



Fiscal Year 2017-18 Verification of the Basic Education Program (BEP) Calculation

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At over \$4.5 billion, the Basic Education Program (BEP) is a significant part of the state budget. Given the magnitude of taxpayer funds involved, the Comptroller's Office has repeatedly emphasized the importance of independently verifying the formula. Now, in fiscal year 2017-18, the Comptroller's Office of Research and Education Accountability (OREA) has checked the calculation for the second year.

In summary:

- **While most of OREA's identified revision points were negligible and affected only a few districts, one issue resulted in misallocated funds to 141 of the state's 142 school districts.** Underallocations to 122 school districts totaled approximately \$9.74 million, and overallocations to 19 school districts totaled \$6.81 million, for a net state underallocation of \$2.94 million. The misallocations were mainly attributable to the inadvertent use of incorrect fiscal capacity data. See Appendix A for overall changes in each district's funding.
- **The Tennessee Department of Education (TDOE) will make adjustments for the 122 districts with underallocations.** BEP funding is disbursed to school districts in 10 payments over the course of the school year; TDOE will accordingly adjust future payments to those 122 districts so that they receive the correct amount of state funding.
- **The Department of Education states that it has implemented review and verification procedures to ensure that all revision points are addressed and to ensure accurate calculation of the BEP each year.** Two of the revision points identified in fiscal year 2017-18 were also identified by OREA in last year's independent verification of the BEP calculation, and an additional similar issue was noted regarding the classification of certain schools.
- **The state appropriated nearly \$50 million more for the BEP than will be distributed to school districts in fiscal year 2017-18.** There were similar excess funds

BEP Refresher

The Basic Education Program, or BEP, is the main source of funding for Tennessee's K-12 public schools. It is split into **four main categories** – Instructional Salary, Instructional Benefits, Classroom, and Non-Classroom – which together contain **45 different components** that generate funding.

The BEP has two parts: a state share, and a local match that school districts are required to meet. How much state money a district receives and how much local money it must contribute is determined through an "equalization" process that takes into account every county's **fiscal capacity**, or ability to pay for education with local revenue. Counties with higher fiscal capacities receive proportionally less state funding and must contribute more local revenue than counties with less calculated ability to raise local money.

remaining in the BEP appropriation in prior fiscal years, with approximately \$30 million and \$20 million at the end of fiscal years 2016-17 and 2015-16, respectively. In fiscal year 2015-16, part of the excess funding was transferred to TDOE's early childhood education program via the Department of Finance and Administration's transfer authority in the appropriations act. While it is not unusual for the BEP appropriation to exceed the actual funding amounts generated by the BEP formula and the overappropriation represents about 1 percent of total BEP funding, this excess has increased significantly in recent years, from about \$7 million in fiscal year 2014-15 to the projected \$50 million in fiscal year 2017-18. The excess is primarily due to budgeting projected increases in school enrollment significantly higher than actual and historical figures; for example, for the fiscal year 2017-18 budget, BEP cost increases were calculated based on 1 percent statewide enrollment growth, but actual statewide growth was 0.47 percent in that period. In past years, this excess money from over-budgeted cost increases has automatically become part of the next year's base BEP appropriation, and so the BEP base has continued to grow as actual enrollment growth is significantly lower than estimated growth each year.

The overall dollar amount associated with OREA's revision points, though higher than last year, represented a very small portion of the total BEP allocation – the \$2.94 million net underallocation represents a 0.06 percent difference from the \$4.5+ billion total. Percentage changes for individual districts were similarly small: the largest overallocation was 1.10 percent of that district's total funding and the largest underallocation 1.97 percent.

Table 1: Five largest percentage changes in final state share

<i>Overallocation</i>			<i>Underallocation</i>		
District	Change in state share	Percent difference	District	Change in state share	Percent difference
Trousdale County	(\$85,000)	-1.10%	Department of Children's Services	\$197,000	1.97%
Wilson County	(\$696,000)	-0.89%	Washington County	\$296,000	0.89%
Lebanon SSD	(\$143,000)	-0.87%	Johnson City	\$263,000	0.86%
Davidson County	(\$2,548,000)	-0.85%	Anderson County	\$238,000	0.76%
Maury County	(\$428,000)	-0.75%	Oak Ridge City	\$161,000	0.76%

Table 2: Five largest dollar amount changes in final state shares

<i>Overallocation</i>			<i>Underallocation</i>		
District	Change in state share	Percent difference	District	Change in state share	Percent difference
Davidson County	(\$2,548,000)	-0.85%	Shelby County	\$2,363,000	0.40%
Rutherford County	(\$1,477,000)	-0.72%	Hamilton County	\$877,000	0.57%
Wilson County	(\$696,000)	-0.89%	Knox County	\$740,000	0.36%
Maury County	(\$428,000)	-0.75%	Hamblen County	\$389,000	0.75%
Bradley County	(\$315,000)	-0.67%	Washington County	\$296,000	0.89%

The majority of OREA’s identified revision points were negligible and affected only a few districts; the first bolded item, however, was significant. The revision points:

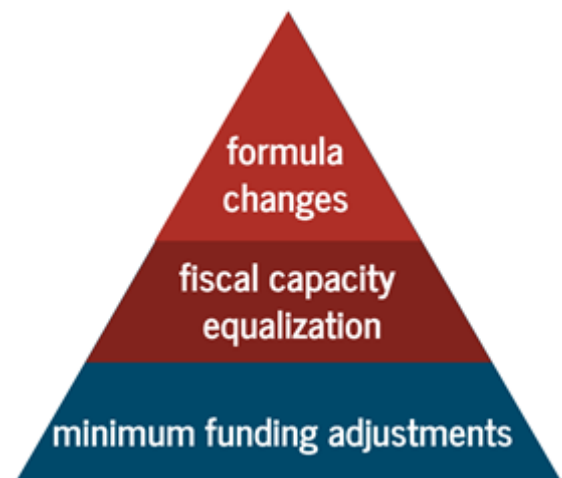
- **Inputted the updated CBER fiscal capacity index into the BEP calculation to reflect the most recent data available to determine state and local shares;**
- Corrected the coding of six elementary and special schools that were previously classified as high schools, affecting the number of school based positions generated for librarians, library assistants, and principals (similar issue previously noted);
- Revised the enrollment count used to estimate 12th grade students taking career and technical college readiness exams to more accurately reflect the number of students taking the tests (repeat revision point);
- Updated the number of miles transported for the career and technical transportation component for one school in Carter County;
- Made technical corrections in the transportation component for the districts in Shelby County and reran the regression with updated inputs;
- Corrected the Department of Children’s Services’ allocation for K-6 counselors (repeat revision point); and
- Updated the per-pupil amount used in the Department of Children’s Services’ minimum funding adjustment.

Finally, although not an error, OREA has an additional observation regarding the implementation of minimum funding. The BEP has always included some form of minimum funding, either for districts with declining enrollment, or districts that may be adversely impacted by revisions to the BEP formula. BEP legislation in 2016 changed the calculation of minimum funding, and 41 of the 42 districts that received such funding for 2017-18 either had declining enrollment or had received minimum funding in the past that was rolled into their new calculation. The remaining district, which received a \$3.4 million adjustment, the largest of any district, qualified for minimum funding because of statutory reductions in Cost Differential Factor (CDF), despite rapid increases in student enrollment.

Changes to the BEP fall into three “tiers”

The BEP is complex, and many components are interrelated. Changes in one area may affect other areas – in a sense, changes may be “stacked” or “tiered” on top of one another. As a result, OREA’s revision points fall into three main categories:

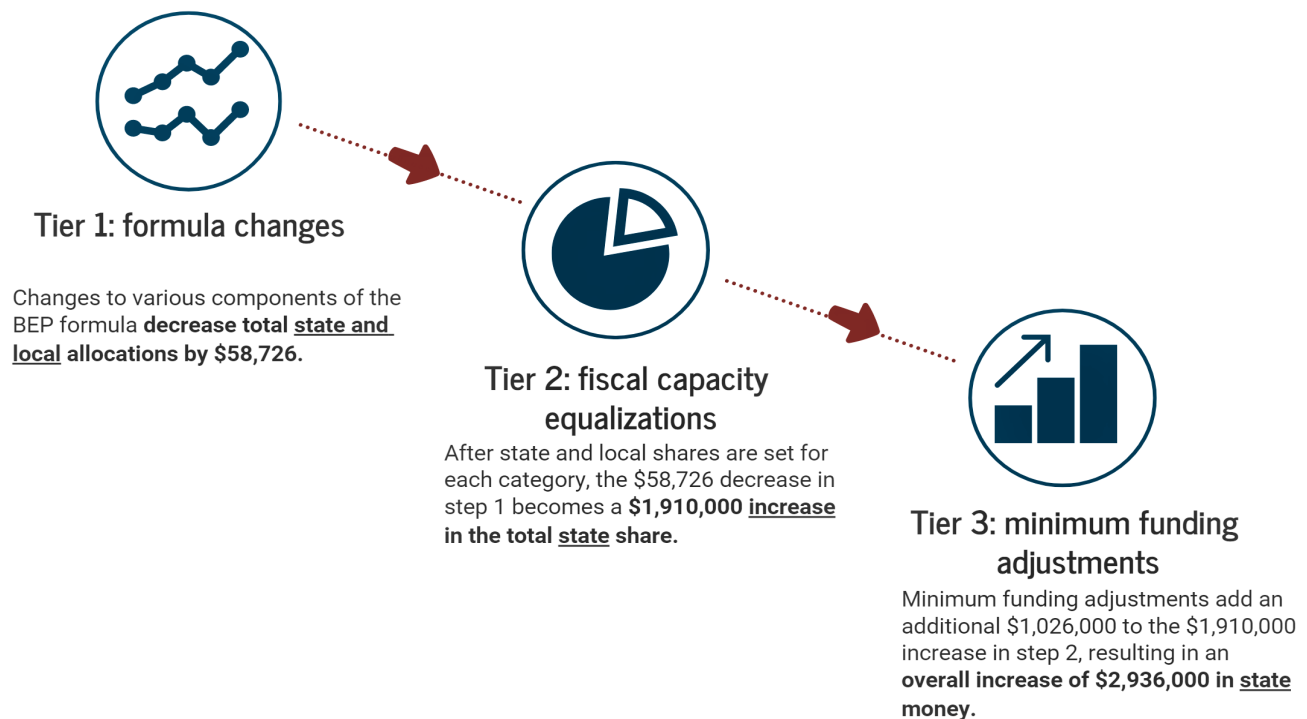
1. Revisions to specific components of the formula, such as correcting school coding, increased or decreased state and local allocations for the districts affected by each change;
2. State and local share rates, as determined by fiscal capacity equalizations, changed for all districts – thus, all districts received more or less state funding with correspondingly lower or higher local matches; and
3. As a result of changes from Tiers 1 and 2, minimum funding levels changed for all districts; depending on other factors, some districts received larger or smaller adjustments.



The changes to specific components in Tier 1 (formula changes) did not affect every district – five districts, for example, had miscoded schools – and resulting changes to total state and local allocations before fiscal capacity equalizations took effect were small. It is difficult, if not impossible, to exactly determine the individual effects of each of these changes on final state shares after fiscal capacity equalizations, however, as the rounding protocols used to set state shares and local match rates may obscure small changes.^A

Change to calculation	Change in overall state and local allocation
School based positions for six miscoded schools (five districts)	\$34,749
Enrollment count for CTE college readiness exams (49 districts)	(8,425)
Student miles for Carter County CTE transportation (one district)	411
Technical update for Shelby County districts in transportation regression (127 districts)	(139,454)
Elementary counselor allocation for Department of Children's Services (one district)	53,993
Total change in state and local allocations	<u>(\$58,726)</u>

In contrast with changes to individual components that affect only certain districts, overall state and local shares are relative. Because the state pays a set percentage of total allocations in each category – 70 percent in the Instructional categories, for example – state allocations are, in a sense, zero-sum. Holding all other factors constant, increasing one district's state share decreases every other district's state share.



^ATo determine state shares, TDOE first rounds the final state and local allocation to the nearest thousand for each of the four categories, e.g., Instructional Salary, Non-Classroom. Next, TDOE multiplies the rounded total by the state share rate to determine the state portion of the overall allocation, then rounds the resulting number to the nearest thousand. Since this number is rounded twice, small changes may be lost: a penny change in the total allocation may result in a final change of zero or \$1,000, depending on the way it rounds. Because many changes to the formula are very small for each district, estimating the final impact of a change with a \$1,000 margin of error is not accurate.

Accordingly, inputting new values for every county’s fiscal capacity, coupled with prior changes in each district’s state and local allocations, changed every district’s state share and local match rate. This led to all districts receiving greater or smaller shares of state funding, with correspondingly lower or higher local matches.

Finally, changes to specific components of the formula and the related changes in state and local shares affected the minimum funding levels for all districts. As set in state law, no district may receive less than a “base” level of funding from fiscal year 2015-16, adjusted downward for decreases in student enrollment, plus subsequent increased costs from raising the teacher salary unit cost, insurance premiums, or retirement contributions.¹ A district that does not generate enough BEP funding in the current year to meet its minimum funding level – usually due to declining enrollment – triggers an adjustment.

As a result of previous changes, all districts’ minimum funding levels increased or decreased. Consequently, districts triggered an additional \$1,026,000 in minimum funding adjustments in the revised BEP calculation.

Tier 1: Five changes to specific components of the BEP formula before fiscal capacity equalizations

OREA identified five issues with the calculation of individual components of the BEP; two of these revision points were also identified by OREA in last year’s verification of the BEP, and an additional similar issue was noted. The changes from making each revision affected districts’ state and local allocations before fiscal capacity equalizations set state and local shares.

School based positions for miscoded schools (similar issue previously noted)

Net result: \$34,749 increased state and local allocation before fiscal capacity equalizations

Districts affected: Five (see Appendix B)

Most of the BEP’s 45 components are based on school districts’ overall ADM, or select portions of it, e.g., grades K-3 or 9-12, special education students, or English learners.^B Several instructional position components, however, are based on individual school ADM, rather than the district’s ADM as a whole.

Additionally, many of these positions are split between grades K-8 and 9-12, and depend on whether the individual school is classified as an elementary school, high school, or “all” (K-12).

Table 3: School based positions

Category	Component	ADM used in calculation
<i>Instructional</i>	K-8 librarians	individual school K-8 ADM
	9-12 librarians	individual school 9-12 ADM
	Principals	individual school K-12 ADM
	K-8 assistant principals	individual school K-8 ADM
	9-12 assistant principals	individual school 9-12 ADM
<i>Classroom</i>	K-8 library assistants	individual school K-8 ADM
<i>Non-Classroom</i>	School secretaries	individual school K-12 ADM

^B ADM stands for Average Daily Membership, and is used interchangeably with “student enrollment” throughout this report. The ADM used in the BEP is a weighted average of enrollment in months 2, 3, 6, and 7 of the school year. Month 2 is weighted at 12.5 percent, month 3 at 17.5 percent, and months 6 and 7 at 35 percent.

Due to an error in the formula, six elementary schools and special schools were miscoded as high schools. As a result, they generated funding for 9-12 positions, rather than K-8 positions.

1. **Harris-Hillman Special Education (Davidson County):** coded as high school rather than “all.”
2. **New Market Elementary (Jefferson County):** coded as high school rather than elementary.
3. **Gibbs Elementary (Knox County):** coded as high school rather than elementary.
4. **Knox Adaptive Education Center:** coded as high school rather than “all.”
5. **Shrine School (Shelby County):** coded as high school rather than “all.”
6. **Maynardville Elementary (Union County):** coded as high school rather than elementary.

In correcting the school type coding for these schools, some districts lost positions and others gained them. Overall, however, the changes resulted in a net increase in the total Instructional state and local allocation before fiscal capacity equalizations, and an increase in the Classroom category.

Table 4: Changes in school based positions due to school type coding; total state and local allocation before fiscal capacity equalizations

Position	Change	Salary	Retirement	CDF	Insurance	Total
K-8 librarians	4.5	\$208,013	\$34,800	\$2,061	\$29,049	\$273,923
9-12 librarians	(3.0)	(\$138,675)	(\$23,200)	(\$58)	(\$19,366)	(\$181,299)
K-8 assistant principals	0.5	\$23,113	\$3,867	\$29	\$3,228	\$30,236
9-12 assistant principals	(2.0)	(\$92,450)	(\$15,467)	(\$58)	(\$12,911)	(\$120,886)
K-8 library assistants	1.0	\$23,000	\$3,721	\$29	\$6,025	\$32,775

Totals may not sum due to rounding.

The figures in Table 4 reflect changes in overall allocations – that is, both state and local shares. Because the state pays only a portion of this total (e.g., 70 percent overall for the Instructional categories), changes to final state shares were less than those shown in the table. Due to the rounding protocols used during fiscal capacity equalizations, however, it is difficult to accurately determine the exact effect of the changes on each district’s final state share (see footnote A).

Furthermore, because the changes in the table affected both the overall state and local totals for all districts combined, as well as the individual totals for the districts with miscoded schools, the changes may have affected state shares and local match rates for all districts. Every district’s allocation affects every other district through fiscal capacity equalizations – keeping all other factors constant, increasing one district’s state share decreases every other district’s state share.

The “special” designation

In past years, TDOE used four classifications when determining school based positions: elementary, high, all, and special. Special schools teach special education students.

Previously, special schools did not generate funding for librarians, library assistants, or assistant principals. Beginning this year, TDOE has eliminated the “special” designation, and special schools will be coded as either elementary, high, or all. As a result, they will generate funding for all school based positions like other schools.

As a result, even though the changes in school based positions directly affected only the five districts with miscoded schools, these changes may have affected every district through fiscal capacity equalizations.

Enrollment count for career and technical college readiness exams (repeat revision point)

Net result: \$8,425 decreased state and local allocation before fiscal capacity equalizations

Districts affected: 49 (see Appendix B)

Career and Technical Education (CTE) students may take industry certification tests in fields such as welding or IT, and the BEP includes a component for these exams. The enrollment count that drives the component is intended to estimate the number of CTE students in 12th grade. TDOE obtained this estimate by dividing the number of students in grades 7-12,

rather than 9-12, by 4, thus inflating the estimated number of 12th grade students by approximately 468 students.^c At a unit cost of \$18 per student, correcting the enrollment count decreased the CTE exam allocation by \$8,425 in state and local money.

Fiscal capacity equalizations have not yet been applied to this total – as such, approximately 75 percent of this change was reflected in districts’ final state shares. The change for each district varied based on the district’s local match rate. Additionally, because this change affected both the statewide total and selected districts’ totals, it may have affected state shares and local match rates for all districts.

CTE exams

The \$18 unit cost of the CTE exam component is based on the cost of WorkKeys, a job skills exam attached to the ACT. Although districts may continue administering WorkKeys, many districts give industry certification tests that allow CTE students to obtain professional certifications while still in high school. The \$18 per student cost funded in the BEP is significantly lower than the fee for many industry certification tests.

Student miles for Carter County career and technical transportation

Net result: \$411 increased state and local allocation before fiscal capacity equalizations

Districts affected: One

Twenty-one districts transport career and technical students to classes at either another school district or a Tennessee College of Applied Technology. The CTE transportation component is funded based on a unit cost per student, per average one-way miles transported from the home district’s school to the school providing CTE instruction.

Due to a technical error, the number of student miles for Cloudland High in Carter County was not included in the district’s total. Cloudland High, which transported one student 13 miles to Hampton High School, did not generate funding for CTE transportation. Based on the unit cost of \$31.64 per “student mile,” Carter County’s allocation for this component increased by \$411 in state and local funding.

^cAll career and technical ADMs in the BEP are calculated on a “full-time equivalent” basis. As defined in TCA 49-3-302(8), “full-time equivalent” is the number of hours a student spends in a CTE class out of the total hours in the school week. For example, a student who spends 7.5 hours out of a 32.5-hour school week in CTE classes counts as 0.23 CTE students.

Technical update for Shelby County districts in transportation regression

Net result: \$139,454 decreased state and local allocation before fiscal capacity equalizations

Districts affected: 127 (see Appendix B)

The transportation component within the Non-Classroom category is one of the most complicated components within the BEP. It attempts to predict the cost of transporting students in the current school year based on the cost of transportation in prior years. To do so, a multiple regression starts with a three-year average of each district’s actual transportation expenditures, adjusted for inflation, per student enrolled. The regression then considers four additional factors:

- **ADT per ADM:** the three-year average of students who ride the bus (ADT) as a percentage of the district’s total students (ADM);
- **SpEdADT per ADM:** the three-year average of special education students who ride the bus (SpEdADT) as a percentage of the district’s total students (ADM);
- **Miles per ADM:** the three-year average of one-way miles driven per student; and
- **School district type:** county and special school districts – which are typically larger geographically than municipal school districts – receive additional transportation funding.

The regression “weights” each of these components to predict each district’s transportation cost per student in the current year. The cost per student is then multiplied by the number of students in the district to find that district’s total transportation allocation.

Example: Transportation regression

Over the past three years, Volunteer County has spent, on average, \$350 per student in transportation funding. Of its 1,000 students, 75 percent, or 750, ride the bus. Twenty special education students ride the bus, or 2 percent. On average, the bus drives 0.65 miles per student.

Volunteer County’s inputs in the regression are then:

<i>Dependent variable</i>	Cost/ADM	\$350
<i>Independent variables</i>	ADT/ADM	0.75
	SpEdADT/ADM	0.02
	Miles/ADM	0.65
	Type (county and special = 1, municipal = 0)	1

The regression takes this data for Volunteer County and the other districts in the state to find coefficients, or “weights,” for each of the four independent variables, as well as a “base” amount per student that every district receives. Based on school type, county and special school districts receive an additional \$70 per student; municipal school districts do not.

Variable	Coefficient
Base amount per student	\$100
ADT/ADM	115
SpEdADT/ADM	1,300
Miles/ADM	230
Type	\$70

Volunteer County's predicted transportation cost per student is then "constructed" by multiplying each weight by the corresponding input to obtain \$431.75 per student:

Base amount per student	\$100
ADT/ADM	$115 \times 0.75 = \$86.25$
SpEdADT/ADM	$1,300 \times 0.02 = \$26.00$
Miles/ADM	$230 \times 0.65 = \$149.50$
Type	$\$70 \times 1 = \70
Total	\$431.75

Finally, Volunteer County's predicted transportation cost of \$431.75 per student is multiplied by its 1,000 students, for a total transportation allocation of \$431,750.

In school year 2013-14, Shelby County Schools merged with the now-dissolved Memphis City Schools. The following year, school year 2014-15, six municipal school districts withdrew from Shelby County Schools. In the years immediately following, several modifications were made for the districts in Shelby County to calculate transportation funding.

Prior to fiscal year 2013-14, Shelby County School's transportation expenditures did not account for students absorbed from Memphis City Schools, as the two school systems were separate. Similarly, the municipal districts did not have transportation expenditures until fiscal year 2014-15. Accordingly, these years were excluded from the three-year averages of expenditures to avoid artificially low figures.

Table 5: Data used to calculate three-year average expenditures for Shelby County districts

District	Actual FY 13 expenditures	Actual FY 14 expenditures	Actual FY 15 expenditures	Actual FY 16 expenditures
Shelby County	\$10,502,178	\$27,018,240	\$28,640,601	\$28,693,222
Arlington	—	—	\$933,755	\$1,119,859
Bartlett	—	—	\$2,504,433	\$2,301,754
Collierville	—	—	\$2,270,567	\$2,357,979
Germantown	—	—	\$1,216,201	\$1,084,425
Lakeland	—	—	\$207,145	\$177,877
Millington	—	—	\$1,122,784	\$1,117,630

Data shaded in yellow was correctly excluded from the three-year averages to avoid skewing the results downward. Data shaded in red was incorrectly excluded due to a technical error.

By now, these years have begun to “roll off” the three-year average; however, formulas were not updated to include the full data. Updating these calculations slightly affected the three-year expenditure averages for the districts in Shelby County. Inputting these new figures into the regression likewise slightly altered each output.

Table 6: Coefficients for transportation regression

Coefficient	Original	Revised
Base amount per student	\$107.26	\$108.01
ADT/ADM	115.32	114.39
SpEdADT/ADM	1,302.31	1,301.24
Miles/ADM	230.43	232.61
Type	\$70.53	\$69.35

Because every district’s predicted transportation cost depends on the regression outputs, changing the outputs changed each district’s cost and resulting allocation. How the predicted cost changed depended on each district’s individual inputs. For example, miles per ADM were weighted more heavily with the changes; thus, a district that transports its students relatively farther than average might have an increased predicted cost, while a district with shorter average routes might have a decreased cost.

All total, the transportation component decreased by \$139,454 in state and local funding as a result of these changes.^D Because this change affected both the statewide total and most districts’ totals, it may have affected state shares and local matches for all districts.

Elementary counselor allocation for Department of Children’s Services (repeat revision point)

	As a safeguard for small districts, every school district generates funding for a minimum of one K-6 counselor. Due to a technical error, the Department of Children’s Services did not generate the minimum of one counselor; making the correction increased its Instructional allocation by \$53,993.
Net result: \$53,993 increased state allocation	
Districts affected: One	

Table 7: Changes in DCS counselor allocation

Position	Change	Salary	Retirement	Insurance	Total
K-6 counselors	0.89	\$41,312	\$6,911	\$5,769	\$53,993

Because DCS receives a supplemental adjustment at the end of the BEP calculation (see p. 15), this error ultimately had no effect on the final DCS allocation.

^DThe transportation amounts obtained by the regression are later divided into two parts: 45 percent of the overall figure goes toward transportation personnel, and the remaining 55 percent goes toward “other” transportation costs. The \$139,454 decrease in overall transportation allocations is broken down into: a \$53,642 decrease in salaries, an \$8,679 decrease in TCRS and FICA, an \$823 decrease in CDF, a \$10,748 decrease in insurance, and a \$65,562 decrease in “other” transportation funding.

Tier 2: Changes in fiscal capacity equalizations due to Tier 1 changes and input of updated CBER fiscal capacity index

The BEP is split into two parts – a state share, and a statutorily required local match that is determined through an “equalization” process based on each county’s fiscal capacity, or calculated ability to pay for education. To find each county’s state share rate and corresponding local match rate, funding is first generated for all 45 BEP components to obtain the overall state and local total. Then, state share rates are set for each county so that counties with higher fiscal capacities receive less state funding and are required to contribute more local money than counties with less ability to raise revenue.

The state pays 70 percent of the overall total in the Instructional categories.^E A county’s Instructional local match rate is then given by:

$$\frac{\left[\left[\text{total statewide state and local allocation} \times 30\% \right] \text{total local share} \times \text{county fiscal capacity} \right] \text{dollar amount of county share}}{\text{total state and local county allocation}}$$

A change in any of the components above affects a county’s local match rate, and, correspondingly, its state share rate.^F As such, three things may change the local match rate:

1. Changes in the statewide total of all state and local funds generated for each category;
2. Changes in an individual county’s state and local total generated for each category (summed for all counties to compute element 1 above); and
3. Changes in the county’s fiscal capacity.

All three of the above elements changed as a result of the identified revision points. Tier 1 changes affected state and local allocations for individual counties, and, as a result, total overall state and local allocations. Additionally, element 3 was affected by errors related to each county’s fiscal capacity.

Effect of Tier 1 changes on fiscal capacity equalizations

Many parts of the BEP are interrelated and depend on one another, and changes in one component may affect other related components. In this respect, changes to the BEP formula may be “stacked” on top of each other. For example, not all counties were affected by Tier 1 changes, such as miscoded schools or changes in the transportation regression.

As shown in the equation above, however, state share rates depend not only on fiscal capacity, but on how much funding every county generates for all 45 BEP components. In other words, every county’s allocation affects every other county; even if every county’s fiscal capacity stays the same, a change in any county’s state and local total will affect every other county’s state and local share rates. Thus, although Tier 1 changes may not have materially affected a particular county, these changes were nevertheless passed on to that county (and every county) through fiscal capacity equalizations.

^E All total, the state pays 75 percent of the Classroom category and 50 percent of the Non-Classroom category. Depending on each county’s fiscal capacity, however, the state may pay more or less than the overall rate for each individual county. As set in state law, no county may receive less than a 25 percent state share in the Non-Classroom category. *Tennessee Code Annotated* 49-3-307(a).

^F A county’s state share rate is obtained by subtracting its local share rate from 100 percent.

Input of updated CBER fiscal capacity index

Two models provide fiscal capacity data. The Tennessee Advisory Commission on Intergovernmental Relations (TACIR) calculates one index, and the Boyd Center for Business and Economic Research (CBER) at the University of Tennessee provides another index. As set in law, the final fiscal capacity values used in the BEP formula are an average of the two indices.²

The CBER fiscal capacity index is based on two factors: property tax base and sales tax base.⁶ CBER first finds the three-year average of each county's sales tax base and property tax base. CBER then calculates the average sales tax rate and property tax rate for the state as a whole: total statewide local option sales tax revenue spent on education divided by total statewide local option sales tax base, and similarly for the property tax. A dollar value of a county's fiscal capacity is then the average sales tax rate multiplied by the county's sales tax base, plus the average property tax rate multiplied by the county's property tax base.

Dollar value of CBER county fiscal capacity =

$$\begin{aligned} & \text{county sales tax base} \times \frac{\text{statewide local sales tax revenue spent on education}}{\text{statewide local sales tax base}} + \\ & \text{county property tax base} \times \frac{\text{statewide property tax revenue spent on education}}{\text{statewide property tax base}} \end{aligned}$$

This figure is used to find the county's fiscal capacity as a percentage of the entire state, and this percentage is used in the BEP calculation.

In the fiscal year 2017-18 BEP calculation, the updated CBER fiscal capacity index with new values was not inputted into the BEP calculation, and values from fiscal year 2016-17 were used instead. As a result, every county's state/local split was affected, if only slightly. Because the CBER fiscal capacity index is based on a three-year average of data, only one year of data changed from one year to the next in the calculation; thus, the effects were "smoothed" somewhat, and no county had a drastic change in its fiscal capacity. Additionally, because CBER data is averaged with TACIR data, the changes were further mitigated.

In short, the effect on final state shares in the BEP depended on whether the county's tax bases are growing or shrinking. For counties with increasing fiscal capacities – growing property and sales tax bases, in many cases more urban areas – using last year's fiscal capacity in the calculation effectively made the counties appear less wealthy than they are. This led to overallocations due to higher state share rates and lower local matches. Updating the fiscal capacity index in the revised calculation therefore decreased their original state share rates and corresponding state funding.

The reverse was true for counties with decreasing fiscal capacities. Using last year's fiscal capacity made such counties appear wealthier than they are, and resulted in underallocations: less state funding with a higher local match. As a result, correcting the calculation increased their state share rates and associated state funding.

⁶ Tax base is related to, but not the same as, actual revenue collected. A county's sales tax base is, essentially, the value of all taxable purchases made in the county. CBER calculates sales tax base by dividing all county revenue from the local option sales tax by the local option sales tax rate. Similarly, property tax base is the assessed value of all property in the county, rather than actual property tax revenue collected. The statewide tax base is the sum of all counties' tax bases.

Table 8: Ten largest percentage increases and decreases in CBER fiscal capacity values from prior to current year

County	Percent change	County	Percent change
Trousdale	10.2%	Van Buren	-5.1%
Williamson	4.4%	Roane	-4.2%
Wilson	3.3%	Polk	-4.1%
Rutherford	3.3%	Morgan	-3.9%
Maury	3.0%	Cocke	-3.9%
Bradley	2.9%	Lauderdale	-3.8%
Davidson	2.4%	Hancock	-3.6%
Marshall	2.1%	Hamblen	-3.4%
Sumner	0.9%	Hawkins	-3.4%
Smith	0.8%	Henderson	-3.3%

The percentage changes reflected above do not translate exactly to a county's state share rate. A 10.2 percent increase in Trousdale County's fiscal capacity does not mean that Trousdale County's state share rate decreased by either 10.2 percent or 10.2 percentage points. In the final BEP allocations, Trousdale County's state shares decreased by 0.82, 0.67, and 1.21 percentage points in the Instructional, Classroom, and Non-Classroom categories, respectively.

These changes may not have translated directly to a county's state share rate, however. As shown earlier, a county's state share rate depends not only on its fiscal capacity, but on the total state and local allocations that are calculated earlier in the process. That is, any changes in either that county's state and local allocation, or any county's state and local allocation in Tier 1, also affect state and local shares. Thus, while the counties with the largest changes in fiscal capacities generally also had the largest changes in state and local shares, these changes may have been either mitigated or exacerbated depending on how the individual county was affected by the preceding Tier 1 changes.

Table 9: Two largest changes in state share rates

	County	Original state share	Revised state share	Difference
<i>Instructional</i>	Roane County	68.49%	69.23%	0.74%
	Williamson County	58.18%	57.32%	-0.87%
	Franklin SSD	58.18%	57.32%	-0.87%
<i>Classroom</i>	Roane County	73.94%	74.55%	0.61%
	Williamson County	53.50%	52.54%	-0.96%
	Franklin SSD	53.50%	52.54%	-0.96%
<i>Non-Classroom</i>	Roane County	47.93%	49.15%	1.22%
	Williamson County	30.61%	29.16%	-1.44%
	Franklin SSD	30.61%	29.16%	-1.44%

Combined, Tier 1 changes and update of the CBER fiscal capacity index led to a \$1,910,000 increase in BEP state shares in all four categories. This figure was further affected by changes in minimum funding adjustments.

Table 10: Five largest dollar amount increases and decreases in BEP state shares in all four categories before minimum funding adjustments

District	Original	Revised	Difference
Shelby County	\$594,460,000	\$596,823,000	\$2,363,000
Hamilton County	\$154,728,000	\$155,605,000	\$877,000
Knox County	\$207,876,000	\$208,616,000	\$740,000
Roane County	\$29,298,000	\$29,694,000	\$396,000
Hamblen County	\$51,973,000	\$52,362,000	\$389,000
Williamson County*	\$125,538,000	\$122,858,000	(\$2,680,000)*
Davidson County	\$300,621,000	\$298,073,000	(\$2,548,000)
Rutherford County	\$205,168,000	\$203,691,000	(\$1,477,000)
Wilson County	\$77,781,000	\$77,085,000	(\$696,000)
Maury County	\$57,221,000	\$56,793,000	(\$428,000)

* These changes are further affected by minimum funding adjustments. For example, while Williamson County's total state funding decreased by \$2,680,000 for all four categories, it received an additional \$3,400,000 in minimum funding adjustments. Coupled with other changes in the county's minimum funding level, its final state share decreased by \$100,000, rather than the \$2,680,000 listed here.

Tier 3: Changes in minimum funding adjustments

Every district has a minimum level of funding, and a district that does not generate enough funding through the BEP to meet that level triggers an adjustment. This minimum funding adjustment “makes up the difference” so that the district ultimately receives its minimum level of state funding.

As set in law, a district cannot receive less funding than it received in fiscal year 2015-16, adjusted downward for declining student enrollment, plus mandatory increase costs:

$$\text{FY 2017-18 minimum funding level} = \text{adjusted FY 2015-16 base funding} + \text{mandatory increase}$$

Mandatory increase is the additional state funding in the Instructional categories that results from increased salary unit costs, increases in corresponding retirement contributions, and increased insurance premiums. This funding is included as a supplement so that districts with declining enrollment, and therefore declining BEP funding, receive enough state money to increase salaries and benefits at the same level as other districts, despite reductions in overall BEP funding.

Tier 1 and Tier 2 changes affect the mandatory increase calculation in two ways:

1. Changes in the number of Instructional positions for the districts with miscoded schools affected the salaries, retirement contributions, and insurance premiums calculated for mandatory increase; and
2. Changes in the state share rate for all districts affected each district's calculated mandatory increase.

A separate revision point changed the minimum funding adjustment for the Department of Children's Services.

Changes in mandatory increase

Both changes to the formula and changes to districts' state share rates due to updating the CBER fiscal capacity index affected all districts' mandatory increase values. By extension, all districts' minimum funding levels changed as well.

	Original	Revised	Difference
FY 16 base	\$4,133,854,000	\$4,133,854,000	—
Plus: Mandatory increase	263,912,000	264,678,000	\$766,000
FY 18 minimum funding level	\$4,397,766,000	\$4,398,532,000	\$766,000

Figures above exclude the Department of Children's Services, as its minimum funding adjustment is calculated differently.

Revised minimum funding levels led to two types of changes:

- 1. Districts that did not meet their minimum funding level** received a different adjustment in the revised calculation. Originally, 43 districts received \$29.1 million in adjustments; following the revisions, 42 districts received \$30.0 million in adjustments.
- 2. Districts that met their minimum funding level** did not receive any adjustments under either calculation. Even though these districts' mandatory increase amounts changed, such changes had no effect on their final state shares.

After revisions were made, districts triggered an additional \$883,000 in minimum funding adjustments statewide. Depending on the effect of Tier 1 and Tier 2 changes for each particular district, that district may have received a larger or smaller adjustment in the revised calculation.

	Original	Revised	Difference
BEP-generated state funding	\$4,502,542,000	\$4,504,398,000	\$1,856,000
Plus: Minimum funding adjustments	29,115,000	29,998,000	883,000
Total FY 18 BEP state funding	\$4,531,657,000	\$4,534,396,000	\$2,739,000

Figures above exclude the Department of Children's Services, as its minimum funding adjustment is calculated differently.

Minimum funding adjustment for Department of Children's Services (DCS)

Net result: \$143,000 increase in minimum funding adjustment

Districts affected: One

Although the Department of Children's Services generates funding through the BEP like a school district, it is entirely state funded, and has no corresponding local match. In practice, nearly all school districts contribute more local money than is required by the BEP. Because DCS does not receive such "above and beyond" local funds, an additional adjustment is made to ensure that DCS receives at least the average amount of state and local funding per student.

To find the minimum funding level for DCS, TDOE takes the average state and local expenditures per student and multiplies that amount by the overall enrollment figure for DCS. This ensures that DCS

receives an equivalent amount of additional local funding as other districts.

DCS funding \geq average state and local
expenditures per pupil \times DCS ADM

When calculating the adjustment for DCS, TDOE used the per-pupil amount of \$8,224 from two years prior, rather than the prior year figure of \$8,386. Accordingly, with the correct figure, the adjustment for DCS increased, and its final state share increased by \$197,000.

Per-pupil expenditures

The per-pupil expenditure figure used to calculate minimum funding for DCS is based on Average Daily Attendance, or ADA. All BEP components are based on Average Daily Membership, or ADM. Typically, ADA is lower than ADM, as not every student attends school every day. By multiplying the ADA-based per-pupil amount by ADM, DCS receives more funding than may be intended.

	Original	Revised	Difference
BEP-generated funding	\$8,402,000	\$8,456,000	\$54,000
Plus: Minimum funding adjustments	1,610,000	1,753,000	143,000
Final state share	\$10,012,000	\$10,209,000	\$197,000

The \$54,000 increase in DCS BEP-generated funding resulted directly from the increase in elementary counselors in Tier 1 (see p. 10).

Additional observation regarding minimum funding

The BEP has always included some form of minimum funding for districts, either for districts with declining enrollment, or districts that may be adversely impacted by revisions to the BEP formula. The types and calculations of these adjustments have changed over the years, and were most recently revised in 2016 legislation. Under the current BEP formula, no school district may receive less funding than it received in fiscal year 2015-16, adjusted downward for declining ADM, plus any increased instructional costs due to raising the salary unit cost, retirement contributions, and insurance premiums (see p. 14).

In other words, TDOE obtains a “base” level of funding for each district by essentially recalculating the BEP using unit costs from 2015-16 and student enrollment counts from either fiscal year 2015-16 or the current year, whichever are lower. TDOE then adds to this base the cost of funded teacher raises, increases in retirement contributions, and increases in insurance premiums since fiscal year 2015-16 to determine a district’s minimum funding. If the district does not generate enough money in the current year BEP calculation to meet this minimum, it receives an adjustment to make up the difference.

There are three scenarios under the new minimum funding adjustments:

- 1. Districts with overall declining enrollment from fiscal year 2015-16 to 2017-18 may receive minimum funding adjustments.** Thirty-eight of the 42 districts receiving adjustments fell into this category.
- 2. Districts that received adjustments under the prior baseline and stability provision but now have stable or growing enrollment may continue to receive minimum funding adjustments.** Three districts – Carroll County, Fayette County, and

Sevier County – received adjustments under this category. Carroll County provides career and technical education for the five special school districts within the county, and does not operate a K-12 program. With a total enrollment of approximately four students, even small changes in enrollment may affect its total BEP allocation. Both Fayette County and Sevier County received significant baseline adjustments prior to the 2016 BEP changes, and those adjustments were rolled into the new calculation.

- 3. Districts with growing enrollment that have never received baseline or stability funding may receive minimum funding adjustments under the new calculation due to decreases in other BEP components.** One district, Williamson County, received an additional \$3.4 million in minimum funding, the largest adjustment of any district, due to legislatively mandated reductions in Cost Differential Factor.

Williamson County has the highest Cost Differential Factor (CDF) in the state, and receives additional money for salaries and retirement contributions due to its higher-than-average private sector wages.^H Over the past several years, CDF has been reduced by legislative mandate in each year's appropriation act: it was funded at 50 percent in fiscal year 2015-16, 25 percent in fiscal year 2016-17, and 20 percent in fiscal year 2017-18.³ This amounted to an additional 14.4 percent in salary-related funding for Williamson County in fiscal year 2015-16 and 5.7 percent in fiscal year 2017-18.

Over this period, Williamson County's final fiscal capacity – an average of values provided by TACIR and CBER – increased 8 percent due to growth in the county's tax base. As Williamson County's calculated ability to pay for education with local money increased, the mix of state and local funding shifted: while the district generated more BEP funding overall, the state paid a proportionally smaller share of the total allocation, and the district was required to make up the difference with local money.

As one of the fastest-growing districts in the state, Williamson County generated more funding for every BEP component except CDF in fiscal year 2017-18 compared to the 2015-16 base. In spite of increasing enrollment and unit cost inflation, however, the reduction in CDF from 50 percent to 20 percent, in conjunction with the shift of funding responsibility from the state to the district, triggered the district's \$3.4 million minimum funding adjustment, the largest of any district.

With the adjustment, Williamson County's CDF was effectively funded at a higher rate than the 20 percent specified in the appropriations act. The district will likely continue receiving similar adjustments in future years until its enrollment growth and unit cost inflation overtake reductions in CDF.

The gradual phaseout and intended elimination of CDF began in 2007 and reflects a policy decision of state lawmakers. Because the BEP is complicated and many components are interrelated, making changes to one component can produce consequences that may be unintended. In this case, the reductions in the CDF were sizable enough to result in one of the state's fastest-growing districts receiving the largest amount of minimum funding.

^H Franklin Special School District within Williamson County also has the highest CDF in the state, and likewise received a minimum funding adjustment; the district also had overall declining enrollment from fiscal year 2015-16 to 2017-18, however.

	Fiscal year 2015-16 base	Fiscal year 2017-18	Percent difference
ADM	35,040	37,681	7.54%
BEP-generated state and local funding <i>excluding</i> CDF	\$210,446,068	\$244,989,788	16.41%
Plus: State and local CDF	20,040,126	9,392,827	-53.13%
Total BEP-generated state and local funding	230,486,194	254,382,606	10.37%
Total BEP-generated <i>state</i> funding	118,019,000	122,858,000	4.10%
Plus: Minimum funding adjustment	—	3,400,000	—
Total BEP funding (including adjustments)	\$118,019,000	\$126,258,000	6.98%

Although Williamson County's total state and local BEP funding increased by 10.37 percent from fiscal year 2015-16 to 2017-18, its state share of BEP funding increased by only 4.10 percent. Over this period, Williamson County's final averaged fiscal capacity increased by over 8 percent – as a result, the state paid a proportionally smaller share of its total BEP funding.

BEP overappropriation

While the Department of Education determines the BEP allocations for each district that are generated by the BEP formula, the Department of Finance and Administration (F&A) prepares the state budget and presents the BEP and associated costs to the legislature each year as part of the Governor's recommended budget. In each year's budget, TDOE and F&A begin with a base amount of BEP funding; added to that base amount are cost increases for the upcoming year, such as raises in the teacher salary unit cost, increased funding due to student enrollment growth and unit cost inflation, and projected increases in insurance premiums.

In fiscal year 2015-16, TDOE, in consultation with F&A, budgeted increases in enrollment growth based on flat 1.25 percent growth in every school district; in fiscal year 2016-17, that growth rate was reduced to 1 percent. Actual growth in those years was significantly lower, however: aggregate statewide growth was 0.16 percent in fiscal year 2015-16, 0.17 percent in fiscal year 2016-17, and 0.47 percent in fiscal year 2017-18.

When actual enrollment growth is much lower than budgeted enrollment growth, the state may spend less BEP funding than has been appropriated after distributing all BEP funds generated by the formula to school districts. Part of the excess funding may then be transferred to other programs within TDOE via F&A's transfer authority in the appropriations act, and any remaining BEP funding reverts to the state's general fund.

In recent years, TDOE and F&A have used the prior year's appropriation as a starting point for the current year. As a result, the dollar amount of any excess money from the prior year has automatically been rolled into the next year's base BEP appropriation. When the next year's cost increase is budgeted based on similarly higher than actual enrollment growth, these funds build up over time.

For example, in fiscal year 2015-16, approximately \$20.4 million of BEP appropriation remained after

all funding generated by the BEP formula was distributed to school districts. This excess was primarily due to actual student enrollment growing less than was budgeted. About \$4.5 million of the excess funding was transferred to TDOE's early childhood education program through F&A's transfer authority in the appropriations act.

The next year, the base appropriation was not reduced to take into account the previous year's overappropriation; instead, the additional \$20 million was automatically included in the fiscal year 2016-17 base. In fiscal year 2016-17, the cost increase for enrollment growth was likewise budgeted based on higher than actual and historical growth. Compounded with the additional \$20 million from the previous year, the unspent BEP appropriation increased to \$30 million at the end of fiscal year 2016-17.

Based on the updated BEP allocations using the increased insurance premium that will take effect January 1, 2018, nearly \$50 million of BEP appropriation will remain unspent at the end of fiscal year 2017-18.

The BEP account

TCA 49-3-358 creates the Basic Education Program (BEP) account. The law specifies that any BEP funding from portions of liquor-by-the drink taxes, tobacco taxes, state sales taxes, and other state taxes allocated for education, plus "such other appropriations as may be provided by law," are to be placed in the BEP account. The law further specifies that unspent funds in the account do not revert to the general fund or education fund, but are carried forward from year to year.

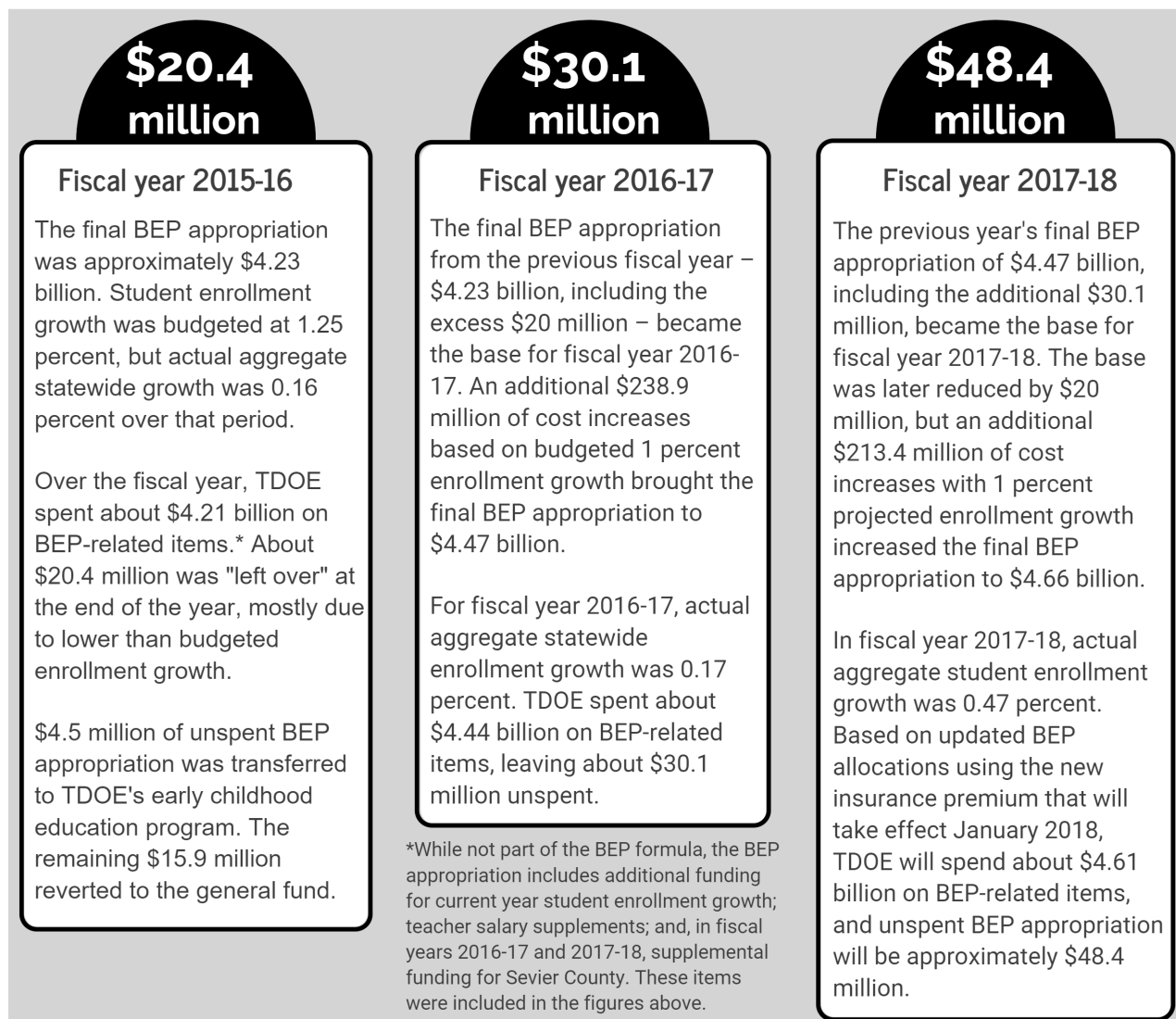
The annual appropriations act provides an appropriation for the BEP as one large dollar amount and does not distinguish between the various revenues used to fund the formula. In practice, the sales and other tax revenues specifically dedicated for education are not enough to pay for the entirety of the allocations generated by the BEP formula. Any remaining appropriation used to cover the difference is taken from the general fund.

Flexibility is built into the BEP appropriation each year to ensure that enough money is available to pay for the allocations generated by the formula. When actual payments to school districts – primarily from dedicated revenues and subsidized with general fund revenue – are thus less than what has been appropriated for the BEP, the difference between the total BEP appropriation and payments to districts reverts to the general fund at the end of the year.

Table 11: BEP appropriation, actual and estimated expenditures, and reversion, fiscal years 2012-13 to 2017-18

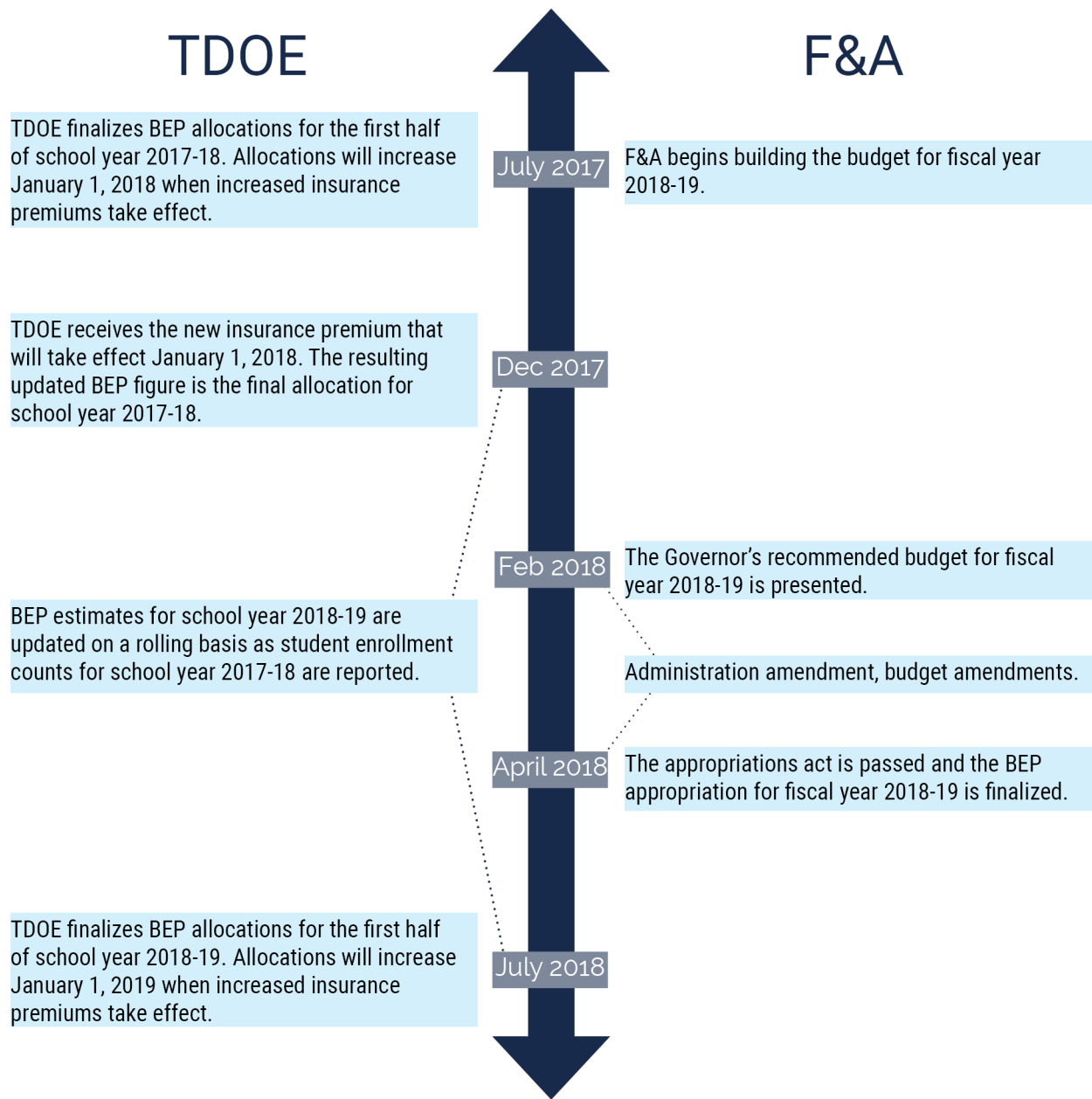
Fiscal year	Final BEP appropriation	Actual BEP expenditures	BEP reversion to general fund
2012-13	\$3,905,319,100	\$3,900,730,187	\$4,588,913
2013-14	\$4,030,319,100	\$4,022,715,118	\$7,603,982
2014-15	\$4,078,960,000	\$4,072,064,872	\$6,895,128
2015-16	\$4,231,083,000	\$4,210,732,500*	\$15,894,800*
2016-17	\$4,469,934,600	\$4,439,855,134	\$30,079,466
2017-18	\$4,663,307,600	\$4,614,887,000 (estimated)	\$48,420,600 (estimated)

* In fiscal year 2015-16, \$4,464,700 was transferred to TDOE's early childhood education program; to calculate reversion for that year, the transfer is added to BEP expenditures and that total subtracted from the appropriation. Figures for fiscal years 2012-13 through 2016-17 provided by the Department of Finance and Administration, Office of Budget.



Part of the excess funding relates to timing. Because the budget for the upcoming year is passed several months before BEP allocations for that time period are finalized, standard practice is to appropriate more funding than necessary to provide a degree of flexibility should unanticipated situations arise (e.g., unusually rapid student enrollment growth or an unexpectedly high mid-year increase in insurance premiums). While it is thus not unusual for the BEP appropriation to exceed actual BEP expenditures, the amount of excess funding has increased significantly in recent years, from \$6.9 million in fiscal year 2014-15 to the estimated \$48.4 million in fiscal year 2017-18.

Because the numbers used to build the base BEP appropriation are finalized in December of each year, opportunities exist throughout the budget process to revise the base in either the recommended budget or through amendments to the appropriations bill, should F&A and TDOE wish to more closely align the starting point for the BEP appropriation with actual current year expenditures and updated projections for the upcoming year. To plan for the upcoming year, cost increases based on historical and current year enrollment growth can then be added to the base to ensure that sufficient BEP funding is available in the next year to fund increased student enrollment, inflated unit costs, increased insurance premiums, and any other increased BEP expenditures.



Endnotes

¹ *Tennessee Code Annotated* 49-3-307(a).

² *Tennessee Code Annotated* 49-3-307(a).

³ *Tennessee Code Annotated* 49-3-307(a); *Tennessee Public Acts*, 109th General Assembly, 2016 regular session, Public Chapter 758, Section 11, Item 1; *Tennessee Public Acts*, 110th General Assembly, 2017 regular session, Public Chapter 460, Section 11, Item 1.

Appendix A: Total change in overall district allocations

District	Difference in state funding	Overallocation	Underallocation	Percent change
Alamo City	\$6,000		\$6,000	0.16%
Alcoa City	\$11,000		\$11,000	0.13%
Anderson County	\$238,000		\$238,000	0.76%
Arlington	\$8,000		\$8,000	0.04%
Athens City	\$28,000		\$28,000	0.36%
Bartlett	\$169,000		\$169,000	0.42%
Bedford County	\$24,000		\$24,000	0.05%
Bells City	\$4,000		\$4,000	0.17%
Benton County	\$16,000		\$16,000	0.13%
Bledsoe County	\$38,000		\$38,000	0.32%
Blount County	\$10,000		\$10,000	0.02%
Bradford SSD	\$6,000		\$6,000	0.18%
Bradley County	(\$315,000)	(\$315,000)		-0.67%
Bristol City	\$89,000		\$89,000	0.57%
Campbell County	\$168,000		\$168,000	0.58%
Cannon County	\$3,000		\$3,000	0.03%
Carroll County	—			0.00%
Carter County	\$116,000		\$116,000	0.39%
Cheatham County	\$4,000		\$4,000	0.01%
Chester County	\$30,000		\$30,000	0.18%
Claiborne County	\$6,000		\$6,000	0.02%
Clay County	\$10,000		\$10,000	0.16%
Cleveland City	(\$176,000)	(\$176,000)		-0.64%
Clinton City	\$32,000		\$32,000	0.71%
Cocke County	\$157,000		\$157,000	0.65%
Coffee County	\$5,000		\$5,000	0.02%
Collierville	\$161,000		\$161,000	0.42%
Crockett County	\$19,000		\$19,000	0.15%
Cumberland County	\$168,000		\$168,000	0.53%
Davidson County	(\$2,548,000)	(\$2,548,000)		-0.85%
Dayton City	\$13,000		\$13,000	0.29%
Decatur County	\$39,000		\$39,000	0.44%
DeKalb County	\$82,000		\$82,000	0.52%
Department of Children's Services	\$197,000		\$197,000	1.97%
Dickson County	(\$49,000)	(\$49,000)		-0.12%
Dyer County	\$38,000		\$38,000	0.19%
Dyersburg City	\$24,000		\$24,000	0.18%

District	Difference in state funding	Overallocation	Underallocation	Percent change
Elizabethton City	\$52,000		\$52,000	0.39%
Etowah City	\$6,000		\$6,000	0.33%
Fayette County	\$4,000		\$4,000	0.02%
Fayetteville City	\$19,000		\$19,000	0.25%
Fentress County	\$4,000		\$4,000	0.03%
Franklin County	\$5,000		\$5,000	0.02%
Franklin SSD	(\$11,000)	(\$11,000)		-0.08%
Germantown	\$113,000		\$113,000	0.43%
Gibson County SSD	\$27,000		\$27,000	0.13%
Giles County	\$27,000		\$27,000	0.14%
Grainger County	\$20,000		\$20,000	0.09%
Greene County	\$13,000		\$13,000	0.04%
Greeneville City	\$67,000		\$67,000	0.48%
Grundy County	\$4,000		\$4,000	0.03%
Hamblen County	\$389,000		\$389,000	0.75%
Hamilton County	\$877,000		\$877,000	0.57%
Hancock County	\$20,000		\$20,000	0.29%
Hardeman County	\$7,000		\$7,000	0.03%
Hardin County	\$5,000		\$5,000	0.03%
Hawkins County	\$210,000		\$210,000	0.58%
Haywood County	\$73,000		\$73,000	0.45%
Henderson County	\$96,000		\$96,000	0.44%
Henry County	\$43,000		\$43,000	0.28%
Hickman County	\$5,000		\$5,000	0.02%
Hollow Rock-Bruceton SSD	\$10,000		\$10,000	0.26%
Houston County	\$19,000		\$19,000	0.23%
Humboldt City	\$9,000		\$9,000	0.14%
Humphreys County	\$3,000		\$3,000	0.02%
Huntingdon SSD	\$17,000		\$17,000	0.25%
Jackson County	\$24,000		\$24,000	0.25%
Jefferson County	\$160,000		\$160,000	0.44%
Johnson City	\$263,000		\$263,000	0.86%
Johnson County	\$5,000		\$5,000	0.04%
Kingsport City	\$167,000		\$167,000	0.57%
Knox County	\$740,000		\$740,000	0.36%
Lake County	\$1,000		\$1,000	0.02%
Lakeland	\$28,000		\$28,000	0.41%
Lauderdale County	\$9,000		\$9,000	0.04%

District	Difference in state funding	Overallocation	Underallocation	Percent change
Lawrence County	\$50,000		\$50,000	0.14%
Lebanon SSD	(\$143,000)	(\$143,000)		-0.87%
Lenoir City	\$47,000		\$47,000	0.48%
Lewis County	\$2,000		\$2,000	0.02%
Lexington City	\$2,000		\$2,000	0.04%
Lincoln County	\$49,000		\$49,000	0.24%
Loudon County	\$8,000		\$8,000	0.04%
Macon County	\$33,000		\$33,000	0.14%
Madison County	\$278,000		\$278,000	0.57%
Manchester City	\$3,000		\$3,000	0.04%
Marion County	\$7,000		\$7,000	0.04%
Marshall County	(\$91,000)	(\$91,000)		-0.32%
Maryville City	\$26,000		\$26,000	0.12%
Maury County	(\$428,000)	(\$428,000)		-0.75%
McKenzie SSD	\$19,000		\$19,000	0.26%
McMinn County	\$97,000		\$97,000	0.37%
McNairy County	\$20,000		\$20,000	0.08%
Meigs County	\$30,000		\$30,000	0.29%
Milan SSD	\$14,000		\$14,000	0.12%
Millington	\$5,000		\$5,000	0.04%
Monroe County	\$10,000		\$10,000	0.04%
Montgomery County	(\$52,000)	(\$52,000)		-0.03%
Moore County	\$1,000		\$1,000	0.02%
Morgan County	\$71,000		\$71,000	0.37%
Murfreesboro City	(\$272,000)	(\$272,000)		-0.67%
Newport City	\$21,000		\$21,000	0.60%
Oak Ridge	\$161,000		\$161,000	0.76%
Obion County	\$5,000		\$5,000	0.03%
Oneida SSD	\$18,000		\$18,000	0.25%
Overton County	\$5,000		\$5,000	0.03%
Paris SSD	\$21,000		\$21,000	0.25%
Perry County	\$1,000		\$1,000	0.02%
Pickett County	\$1,000		\$1,000	0.02%
Polk County	\$5,000		\$5,000	0.04%
Putnam County	(\$8,000)	(\$8,000)		-0.02%
Rhea County	\$80,000		\$80,000	0.35%
Richard City SSD	\$1,000		\$1,000	0.07%
Roane County	\$24,000		\$24,000	0.08%
Robertson County	(\$57,000)	(\$57,000)		-0.10%

District	Difference in state funding	Overallocation	Underallocation	Percent change
Rogersville City	\$20,000		\$20,000	0.57%
Rutherford County	(\$1,477,000)	(\$1,477,000)		-0.72%
Scott County	\$38,000		\$38,000	0.23%
Sequatchie County	\$27,000		\$27,000	0.22%
Sevier County	(\$3,000)	(\$3,000)		-0.01%
Shelby County	\$2,363,000		\$2,363,000	0.40%
Smith County	(\$20,000)	(\$20,000)		-0.12%
South Carroll SSD	\$5,000		\$5,000	0.25%
Stewart County	\$3,000		\$3,000	0.03%
Sullivan County	\$17,000		\$17,000	0.04%
Sumner County	(\$277,000)	(\$277,000)		-0.20%
Sweetwater City	\$39,000		\$39,000	0.48%
Tipton County	\$128,000		\$128,000	0.21%
Trenton SSD	\$9,000		\$9,000	0.12%
Trousdale County	(\$85,000)	(\$85,000)		-1.10%
Tullahoma City	\$5,000		\$5,000	0.03%
Unicoi County	\$5,000		\$5,000	0.04%
Union City	\$23,000		\$23,000	0.28%
Union County	\$3,000		\$3,000	0.01%
Van Buren County	\$3,000		\$3,000	0.06%
Warren County	\$88,000		\$88,000	0.25%
Washington County	\$296,000		\$296,000	0.89%
Wayne County	\$3,000		\$3,000	0.02%
Weakley County	\$5,000		\$5,000	0.02%
West Carroll SSD	\$14,000		\$14,000	0.27%
White County	\$75,000		\$75,000	0.34%
Williamson County	(\$100,000)	(\$100,000)		-0.08%
Wilson County	(\$696,000)	(\$696,000)		-0.89%
Total	\$2,936,000	(\$6,808,000)	\$9,744,000	0.06%

Appendix B: Districts affected by Tier 1 changes to the BEP formula

School based positions for miscoded schools

1. Davidson County
2. Jefferson County
3. Knox County
4. Shelby County
5. Union County

Enrollment count for career and technical college readiness exams

- | | | |
|-----------------------|------------------------------|-----------------------|
| 1. Anderson County | 18. Greeneville City | 34. Maryville City |
| 2. Arlington | 19. Hamblen County | 35. Maury County |
| 3. Bartlett | 20. Hamilton County | 36. McNairy County |
| 4. Bedford County | 21. Hardeman County | 37. Millington |
| 5. Blount County | 22. Hardin County | 38. Montgomery County |
| 6. Bradley County | 23. Hawkins County | 39. Oak Ridge |
| 7. Bristol City | 24. Hollow Rock-Bruceton SSD | 40. Putnam County |
| 8. Campbell County | 25. Houston County | 41. Rutherford County |
| 9. Cleveland City | 26. Humboldt City | 42. Shelby County |
| 10. Coffee County | 27. Humphreys County | 43. Sullivan County |
| 11. Collierville | 28. Knox County | 44. Sumner County |
| 12. Cumberland County | 29. Lawrence County | 45. Union County |
| 13. Davidson County | 30. Loudon County | 46. Van Buren County |
| 14. Elizabethton City | 31. Madison County | 47. Warren County |
| 15. Franklin SSD | 32. Marion County | 48. Williamson County |
| 16. Germantown | 33. Marshall County | 49. Wilson County |
| 17. Grainger County | | |

Technical update for Shelby County districts in transportation regression

- | | | |
|-----------------------|-----------------------|-----------------------|
| 1. Anderson County | 18. Claiborne County | 35. Milan SSD |
| 2. Oak Ridge | 19. Clay County | 36. Trenton SSD |
| 3. Bedford County | 20. Cocke County | 37. Bradford SSD |
| 4. Benton County | 21. Coffee County | 38. Gibson County SSD |
| 5. Bledsoe County | 22. Manchester City | 39. Giles County |
| 6. Blount County | 23. Tullahoma City | 40. Grainger County |
| 7. Alcoa City | 24. Crockett County | 41. Greene County |
| 8. Maryville City | 25. Cumberland County | 42. Greeneville City |
| 9. Bradley County | 26. Davidson County | 43. Grundy County |
| 10. Cleveland City | 27. Decatur County | 44. Hamblen County |
| 11. Campbell County | 28. DeKalb County | 45. Hamilton County |
| 12. Cannon County | 29. Dickson County | 46. Hancock County |
| 13. Carroll County | 30. Dyer County | 47. Hardeman County |
| 14. Carter County | 31. Fayette County | 48. Hardin County |
| 15. Elizabethton City | 32. Fentress County | 49. Hawkins County |
| 16. Cheatham County | 33. Franklin County | 50. Haywood County |
| 17. Chester County | 34. Humboldt City | 51. Henderson County |

- | | | |
|-----------------------|-----------------------|------------------------|
| 52. Henry County | 78. Meigs County | 104. Germantown |
| 53. Paris SSD | 79. Monroe County | 105. Lakeland |
| 54. Hickman County | 80. Sweetwater City | 106. Millington |
| 55. Houston County | 81. Montgomery County | 107. Smith County |
| 56. Humphreys County | 82. Moore County | 108. Stewart County |
| 57. Jackson County | 83. Morgan County | 109. Sullivan County |
| 58. Jefferson County | 84. Obion County | 110. Bristol City |
| 59. Johnson County | 85. Union City | 111. Kingsport City |
| 60. Knox County | 86. Overton County | 112. Sumner County |
| 61. Lake County | 87. Perry County | 113. Tipton County |
| 62. Lauderdale County | 88. Pickett County | 114. Trousdale County |
| 63. Lawrence County | 89. Polk County | 115. Unicoi County |
| 64. Lewis County | 90. Putnam County | 116. Union County |
| 65. Lincoln County | 91. Rhea County | 117. Van Buren County |
| 66. Fayetteville City | 92. Roane County | 118. Warren County |
| 67. Loudon County | 93. Robertson County | 119. Washington County |
| 68. Lenoir City | 94. Rutherford County | 120. Johnson City |
| 69. McMinn County | 95. Murfreesboro City | 121. Wayne County |
| 70. Athens City | 96. Scott County | 122. Weakley County |
| 71. Etowah City | 97. Oneida SSD | 123. White County |
| 72. McNairy County | 98. Sequatchie County | 124. Williamson County |
| 73. Macon County | 99. Sevier County | 125. Franklin SSD |
| 74. Madison County | 100. Shelby County | 126. Wilson County |
| 75. Marion County | 101. Arlington | 127. Lebanon SSD |
| 76. Marshall County | 102. Bartlett | |
| 77. Maury County | 103. Collierville | |



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