and district demographic factors. For other periods of time, all school districts received inflationary adjustments to account for cost of living increases (the 2014-15 base has not been adjusted for inflation; if it had, it would approximate the BEF formula increases over the past nine years).

The combination of all of those efforts was locked in place by the original BEF Commission to ensure stability and to create a balance with the dynamic formula designed to distribute all new funds. The stable base concept was to ensure that districts would not receive less than their 2014-15 amount, but through the dynamic portion of the subsidy—the BEF formula (discussed below)—they could receive less from year to year.

How does the BEF Formula work?

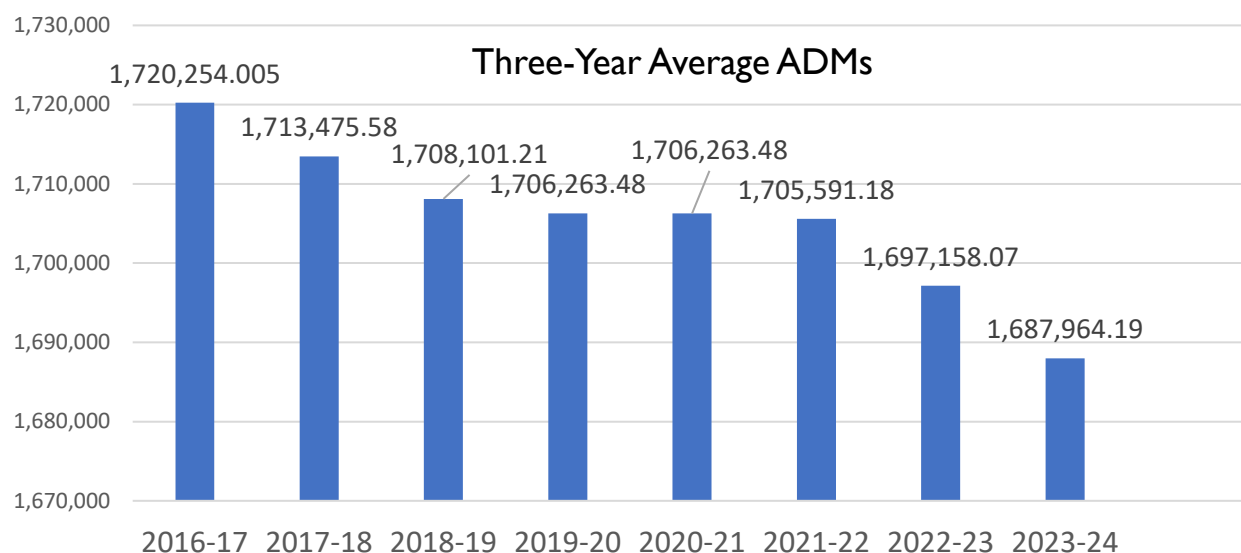
The BEF formula was developed after a long and comprehensive effort, spanning two administrations, to rethink the way BEF subsidy was distributed to school districts. The original BEF Commission held a series of hearings, worked with experts, examined student population and district demographics impacting district resource needs, conducted a survey of school districts with the Independent Fiscal Office, and developed the formula that is in its ninth year of implementation in 2023-24.

The BEF formula was developed for a specific purpose—to dynamically distribute a portion of the BEF subsidy dollars—and it was layered on top of a stable base for school districts. As noted above, the intent from the BEF Commission was that the stable base would provide stability while the dynamic formula would respond to changing needs and demographics of each individual school district.

Overall, the BEF formula does precisely what it's supposed to do—shift resources to school districts with needs comparatively greater than other districts each year. History has shown that it may be more dynamic than originally anticipated, but as designed, it alters district funding shares every year. The formula has two components, a student weighted component and a district demographic component, and both work together to determine the amount of funding a district receives each year.

The formula starts with each school district's Average Daily Membership (ADM) averaged over the three most recent years. The ADM for a school district represents the number of students the district is responsible for—this includes students the district educates each day in its buildings, as well as students that it pays tuition to educate in another LEA, such as an IU, charter or cyber charter school, or in a private placement. For the 2023-24 fiscal year, the BEF formula uses the average ADMs from 2019-20, 2020-21, and 2021-22—these are the three most recent years of ADM data available, and they are smoothed in the formula to mitigate any sharp increases or decreases.

The figure below shows the change in the three-year average ADMs across all nine years of the BEF formula. Overall, the ADMs have been declining in Pennsylvania. From 2015-16 to 2023-24 (the years of the BEF formula), 360 school districts (72%) have had declining ADMs, and 139 school districts (28%) have experienced increasing ADMs (Bryn Athyn School District is excluded from this analysis). Since the start of the BEF formula, school districts have lost approximately 32,000 ADMs.



For 2023-24, the range in three-year average ADMs across districts is about 156 ADMs in Austin Area School District, to more than 201,000 ADMs in the School District of Philadelphia. The median three-year average ADMs is about 2,000 ADMs. The table below identifies the number of school districts in each identified range of ADMs based on 2023-24 BEF formula data.

Range of Three-Year Average ADMs (2023-24)	Number of School Districts
1 to 500 ADMs	15
501 to 1,000 ADMs	76
1,001 to 2,000 ADMs	156
2,001 to 3,000 ADMs	79
3,001 to 4,000 ADMs	60
4,001 to 5,000 ADMs	39
5,001 to 6,000 ADMs	23
6,001 to 10,000 ADMs	35
10,001 to 20,000 ADMs	14
20,001 to 25,000 ADMs	2
>25,001 ADMs	1

The next step of the formula is to add weights to a district's three-year average ADM based on the population of students residing in each district. Based on the work of the original BEF Commission, the testimony they heard, and the factors included in many other state funding formulas (as well as many previous Pennsylvania funding formulas), the Commission identified three categories of need that require additional resources.

The first category is poverty, and the BEF formula provides three separate student weights for poverty. These weights are all derived from federal Census data that comes from the American Community Survey (ACS). This is a federal survey that is conducted on an annual bases through small surveys in each community across the country, and data is averaged over five years.

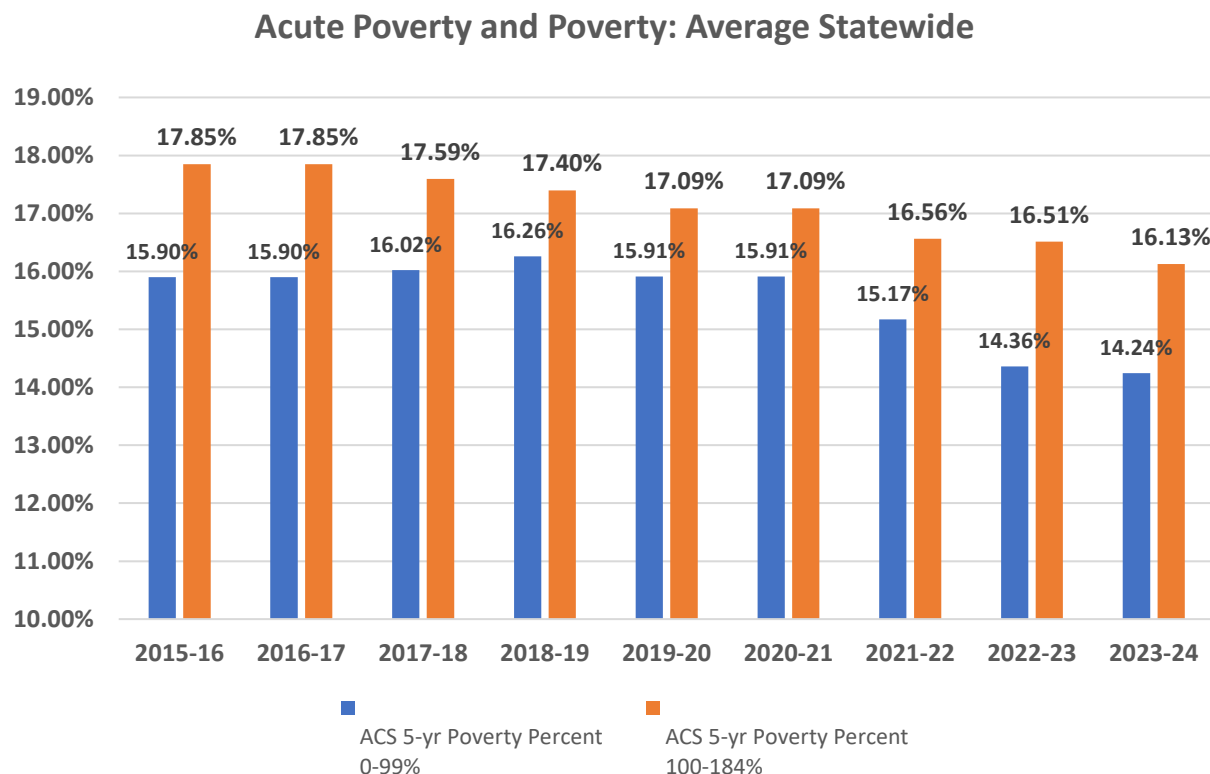
The original BEF Commission struggled to find an appropriate metric through which to measure student poverty in each district. Some of the data used in prior formulas—economically disadvantaged students—was not used in the formula. Some of reasons behind the use of federal ACS data was the recognition that the use of free/reduced price lunch data was limited as a metric due to participation in the Community Eligibility Provision of the National School Lunch program, which allows districts to provide free meals to all students in schools in which at least 40% of their student population is eligible for participation in certain assistance programs, such as Supplemental Nutrition Assistance Program (SNAP) or Temporary Assistance for Needy Families (TANF).

Additionally, this economically disadvantaged data does not require uniformity in application, and some schools—particularly high schools—have opted out of the National School Lunch and Breakfast programs.

As a result, the BEF Commission landed on the federal ACS data as the best option to uniformly measure student poverty. The ACS data measures *children in poverty* only, and it is not a measure of entire community. The BEF formula measures poverty in three categories: Acute Poverty: children 6-17

residing in the district that are living below the federal poverty line; Poverty: children 6-17 residing in the district that are living between 100% and 184% of the federal poverty line; and Concentrated Poverty: districts with 30% or greater of their children 6-17 living below the federal poverty line.

The figure below shows the average percentages of Acute Poverty and Poverty across Pennsylvania's school districts over the nine years of the BEF formula. In both metrics, the poverty percentages have declined over time. While some of the recent declines are likely driven by increases in COVID relief, the overall trend, even prior to the pandemic, was a decline.



For 2023-24, the Acute Poverty percentages range from less than 1% to about 65%, and the Poverty percentages range from less than 1% to about 42%.

The BEF formula uses the individual federal ACS percentage for each income threshold for each school district and multiplies it by the most recent available year of the district's ADM (for the 2023-24 fiscal year, the formula uses the 2021-22 ADM). It's important to note that the federal ACS data (like most of the data in the BEF formula) is delayed, so the 2023-24 BEF formula uses 2021 federal ACS poverty percentages (this data was released in December 2022). The product provides a proxy number of students in each district that are living in each category of poverty.

The next step is to apply the assigned weights, and the weights were derived from a survey of school district expenditures and an analysis conducted by the Independent Fiscal Office. The weights have not been adjusted since formula inception.

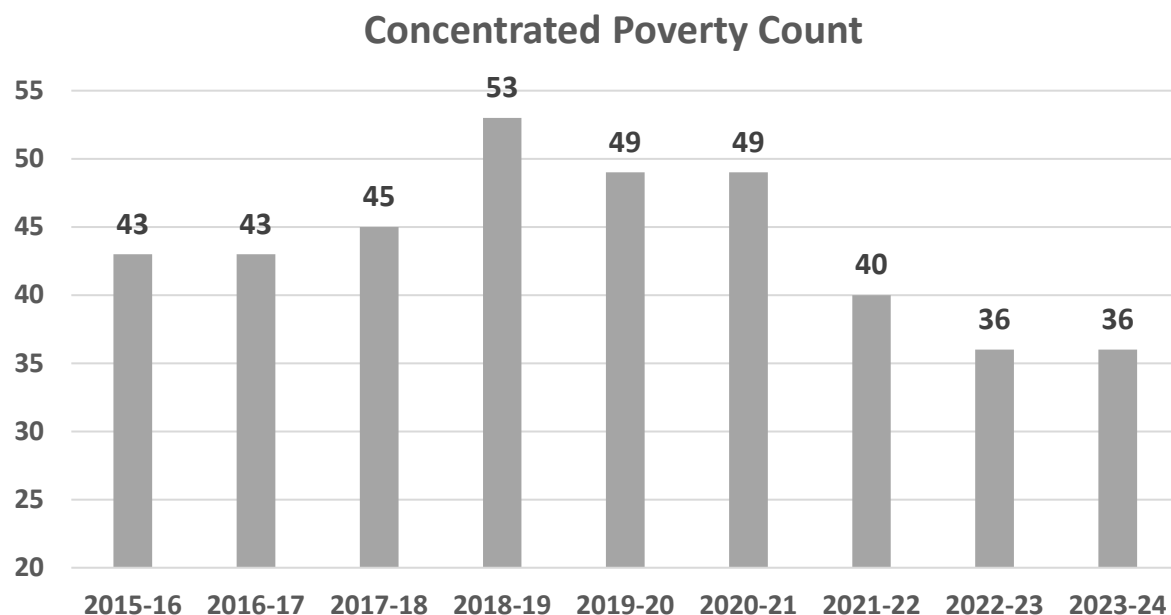
The weight designated for Acute Poverty is 0.6; the weight designated for Poverty is 0.3.

As an example of how the weights are calculated, a school district has 32% of their children ages 6-17 living under the federal poverty line and 26% of their children 6-17 living between 100% and 184% of the federal poverty line. The school district's 2021-22 ADM is 1,000. So, there are 320 ($32\% \times 1,000$) students living in Acute Poverty and 260 ($26\% \times 1,000$) students living in Poverty based on the BEF formula.

When the weights are applied (320×0.6 and 260×0.3), the district adds an additional 192 students through the Acute Poverty weight and an additional 78 students through the Poverty weight. These additional students are added to the district's three-year average ADM.

A. Acute Poverty percentage	32%
B. Poverty percentage	26%
C. Single Year ADM (2021-22)	1,000
D. Acute Poverty weight add-on ($A \times C \times 0.6$)	192
E. Poverty weight add-on ($B \times C \times 0.3$)	78
F. Total Acute & Poverty weight add-ons ($D + E$)	270

The final poverty weight, the Concentrated Poverty weight, applies only to school districts with an Acute Poverty percentage of at least 30%. Each year, there are about 45 school districts that qualify for this weight—however, it is not the same set of school districts each year, as many school districts hover around the 30% threshold. The figure below shows the number of qualifying districts each year of the BEF formula.



For those school districts qualifying for the Concentrated Poverty weight, these districts receive an additional weight of 0.3 for their proxy number of students living in Acute Poverty. Using the example above, with 320 students living in Acute Poverty, the district would get an additional 96 students (320×0.3) added to the three-year average ADM. In the example, the district would receive an additional 366 ADMs due to the three poverty weights.

A. Acute Poverty percentage	32%
B. Poverty percentage	26%
C. Single Year ADM (2021-22)	1,000
D. Acute Poverty weight add-on ($A \times C \times 0.6$)	192
E. Poverty weight add-on ($B \times C \times 0.3$)	78
F. Concentrated Poverty weight add-on ($A \times C \times 0.3$)	96
G. Total Poverty add-on ($D + E + F$)	366

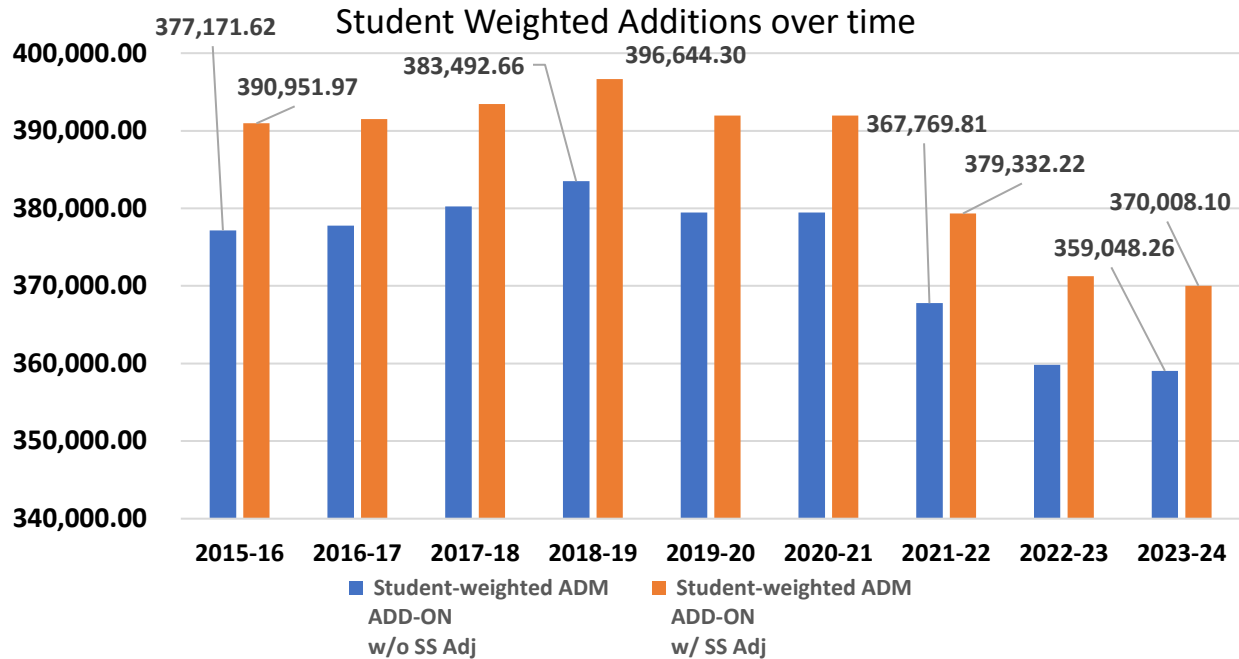
The next step of the BEF formula is to apply a weight for the number of students who are English Language Learners (ELL). This data is reported by LEAs via PIMS, and a weight of 0.6 is applied to the number of ELL students for each district. For example, if a district had 100 ELL students in 2021-22, the district would get an additional 60 ADMs through this part of the formula (100×0.6).

The final step of the student population-based piece of the BEF formula is to add a weight for charter school students, with the recognition that due to mandated and stranded costs that arise when a resident student attends a charter school, a weight of 0.2 is applied to each school district's charter school population. For example, a school district with 20 charter school students, adds 4 additional ADMs (20×0.2) to their three-year average ADMs.

The table below illustrates our example school district and the additional ADMs they added as a result of their student population and the corresponding formula weights. Overall, the formula weights increased their starting place—their three-year average ADMs (which includes charter school students)—by nearly 36%. For this portion of the formula, all school districts have a total student-weighted ADM that is higher than their three-year average ADM.

A. Three-year average ADMs	1,200
B. Acute Poverty Weight	192
C. Poverty Weight	78
D. Concentrated Poverty Weight	96
E. ELL Weight	60
F. Charter School Weight	4
G. Total Student-weighted ADM ($A + B + C + D + E + F$)	430

Across Pennsylvania, for the 2023-24 fiscal year, the BEF formula's student weights add about 360,000 ADMs to the three-year average ADMs number; however, because ADMs are falling, as well as poverty percentages, the student-weighted additions have been declining for several years (see the blue bars in the figure below).

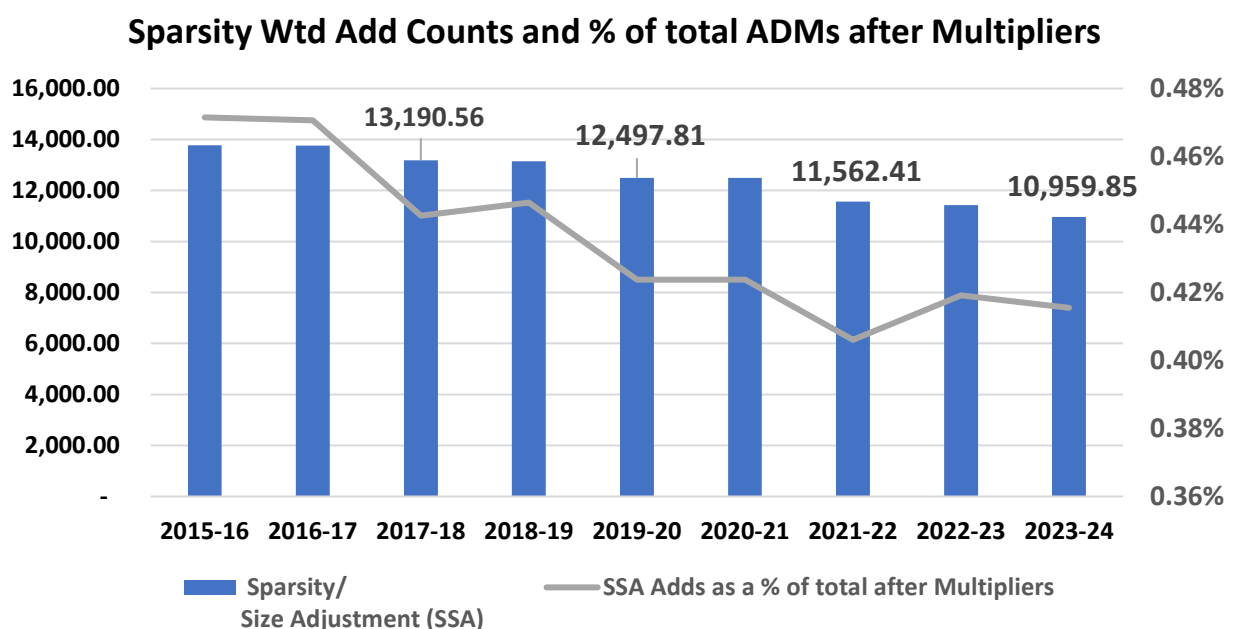


The extent to which a school district's student weights increase the district's three-year average ADM is dependent entirely the district's unique student population and community demographics. In some districts with low poverty percentages, few ELLs, and few charter school students, the formula adds just a handful of additional ADMs. However, in other school districts, the student weights can add more than 50% of their three-year average ADMs. The table below represents the top and the bottom for 2023-24 in terms of the extent of the Student-Weighted add-on across districts.

School District	Three-Year Avg ADM	Student Weighted Add-on	Add-on % of Three-Year Avg ADM
Unionville-Chadds Ford SD	3,914.298	66.221	1.69%
Peters Township SD	3,856.340	67.848	1.76%
Pine-Richland SD	4,448.978	88.844	2.00%
Upper Dublin SD	4,071.803	122.070	3.00%
Springfield SD	4,215.640	130.624	3.10%
South Fayette Township SD	3,373.729	105.299	3.12%
Jenkintown SD	732.143	25.289	3.45%
Wilkinsburg Borough SD	1,152.331	643.318	55.83%
York City SD	8,137.040	4,704.443	57.82%
Harrisburg City SD	7,967.737	4,787.925	60.09%
Chester-Upland SD	6,774.723	4,142.754	61.15%
Reading SD	18,434.621	11,423.306	61.97%
Farrell Area SD	700.639	460.128	65.67%
Aliquippa SD	1,233.241	854.293	69.27%

The next portion of the formula recognizes the challenges associated with school districts that are large geographically but sparsely populated—making it extremely difficult to gain efficiencies and benefit from economies of scale. As a result, the formula adds an adjustment—the Sparsity/Size Adjustment—to the 150 school districts (those above the 70th percentile) that have the fewest ADMs in comparison to the state *and* have the fewest ADMs per square mile in comparison to the state. The 150 school districts that qualify get a slight adjustment in the form of additional ADMs—the additional ADMs added to the three-year average ADM for 2023-24 range from less than 1 to nearly 142.

The blue bars in the figure below illustrate the overall additional ADMs that are added each year as a result of the Sparsity/Size Adjustment. For 2023-24, this component of the formula added nearly 11,000 additional ADMs across the 150 eligible school districts (see also the orange bars in the figure at the top of page 8, which highlights the overall additional weighted ADMs including Sparsity/Size).



With all of the additional ADMs now calculated, the next step is to add those additional ADMs to each school district’s three-year average ADMs to calculate the Total Weighted Student Count. Once that is complete, the next step of the formula is to apply multipliers—one for local wealth and one that combines local tax effort and tax capacity. Nine years into the formula, these multipliers have a significant impact on increasing or decreasing a school district’s share of BEF. These multipliers are applied to each school district’s Total Student-Weighted ADMs.

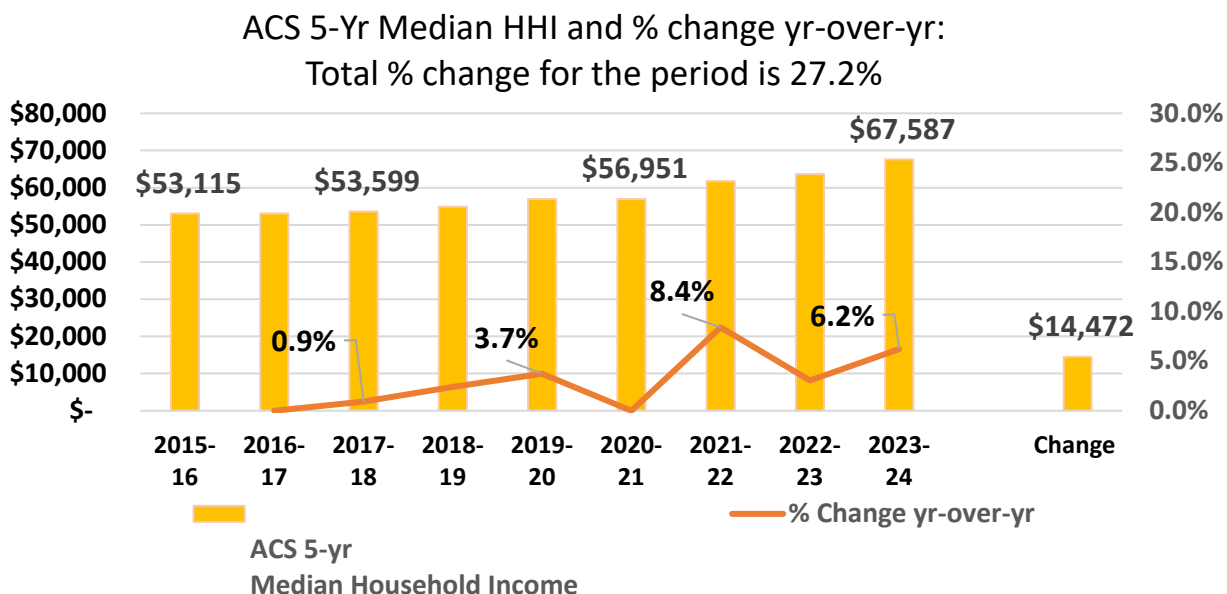
The first multiplier is the Median Household Income Index (MHII), and it functions as a proxy for a school district’s local wealth. The BEF formula uses median household income to determine local wealth, and again uses federal ACS Census data (5-year average) to define the median household income in each school district. The data used for the 2023-24 BEF formula is the 2021 federal ACS data that was released in December 2022 (it’s important to note that this date is COVID-impacted data and will be for at least another year).

The original BEF Commission chose median household income over other measures of school district local wealth—such as Market Value/Personal Income (MV/PI) Aid Ratio. The MV/PI Aid Ratio has demonstrated significant inaccuracies for large numbers of districts, and as such, it was explicitly avoided in the development of the BEF formula. The lack of uniform countywide reassessment, the fact that neither Market Value nor Personal Income are taxable, and the impact of second homes/vacation properties in some districts renders MV/PI Aid Ratio inaccurate for too many as a local wealth measure. The use of median household income more reliably captures a school district’s local wealth, and while also not a taxable factor, more effectively captures the wealth of all adult residents in each community.

The BEF formula compares each school district’s median household income to the state median household income. If the district is poorer than the state median, the district has an MHII multiplier that is greater than 1.0. If the school district is wealthier than the state median, the district has an MHII multiplier that is less than 1.0.

For the 2023-24 BEF formula, the state median household income is \$67,587. There are 205 school districts with a median household greater than the state, resulting MHII less than one. The rest of the school districts have an MHII at or above 1.0. Each year a district’s median household income changes in relation to the state median change (see median HHI figure) and in all other districts the index will change in correlation to that change.

The figure below shows the change in the state median household income over the years of the BEF formula. The relatively significant increase from 2022-23 to 2023-24 (representing the change between 2020 and 2021 federal Census data) is likely impacted by COVID-relief funds flowing to families across the Commonwealth. Since the inception of the formula in 2015-16, the state median household income increased by nearly \$14,500.



For the 2023-24 BEF formula, the median household income in individual school districts ranged from

just under \$30,000 in Farrell Area School District in Mercer County to more than \$154,000 in New Hope-Solebury in Bucks County, which leads to MHII multipliers of nearly 2.28 and nearly 0.44 respectively.

The table below highlights the ends of the median household income spectrum in Pennsylvania along with the corresponding MHII multiplier for the BEF formula. The districts with the lowest median household income have an MHII multiplier that is four to five times greater than the districts with the highest median household income.

School District	Median Household Income	MHII Multiplier
Farrell Area SD	\$29,652	2.2793
Greater Johnstown SD	\$35,063	1.9276
Aliquippa SD	\$35,688	1.8938
Sharon City SD	\$35,814	1.8872
New Castle Area SD	\$36,464	1.8535
Duquesne City SD	\$37,478	1.8034
Unionville-Chadds Ford SD	\$142,198	0.4753
Pine-Richland SD	\$144,241	0.4686
Upper Dublin SD	\$145,905	0.4632
Lower Merion SD	\$147,418	0.4585
Tredyffrin-Easttown SD	\$150,910	0.4479
New Hope-Solebury SD	\$154,229	0.4382

The second multiplier in the formula includes two components and is, by far, the most complex component of the BEF formula. It is the Local Effort/Capacity Index (LECI), which aims to measure both the local tax effort on district households and the capacity of the district to generate local revenue.

The first part of the multiplier—the Local Effort Index—seeks to measure local tax effort. Because the BEF Commission recognized the flaws of using Market Value data, the formula moved away from the use of Equalized Mills as a metric for tax effort. Instead, it measures local tax effort by looking at the burden on each individual household in the district and comparing that to the state median.

To do so, the formula looks at a school district’s total tax-related revenue (which is predominately comprised of property taxes for most school districts), and divides that by the district’s median household income and the number of households in each district (also federal Census data). This household effort factor is then compared to the state median, with districts receiving a Local Effort Factor that is either above one (if their household effort is greater than the state median) or below one (if their household income is less than the state median).

The formula then adjusts the Local Effort Factor for school districts that are spending more than the state median in their Current Expenditures per Weighted Student. Current expenditures is a measurement of the amount a school district is spending in certain areas of operation—namely instruction, support services and operations (it does not include expenditures related to facilities or debt) on a per weighted student basis. This factor focuses on expenditures, so it represents the expenditure of all relevant state, local, and federal funds (it’s important to recognize that this current

expenditure metric is hugely impacted by ESSER use across districts, which increases current expenditures significantly in some cases due to targeted eligible use of those limited funds).

To calculate this, the formula uses the most recently available Annual Financial Report data for each school district (for 2023-24, the formula uses 2021-22 data) and divides that by the total Student-weighted ADMs calculated as described above in the BEF formula.

If a district's Current Expenditures per Weighted Student are less than the state median (which is \$15,309 for 2023-24), there is no adjustment to the district's Local Effort Factor as calculated above; however, if the district's Current Expenditures per Weighted Student are greater than the state median, the district's Local Effort Factor is reduced.

For example, a school district has a Local Effort Factor of 1.75 (meaning that taxes actually collected from their tax base are more than 1.7 times the median tax effort), and their Current Expenditures per Weighted Student are \$21,896, which is 1.43 times greater than the state median of \$15,309. As a result, that school district's Local Effort Factor would be reduced to 1.22.

The purpose of this adjustment in the formula is to ensure that school districts are not incentivized through the BEF formula to increase their local tax burden for the purpose of significantly increasing current expenditures above the state median.

The table below provides some examples from the 2023-24 BEF formula data showing the calculation of the Local Effort Index.

School District	Local Effort Factor	Current Expenditures per Weighted Student	Local Effort Index
Upper Saint Clair SD	1.4300	\$20,981.11	1.0400
Reading SD	0.8000	\$9,019.57	0.8000
Greater Johnstown SD	0.6300	\$11,115.02	0.6300
State College Area SD	1.2700	\$18,881.96	1.0300
Catasauqua Area SD	1.4800	\$16,359.81	1.3800
Grove City Area SD	0.7800	\$16,952.42	0.7000
Philadelphia City SD	1.0300	\$12,808.91	1.0300

The second half of the LECI multiplier focuses on the capacity of each school district to generate revenue at the local level. The calculation starts by dividing a district's total tax-related revenue (for most districts, this is mostly property tax revenue) by the district's total Market Value and Personal Income (neither of which are taxable by districts) to obtain the state median rate. For 2023-24, it's 1.40%.

Then, each district's total Market Value and Personal Income are multiplied by that state median rate of 1.40%. Each district's amount is then divided by the Total Weighted Student count as discussed above. That amount is compared to the state median and conceptually represents the per student capacity to generate local revenue.

The state median is \$8,258 per weighted student for 2023-24, so if a district can generate more than that amount pursuant to the metric, there is no adjustment. If a district can generate less than that state

median pursuant to the metric, the district gets a special capacity bonus representing the percentage of the difference between the district's per weighted student capacity and the state median capacity.

For 2023-24, 253 districts have a capacity adjustment of zero and 247 districts receive a capacity adjustment ranging from 0.01 to 0.84. This adjustment—the Local Capacity Index—is then added to a district's Local Effort Index.

The table below shows some examples of the 247 school districts that receive a capacity adjustment in the 2023-24 BEF formula as a result of having a local capacity per weighted student that is less than the state median.

School District	Local Capacity per Weighted Student	Local Capacity Index
Upper Adams SD	\$6,168.24	0.2500
Duquesne City SD	\$1,469.44	0.8200
Tussey Mountain SD	\$5,934.30	0.2800
Brownsville Area SD	\$3,835.52	0.5400
Hanover Public SD	\$6,979.95	0.1500
Meyersdale Area SD	\$5,641.65	0.3200
Philadelphia City SD	\$6,176.58	0.2500

When the Local Effort Index and the Local Capacity Index as defined above are added together, it becomes the LECI multiplier, and just like the MHII, the multiplier ranges from less than one to greater than one. For 2023-24, the LECI ranges from 0.57 to nearly 2.0. The table below shows some examples from both ends of the spectrum for the LECI multiplier.

School District	LECI Multiplier
Palisades SD	0.5700
New Hope-Solebury SD	0.5800
Laurel SD	0.5800
Lakeview SD	0.6200
Salisbury-Elk Lick SD	0.6200
Northwest Area SD	0.6300
East Stroudsburg Area SD	1.8800
Allentown City SD	1.8900
Pottstown SD	1.9100
Southeast Delco SD	1.9600
Harrisburg City SD	1.9700
York City SD	1.9800

With all of the components calculated, it's time to do the final math of the BEF formula. We start with the Total Weighted Student Count (a number that represents each district's three-year average ADMs

plus all additional ADMs due to the student weights and the Sparsity/Size Adjustment). Then we multiply by the MHII multiplier (local wealth) and the LECI multiplier (tax effort and capacity).

The impact of this math varies dramatically across districts, as the multipliers can work together to significantly increase or decrease the Total Weighted Student Count. The multipliers can also, in some cases, counteract each other and have a net impact of about 1.0 on the Total Weighted Student Count.

Continuing our example, the school district in the table below has a Total Weighted Student Count of 1,4642.5 (their three-year average ADM was 1,200 plus student weights added). Their MHII multiplier is 1.30 (meaning their median household income is less than the state median—they are poorer than the state median), and their LECI multiplier is 1.10 (meaning that they have a slightly higher than tax effort and/or low capacity—however, they are very close to the median). When you do the math, the district ends up with 2,348.775 ADMs as their total share of the Total Formula ADMs. Since both multipliers were greater than 1.0, the Total Student-Weighted Count was adjusted upwards.

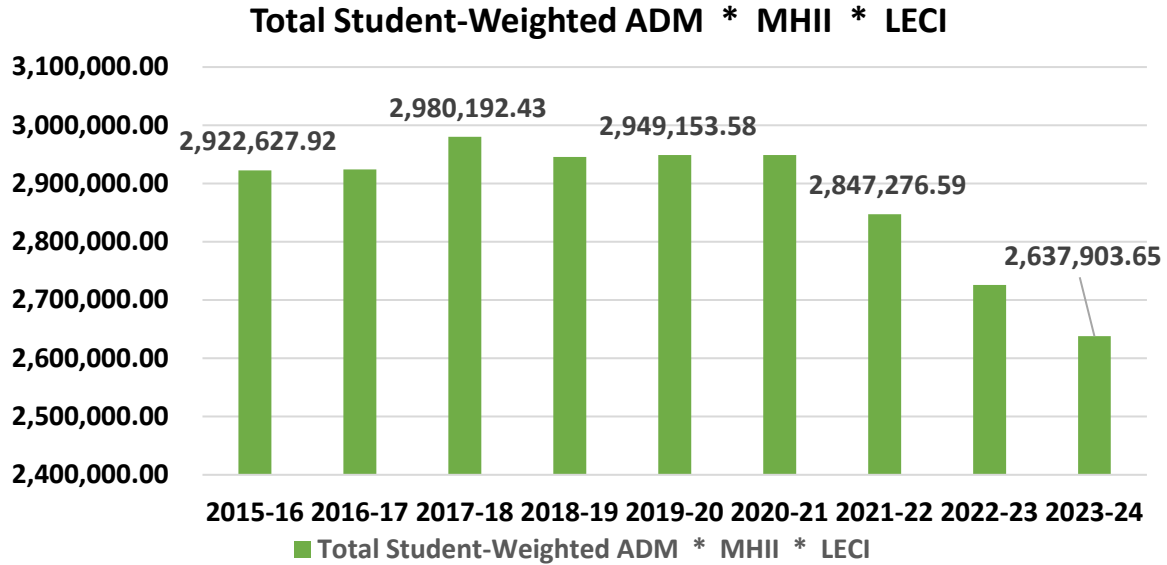
A. Three-year average ADMs	1,200
B. Acute Poverty Weight	192
C. Poverty Weight	78
D. Concentrated Poverty Weight	96
E. ELL Weight	60
F. Charter School Weight	4
G. Sparsity/Size Adjustment	12.5
H. Total Student-Weighted Count (A+B+C+D+E+F+G)	1,642.5
I. Median Household Income Index (MHII) (\$51,986)	1.30
J. Local Effort/Capacity Index (LECI)	1.10
Total Formula Share of ADMs (after multipliers) (HxIxJ)	2,348.775

How each district's multipliers interact has a huge impact on the formula outcome. For 2023-24, there are 224 school districts in which the net impact of the multipliers is to reduce the Total Student-Weighted Count. In 276 districts, the net impact of the multipliers is to increase the Total Student-Weighted Count.

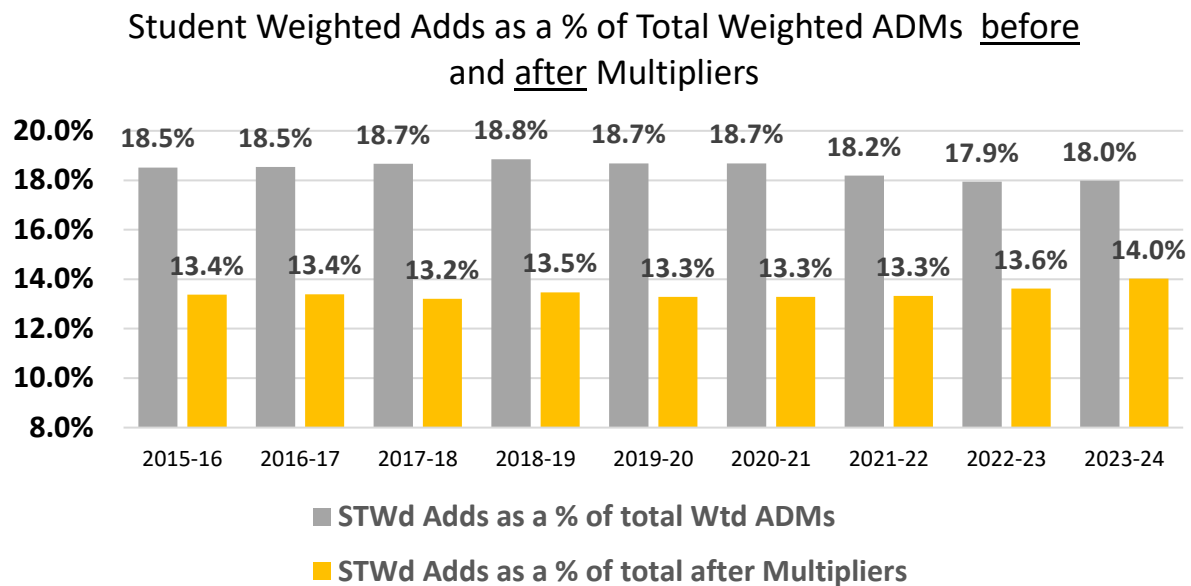
The table below shows the varying impacts of the formula on different districts—all entirely dependent on the individual demographics and dynamics of each school district.

School District	Total Student Weighted Count	MHII	LECI	Total Formula ADMs
Cumberland Valley SD	10,914.158	0.7160	1.0600	8,283.409
Harrisburg City SD	12,755.662	1.5207	1.9700	38,213.144
Solanco SD	3,684.580	0.9994	1.0000	3,682.369
Crestwood SD	3,178.434	0.7820	0.8200	2,038.139
North Penn SD	14,421.838	0.7172	1.0100	10,446.776
Wallenpaupack Area SD	3,329.366	1.1286	1.2200	4,584.177
York City SD	12,841.483	1.6997	1.9800	43,216.804

Additionally, the first of the figures below shows the total Formula ADMs across all 500 school districts (the end result of the BEF formula each year). Overall, the total of Formula ADMs are declining (nearly 10% since the inception of the formula) as overall ADMs decline, median household income grows, and other factors come into play.



The figure below shows the percentage of the total student weights to the Total Formula ADMs before and after the application of the MHII and LECI multipliers. Based on the figure below, the application of the MHII and LECI multipliers reduce the impact of the ADM additions based on the student population and the student weights, as district demographics are applied. This indicates, as we have noted nine years into the BEF formula, due to the range of the MHII and LECI multipliers across school districts, they play a critical role in defining BEF distribution.



The final step of the formula is to distribute the available BEF funds based on each district's share of the Total Formula ADMs. The example school district's Formula ADMs are 2,348.775. Since the overall Formula ADMs for all 500 school districts are 2,637,903.65 for 2023-24, that district's share of the BEF formula funds is 0.00089039. That means the district's share of the \$1,991,032,243.45 in 2023-24 BEF formula funds is \$1,772,804 ($0.00089039 \times \$1,991,032,243.45$).

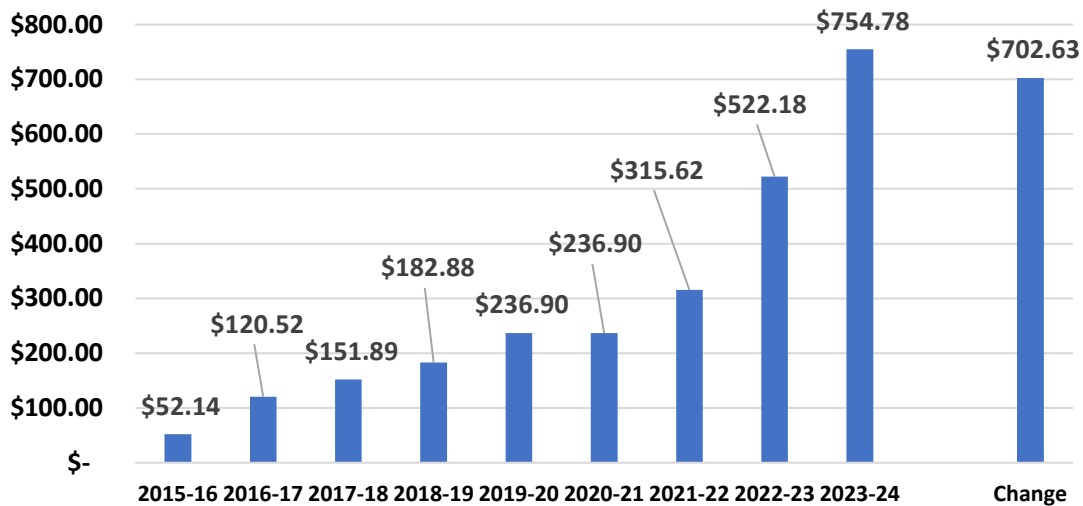
A. Three-year average ADMs	1,200
B. Total Poverty Weight	366
C. ELL Weight	60
D. Charter School Weight	4
E. Sparsity/Size Adjustment	12.5
F. Total Student-Weighted Count (A+B+C+D+E)	1,642.5
G. Median Household Income Index (MHII) (\$51,986)	1.30
H. Local Effort/Capacity Index (LECI)	1.10
I. Total Formula Share of ADMs (F x G x H)	2,348.775
J. BEF Formula Share (I / 2,637,903.65)	0.00089039
K. BEF Formula Distribution (J x \$1,991,032,243.45)	\$1,772,804

The amount each school districts receives through the BEF formula—which is recalculated and updated with all new data elements every year—is added to the amount the district receives in their BEF base, and the two components together equal a district's total BEF subsidy. It's critical to recognize that for next year's 2024-25 BEF, any district that has share reduction from 2023-24 to 2024-25, will first lose that share loss value multiplied by 2023-24 distribution amount of \$1.991 billion.

Looking at the BEF formula broadly, based on the total ADMs in the formula, the value of an individual ADM has grown to more than \$754 in 2023-24. That means that for each ADM in a district's total formula share, they get \$754. In the example above, their total BEF formula distribution equates to $\$754 \times 2,348.775$. As more money is added to the BEF formula, the value of a formula ADM has grown significantly—by more than \$700 since 2015-16. The table and figure below demonstrate this growth over time.

	Value for Each Total Wtd ADM	\$ Change Year Over Year	% Change Year Over Year
2015-16	\$ 52.14		
2016-17	\$120.52	\$ 68.37	131.1%
2017-18	\$151.89	\$ 31.38	26.0%
2018-19	\$182.88	\$ 30.99	20.4%
2019-20	\$236.90	\$ 54.03	29.5%
2020-21	\$236.90	-	0.0%
2021-22	\$315.62	\$78.72	33.2%
2022-23	\$522.18	\$206.55	65.4%
2023-24	\$754.78	\$232.60	44.5%
Change	\$702.63	\$650.49	1247.5%

Value for Each Total Wtd ADM After Multipliers



School District Share

PASBO has studied the BEF formula for nine years since its development, and we focus on looking at and understanding the formula by examining each school district's share of the total BEF formula amount. Since the BEF formula provides each school district with its pro rata share of the available subsidy based on its unique student population and district demographics, looking at the trends and changes in a school district's share of these dollars from year to year is effective and helps school districts cut through the complexity of the formula to plan for future fiscal years.

Examining a school district's BEF share (shares are calculated by dividing each school district's Formula ADMs by the Total Formula ADMs) and the extent of any BEF share change from year to year demonstrates the changes happening within the district and community that is then reflected in the BEF distribution. Looking just from 2022-23 to 2023-24, 310 school districts experienced a growing BEF formula share—meaning that the formula drove out a larger piece of the overall BEF formula pie than the previous year. The school districts below experienced the greatest BEF formula share growth in 2023-24.

School District	22-23 share	23-24 share	Share Change
Wyoming Valley West SD	0.00380	0.004196	0.1044590%
Lebanon SD	0.007409	0.008224	0.1099832%
Coatesville Area SD	0.003847	0.004366	0.1347880%
Pittsburgh SD	0.01044	0.01201	0.1503901%
Panther Valley SD	0.00218	0.002535	0.1628776%
Boyertown Area SD	0.002019	0.002355	0.1666021%
Ridley SD	0.001893	0.00224	0.1827977%
Aliquippa SD	0.002009	0.002413	0.2007853%
Big Beaver Falls Area SD	0.001814	0.002206	0.2159177%
Pleasant Valley SD	0.001631	0.002234	0.3700152%

Overall, when school districts experience growth in their share, it is due to several factors, such as growth in ADMs, increases in the percentages of students in poverty, eligibility for the Concentrated Poverty weight, a slow-growing or declining median household income, and/or increasing local effort or capacity. Within this, all the math is relative to all the metric changes for what all other 499 districts have experienced. So, as all those factors change at the district level, the impact on an individual district's BEF share is based on how all other districts moved as well. For example, if a district lost enrollment, but so did hundreds of other districts, the decline in enrollment may have no negative impact on their share.

In most cases, share growth is tied to a combination of these items. For example, if poverty percentages increase along with ADMs, the impact of the student weights is magnified. Additionally, the impact of growth in the Total Student-Weighted Count also has implications for some of the calculations in both the Local Effort Index and the Local Capacity Index—increasing the denominator of those calculations may result in a district falling below the state median, which may result in a greater LECI multiplier.

On the flip side, there are 190 school districts that lost share from 2022-23 to 2023-24. Those districts with the largest share loss are included in the table below.

School District	22-23 share	23-24 share	Share Change
East Stroudsburg Area SD	0.005677	0.005471	-0.0363018%
Wilkes-Barre Area SD	0.009507	0.009022	-0.0510235%
McKeesport Area SD	0.005409	0.00504	-0.0681701%
Philadelphia City SD	0.205897	0.190152	-0.0763615%
Williamsport Area SD	0.00506	0.004668	-0.0774058%
Woodland Hills SD	0.003406	0.003079	-0.0959687%
Columbia Borough SD	0.001857	0.001629	-0.1227839%
Dover Area SD	0.001657	0.001318	-0.2044059%
Sayre Area SD	0.0010	0.000729	-0.2710171%
Allentown City SD	0.037231	0.033914	-0.890687%

In many cases, share loss is a result of the opposite movement in factors causing share growth—such as a decrease in ADMs, decreases in the percentages of students in poverty, ineligibility for the Concentrated Poverty Weight, a median household income that is growing faster than the state median and/or a falling tax effort or tax capacity. As noted above, a combination of these factors can result in a magnification of share loss.

It's also important to recognize that the formula is so complex and treats each district so uniquely that you can't make assumptions about changes in shares across districts. For example, looking at BEF formula data from before the pandemic (2018-19) to 2023-24, 348 school districts experienced a decrease in their three-year average ADMs in that time.

However, not all of those school districts experienced a share loss over that timeframe. In fact, 207 districts (nearly 60%) of those that lost ADMs actually experienced an increase in their BEF formula share from 2018-29 to 2023-24. Additionally, of the 152 districts that experienced ADM growth during

that timeframe, nearly 16% of them experienced share loss in the BEF formula during that period. While this may seem counterintuitive, it demonstrates the purposeful complexity of the formula.

	Districts with ADM Loss (2018-19 to 2023-24)	Districts with ADM Gain (2018-19 to 2023-24)
Districts with Share Loss (2018-19 to 2023-24)	141	128
Districts with Share Gain (2018-19 to 2023-24)	207	24

While looking at share growth or share loss is important from year to year, it's important to look at it over time to provide school districts with some semblance of predictability in planning and budgeting over time. PASBO has built models for school districts to capture and track their BEF formula share from 2015-16 and on, allowing them to identify trends in share changes and to predict, based on data, future share changes so that they can more effectively balance state funds with local revenue needs and begin to plan over multiple fiscal years.

An example of this model is below, and school districts can make assumptions about their BEF formula share as well as the state funding level to map out possibilities as they are planning their school district budgets. Actual share trend data for districts run the full continuum of change from mild trend gain or loss, to severe trend gain or loss, to erratic changes up and down, and to those with steady stable share. Some notes about the model are below:

- The model uses all nine years of a district's BEF metrics and runs analytics on the various components for trend, direction, and scope of change. It includes poverty percentages, poverty weights, median household income and local effort indices, ELL, charter ADMs, three-year average ADMs, district share and share change, district student weighted dollars, and a district snapshot of their formula metric weights to that of the state averages.
- The output model (below) shows actual data above the grey bar and allows for what-if data based on best estimates on share changes and state additions to the formula for out years.
- Actual data includes state additions for each fiscal year, the district total student weighted amounts and the annual increase, the district share, and a four year what-if projection total.

The example below shows the output model for Twin Valley School District. The out-year projections are set at \$300 million increases per year and at a flat BEF share. The blue arrows indicate where districts can make adjustments to projected state increases and their BEF shares for future years to allow them to begin to build options as they move through their budget process.

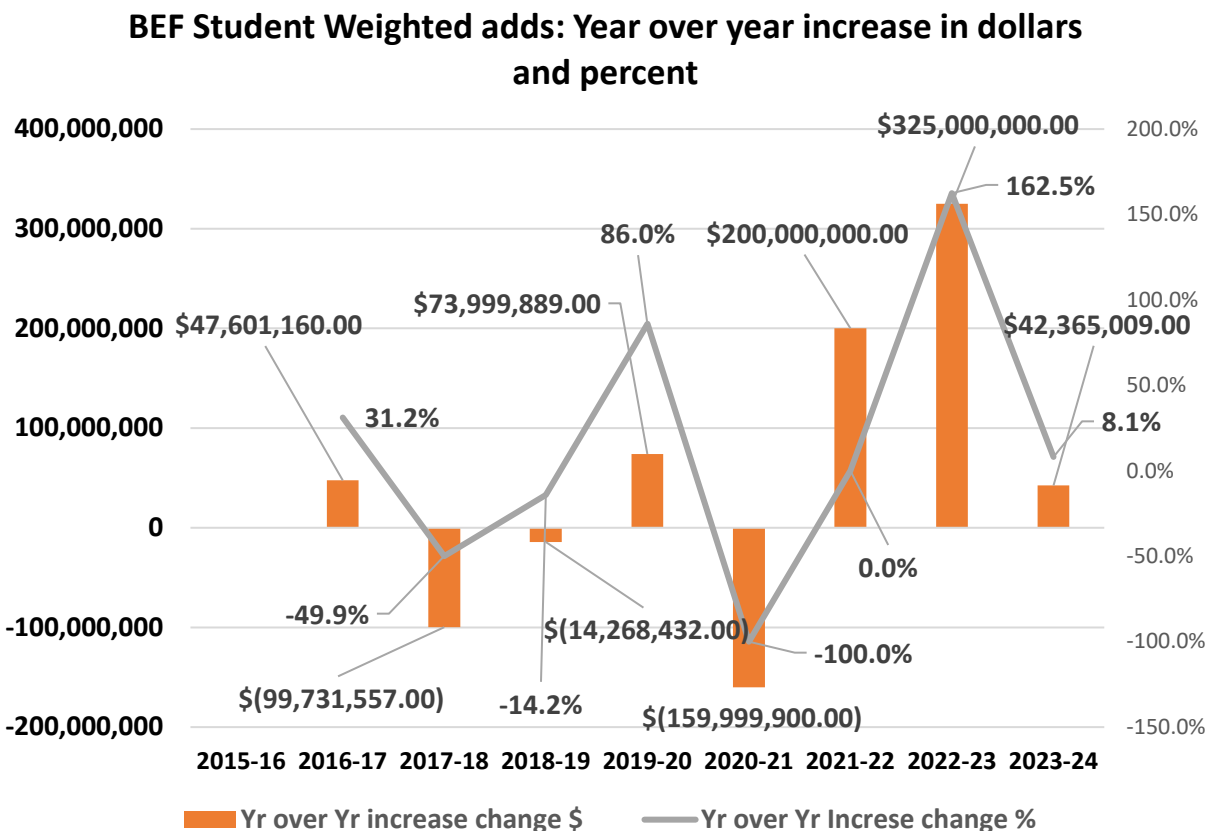
Twin Valley SD	FY	State BEF ADD	State BEF Student wtd Distribution	(Enter) LEA's Share	LEA's Student Wtd Amount	LEA's Student Wtd Amount Annual Increase
Actuals from 2015-16 to 2023-24	2015-16	\$152,398,840.00	\$152,398,840.00	0.001088	\$165,773.11	\$165,773.11
	2016-17	\$200,000,000.00	\$352,398,840.00	0.001087	\$383,193.62	\$217,420.51
	2017-18	\$100,268,443.00	\$452,667,283.00	0.001152	\$521,643.64	\$138,450.02
	2018-19	\$86,000,011.00	\$538,667,294.00	0.001081	\$582,201.63	\$60,557.99
	2019-20	\$159,999,900.00	\$698,667,194.00	0.000973	\$679,915.61	\$97,713.98
	*2020-21	\$0.00	\$698,667,194.00	0.000973	\$679,915.61	\$0.00
	2021-22	\$200,000,000.00	\$898,667,194.00	0.001213	\$1,090,247.96	\$410,332.35
	2022-23	\$525,000,000.00	\$1,423,667,194.00	0.001104	\$1,571,471.23	\$481,223.27
Average Add = \$221 million	2023-24	\$567,365,009.00	\$1,991,032,243.00	0.001357	\$2,702,563.45	\$1,131,092.22
Projections based on Estimated State Adds and share estimates	2024-25 Proj.	\$300,000,000.00	\$2,291,032,243.00	0.001357	\$3,109,773.85	\$407,210.40
	2025-26 Proj.	\$300,000,000.00	\$2,591,032,243.00	0.001357	\$3,516,984.25	\$407,210.40
	2026-27 Proj.	\$300,000,000.00	\$2,891,032,243.00	0.001357	\$3,924,194.65	\$407,210.40
	2027-28 Proj.	\$300,000,000.00	\$3,191,032,243.00	0.001357	\$4,331,405.05	\$407,210.40



While BEF formula share changes tell the story of each school district's dynamic distribution, it's important to recognize that the amount of money appropriated each year for distribution for the BEF formula determines the extent to which a school district's share change impacts them. Since 2015-16, the increases added to the BEF formula have not been consistent (see the table below).

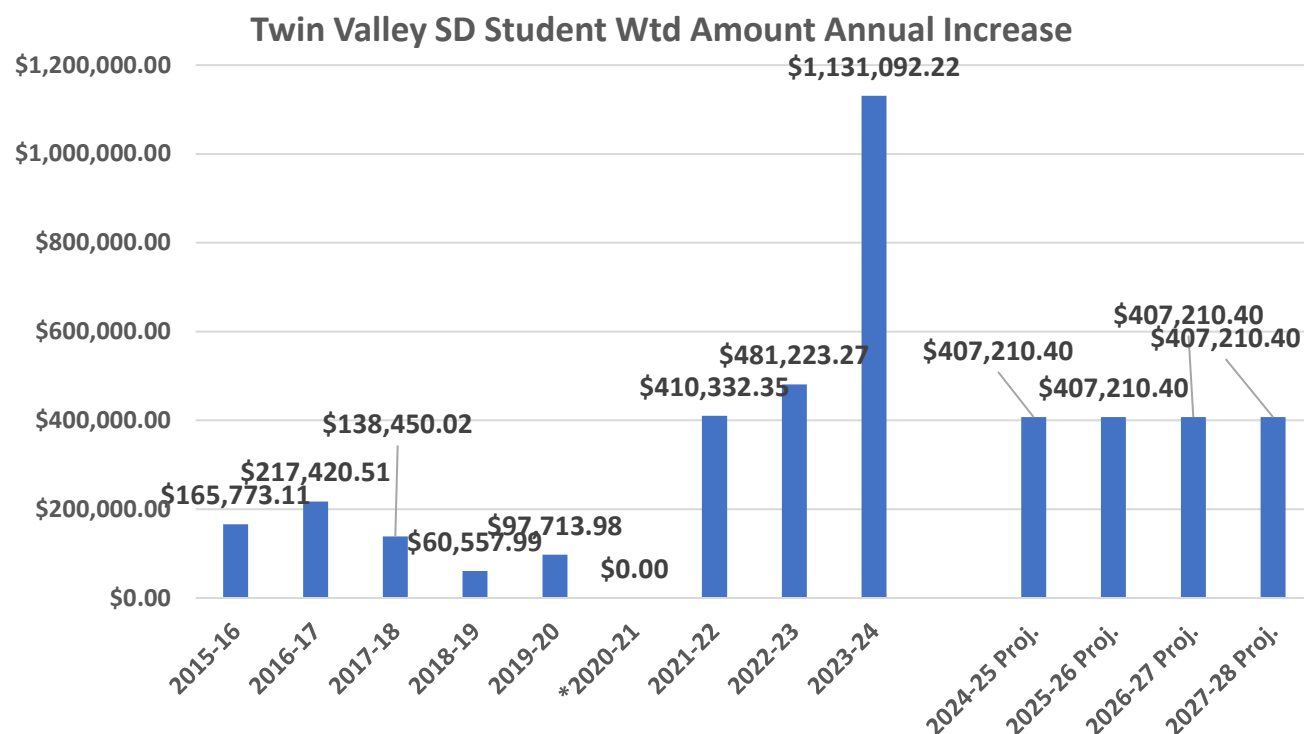
FY	BEF Formula Increase	\$ Increase Year Over Year	% Increase Year Over Year
2015-16	\$152,398,840	-	-
2016-17	\$200,000,000	\$47,601,160	31.2%
2017-18	\$100,268,443	(\$99,731,557)	-49.9%
2018-19	\$85,999,961	(\$14,268,432)	-14.2%
2019-20	\$159,999,950	\$73,999,889	86.0%
2020-21	\$0	(\$159,999,900)	-100.0%
2021-22	\$200,000,049	\$200,000,000	0.0%
2022-23	\$525,000,000	\$325,000,000	162.5%
2023-24	\$567,365,009	\$42,365,009	8.1%

The table above and the figure below illustrate that not only are the BEF formula data metrics dynamic, but the state increases to BEF have been more dynamic than perhaps initially anticipated as well. These dynamic increases along with declining total student weights over time have quickly compounded the total dollar value of each student weighted ADM in the BEF formula.



The state increases in BEF have significant impacts on a district's BEF distribution. For example, a district that has a decreasing share of the BEF formula—meaning that its piece of the overall BEF formula pie has declined from the previous year—might not see a negative impact (i.e. the district could still get an increase in BEF funds from one year to the next) if the additional BEF appropriation added by the General Assembly is enough to offset the district's share loss.

For the district used in the model example above, Twin Valley School District, the share gain they experienced between 2022-23 and 2023-24 significantly increased their BEF share at a time that a historic \$567 million increase was added to the formula. You can see from the figure below how significantly their BEF formula distribution changed in terms of their increase for 2023-24.



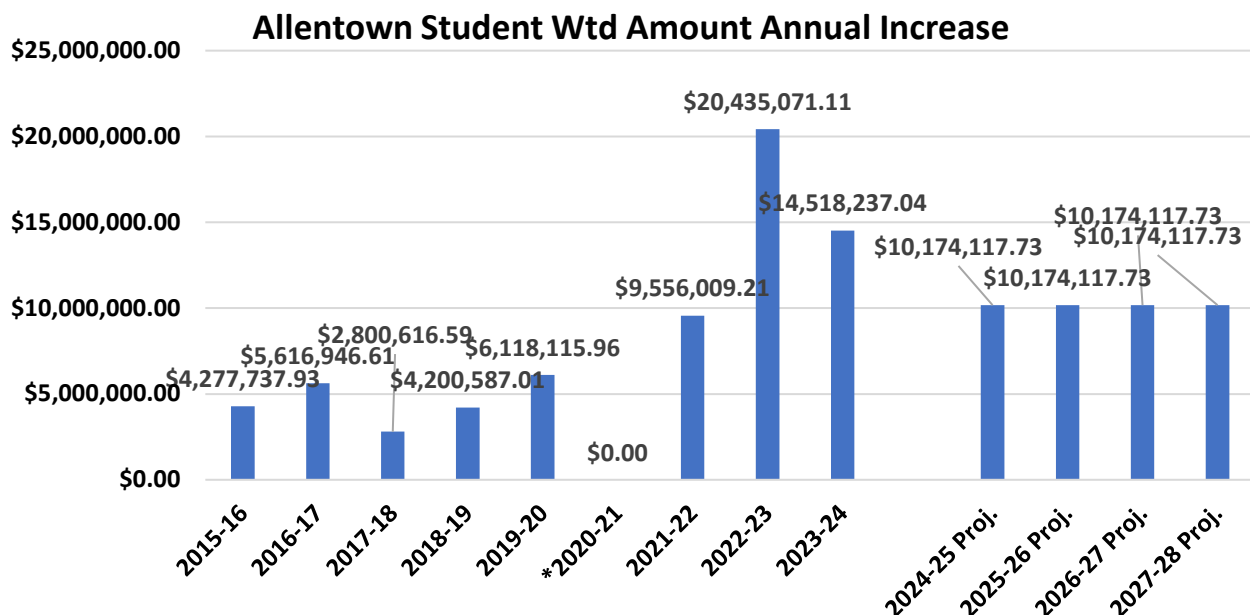
Because all of the data elements are updated in each year of the formula (with the exception of 2020-21, when, during the pandemic, the appropriation was level-funded and the data was not updated to avoid the negative impact of share losses across districts), each school district's BEF formula share changes every year. This means that each year districts experiencing a loss of share run the risk of getting less BEF dollars than the previous year unless the increased appropriation offsets their share decrease. It's also important to recognize that a school district could experience a loss of share simply because other school districts are gaining share. As the dynamic formula component of BEF grows, the amount needed from year to year to offset school district share losses increases as well, and there have been years of the BEF formula in which some districts received slightly less in BEF than in the previous year.

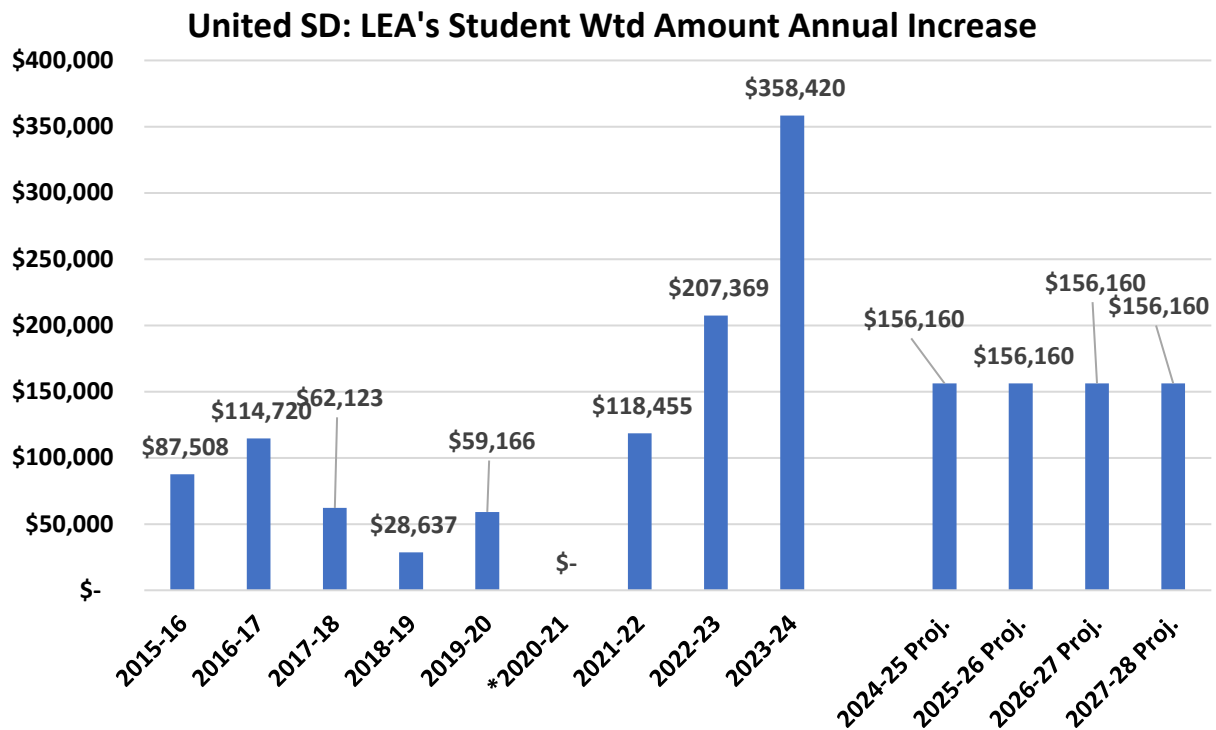
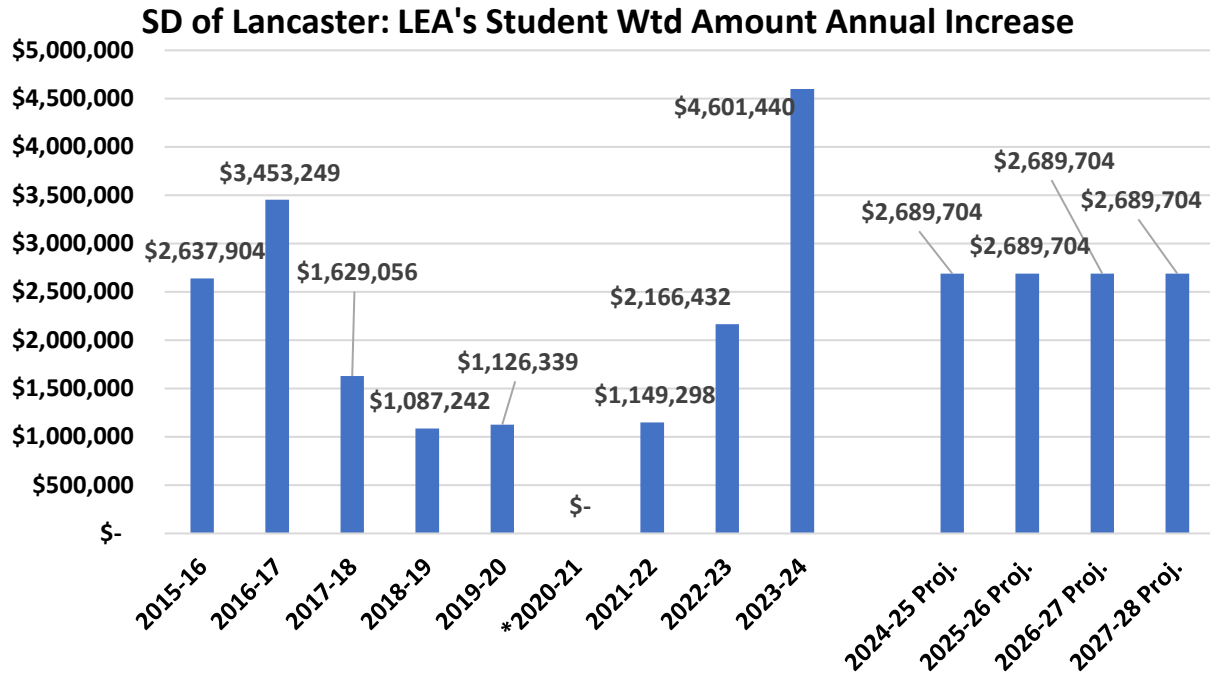
Allentown School District, for example, lost share in 2023-24—going from a share of 0.03723 of the BEF formula pie in 2022-23 to a share of 0.03391 in 2023-24. While they still received a \$14 million increase this fiscal year due to the significant \$567 million increase to the formula, the district would have

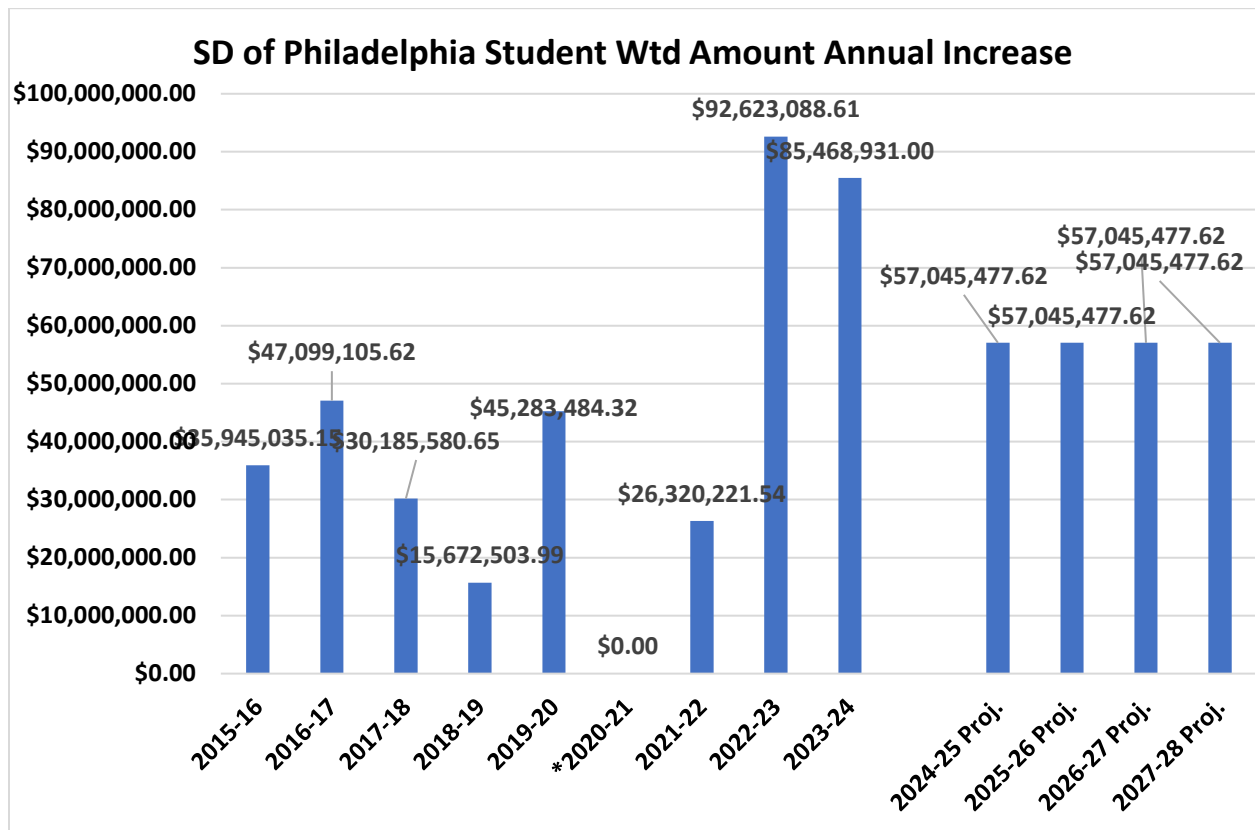
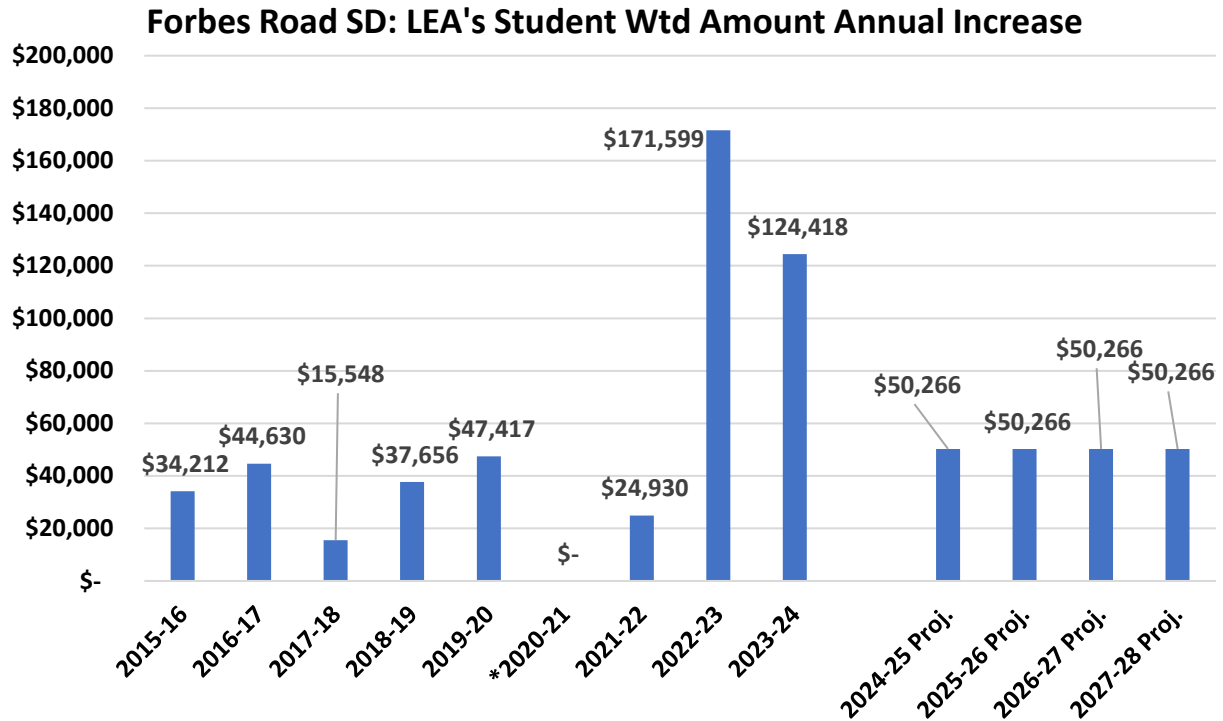
received \$6.6 million more in BEF this year if its share had stayed the same. Of that \$6.6 million that was distributed to other school districts through the dynamic formula, \$4.7 million is money from 2022-23 that was distributed from Allentown School District to other school districts with growing BEF share.

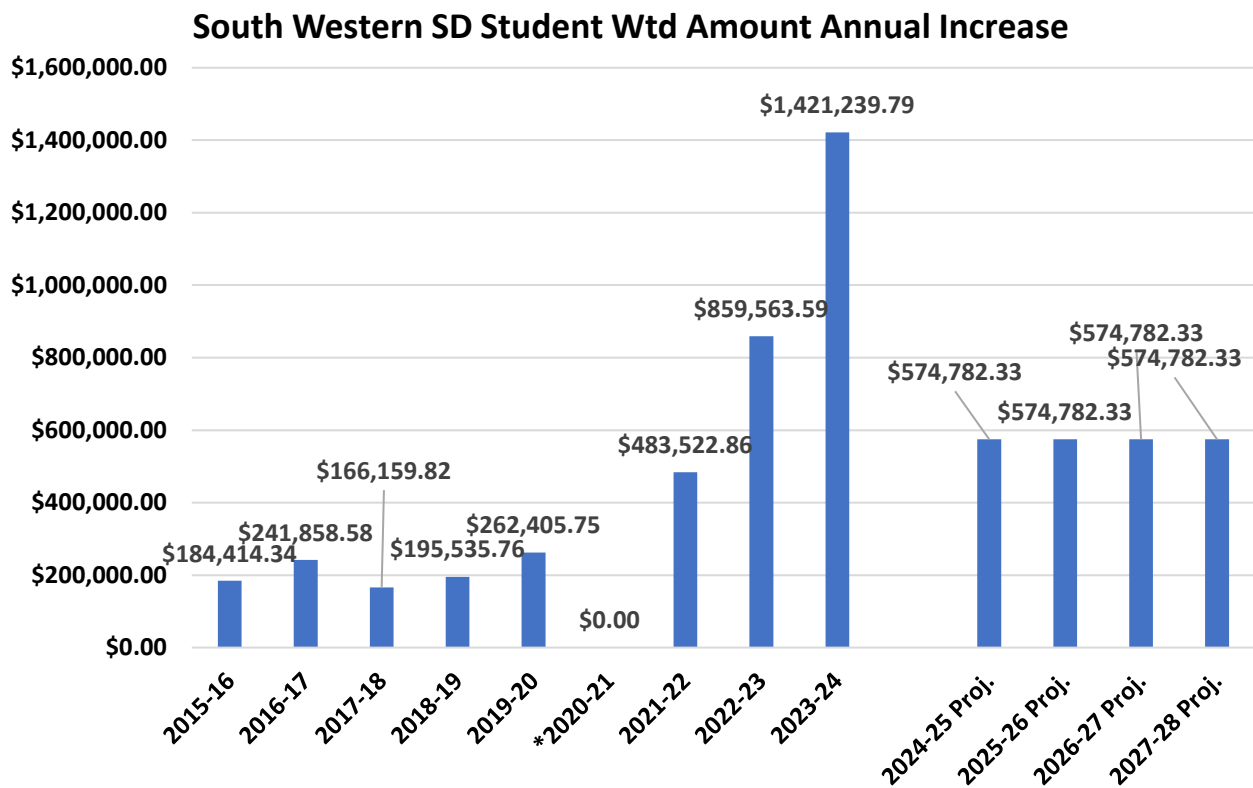
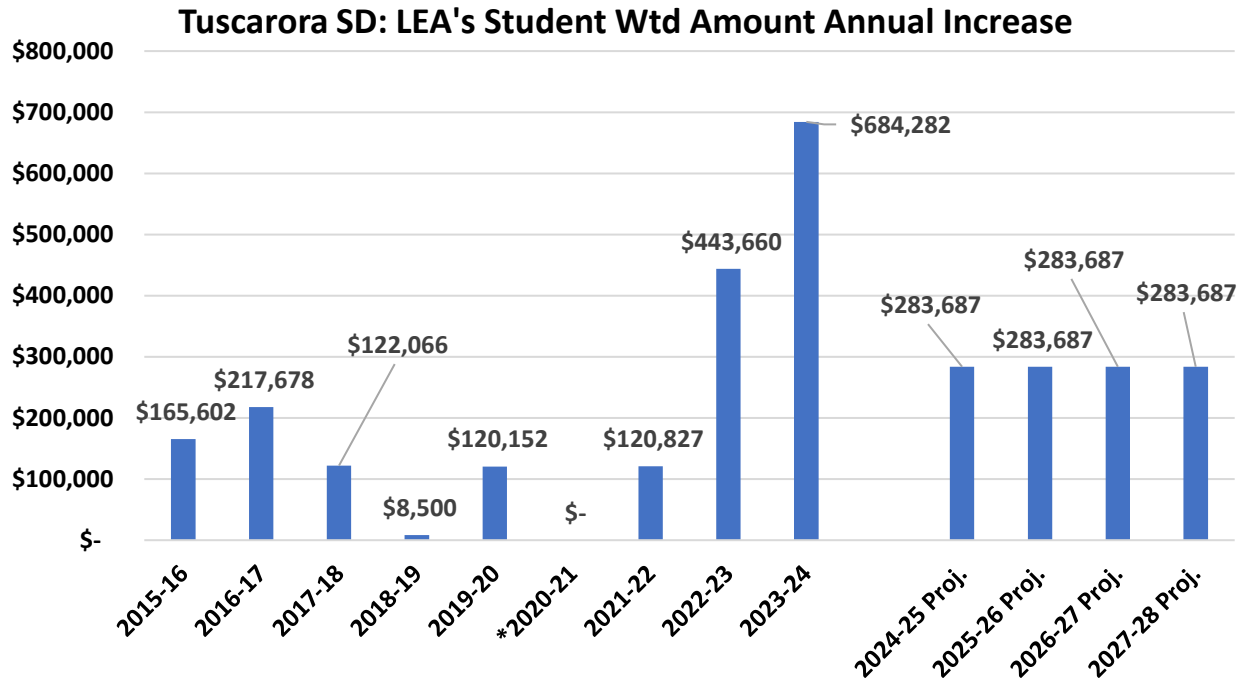
0.036243	2021-22 share
0.037231	2022-23 share
0.033914	2023-24 share
-0.003318	Yr over yr share change
\$ 1,423,667,194	22-23 Total BEF Formula Distribution
-0.003317647	Share Change from 22-23 to 23-24
\$ (4,723,225.63)	Dollar change on Prior year distribution
0.0339137	New share for 23-24
\$ 567,365,049	New BEF added to formula
\$ 19,241,463	23-24 Increase on 23-24 new BEF
\$ 14,518,237	Net Increase to Allentown for 23-24

Below are several examples of BEF formula increases from year to year that are defined by share changes in in each school district. The examples below are pulled from the output model component of our PASBO BEF model. They include actual data through 2023-24, and the assumptions for out-years, for purposes of this model, include static share changes. Take note of the changes in the 2022-23 and the 2023-24 BEF formula increases in the districts below, driven almost entirely by share changes.









Recommendations for BEF Formula Adjustments

PASBO has tracked the BEF formula metrics over nine years of implementation. We have evaluated how the formula works, built models to project trends and help school districts plan and budget from year to year, presented six-hour workshops on the math of the formula to districts across the state, identified concerns, and modeled solutions.

The BEF formula is a good formula that uses multiple factors that define—at a very detailed and complex level—the needs, demographics, and capacities at each school district, and it does precisely what it is intended to do—dynamically distribute resources to districts based on changes in populations and demographics.

From PASBO’s perspective and the perspective of school business officials across the commonwealth tasked with developing, maintaining, and implementing school district budgets each year, the most important factor in any formula or funding source is predictability. The goal for school districts is to know what they are likely to receive in state funding far enough ahead in the process so that they can not only effectively plan for local revenue needs to sustain programming, staff, and operations for the next fiscal year, but also to ensure that they can make thoughtful and accurate plans over multiple-fiscal years. Predictability breeds accuracy and efficiency, and there are many ways to make improvements in predictability both within and outside of the BEF formula.

Reviewing the BEF formula, it’s important to recognize that the formula is a snapshot in time—and all of the data elements are updated annually to ensure that the formula can respond to changes in need and demographics. What we have learned nine years in, is that some of the data elements are a little more volatile for some districts than originally anticipated, and to provide that critical component of predictability, there are changes that can be made within the four walls of the formula to mitigate the volatility.

Smooth the Poverty Percentages

Some of the most volatile metrics in the formula are the poverty metrics. With no uniformly reported state data to use, the federal Census data provides the proxy for student poverty by district. And while the data is already averaged over five years, some volatility—most likely due to small sample sizes in some districts—continues to exist. Smoothing both the percentages for Acute Poverty and Poverty over three years (as is done for the ADM measure in the BEF formula and also in some components of the Special Education Funding formula) would go a long way in mitigating some of the peaks and troughs for most districts (a three-year average of the five-year average number). While we anticipate that some of this volatility will be mitigated as we move further from the impact of the pandemic, this is an easy fix that would help to increase predictability.

Eliminate the Concentrated Poverty Cliff

The inherent volatility experienced by some districts in the poverty percentages is magnified for those districts that are at or around the 30% Acute Poverty threshold for the Concentrated Poverty weight. As noted above, while about 40-45 districts, on average, qualify for this additional weight each year, it is not a uniform group of school districts. Each year, some school districts drop below the 30% threshold and others reach it, and the impact from year to year of qualifying for or not qualifying for the Concentrated Poverty weight is significant. Realistically, for far too many districts there is no difference in their demographic composition and student needs whether at 25% or 35% Acute Poverty, yet the

formula can deliver a severe share penalty at 29.9% if a district had previously qualified for Concentrated Poverty.

The table below shows the districts that either no longer qualified for the Concentrated Poverty weight in or newly qualified for the Concentrated Poverty weight over the past several years of the BEF formula. Many districts that see the greatest overall share increase or share loss from year to year are districts that either newly qualify for or no longer qualify for the Concentrated Poverty weight.

	8	12	7	7	5	12	9
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Added	Woodland Hills SD	Uniontown Area SD	Charleroi SD	Jamestown Area SD	Charleroi SD	Uniontown Area SD	Lebanon SD
	Forest Area SD	Southeastern Greene SD	Steel Valley SD	Union SD	Sto-Rox SD	East Allegheny SD	Big Beaver Falls Area SD
	Claysburg-Kimmel SD	Washington SD	Forest Area SD	Harmony Area SD	Salisbury-Elk Lick SD	Iroquois SD	Midland Borough SD
	Fannett-Metal SD	Clarion Area SD	Windber Area SD	Columbia Borough SD	Windber Area SD	Northern Cambria SD	Ferndale Area SD
	Steelton-Highspire SD	Greensburg Salem SD	Antietam SD	Hazleton Area SD	Riverside SD	Smethport Area SD	Corry Area SD
	Pottstown SD	Jeannette City SD	Hanover Area SD	Big Beaver Falls Area SD		Millersburg Area SD	Forest Area SD
	Rochester Area SD	Salisbury-Elk Lick SD	Bristol Borough SD	Marion Center Area SD		Sayre Area SD	Riverside SD
	Purchase Line SD	Shanksville-Stonycreek SD				Williamsport Area SD	Minersville Area SD
		Columbia Borough SD				Greater Nanticoke Area SD	Charleroi SD
		Mount Carmel Area SD				Weatherly Area SD	
		Mid Valley SD				Homer-Center SD	
		Mahanoy Area SD				Mahanoy Area SD	
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Dropped	Uniontown Area SD	Forest Area SD	Washington SD	Albert Gallatin Area SD	Steel Valley SD	Charleroi SD	Millersburg Area SD
	Carlynton SD	Oil City Area SD	Woodland Hills SD	Connellsville Area SD	Jamestown Area SD	Clairton City SD	Homer-Center SD
	Clarion-Limestone Area SD	Monessen City SD	Titusville Area SD	Uniontown Area SD	Harmony Area SD	Sharon City SD	Uniontown Area SD
	Mount Carmel Area SD	Purchase Line SD	Salisbury-Elk Lick SD	Southeastern Greene SD	Williamsport Area SD	Forest Area SD	Williamsport Area SD
	Hazleton Area SD		Shanksville-Stonycreek SD	Charleroi SD	Hazleton Area SD	Salisbury-Elk Lick SD	Mahanoy Area SD
	Wyoming Valley West SD		Columbia Borough SD	Pittsburgh SD	Bristol Borough SD	Windber Area SD	Union SD
			Lebanon SD	Sto-Rox SD	Big Beaver Falls Area SD	Fannett-Metal SD	Weatherly Area SD
			Greater Nanticoke Area SD	Clarion Area SD		Columbia Borough SD	Sayre Area SD
			Mid Valley SD	Greensburg Salem SD		Lancaster SD	Wilkes-Barre Area SD
			Panther Valley SD	Claysburg-Kimmel SD		Steelton-Highspire SD	
			Big Beaver Falls Area SD	Windber Area SD		Riverside SD	
				Antietam SD		Scranton SD	
				Mount Carmel Area SD		Pottstown SD	
				Mahanoy Area SD		Midland Borough SD	
						Rochester Area SD	
						Marion Center Area SD	
	6	4	11	14	7	16	9

The cliff component of this weight, along with the volatility in this metric (heightened by COVID), makes it extremely difficult for districts to predict their eligibility from year to year. For example, for 2023-24, the School District of Philadelphia has an Acute Poverty percentage of 33.4%, which has been steadily declining year over year since the start of the BEF formula. For 2023-24, the district still qualified for the Concentrated Poverty weight, and it was responsible for 20% of their overall Student-Weighted addition to their three-year average ADM. Similarly, Erie City School District has an Acute Poverty percentage of 34.75%, which has also been declining steadily. For Erie City School District, the Concentrated Poverty weight provides 21% of their total Student Weighted addition. As another example, Allentown City School District is at the 34% range for 23-24 in decline from 41.2% in 2019-20.

For these districts, and others like them, the implications of falling under the 30% threshold are significant from a financial perspective—and this change in the data is something that happens to districts every year. If the School District of Philadelphia wouldn't have qualified for the Concentrated Poverty weight in 2023-24, its BEF formula distribution would have been \$20 million less. Likewise, if

Erie City School District didn't qualify for the Concentrated Poverty weight in 2023-24, its BEF formula distribution would have been \$2.5 million less.

There are multiple ways to smooth this metric to eliminate the impact of the cliff and prevent the significant increases or decreases in weighted student count experienced by the 5-15 districts each year that fall on or off the Concentrated Poverty cliff. This could be accomplished by creating a metric that applied a percentage of the weight to districts based on their proximity to the 30% threshold. Or, if a district didn't qualify for the Concentrated Poverty weight from one year to the next, the weight could be applied for one additional year—giving the district the opportunity to plan for and adjust to a falling BEF formula amount. Focusing on this element of the BEF formula would provide another simple and beneficial adjustment to help districts that have experienced the huge increases or decreases due to this metric alone.

Exchange the Charter School Weight for Reimbursement

Pennsylvania's BEF formula is unique in that it includes a weight for students attending a charter school. This weight was added in recognition of the unique charter school tuition model used in Pennsylvania and the impact of stranded costs on school districts. While the intent of the weight was certainly positive, the impact of the weight is minimal. Overall, the charter school weight itself only drives out about \$32.5 million of the nearly \$2 billion BEF formula amount—which provides minimal relief for school districts (1.6% of BEF distribution) in comparison to the overall nearly \$3 billion in total charter school tuition they paid in 2021-22 (the most recent year for which Annual Financial Report data is available). Said another way, for the average district, this component of the BEF formula provides funding to cover about 3 to 5 charter students out of 40 to 60 students.

While charter school students are included in each school district's ADM—along with all other students the district is financially responsible for being educated outside of the district—including a separate weight for charter students simply doesn't do much in terms acknowledging the impact of these costs. We would recommend the removal of the charter school weight from the formula and argue that districts and taxpayers would be far better served if a charter school reimbursement was created as a separate bucket of education funding provided to school districts. This recommendation requires both actions as without a move to mitigate charter costs on districts and their taxpayers, then we have to at least keep this small weight in the BEF formula.

For example, a significant state reimbursement could be resumed, and school districts could receive their share of available state funds based on their share of the overall charter school enrollment. Since all districts start from where they are, the state could simply assume a significant percent share of district cost increases prospectively. This effort would provide far greater support for school districts in recognition of the impacts of charter school policy and tuition costs. Additionally, recognizing that charter school tuition costs—which grow each year as school district expenditures grow—are one of the primary drivers of property taxes, moving to a reimbursement that could begin to target some of the growth in charter school tuition costs each year would provide relief to taxpayers in many districts as well as improve actual BEF efficacy.

Local Tax Effort

Another issue within the four walls of the formula that is worth a second look is simply based on the fact that the entire formula is relative—and each school district is compared to the 499 other school districts across the Commonwealth. This is very apparent in the Local Effort Index component—one half of one of the two multipliers in the BEF formula.

Each school district's local tax effort is assessed by examining their total tax-related revenue in the context of their median household income and number of households. While there are some changes each year in all of these factors that create some movement for some districts, the reality is that every district is starting from where they are, and in a tax effort spectrum of 500 school districts, with Act 1 limitations and political challenges in every tax conversation, districts don't have the capacity to move their place—at least not significantly. Who they are is built-in demographically and economically. A district that taxes at the maximum Act 1 index every year but started at the bottom in terms of tax effort will never catch a district at the top...ever.

Additionally, the rest of the Local Effort Index metric includes an adjustment based on current expenditures per weighted student, and over time, changes in enrollment as well volatility in poverty metrics have created some unintuitive impacts for some districts. While smoothing the poverty metrics as discussed above will go a long way to address this component of the issue, there is benefit to examining this factor in a different way and measuring growth within a district instead of solely growth across all 500 school districts. Comparing the top to the bottom is an ineffective metric when it comes to local effort, and PASBO is working to model some possibilities of measuring local effort in a way that captures changes in effort from year to year within a district versus across all districts.

Furthermore, we acknowledge that some important factors, such as growth (or decline) in assessed value and earned income tax—two of the factors that are actually taxable by school districts—could be added to the formula or even monitored separately as a backstop, to provide some additional precision to the local effort and capacity components of the formula.

Finally, within the LECI multiplier, we recommend use of the three-year average ADM instead of a single year of ADM data when calculating the current expenditures per weighted student.

Balance in the Formula

Outside of the factors within the BEF formula, which can be adjusted to be less volatile and more predictable, there are some larger issues with how the BEF formula has been funded and the balance between the stable base and dynamic portions of the BEF subsidy that substantially limit predictability.

As noted above, the BEF formula is dependent upon the General Assembly to determine the amount available for dynamic distribution each year. Since the original BEF Commission did not want to predefine future state budget conversations and negotiations, the amount added to the BEF formula is determined each year in the state budget process. The result has been routine increases, but at wildly varying amounts (see the table on page 21).

With increases ranging from \$86 million to \$567 million (and \$0 in 2020-21 when the formula data was not updated), these varying increases coupled with the dynamic nature of the formula have made it increasingly hard for districts to predict what their BEF revenue will look like from year to year, let alone plan carefully over multiple fiscal years—both with regards to programming and operations and also with respect to local revenue needs.

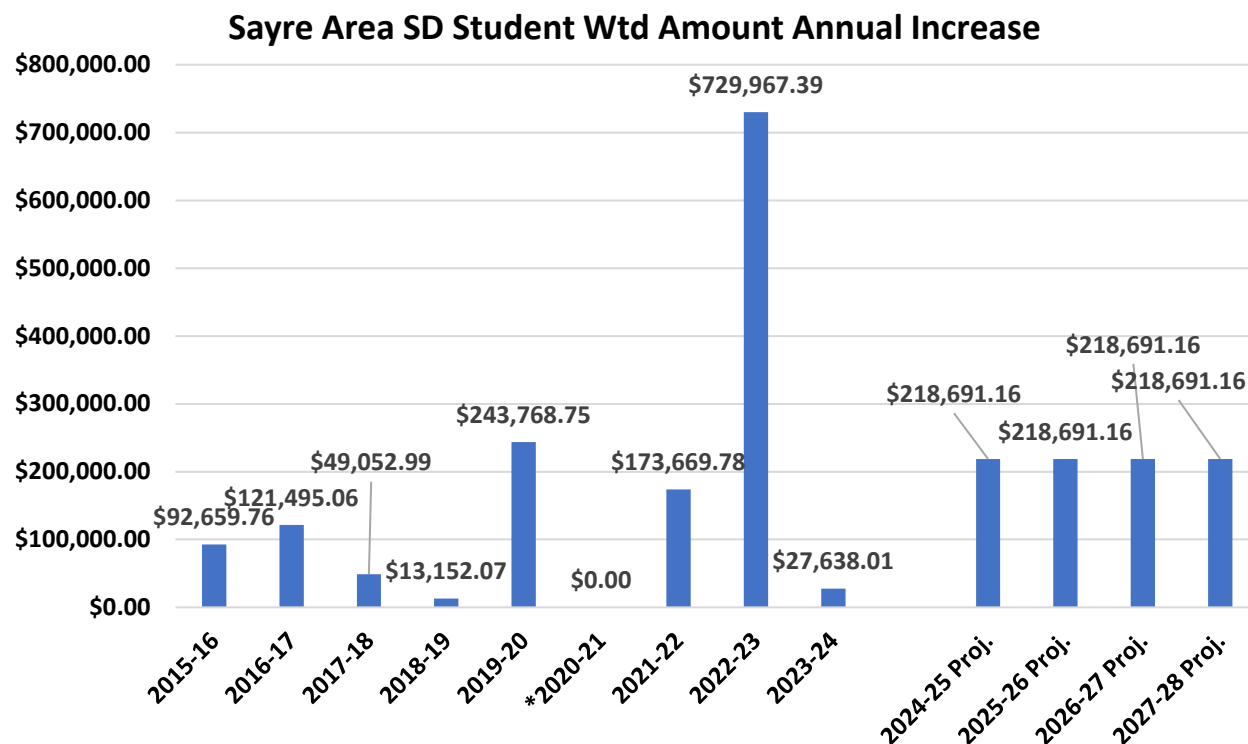
As described above, the original BEF Commission intended the BEF subsidy to have two components—a dynamic formula component that changed every year and a stable base that provided consistency from year to year. These two elements, if working in harmony and with consistent and inflationary adjusted

additions annually, would provide predictability for districts in budgeting. What has happened after nine years and nearly \$2 billion added to the BEF formula is an imbalance in these two components.

Additionally, as illustrated above, while the value of a weighed ADM in the BEF formula was originally about \$50 in 2015-16, for 2023-24, it has climbed to more than \$754. That means that as a district's data change from year to year and the district gains share, every weighted ADM accumulated nets the district \$754 more per student. The flip side is that every time a district loses share—through a decline in enrollment, a climb in median household income, or a reduction in tax effort by comparison, a district loses \$754 per student.

Combining this increasing weighted student value with the dynamic nature of the formula, and predictability for school district school business officials is out the window. There are school districts that received a six or seven-figure BEF increase in 2022-23 when \$525 million was added to the formula that are barely receiving five-figure BEF increases in 2023-24 when \$567 million was added to the formula.

Sayre Area School District's BEF formula increases from year to year are highlighted in the figure below. After qualifying for the Concentrated Poverty weight in 2022-23, the district's share increased substantially in conjunction with a \$525 million increase in BEF. However, in 2023-24, the district's share decreased dramatically, as the district dropped below the 30% threshold for Acute Poverty. As a result, with even more added by the state to the BEF formula (\$567 million), Sayre Area School District is receiving an increase of just \$27,000 compared to 2022-23.



While the dynamic nature of the formula was intended, the high stakes and unpredictable nature was not. These dynamics at the extreme are also why districts must retain fund balance flexibility to leverage BEF funds received over time for student effective use. Districts such as Sayre Area School District and many others can't make good, thoughtful, or long-term decisions within such significant swings in their BEF increases—and districts can't always accurately predict how significantly their data changes (or lack thereof) will impact their share of the BEF formula pie. Smoothing the poverty metrics as noted above will absolutely help, but as more money is added to the dynamic portion of the subsidy, it's clear that balance between the dynamic and the stable BEF components is also crucial.

How the state funds the BEF subsidy matters

Through the lens of predictability and from a school district budgeting perspective, knowing how much money a district will receive from year to year is important. Knowing whether you will sustain it from year to year is just as critical. While increasing the amount to school districts through BEF is certainly needed, how that is accomplished makes a difference.

To further ensure predictability in budgeting from year to year, there are two options that PASBO recommends. First, we would suggest adjusting the base to reduce the weighted student impact of the formula. This could be accomplished by locking in place more of the BEF subsidy to create a stable base for each school district; this would benefit all 500 school districts by ensuring that they would not get less from year to year than the newly reset base amount. It would reduce the dynamic component of the formula to further mitigate unpredictability, and it would lock in place many of the advances made through the BEF formula over the past nine years.

Some of the districts that would benefit the greatest from this approach are those that have experienced significant growth in their share of the BEF formula distribution since 2015-16 but maintain more recent share losses. School districts such as Philadelphia, Lancaster, Allentown, and Reading all fall into this category. Additionally, school districts that have experienced some of the greatest percentage increases in in BEF formula distribution—such as many wealthier suburban districts—would benefit from ensuring that the growth they have experienced is locked in and sustainable. Finally, rural school districts would benefit from this recommendation, as it would lock in some of the more minimal cost-of-living adjustments the formula has driven to them over time.

Adding more money to the BEF formula without also readjusting the balance between the dynamic and stable pieces of the subsidy will hurt all 500 districts—maybe not in year one or two, but eventually when the demographics result in share losses, there will be no capacity for districts to maintain their programs, services, or staff. When the current \$754 per weighted student increases to \$1,000, \$3,000 or more, the dynamic changes in the annual BEF formula metrics will be magnified so substantially that it will be detrimental to school districts, taxpayers, and sound financial policy and planning.

Another option would simply be to provide constraints around the dynamic portion of the BEF formula to create a minimum and perhaps even a maximum increase from year to year at the school district level. While the \$567 million added to the BEF formula for 2023-24 represented an 8% increase in the appropriation to correspond to the inflation rate, that is not the percentage increase that all districts received, with many well below the rate of inflation.

For 2023-24, the median percentage increase in BEF formula increases across all 500 school districts was about 7.1%; however, some school districts received an increase of less than 3% (with one receiving an increase of less than 1.0%), and others received an increase of greater than 20%. While the dollar

amounts associated with these percentage increases certainly vary and are reflective of decades of funding policy, the range is significant. For districts at the low end of the percentage increases, the increase may not be enough to begin to cover increased costs from year to year. For districts at the high end of the percentage increases, due to the dynamic nature of the formula, there can be no expectation that level of increase is sustainable, so planning for future years must include how best to leverage dollars over time. School district budgeting should never be a one-year exercise.

We recognize that our recommendations may not follow a similar lens or the approaches that have been presented at previous hearings. However, from a predictability, sustainability, and general school district operational finance perspective, we believe proposals that would move all \$7.8 billion in BEF subsidy through the dynamic formula, or proposals that would increase the unpredictability of the formula by adding additional elements or combining multiple formulas would be detrimental to school districts across the board.

As noted above, more money in the dynamic portion of the formula results in a more magnified per weighted student impact. With all \$7.8 billion through the dynamic formula and none in the stable base, for 2023-24, 310 school districts would lose a collective \$1 billion in one fell swoop. The loss in most districts would be impossible to make up at the local level due to Act 1 limitations and limited tax bases, and simply attempting to level-fund these districts year over year ignores the fact that every district experiences increases in costs from one year to the next.

To take a closer look at the consequences of eliminating the stable base, we have modeled the impact on districts of running 100% of the BEF subsidy through the dynamic formula beginning in 2015-16. From 2014-15 to 2015-16, 344 school districts would have lost a collective \$1 billion, shifting those dollars to the other 156 school districts. From 2015-16 and on, the dynamic nature of the formula would have wreaked havoc on school district budgets, making it impossible for districts to sustain programs, maintain a long-term local revenue policy, or predict their state revenue from year to year.

For example, the School District of Lancaster would have increased its BEF subsidy by \$44 million in 2015-16 if all of the money ran through the BEF formula. If one assumes expenditures (E) = revenues (R) due to the state's balanced budget requirement, the district would have ramped up spending to utilize that BEF increase and lifted its spend level to a new baseline of E=R. After that, however, the amount the district received from year to year tracked the changes in their BEF share.

In 2016-17, the district would have gained an additional \$3.5 million. In 2017-18, the district would have gained an additional \$350,000. In 2018-19, the district would have lost \$2.5 million. In 2019-20, the district would have lost \$10.7 million. In 2021-22, the district would have lost another \$8 million. In 2022-23, the district would have lost another \$15.8 million. In 2023-24, the district would have gained an additional \$2.7 million. Overall, if the state's policy had been to run all of the BEF subsidy through the BEF formula, the School District of Lancaster would have lost all but \$13 million of the \$44 million increase it received in 2015-16. This same dynamic would occur in year two after any large add or alteration in using more base funds in the formula creating annual "losers" of many districts lifted in year one.

2014-15 Base	\$53,818,381.15
2015-16 Change	\$44,499,313.74
2016-17 Change	\$3,573,084.18
2017-18 Change	\$354,872.99
2018-19 Change	(\$2,588,379.90)
2019-20 Change	(\$10,721,312.93)
2020-21 Change	\$0
2021-22 Change	(\$8,093,452.00)
2022-23 Change	(15,876,600.73)
2023-24 Change	\$2,702,070.30
Net Increase from 14-15	\$13,849,595.65

The same up and down dynamics would be true for districts of all shapes and sizes across the Commonwealth. The BEF formula was designed to distribute resources to those districts that need them based on a one-year, snapshot-in-time look at the district's population and demographics. Comparing districts using metrics built to define distribution of *some* funds in an *individual* year defies an understanding of the purpose and functionality of the formula. Shifting to a completely dynamic distribution eliminates the capacity for any predictability, for sustainability of programming and supports, for long-term local tax policy, and for ensuring student equity across districts.

Frankenstein Formula

Similarly, there has been some discussion at previous hearings regarding the combination of state education funding formulas—or elements thereof—into the BEF formula. PASBO strongly cautions against this effort, especially given that we will continue to see COVID and economic lag impact on the BEF formula (and other state formulas) for the next several fiscal years (e.g. the BEF formula uses data that lags for Market Values, Personal Income, current expenditures, poverty percentages, ADMs, household incomes, and actual tax collection; we anticipate significant movement in Market Values, Personal Income, current expenditures, poverty percentages, and household income over the next couple of fiscal years).

Every school district is unique, and every school district benefits from different components of different state formulas. For example, for 2023-24, 324 school districts do better—dollar for dollar—in the state's Special Education Funding (SEF) formula compared to the BEF formula. Based on their population of students, these school districts have a larger share of the SEF pie than the BEF pie.

For those school districts, an attempt to roll the special education student weights and funds into the BEF formula would actually dilute the value of their SEF resources they receive now. Most districts would (when comparing the combined BEF and SEF formula amounts in 2023-24 to the same total dollar amount distribution through a modified BEF formula to contain SEF student weights), see reduced total dollars if the SEF weights were added to the BEF formula. The implications for combining components from multiple formulas into one larger formula are significant. Using the BEF/SEF example, 314 school districts would effectively lose funding through this simple adjustment, redistributing resources targeted to special education to districts with smaller shares of SEF need.

Consolidating state buckets of funding into one Frankenstein formula—as evidenced at a basic level through modeling the consolidation of SEF alone—minimizes the state's ability to respond to specific district needs or areas of expenditure growth. Targeting more resources to mental health supports,

increasing the state share of special education expenditures, or effectively addressing the school facility needs of districts would be impossible to do with consolidated formulas.

Overall, recognizing the diversity of districts in Pennsylvania, the most effective way to ensure that student equity is achieved is to ensure that multiple buckets of funds are available and that the state increases its overall share of education funding. Through multiple buckets—such as BEF, SEF, charter school tuition reimbursement, PSERS, school safety, pupil transportation, PlanCon, etc.—the unique student and community demographics and the needs of each student population and each school district can most efficiently be addressed. At the same time, predictability within individual buckets of state resources is easier to achieve and maintain, and the growing or changing needs in one area will not negatively impact the needs in all other relevant areas.

Student Equity vs. Taxpayer Equity

A critical component of the BEF conversation is the distinction between student equity and taxpayer equity. The school funding lawsuit focused on the inequity across high-wealth and low-wealth districts in Pennsylvania, and the BEF Commission has heard testimony regarding the inequity in opportunity, programs, staff, facilities, and funding at every hearing to date. While the lawsuit seeks to remedy student inequity across districts, ensuring that all school districts have the resources to provide students with the opportunities, programs, supports, and facilities they need, underlying that conversation is one regarding taxpayer inequity. There is significant inequity in the burden on taxpayers to fund k-12 education across the Commonwealth.

Based on 2021-22 Annual Financial Report data, the range of local revenue to total revenue across school districts is about 11% in Duquesne School District to about 84% in Lower Merion School District; there are 16 school districts with local revenue making up less than 20% of their total revenue picture and 14 school districts with local revenue making up more than 80% of their total revenue picture.

While the state and local revenue picture looks different across all 500 school districts, there are certainly distinctions between those districts that have wealthy and robust tax bases and can support relatively high current expenditures per weighted student and those that cannot. This distinction highlights the difference between student equity and taxpayer equity.

Directing more state resources to education is critical for ensuring that students in all 500 school districts have the learning opportunities, the safe and secure facilities, and the staff and supports they need regardless of their zip code; this is student equity. Putting more resources into BEF to get more money to school districts for students is one way to begin to address it.

For school districts that already have the resources to provide their students with extensive learning opportunities, updated facilities, and needed supports, the challenge is not just student equity, but it requires a balance with taxpayer equity. As the state support in these districts is generally on the low side of the spectrum, as the state revenues increase, these districts are focused on providing relief to taxpayers. If you accomplish this increased state support entirely through BEF (which represents the student equity side of the coin), districts with declining BEF share from year to year will have their previous portion of the BEF pie going to other districts. To the degree you send such shifted funds to districts with truly lower needs, those resources are simply shifted out of the student equity bucket and over to taxpayers, as other school districts become collateral damage.

While student equity and taxpayer equity are inextricably linked, they are not the same thing and efforts to address them require very different approaches. It's important to understand and distinguish whether each district's challenge is a student equity challenge, a taxpayer equity challenge, or a little bit of both.

More state resources to BEF, for example, represents more money for students and should be focused for those purposes only; they should not be used for property tax relief. Taxpayer equity should be accomplished through a different mechanism—a specific bucket of funds directed to property tax relief in districts with the greatest burden and/or targeted state efforts to begin to cover the growth in mandated expenditures from year to year, mitigating the need for additional property tax burden. Taxpayer equity is critical and property tax relief is essential; however, how you provide it matters.

Lots of Buckets

Overall, when it comes to state share, all 500 school districts are underfunded, and we believe a significant state investment in education is critical. While some districts may need a greater investment than others, more state support is needed for students in all zip codes, and how that investment is accomplished is important.

For purposes of the Commission's work, BEF is one important component of a much larger solution. BEF represents the lion's share of the state funding side, but it is still only about 20% of total school district expenditures, limiting its impact as a standalone opportunity to alter school funding policy. Currently, BEF provides dynamic funds to districts along with a stable base, and if some of the changes outlined above are adopted, the formula will be stronger, more predictable, more stable, and better for all 500 school districts, setting the stage for a conversation about increasing the state share.

A larger overarching conversation should be aimed at other needed areas of state funding, which should be based on a review of what is driving school district budget growth. Many of those areas already exist through separate buckets of state funds with separately defined formulas that drive resources based on student and/or district need.

For example, more funding for special education is critical, as the state's share of total school district special education expenditures continues to decline. Additionally, special education costs grow so significantly that many districts exhaust their BEF subsidy for SEF purposes and/or rely on property tax increases to cover growth in this important mandated cost. Targeting additional state funds at this critical program and cost driver would be significant in ensuring school districts—particularly those 300+ school districts that do better dollar for dollar through the SEF formula compared to the BEF formula—have the resources they need to cover growth in special education costs without pulling resources from BEF for this purpose and without the need to increase property taxes to cover the growth at the local revenue level. Additional funds in this bucket—as it is tied to a defined expenditure—have the capacity to produce both student equity and taxpayer equity.

Likewise, the same is true for school facilities. The state has had a moratorium in effect on new funding for any type of school construction or renovation, and the maintenance program approved in Act 70 has not been funded. School districts that have needed to engage in school facility upgrades, renovations, or maintenance have had to do it with no state support. Many simply have not been able to do it; others have used BEF dollars and property tax revenue to fund projects, and while ESSER funds provided a limited opportunity for some school districts to engage in long-overdue projects and upgrades, those dollars are coming to an end. School facilities funds are critical to the larger conversation of school

funding, and additional state investment in PlanCon and the maintenance program will support school districts across the commonwealth in making needed facility upgrades and repairs. Again, state investment in this bucket has the capacity to tackle both student equity and taxpayer equity.

Focusing on another major cost driver for school districts and an existing bucket of funding, the state could increase its share of PSERS reimbursement costs to school districts. Additional state funding targeted at covering the growth in costs from year to year would keep BEF intact for use in the classroom and would mitigate the need to increase the local tax burden to cover the growth in this expenditure from year to year.

Additionally, we think it's important to look at other areas of school funding as well. The state's pupil transportation formula would benefit from an overhaul to ensure that the formula incentivizes efficiency and collaboration and minimizes burden at the local level; the state's CTE formula should be reviewed to ensure that dollars are flowing efficiently to the entities that need them the most and to avoid a process of having to adjust multipliers each year if a subsidy increase is provided; funds for school safety and student mental health continue to be critical.

Finally, concepts like the Level-Up Supplement, which provided targeted additional support to districts that needed the most additional resources based on their student populations but were spending at the low end on a per weighted student basis, could be valuable tools to further move the needle in this conversation. Buckets of state funding focused on lifting the bottom can provide meaningful support to those school districts with the greatest need without negatively impacting the rest of the Commonwealth.

All of these things together make up the state's share of k-12 education, and they must all be part of a larger solution to ensure that every school district has the resources it needs to provide its students with an effective education. Now is the time to lay out a long-term view for leveraging the growing statewide tax bases and to begin to grow the state share of education and shift, over time, away from our current policies of sending known cost drivers downstream to widening and disparate local tax bases.

As the conversation continues to focus on school funding policy, it's also important to also focus on the policies that make it difficult to drive the funding to the intended target. For example, every dollar that is added to BEF (or SEF, etc.) impacts a school district's charter school tuition costs. The nearly \$2 billion added to the BEF formula since 2015-16, increased charter school tuition by increasing school districts' total budgeted expenditures. As a result, a portion of that \$2 billion increased in BEF for school districts went directly to charter schools.

As noted above, charter school tuition costs for school districts totaled nearly \$2.7 billion in 2021-22, and we expect that they will have exceeded \$3 billion in 2023-24. As school district costs increase, charter school tuition increases as well, putting additional pressure on school district budgets and reducing the value of BEF and other funding increases.

The policy that defines the funding for charter schools functions to exacerbate student equity and taxpayer equity across school districts. As part of the larger school funding discussion, this challenge must be overcome prior to making any significant commitment to increasing the state investment in school districts—otherwise, that state investment will miss the mark entirely.

The solutions on this front are many. Modifications can be made in the policy that defines how charter school tuition is calculated. The state could reinstate a charter school tuition reimbursement to school districts to mitigate the impact of charter school costs on school district budgets. The state could take over funding charter schools—or take over the growth in charter school costs each year going forward. These options would generally serve to benefit both student equity and taxpayer equity (some options more than others); doing nothing to acknowledge, address, or control these costs makes it impossible to effectively remedy the inequity that exist with our current system of education funding.

PASBO appreciates the opportunity to participate in this important conversation, and we appreciate the opportunity to share our expertise. Pennsylvania has a good BEF formula, and there are many ways to could make it even better for school districts to ensure predictability from year to year. As the conversation expands, we reiterate that BEF is not the whole picture—it's only a part of a very large picture, and a too myopic lens on BEF may provide a temporary solution that complicates the future of school finance even more so than now. Looking holistically at the state's investment across multiple buckets—each of which impacts districts differently—is the most effective way to achieve improvement.

There is no one-size-fits-all approach to school funding in Pennsylvania, and we're starting from where we are today, but there is a way to navigate this massive conversation and to address our unconstitutional system of education funding in a way that provides increased state revenues, increased predictability and stability for school districts, and benefits for schools, students, and taxpayers.

Thank you for the opportunity to testify today.

PA Association of School Business Officials (PASBO)



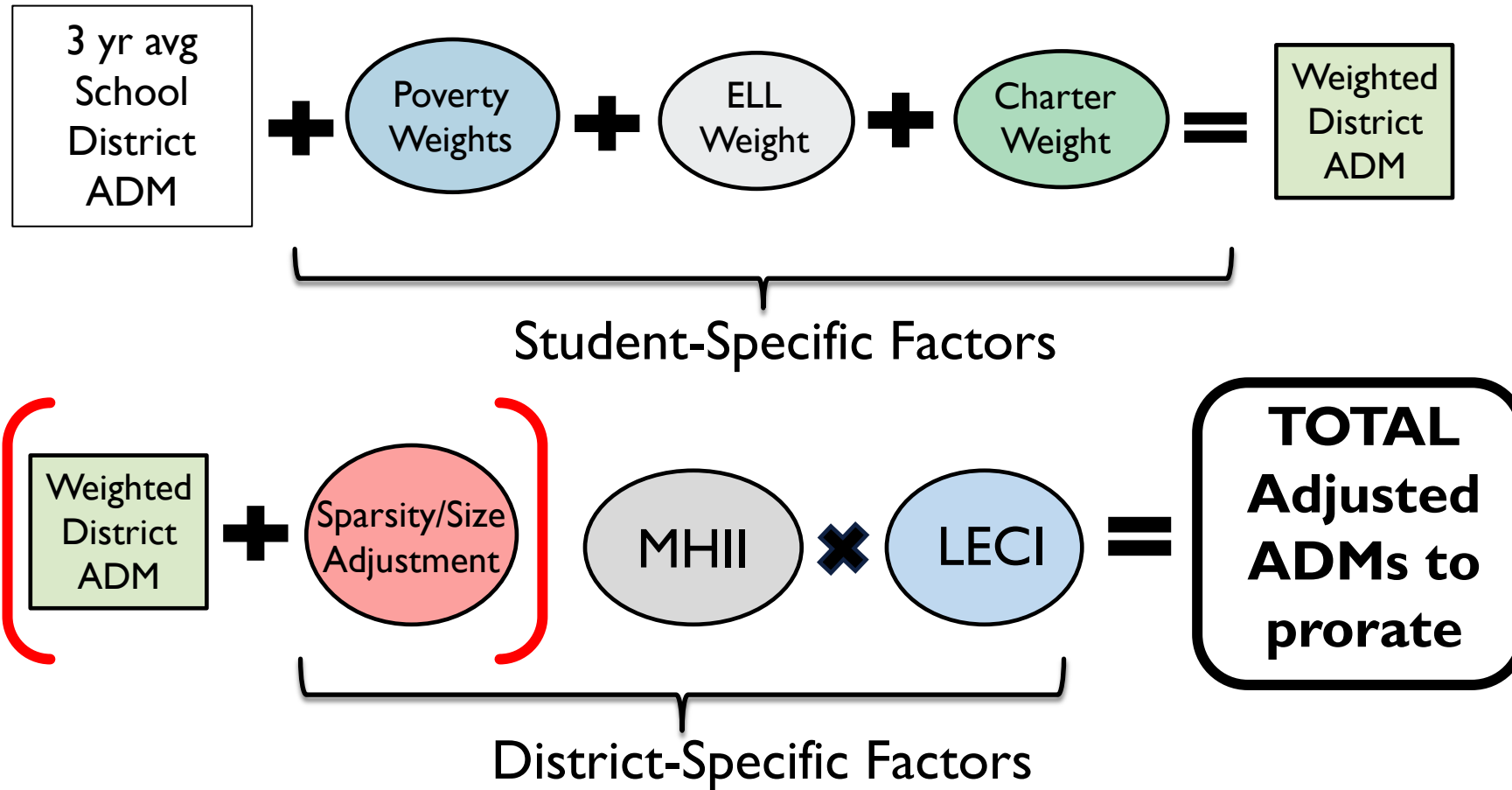
What is BEF?

- Largest state subsidy to schools; \$7.8 billion in 2023-24
- Equates to 20% of total district expenditures
- Not an expenditure category—allows for broad, flexible spending
- Made up of two components:
 1. Stable base (\$5.88 billion)
 2. Dynamic formula (\$1.99 billion)

What does the BEF formula do?

- Formula is designed to direct resources to districts that need them the most (growing districts, high poverty, high ELL, etc.)
- Factors are designed to adjust for district geographic and fiscal capacity issues
- Formula is dynamic and distribution will respond to changing district demographics (new funds are redistributed through the formula each year)
- Formula is factor-specific; it does not distribute new dollars in the same way to all urban, suburban and rural districts—no two districts are alike

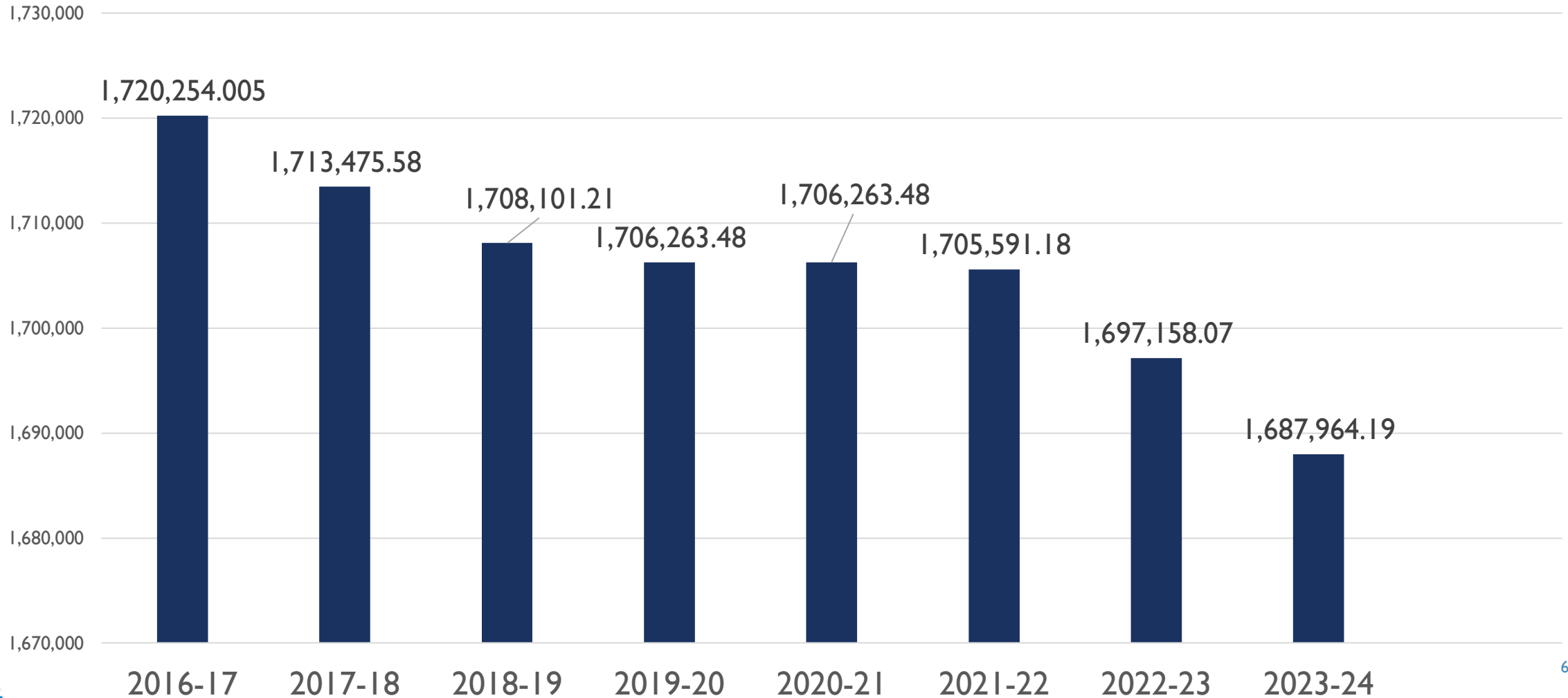
How does the BEF formula work?



Counting Students...

- ADMs=the number of students a district is financially responsible for (includes charter students)
- The 2023-24 BEF formula uses 19-20, 20-21, and 21-22 ADMs
- From 2015-16 to 2023-24 (the years of the BEF formula):
 - **360 or 72.2%** of SDs have had **declining ADMs**
 - **139 or 27.8%** of SDs have experienced **increasing ADMs**

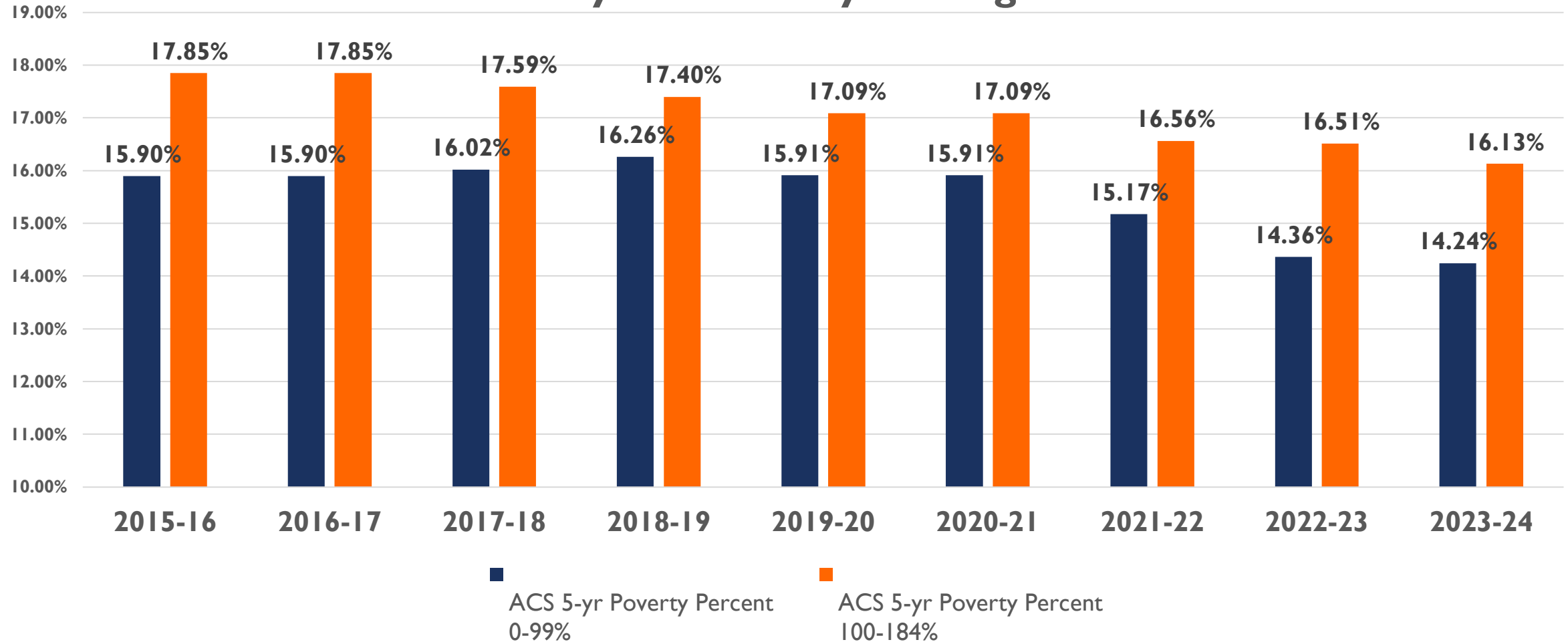
Three-Year Average ADMs



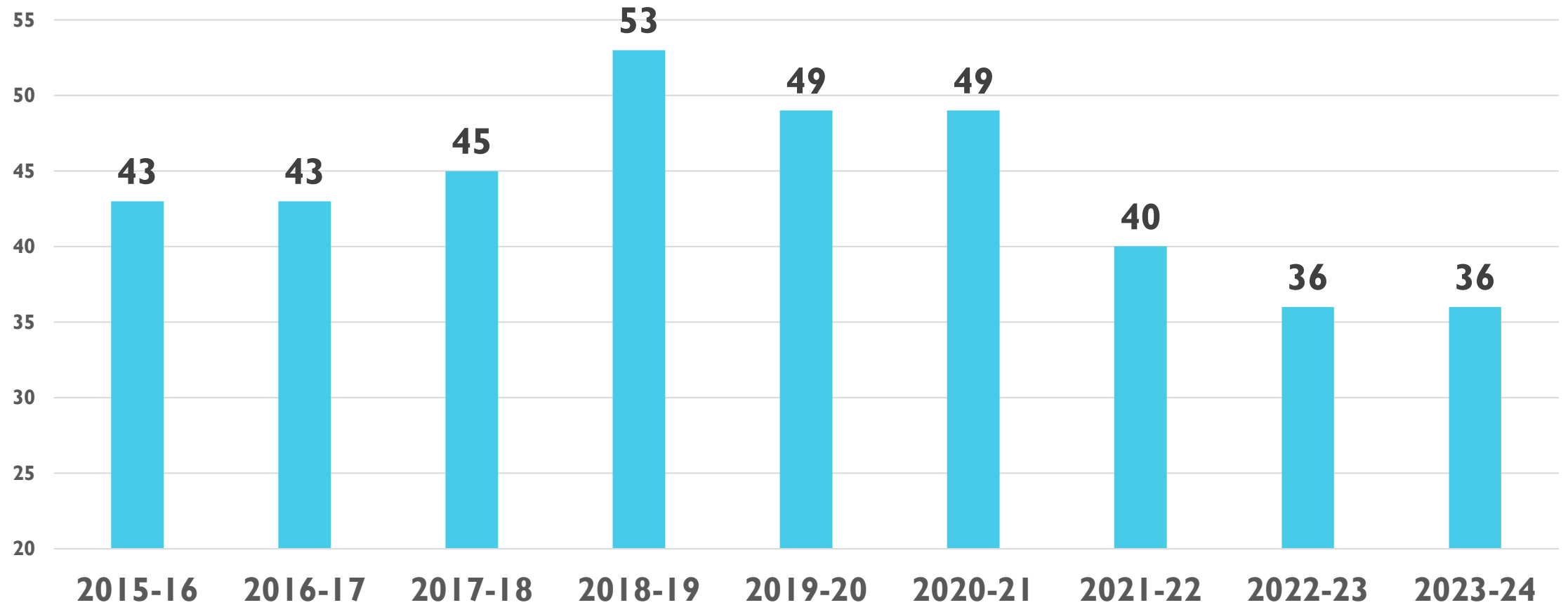
Apply Poverty Weights

1. Acute Poverty: children 6-17 living below the federal poverty line (weight is 0.6)
2. Poverty: children 6-17 living between 100% and 184% of the federal poverty line (weight is 0.3)
3. Concentrated Poverty: Acute Poverty percentage of 30% or more (weight is 0.3)

Acute Poverty and Poverty: Average Statewide %s



Number of Districts Qualifying for Concentrated Poverty



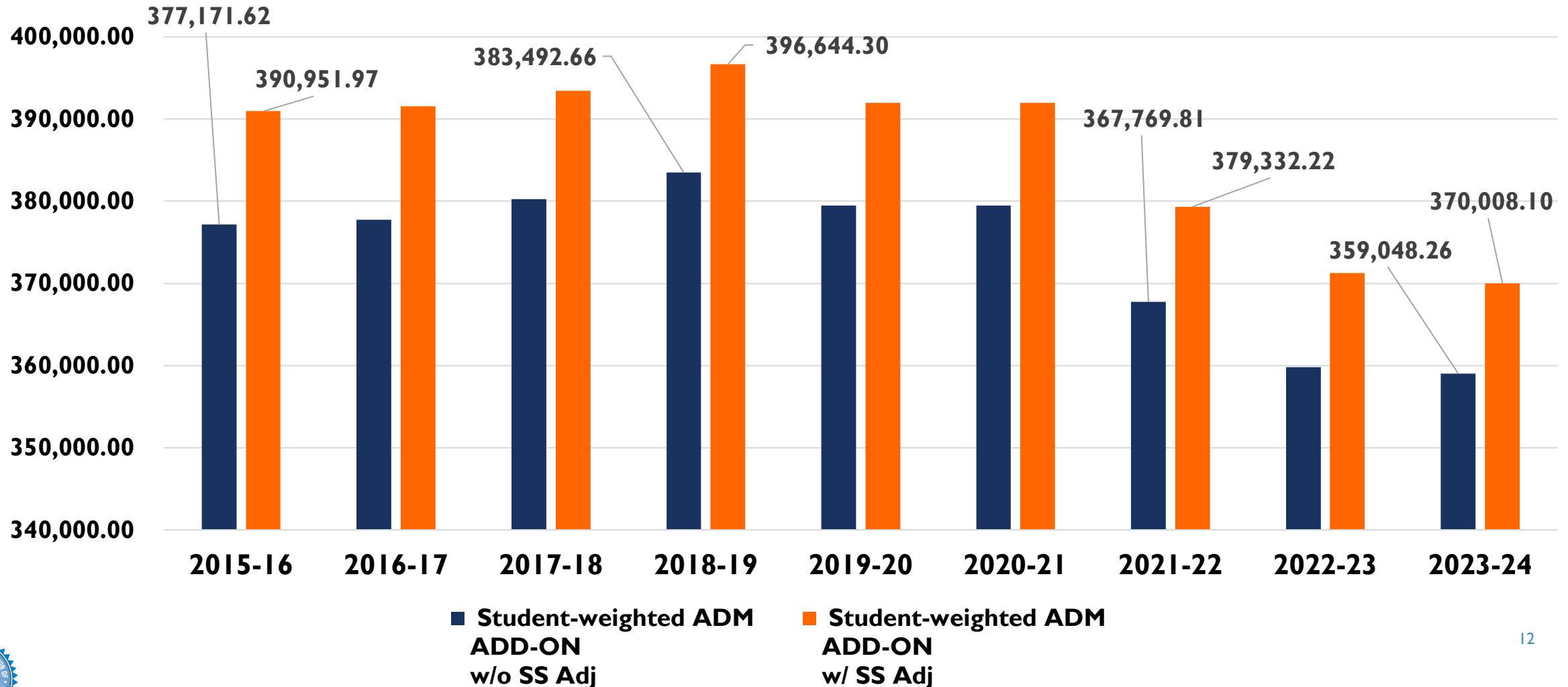
Student Poverty Calculation

A. Acute Poverty percentage	32%
B. Poverty percentage	26%
C. Single Year ADM (2021-22)	1,000
D. Acute Poverty weight add-on ($A \times C \times 0.6$)	192
E. Poverty weight add-on ($B \times C \times 0.3$)	78
F. Concentrated Poverty weight add-on ($A \times C \times 0.3$)	96
G. Total Poverty add-on ($D + E + F$)	366

Apply ELL and Charter Weights

1. English Language Learners (ELL): Apply a weight of 0.3 to the number of ELLs in each district
2. Charter School: Apply a weight of 0.2 to the number of charter school students in each district

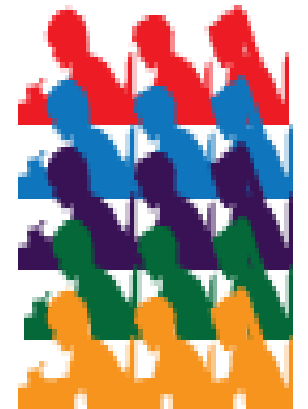
Student Weighted Additions Over time



Add the Student Weights to the 3-Year Average ADMs

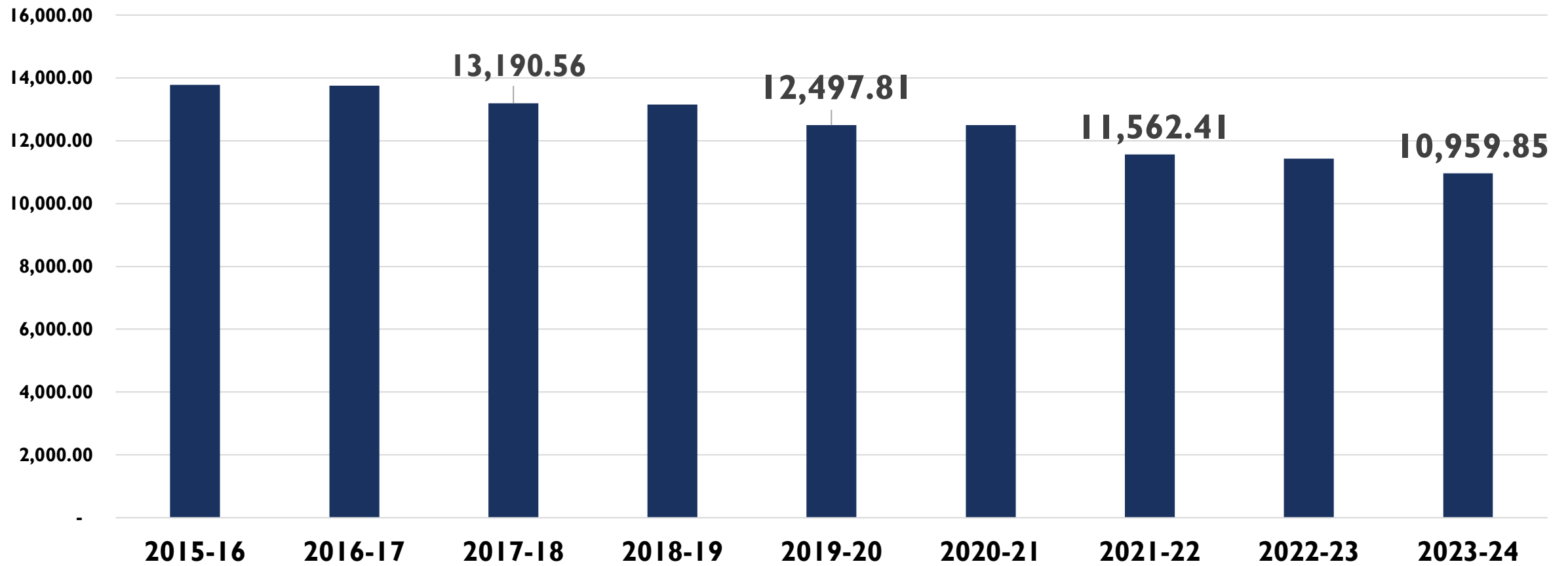
- SD ADMs (3 year average)
- Acute Poverty Adjustment
- Moderate Poverty Adjustment
- Concentrated Poverty Adjustment
- ELL Adjustment
- Charter School Adjustment

**Student
Weighted ADM**



School District	Three-Year Avg ADM	Student Weighted Add-on	Add-on % of Three-Year Avg ADM
Unionville-Chadds Ford SD	3,914.298	66.221	1.69%
Peters Township SD	3,856.340	67.848	1.76%
Pine-Richland SD	4,448.978	88.844	2.00%
Upper Dublin SD	4,071.803	122.070	3.00%
Springfield SD	4,215.640	130.624	3.10%
South Fayette Township SD	3,373.729	105.299	3.12%
Jenkintown SD	732.143	25.289	3.45%
Wilkinsburg Borough SD	1,152.331	643.318	55.83%
York City SD	8,137.040	4,704.443	57.82%
Harrisburg City SD	7,967.737	4,787.925	60.09%
Chester-Upland SD	6,774.723	4,142.754	61.15%
Reading SD	18,434.621	11,423.306	61.97%
Farrell Area SD	700.639	460.128	65.67%
Aliquippa SD	1,233.241	854.293	69.27%

Student Weighted Additions as a Percentage of 3-Year Average ADM

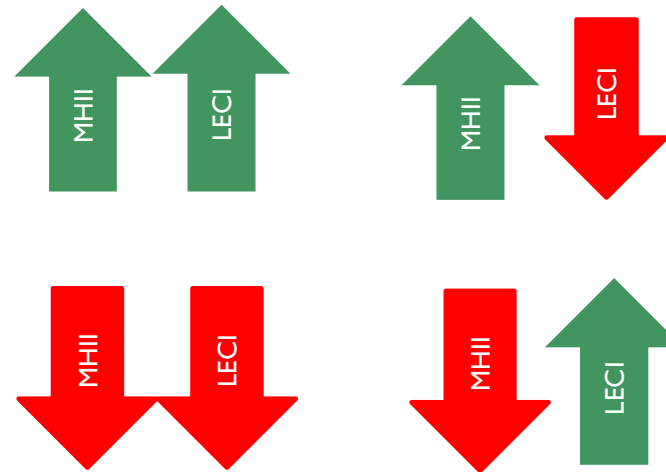


Sparsity/Size Adjustment and Additional ADMs

Adjust by the Multipliers

1. Median Household Income Index (MHII)
2. Local Effort/Capacity Index (LECI)

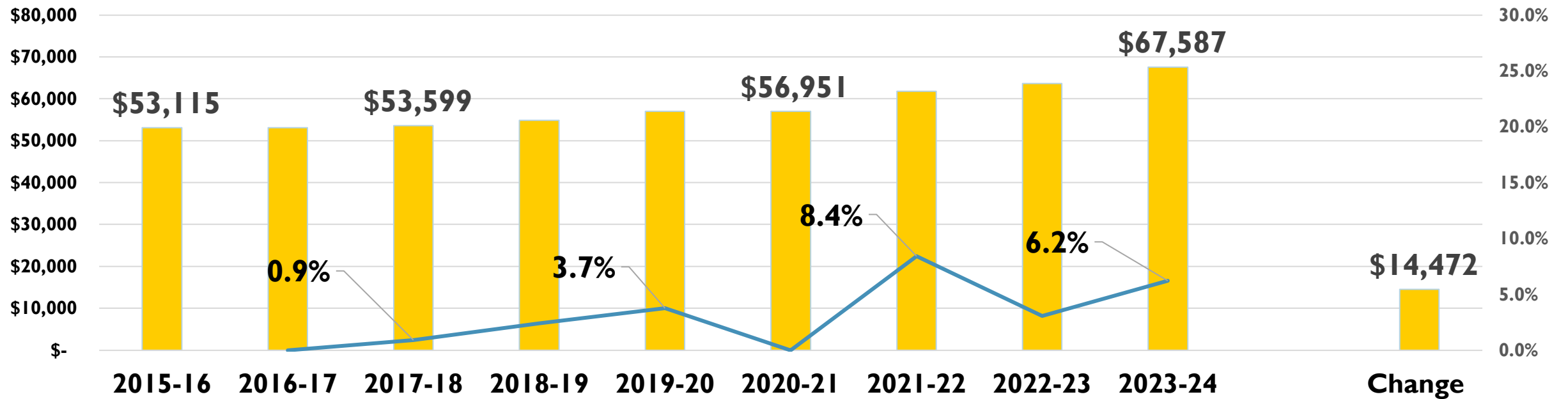
Either Multiplier can raise or lower final student adjusted ADM count depending on the extent to which they are above or below 1.0



Median Household Income

- Measure for local wealth
- Compare median district household income to state median household income (\$67,587 for 2023-24)
- If $>$ | = district median is below state median
- If $<$ | = district median is above state median

Median Household Income Over Time



ACS 5-yr
Median Household Income

— % Change yr-over-yr



School District	Median Household Income	MHII Multiplier
Farrell Area SD	\$29,652	2.2793
Greater Johnstown SD	\$35,063	1.9276
Aliquippa SD	\$35,688	1.8938
Sharon City SD	\$35,814	1.8872
New Castle Area SD	\$36,464	1.8535
Duquesne City SD	\$37,478	1.8034
Unionville-Chadds Ford SD	\$142,198	0.4753
Pine-Richland SD	\$144,241	0.4686
Upper Dublin SD	\$145,905	0.4632
Lower Merion SD	\$147,418	0.4585
Tredyffrin-Easttown SD	\$150,910	0.4479
New Hope-Solebury SD	\$154,229	0.4382

Variation in Median Household Income



Local Effort/Capacity Index

Local Effort Index

- Replaces equalized mills as tax effort measure
- School district's local tax-related revenue divided by median household income times the number of households compared to the state median effort per household
- Index is adjusted down if a district's current expenditures are more per ADM than the state median (\$15,309 in 23-24)

Local Capacity Index

- Local Capacity = district's ability to generate local tax-related revenue on a per-student basis
- Compares a school district's personal income and market value to the state median of local tax related revenue divided by the sum of personal income and market value
- Adjusts only those districts with a local tax capacity per ADM that is less than the state median (\$8,257 for 23-24) (i.e. not every school district has a capacity add-on)



School District	Local Effort Factor	Current Expenditures per Weighted Student	Local Effort Index
Upper Saint Clair SD	1.4300	\$20,981.11	1.0400
Reading SD	0.8000	\$9,019.57	0.8000
Greater Johnstown SD	0.6300	\$11,115.02	0.6300
State College Area SD	1.2700	\$18,881.96	1.0300
Catasauqua Area SD	1.4800	\$16,359.81	1.3800
Grove City Area SD	0.7800	\$16,952.42	0.7000
Philadelphia City SD	1.0300	\$12,808.91	1.0300

Local Effort
Index

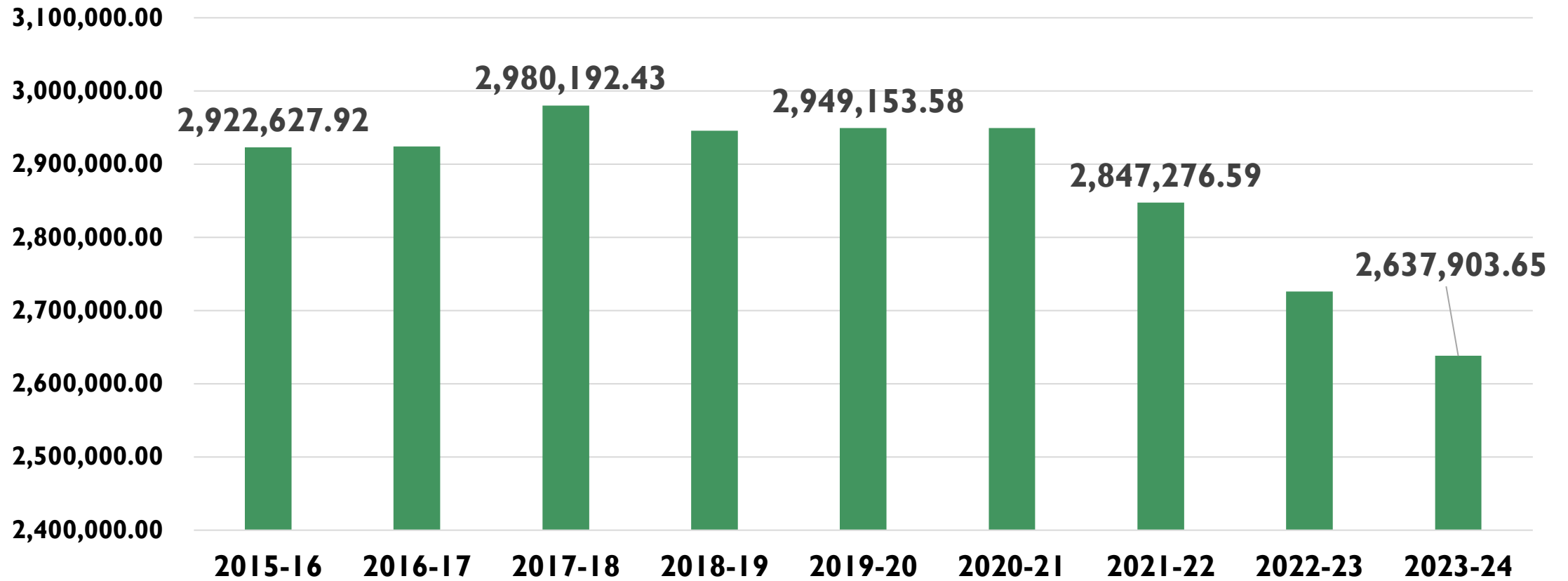
School District	Local Capacity per Weighted Student	Local Capacity Index
Upper Adams SD	\$6,168.24	0.2500
Duquesne City SD	\$1,469.44	0.8200
Tussey Mountain SD	\$5,934.30	0.2800
Brownsville Area SD	\$3,835.52	0.5400
Hanover Public SD	\$6,979.95	0.1500
Meyersdale Area SD	\$5,641.65	0.3200
Philadelphia City SD	\$6,176.58	0.2500

Local Capacity
Index

A. Three-year average ADMs	1,200
B. Acute Poverty Weight	192
C. Poverty Weight	78
D. Concentrated Poverty Weight	96
E. ELL Weight	60
F. Charter School Weight	4
G. Sparsity/Size Adjustment	12.5
H. Total Student-Weighted Count (A+B+C+D+E+F+G)	1,642.5
I. Median Household Income Index (MHII) (\$51,986)	1.30
J. Local Effort/Capacity Index (LECI)	1.10
Total Formula Share of ADMs (after multipliers) (HxIxJ)	2,348.775

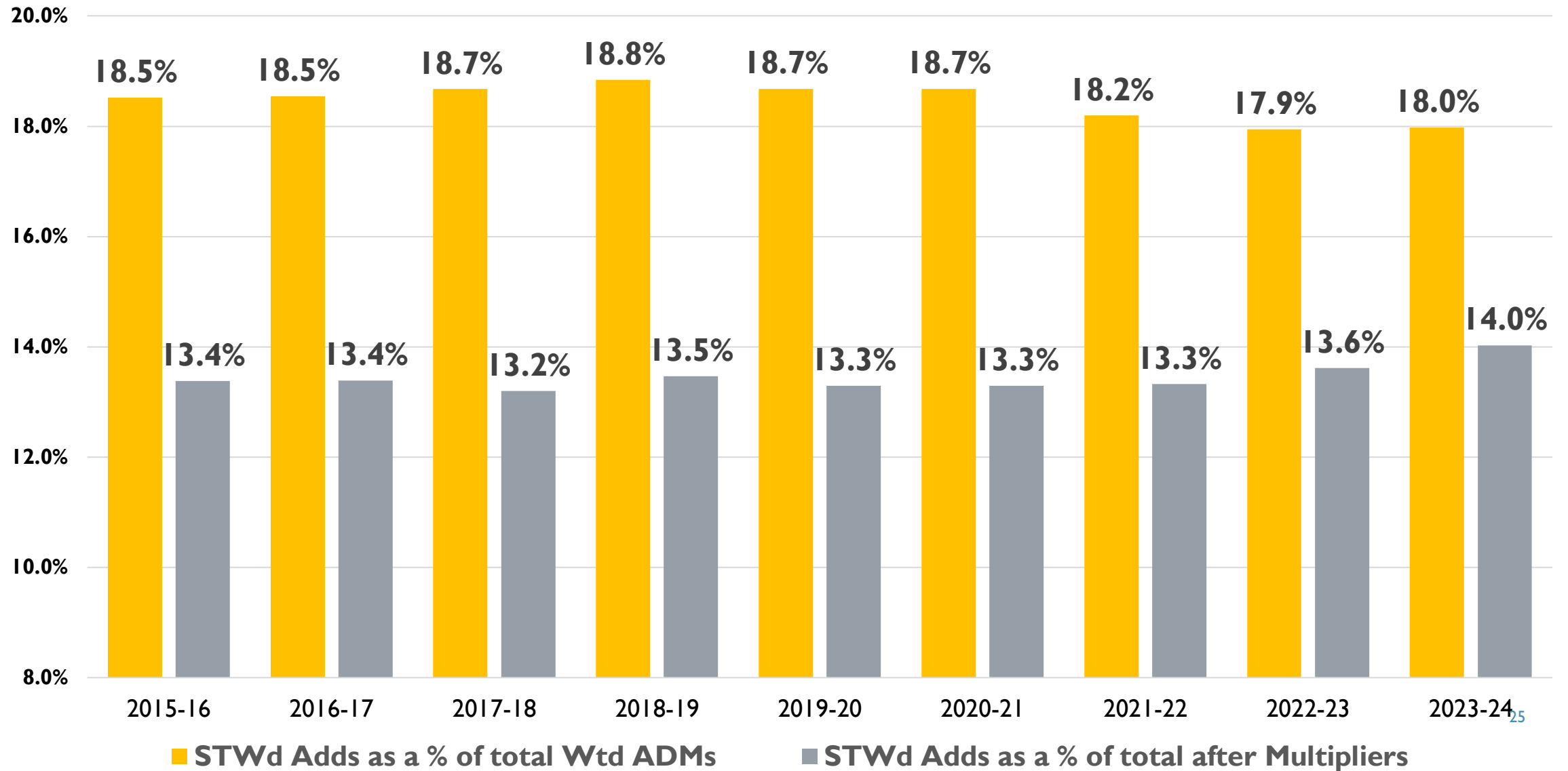
Example District BEF Formula Math...

Total Student-Weighted ADM * MHII * LECI



School District	Total Student Weighted Count	MHII	LECI	Total Formula ADMs
Cumberland Valley SD	10,914.158	0.7160	1.0600	8,283.409
Harrisburg City SD	12,755.662	1.5207	1.9700	38,213.144
Solanco SD	3,684.580	0.9994	1.0000	3,682.369
Crestwood SD	3,178.434	0.7820	0.8200	2,038.139
North Penn SD	14,421.838	0.7172	1.0100	10,446.776
Wallenpaupack Area SD	3,329.366	1.1286	1.2200	4,584.177
York City SD	12,841.483	1.6997	1.9800	43,216.804

Student Weighted Adds as a % of Total Weighted ADMs before and after Multipliers



Calculate BEF Share and Total BEF Formula Distribution

1. Divide district's BEF Formula ADMs by the Total BEF Formula ADMs statewide (2,637,903.65) to determine district's share of the BEF pie
2. Multiply the district's share by the available BEF pie (\$1,991,032,243.45)

A. Three-year average ADMs	1,200
B. Total Poverty Weight	366
C. ELL Weight	60
D. Charter School Weight	4
E. Sparsity/Size Adjustment	12.5
F. Total Student-Weighted Count (A+B+C+D+E)	1,642.5
G. Median Household Income Index (MHII) (\$51,986)	1.30
H. Local Effort/Capacity Index (LECI)	1.10
I. Total Formula Share of ADMs (F x G x H)	2,348.775
J. BEF Formula Share (I/2,637,903.65)	0.00089039
BEF Formula Distribution (J x \$1,991,032,243.45)	\$1,772,804

Share Changes

For 2023-24 (from 22-23)

- 310 districts have an increasing share
- 190 districts have a declining share

Declining share districts are not necessarily receiving less BEF (it depends on the extent of the share loss and the amount of the appropriation)

BEF Share Increases

School District	22-23 share	23-24 share	Share Change
Wyoming Valley West SD	0.00380	0.004196	0.1044590%
Lebanon SD	0.007409	0.008224	0.1099832%
Coatesville Area SD	0.003847	0.004366	0.1347880%
Pittsburgh SD	0.01044	0.01201	0.1503901%
Panther Valley SD	0.00218	0.002535	0.1628776%
Boyertown Area SD	0.002019	0.002355	0.1666021%
Ridley SD	0.001893	0.00224	0.1827977%
Aliquippa SD	0.002009	0.002413	0.2007853%
Big Beaver Falls Area SD	0.001814	0.002206	0.2159177%
Pleasant Valley SD	0.001631	0.002234	0.3700152%

Common reasons for share gain...

- Increasing ADMs
- Increasing percentages of students in poverty
- Eligibility for the concentrated poverty weight
- Slow growing median household income
- Increasing local effort (multiple factors), falling below the median on LEI, LCI

...usually, it's a combination...

BEF Share Decreases

School District	22-23 share	23-24 share	Share Change
East Stroudsburg Area SD	0.005677	0.005471	-0.0363018%
Wilkes-Barre Area SD	0.009507	0.009022	-0.0510235%
McKeesport Area SD	0.005409	0.00504	-0.0681701%
Philadelphia City SD	0.205897	0.190152	-0.0763615%
Williamsport Area SD	0.00506	0.004668	-0.0774058%
Woodland Hills SD	0.003406	0.003079	-0.0959687%
Columbia Borough SD	0.001857	0.001629	-0.1227839%
Dover Area SD	0.001657	0.001318	-0.2044059%
Sayre Area SD	0.0010	0.000729	-0.2710171%
Allentown City SD	0.037231	0.033914	-0.890687%

Common reasons for share loss...

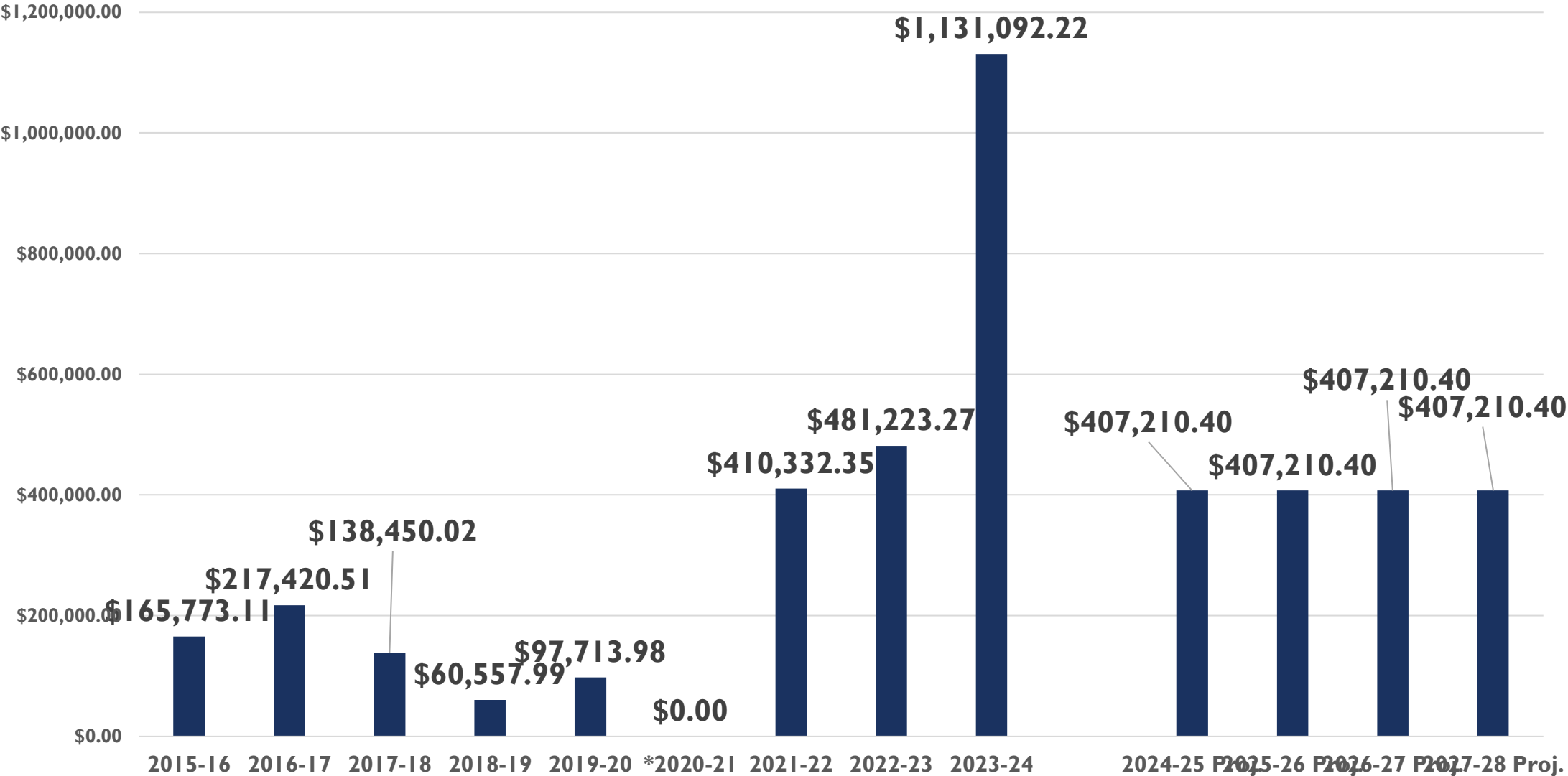
- Declining ADMs
- Falling percentages of students in poverty
- Falling off the concentrated poverty cliff
- Growing median household income
- Falling local effort (multiple factors), above the median on LEI, LCI

...usually, it's a combination...

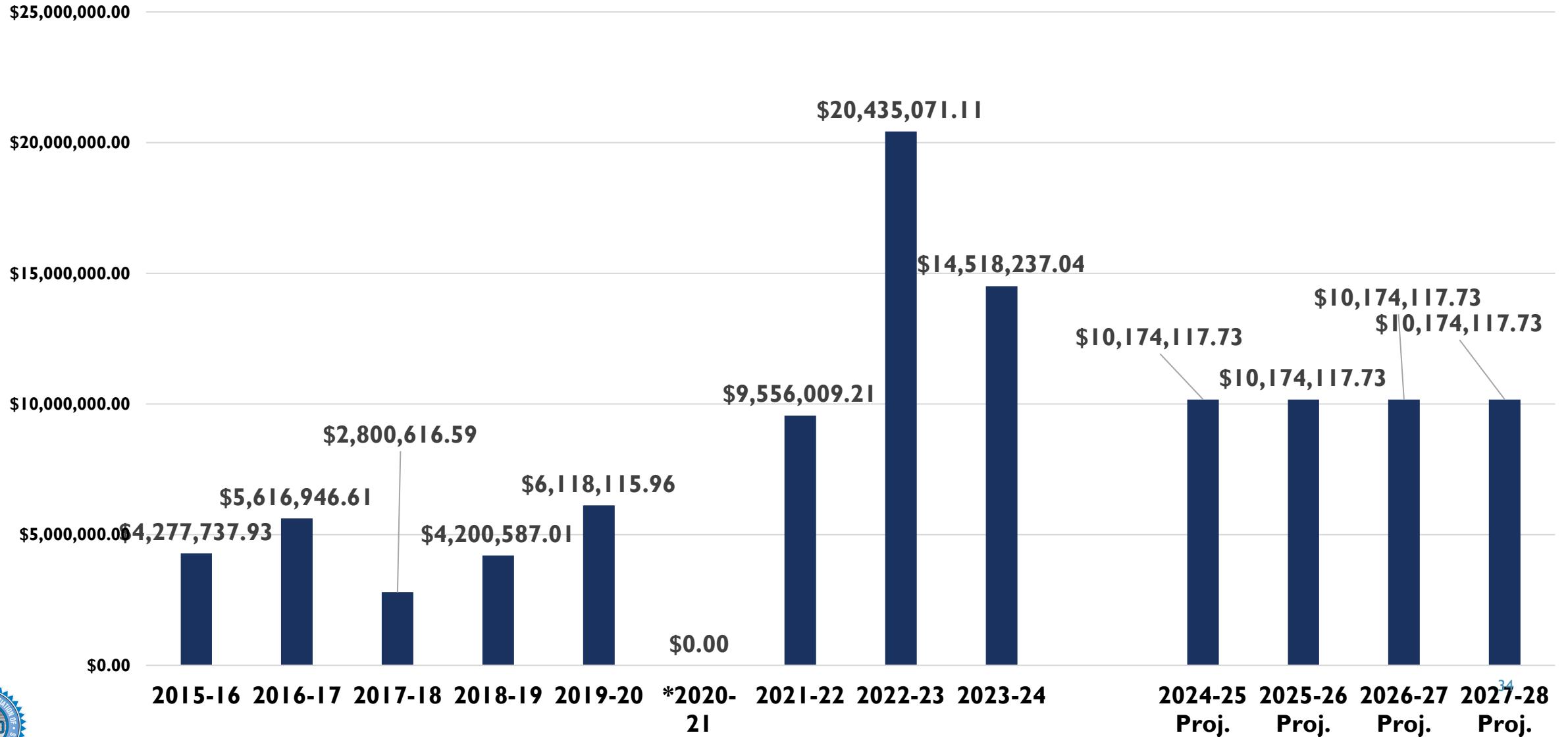
Twin Valley SD	FY	State BEF ADD	State BEF Student wtd Distribution	(Enter) LEA's Share	LEA's Student Wtd Amount	LEA's Student Wtd Amount Annual Increase
Actuals from 2015-16 to 2023-24	2015-16	\$152,398,840.00	\$152,398,840.00	0.001088	\$165,773.11	\$165,773.11
	2016-17	\$200,000,000.00	\$352,398,840.00	0.001087	\$383,193.62	\$217,420.51
	2017-18	\$100,268,443.00	\$452,667,283.00	0.001152	\$521,643.64	\$138,450.02
	2018-19	\$86,000,011.00	\$538,667,294.00	0.001081	\$582,201.63	\$60,557.99
	2019-20	\$159,999,900.00	\$698,667,194.00	0.000973	\$679,915.61	\$97,713.98
	*2020-21	\$0.00	\$698,667,194.00	0.000973	\$679,915.61	\$0.00
	2021-22	\$200,000,000.00	\$898,667,194.00	0.001213	\$1,090,247.96	\$410,332.35
	2022-23	\$525,000,000.00	\$1,423,667,194.00	0.001104	\$1,571,471.23	\$481,223.27
Average Add = \$221 million	2023-24	\$567,365,009.00	\$1,991,032,243.00	0.001357	\$2,702,563.45	\$1,131,092.22
Projections based on Estimated State Adds and share estimates	2024-25 Proj.	\$300,000,000.00	\$2,291,032,243.00	0.001357	\$3,109,773.85	\$407,210.40
	2025-26 Proj.	\$300,000,000.00	\$2,591,032,243.00	0.001357	\$3,516,984.25	\$407,210.40
	2026-27 Proj.	\$300,000,000.00	\$2,891,032,243.00	0.001357	\$3,924,194.65	\$407,210.40
	2027-28 Proj.	\$300,000,000.00	\$3,191,032,243.00	0.001357	\$4,331,405.05	\$407,210.40

PASBO BEF Model

Twin Valley SD Student Wtd Amount Annual Increase



Allentown Student Wtd Amount Annual Increase



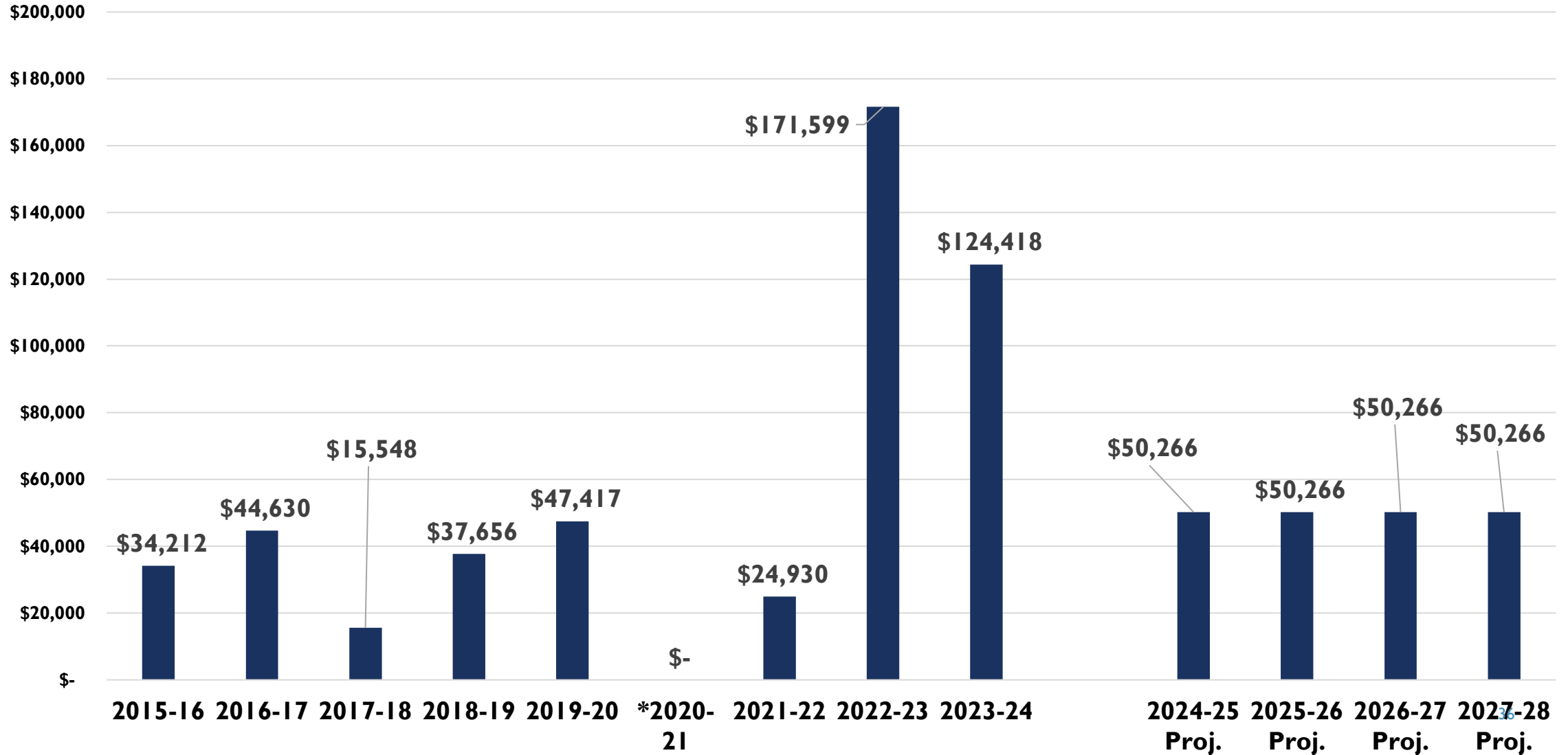
Forbes Road SD BEF Share



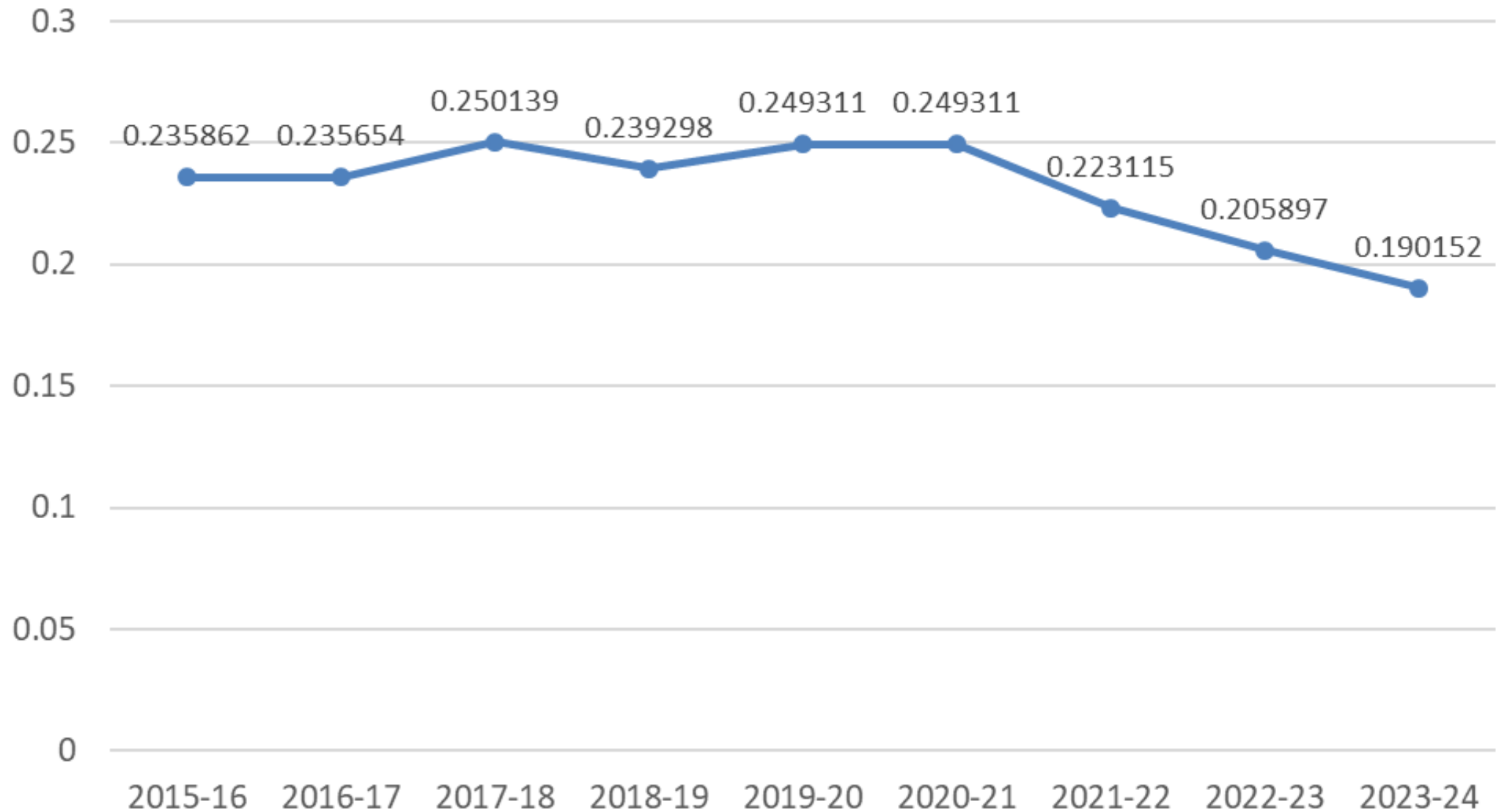
Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD	Forbes Road SD
2015-16	2016-17	2017-18	2018-19	2019-20	*2020-21	2021-22	2022-23	2023-24



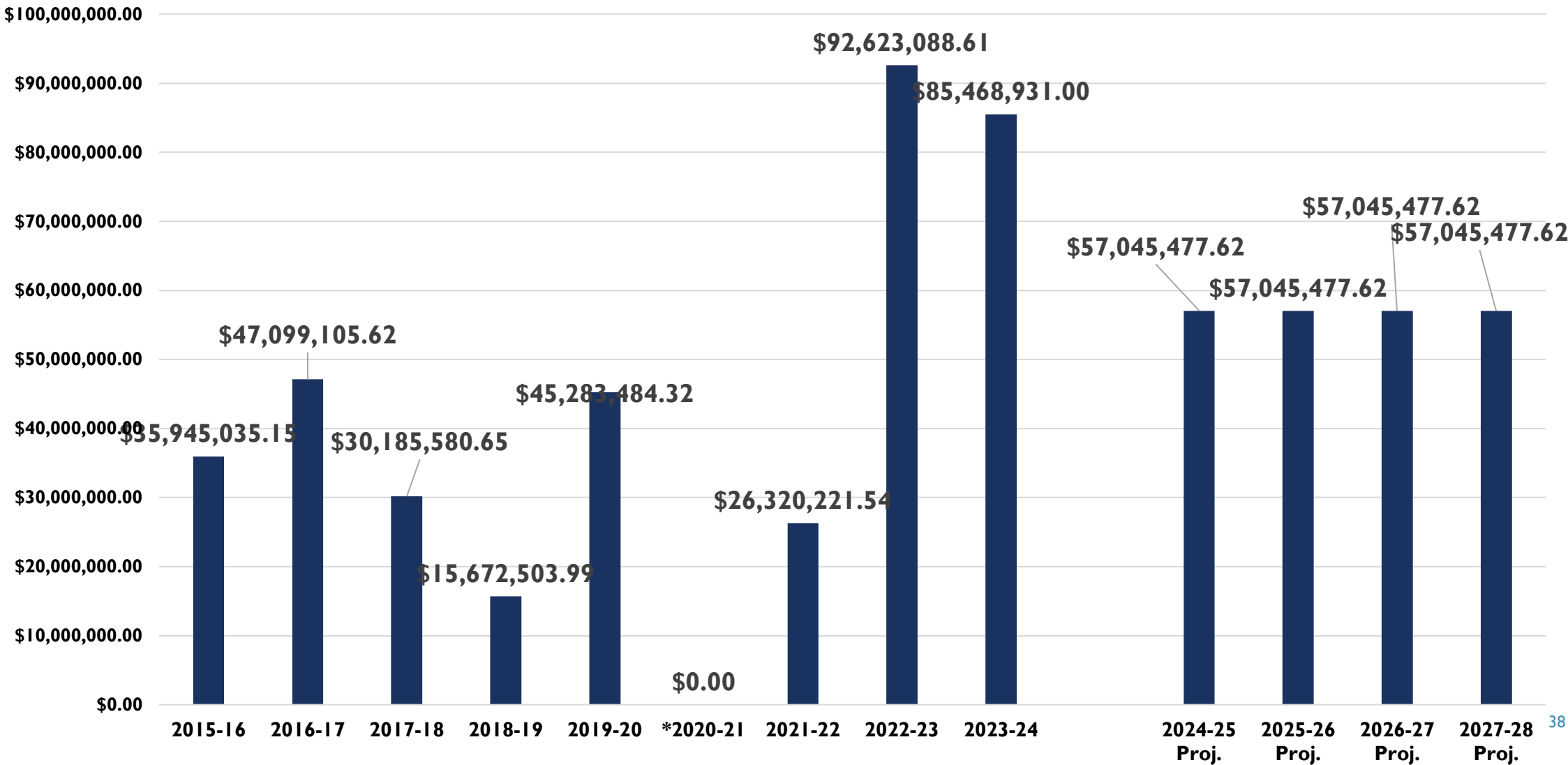
Forbes Road SD: LEA's Student Wtd Amount Annual Increase



SD of Philadelphia BEF Share



SD of Philadelphia Student Wtd Amount Annual Increase



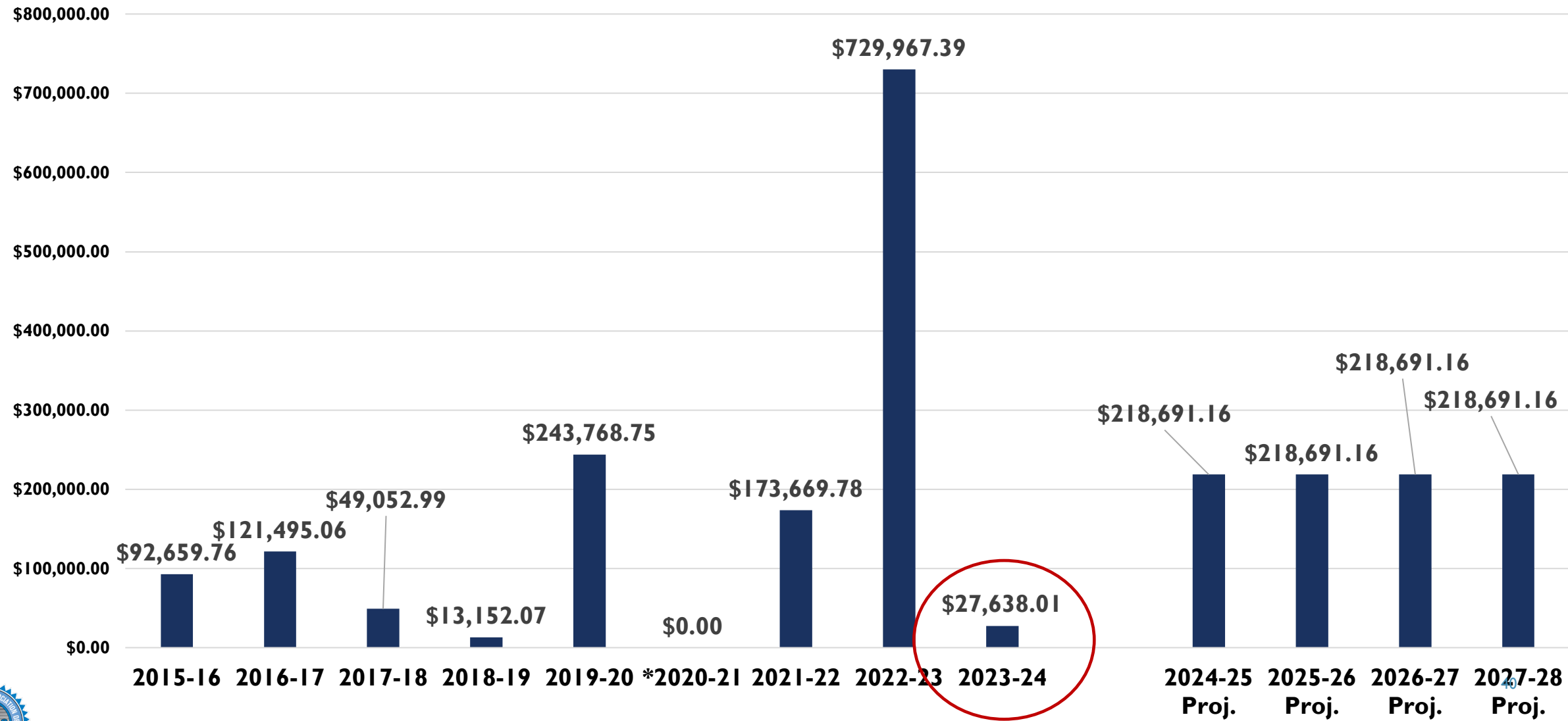
PASBO Recommended Adjustments to the BEF Formula

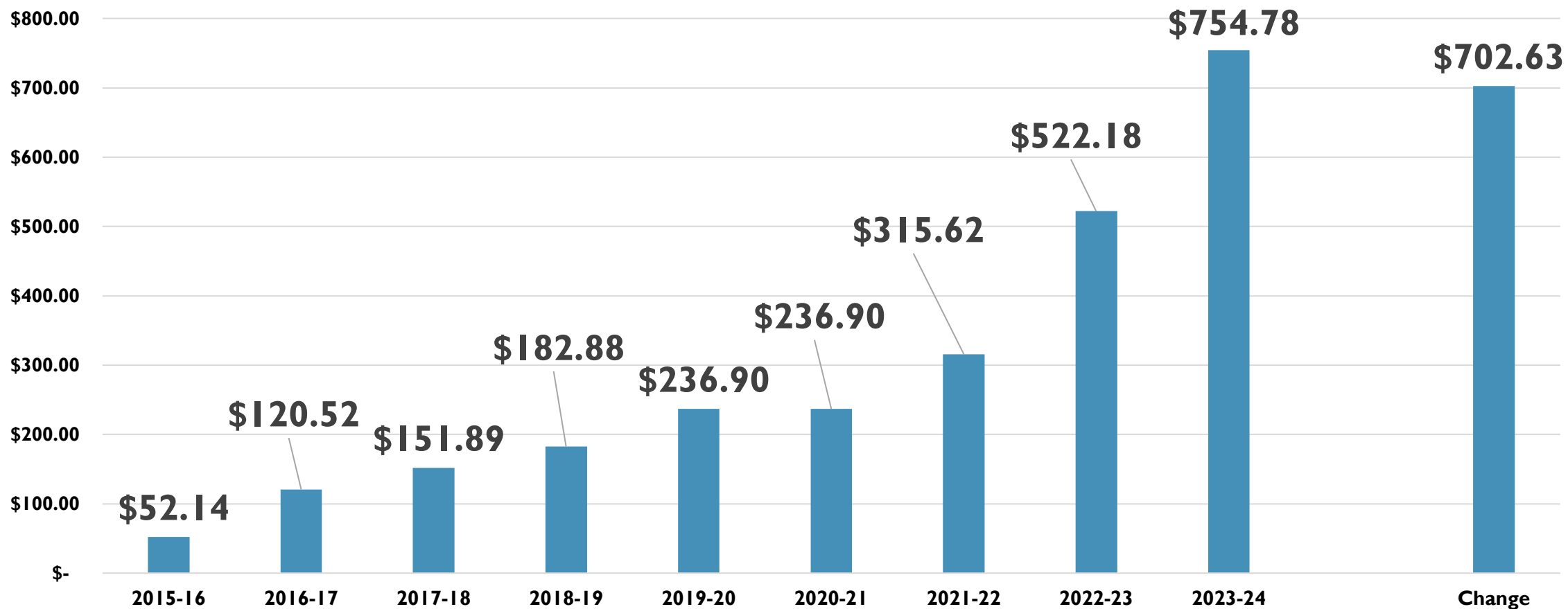
1. Smooth the poverty percentages
2. Fix the Concentrated Poverty Cliff
3. Exchange the Charter Weight for a Charter Reimbursement
4. Examine the LECl and consider measuring local effort through growth, not solely across districts
5. Adjust balance between the stable base and the dynamic formula

Improve predictability.



Sayre Area SD Student Wtd Amount Annual Increase





Total Value of a Weighted ADM (after multipliers)

PASBO Cautions Against...

01

Running all of the
BEF subsidy through
the BEF formula

02

Combining separate
subsidies into one
giant formula

03

Confusing student
equity and taxpayer
equity

PASBO Encourages...

01

Increased state share (increased focus on areas of expenditure growth)

02

Policy/other adjustment to ensure dollars hit the intended target

03

Continue to focus on multiple buckets of state funding

04

Creation of a new bucket to lift those districts that are furthest behind