

# TENNESSEE

  

## BASIC EDUCATION PROGRAM



### HANDBOOK FOR COMPUTATION

Revised July 2016

TENNESSEE DEPARTMENT OF EDUCATION  
OFFICE OF LOCAL FINANCE  
710 JAMES ROBERTSON PARKWAY  
NASHVILLE, TENNESSEE 37243-0381

# TABLE OF CONTENTS

<b>INTRODUCTION</b> .....	4
<b>INSTRUCTIONAL COMPONENTS</b>	
REGULAR K-12 TEACHERS.....	5
VOCATIONAL EDUCATION TEACHERS.....	6
SPECIAL EDUCATION TEACHERS.....	7
ENGLISH LANGUAGE LEARNER TEACHERS.....	8
ENGLISH LANGUAGE LEARNER TRANSLATORS.....	9
PHYSICAL EDUCATION TEACHERS.....	10
ELEMENTARY ART TEACHERS.....	11
ELEMENTARY MUSIC TEACHERS.....	12
ELEMENTARY GUIDANCE COUNSELORS.....	13
SECONDARY GUIDANCE COUNSELORS.....	14
ELEMENTARY LIBRARIANS.....	15
SECONDARY LIBRARIANS.....	16
PRINCIPALS.....	17
ELEMENTARY ASSISTANT PRINCIPALS.....	18
SECONDARY ASSISTANT PRINCIPALS.....	19
REGULAR SUPERVISORS.....	20
SPECIAL EDUCATION SUPERVISORS.....	21
VOCATIONAL EDUCATION SUPERVISORS.....	22
PSYCHOLOGIST.....	23
SOCIAL WORKERS.....	24
SPECIAL EDUCATION ASSESSMENT PERSONNEL.....	25
RETIREMENT and SOCIAL SECURITY.....	26
INSURANCE.....	27
<b>CLASSROOM COMPONENTS</b>	
SCHOOL NURSES.....	28
REGULAR INSTRUCTIONAL ASSISTANTS.....	29
SPECIAL EDUCATION ASSISTANTS.....	30
ELEMENTARY LIBRARY ASSISTANTS.....	31
RETIREMENT and SOCIAL SECURITY.....	32
INSURANCE.....	33
AT-RISK CLASS SIZE REDUCTION.....	34
SUBSTITUTE TEACHERS.....	35
ALTERNATIVE SCHOOLS.....	36
DUTY FREE LUNCH.....	37
TEXTBOOKS.....	38
MATERIALS AND SUPPLIES.....	39
INSTRUCTIONAL EQUIPMENT.....	40
TRAVEL.....	41
EXIT EXAMS.....	42
TECHNOLOGY.....	43
VOCATIONAL CENTER TRANSPORTATION.....	44
<b>NON-CLASSROOM COMPONENTS</b>	
SUPERINTENDENT.....	45
TECHNOLOGY COORDINATORS.....	46
SYSTEM SECRETARIAL SUPPORT PERSONNEL.....	47

SCHOOL SECRETARIAL SUPPORT PERSONNEL.....	48
CUSTODIANS.....	49
RETIREMENT and SOCIAL SECURITY.....	50
INSURANCE.....	51
NON-INSTRUCTIONAL EQUIPMENT.....	52
PUPIL TRANSPORTATION.....	53
MAINTENANCE AND OPERATIONS.....	54
MAINTENANCE AND OPERATIONS STAFF BENEFITS.....	55
CAPITAL OUTLAY.....	56
<b>COST DIFFERENTIAL FACTOR.....</b>	<b>57</b>
<b>FISCAL CAPACITY.....</b>	<b>58</b>
<b>MINIMUM FUNDING.....</b>	<b>59</b>

**APPENDIX**

<b>A</b>	
COST DIFFERENTIAL FACTOR (CDF) FOR FY13.....	60
<b>B</b>	
TACIR INDEX FOR FY13.....	61
<b>C</b>	
FOX / CBER INDEX FOR FY13.....	62
<b>D</b>	
TACIR / FOX MIX (50/50) FOR FY13.....	63
<b>E</b>	
SYSTEM TRANSPORTATION ALLOCATIONS FOR FY13.....	64
<b>F</b>	
SPECIAL EDUCATION OPTIONS.....	65
<b>G</b>	
CBER DEFLATOR SCHEDULE.....	67
<b>H</b>	
DETAILED INSTRUCTIONS FOR CALCULATION OF BEP FORMULA.....	70
<b>I</b>	
FISCAL CAPACITY MODEL COMPARISON.....	93

## INTRODUCTION

The Tennessee Basic Education Program (BEP) formula is a cornerstone of the Education Improvement Act of 1992 (EIA). The formula consists of 45 components that have been deemed necessary for a school district to provide a basic level of education. In addition, it calculates the cost of providing this basic education to the students within the state and local education agencies. The formula represents a continuing effort to determine the most appropriate levels of funding and the proper components for the BEP. A variety of sources, including local, regional and national data on expenditures and staffing levels, provide information for specific funding levels.

This handbook provides documentation for the calculation of the costs associated with each of the formula's components, which are divided into four categories: instructional salaries, instructional benefits, classroom, and non-classroom components. The instructional salaries components include areas of pupil contact and primarily represent teacher salaries. The instructional benefits components includes benefits associated with instructional salaries. The classroom components include areas of classroom support. The non-classroom components include such categories as system support, transportation, maintenance/operations and capital outlay. On a statewide basis, the state funds 70 percent of the instructional category, 75 percent of the classroom category and 50 percent of the non-classroom category. However, each school district has different actual percentages of funding based on the district's ability to pay or fiscal capacity, an outcome of the Tennessee Supreme Court decision in a case often referred to as Small Schools, which required the state to revamp its education funding formula to provide substantially equal opportunities to all students in Tennessee.

The BEP Handbook is intended to provide a description of each component in the formula, as well as an explanation and example of how to calculate each component. School systems wishing to calculate the amount of funds generated by the formula for their districts will need to know specific information about student membership by grade and program, such as special education, students and miles transported and school enrollment. Information about salary, equalization, and cost differential factors for the current year is found in the appendix section.

It's important to note that the BEP is neither a spending plan nor a budget document. It is strictly a funding formula. Each school system has the flexibility in determining the most appropriate use of state funds to best meet the needs of the local system and applicable requirements of state laws and regulations. The only earmark within the formula is on instructional and classroom funds. Funds generated by the instructional components of the formula must

be spent on instruction. Funds generated by the classroom components must be spent in either instruction or other classroom areas.

Appendix E contains the step by step instructions for the calculation used by the Tennessee Department of Education in determining the BEP funding for each school system.

**INSTRUCTIONAL SALARIES COMPONENT (STATE SHARE = 70%)**

**REGULAR K-12 TEACHERS**

All pupil/teacher ratios in kindergarten through Grade 12 are based upon average daily membership as provided for in the Education Improvement Act. The following ratios are used to calculate K – 12 teacher personnel allocations.

Grade Level	Funding Level	Average Class Size Requirement	Maximum Class Size
K-3	20:1	20	25
4-6	25:1	25	30
7-9	30:1	30	35
10-12	26.5:1	30	35

These pupil/teacher ratios generate the number of regular classroom teaching positions. A school may allow a class to exceed the average class requirement provided that each pupil in excess shall be off-set by a comparable number below the requirement within a grade level. For instance positions generated for the 4 – 6 grade level may be used for classes of varying size, but the maximum size allowed for any class in this grade level is 30. In addition, this grade level must not average more than 25.

Planning time for K – 6 teachers is allowed by providing financial resources to employ elementary art, music and physical education teachers. K – 12 positions are calculated on a system wide basis using system wide grade level ADM.

FORMULA: Grade level ADM Divided by Funding Level = Positions

EXAMPLE: 219	Divided		
by 25	Equals	8.76	

The method of providing for planning time for 7 – 12 teachers is multiplying the number of positions earned by 6/5's or 1.2.

FORMULA: Grade level ADM Divided by Funding Level Times 1.2 = Positions

Example:	1,578	Divided by	30	Equals	52.6	Times	1.2	Equals	63.1
	495	Divided by	30	Equals	16.5	Times	1.2	Equals	19.8

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### VOCATIONAL EDUCATION TEACHERS

All pupil/teacher ratios in vocational education are based upon the full time equivalent average daily membership (FTEADM) in vocational education classes as provided for in the Educational Improvement Act. The following ratio is used to calculate vocational education teacher allocations. Vocational education teaching positions are calculated on a system wide basis using system wide 7 – 12 vocational FTEADM.

Vocational Education Grades	Funding Level	Average Class Size Requirement	Maximum Class Size
7 – 12	20	20	25

This pupil/teacher ratio generates the number of vocational education teaching positions. A school may allow a class to exceed the average class requirement provided that each pupil in excess shall be off-set by a comparable number below the requirement within vocational education. Positions generated for vocational education may be used for classes of varying size, but the maximum size allowed for any class in vocational education is 25. Vocational education classes in a school must not average more than 20.

Planning time is provided for by multiplying the number of positions earned by 6/5's or 1.2.

FORMULA: FTEADM Divided by Funding Level Times 1.2 = Positions

EXAMPLE: 680 Divided by 20 Equals 34 Times 1.2 Equals 40.80  
435 Divided by 20 Equals 21.75 Times 1.2 Equals 26.10

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### SPECIAL EDUCATION TEACHERS

Special Education teachers are determined by the number of special education pupils identified and served by option as presented in the following schedule.

Option 1	91.0	Option 6	16.5
Option 2	58.5	Option 7	8.5
Option 3	58.5	Option 8	8.5
Option 4	16.5	Option 9	8.5
Option 5	16.5	Option 10	8.5

See Appendix F for an explanation of the Special Education options.

FORMULA: Option Identified & Served Divided by Funding Level = Positions

EXAMPLE: For Option 1  
515 Divided by 91 Equals 5.66

For Option 7  
158 Divided by 8.5 Equals 18.59

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.



## INSTRUCTIONAL SALARIES COMPONENT

### ENGLISH LANGUAGE LEARNER TEACHERS

English Language Learner teachers are calculated at a ratio of 1 per 25 pupils identified and served. Teacher positions are calculated on a system wide basis using system wide headcounts.

FORMULA: Identified and Served Divided by 25 = Positions

EXAMPLE: 432 Divided by 25 Equals 17.28

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### ENGLISH LANGUAGE LEARNER TRANSLATORS

English Language Learner Translators are calculated at a ratio of 1 per 250 pupils identified and served. Translator positions are calculated on a system wide basis using system wide headcounts.

FORMULA: Identified and Served Divided by 250 = Positions

EXAMPLE: 1,098 Divided by 250 Equals 4.39

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL COMPONENT

### PHYSICAL EDUCATION TEACHERS

Elementary Physical Education teachers are calculated at the ratio of 1 per 350 pupils in grades K – 4 and 1 per 265 pupils in grades 5 – 6. Positions are calculated using system wide grade level ADM.

<u>Elementary Physical Education</u>	<u>Ratio</u>
Grades K – 4	350:1
Grades 5 – 6	265:1

FORMULA: ADM Divided by Grade Level Ratio = Positions

EXAMPLE for Grades K – 4

680 Divided by 350 Equals 1.94

1,587 Divided by 350 Equals 4.53

EXAMPLE for Grades 5 – 6

680 Divided by 265 Equals 2.57

1,587 Divided by 265 Equals 5.99

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

Elementary physical education classes (along with art and music classes) provide planning time for K – 6 teachers.

## INSTRUCTIONAL SALARIES COMPONENT

### ELEMENTARY ART TEACHERS

Elementary Art teachers are calculated at the ratio of 1 per 525 pupils in grades K – 6. Positions are calculated using system wide grade level ADM.

Elementary <u>Art</u>	Funding <u>Ratio</u>
Grades K – 6	525:1

FORMULA: ADM Divided by Grade Level Ratio = Positions

EXAMPLES: Grades K – 6

680 Divided by 525 Equals 1.30

1,823 Divided by 525 Equals 3.47

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

Elementary art classes (along with physical education and music classes) provide planning time for K – 6 teachers.

## INSTRUCTIONAL SALARIES COMPONENT

### ELEMENTARY MUSIC TEACHERS

Elementary Music teachers are calculated at the ratio of 1 per 525 pupils in grades K – 6. Positions are calculated using a system wide grade level ADM.

<u>Elementary Music</u>	<u>Funding Ratio</u>
Grades K – 6	525:1

FORMULA:  $\text{ADM Divided by Grade Level Ratio} = \text{Positions}$

EXAMPLES: Grades K – 6

850 Divided by 525 Equals 1.62

1,978 Divided by 525 Equals 3.77

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

Elementary music classes (along with physical education and art classes) provide planning time for K-6 teachers.

## INSTRUCTIONAL SALARIES COMPONENT

### ELEMENTARY GUIDANCE COUNSELORS

Elementary guidance counselors are calculated at the rate of 1 per 500 pupils in grades K – 6. If a system within a county having more than one system does not have enough pupils to qualify for a position, the county K – 6 totals are used and each system receives a pro rata share of elementary guidance counselors based on its proportion of the total enrollment. If county totals are not sufficient to generate a position, the county is allocated one position and each system is allocated a pro rata share of that position based on its proportion of K – 6 enrollment.

<u>Elementary Guidance Counselors</u>	<u>Ratio</u>
Grades K – 6	500:1

FORMULA: ADM Divided by Grade Level Ratio = Positions

EXAMPLE: Grades K – 6

850 Divided by 500 Equals 1.70

1,978 Divided by 500 Equals 3.96

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### SECONDARY GUIDANCE COUNSELORS

Secondary guidance counselors are calculated at the rate of 1 per 350 students in grades 7 – 12. If a system within a county having more than one system does not have enough pupils to qualify for a position, the county 7-12 totals are used and each system receives a pro rata share of secondary guidance counselors based on its proportion of the total enrollment. If county totals are not sufficient to generate a position, the county is allocated one position and each system is allocated a pro rata share of that position based on its proportion of 7 – 12 enrollment.

<u>Secondary Guidance Counselors</u>	<u>Ratio</u>
Grades 7 – 12	350:1

FORMULA: ADM Divided by Grade Level Ratio = Positions

EXAMPLE: Grades 7 – 12

547 Divided by 350 Equals 1.56

2,379 Divided by 350 Equals 6.80

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### ELEMENTARY LIBRARIANS

Elementary Librarians are earned based upon the following enrollment categories.

School Enrollment <u>K – 8</u>	Positions <u>Allocated</u>
Below 265	0.5
265 – 439	1.0
440 – 659	1.0 (plus .5 library assistant)
Above 659	1.0 (plus 1 library assistant)

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
258	0.5
376	1.0
550	1.0 (plus .5 library assistant)
750	1.0 (plus 1 library assistant)

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.



## INSTRUCTIONAL SALARIES COMPONENT

### SECONDARY LIBRARIANS

Secondary Librarians (9 – 12) are earned based upon the following enrollment categories

<u>School Enrollment 9 – 12</u>	<u>Positions Allocated</u>
Below 300	0.5
300 – 999	1.0
1,000 – 1,499	2.0
Above 1,499	2.0 (plus 1 for each 750 additional pupils)

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
258	0.5
666	1.0
1,288	2.0
2,300	3.0

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### PRINCIPALS

Principals are allocated according to the following schedule.

<u>School Enrollment</u>	<u>Principal Allocation</u>
0 – 224*	0.5
Above 225	1.0

\*Elementary schools less than 100 are not allocated a principal.

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### ELEMENTARY ASSISTANT PRINCIPALS

Elementary Assistant Principals are allocated according to the following schedule.

<u>School Enrollment</u>	<u>Positions Allocated</u>
Below 660	0.0
660 – 879	0.5
880 – 1,099	1.0
1,100 – 1,319	1.5
Above 1,319	2.0

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
567	0.0
666	0.5
990	1.0
1,256	1.5
1,430	2.0

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### SECONDARY ASSISTANT PRINCIPALS

Secondary Assistant Principals are allocated according to the following schedule.

<u>School Enrollment 9 – 12</u>	<u>Positions Allocated</u>
Below 300	0.0
300 – 649	0.5
650 – 999	1.0
1,000 – 1,249	1.5
Above 1,249	2.0 (plus 1 for each additional 250 pupils rounded to nearest .5)

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
280	0.0
555	0.5
875	1.0
1,200	1.5
1,589	3.0

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### REGULAR SUPERVISORS

Regular Supervisors are allocated according to the following schedule. This category includes supervisors for areas such as attendance, materials, and instruction.

System <u>ADM</u>	Positions <u>Allocated</u>
Below 500	1.0
500 – 999	2.0
1,000 – 1,999	3.0
Above 1,999	3.0 (plus 1 for each additional 1,000 pupils)

#### EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
336	1.0
555	2.0
1,675	3.0
3,267	4.0

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### SPECIAL EDUCATION SUPERVISORS

Special Education Supervisors are calculated at the ratio of 1 per 750 identified and served students.

Special Education <u>Supervisors</u>	Funding <u>Ratio</u>
Identified & Served	750:1

FORMULA: Identified & Served Divided by 750 = Positions

#### EXAMPLES:

850 Divided by 750 Equals 1.13

1,978 Divided by 750 Equals 2.64

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### VOCATIONAL EDUCATION SUPERVISORS

Vocational Education Supervisors are calculated at the ratio of 1 per 1,000 vocational education students (FTEADM).

<u>Vocational Education Supervisors</u>	<u>Funding Ratio</u>
Vocational FTEADM	1,000:1

FORMULA: Vocational FTEADM Divided by 1,000 = Positions

#### EXAMPLES:

675 Divided by 1,000 Equals .68

1,978 Divided by 1,000 Equals 1.98

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### PSYCHOLOGISTS

Psychologists are calculated at the rate of 1 per 2,500 pupils. If a system within a county having more than one system does not have enough pupils to qualify for a position, the county totals are used and the system receives a pro rata share of the position based on its proportion of total ADM. If county totals are not sufficient to generate a position, the county is allocated one position and each system is allocated a pro rata share of that position based on its proportion of total ADM.

<u>Psychologist</u>	<u>Ratio</u>
System ADM	2,500:1

FORMULA: System ADM Divided by 2,500 = Positions

EXAMPLE:

3,000 Divided by 2,500 Equals 1.20

4,455 Divided by 2,500 Equals 1.78

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.



## INSTRUCTIONAL SALARIES COMPONENT

### SOCIAL WORKERS

Social Workers are calculated at the rate of 1 per 2,000 pupils. If a system within a county having more than one system does not have enough pupils to qualify for a position, the county totals are used and the system receives a pro rata share of the position based on its proportion of total ADM. If county totals are not sufficient to generate a position, the county is allocated one position and each system is allocated a pro rata share of that position based on its proportion of total ADM.

<u>Social Workers</u>	<u>Ratio</u>
System ADM	2,000:1

FORMULA: System ADM Divided by 2,000 = Positions

#### EXAMPLE:

3,000 Divided by 2,000 Equals 1.50

4,455 Divided by 2,000 Equals 2.23

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL SALARIES COMPONENT

### SPECIAL EDUCATION ASSESSMENT PERSONNEL

Special Education Assessment personnel are calculated at the ratio of 1 per 600 identified and served students.

<u>Special Education Assessment</u>	<u>Funding Ratio</u>
Identified & Served	600:1

FORMULA: Identified & Served Divided by 600 = Positions

#### EXAMPLES:

3,200 Divided by 600 Equals 5.33

4,782 Divided by 600 Equals 7.97

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## INSTRUCTIONAL BENEFITS COMPONENT

### RETIREMENT & SOCIAL SECURITY

Benefits are calculated based upon the amount of salary dollars generated by BEP positions. The percentages (for FY17) to be applied to the salary dollars are presented in the following table.

	Instructional <u>Personnel</u>
Retirement & Social Security and Medicare	9.04% 7.65%
Total	16.69%

FORMULA for Instructional Personnel: Salary dollars multiplied by .1669 = benefits

#### EXAMPLE:

\$350,000 Multiplied by .1669 Equals \$58,415

## INSTRUCTIONAL BENEFITS COMPONENT

### HEALTH INSURANCE

Health insurance is calculated based upon the number of positions generated by the BEP. The insurance premium is based on the average weighted premiums of teachers that are participants in the state education plan as of October 1. For FY17 (July allocations) the premium amount is \$9,098.79. To determine the factor used to calculate the instructional insurance component, the minimum (45%) of the average premium that the state pays is divided by 70%, because the state pays 70% of the instructional component costs. This factor (.64) is then multiplied by \$9,098.79 to arrive at \$5,849.22. The insurance premium for the instructional component for FY2017 is \$5,849.22.

EXAMPLE:

350 Positions Multiplied \$5,849.22 Equals \$2,047,227.00

Insurance premium information is provided by the Department of Finance and Administration.

The insurance component is recalculated in January if there is a premium increase effective January 1. The FY17 BEP allocations will increase in January.

## CLASSROOM COMPONENT (STATE SHARE 75%)

### SCHOOL NURSES

School Nurses are calculated at the ratio of 1 per 3,000 pupils, rounded to the nearest ½ position. Each system receives a minimum of one nurse.

<u>School Nurses</u>	<u>Funding Ratio</u>
System ADM	3,000:1

FORMULA: System ADM Divided by 3,000 = Positions

#### EXAMPLES:

3,200 Divided by 3,000 Equals 1.07

4,782 Divided by 3,000 Equals 1.60

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

## CLASSROOM COMPONENT

### REGULAR TEACHER ASSISTANTS

Regular Teacher Assistants are calculated at the ratio of 1 per 75 pupils in grades K – 6. Teacher assistant positions are calculated on a system wide basis using system wide K – 6 ADM.

<u>Grades</u>	<u>Funding Level</u>
K – 6	75:1

FORMULA: Grade level ADM Divided by Funding Level = Positions

EXAMPLE: 219	Divided by 75	Equals	2.92
678	Divided by 75	Equals	9.04

The number of positions is multiplied by the salary for FY17 of \$22,100. Salaries are adjusted for any pay raises approved by the Legislature.

## CLASSROOM COMPONENT

### SPECIAL EDUCATION ASSISTANTS

Special Education Assistants are calculated at a ratio of 1 per 60 pupils identified and served in options 5, 7, 8.  
FORMULA: Identified and Served Divided by 60 = Positions

EXAMPLE: 442 Divided by 60 Equals 7.37

The number of positions is multiplied by the salary for FY17 of \$22,100. Salaries are adjusted for any pay raises approved by the Legislature.

**CLASSROOM COMPONENT**

**ELEMENTARY LIBRARY ASSISTANTS**

Elementary Library Assistants (K – 8) are earned based upon the following enrollment categories.

<u>School Enrollment K – 8</u>	<u>Positions Allocated</u>
Below 440	0.0
440 – 659	0.5
Above 659	1.0

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
377	0.0
551	0.5
750	1.0

The number of positions is multiplied by the salary for FY17 of \$22,100. Salaries are adjusted for any pay raises approved by the Legislature.



## CLASSROOM COMPONENT

### RETIREMENT & SOCIAL SECURITY

Benefits are calculated based upon the amount of salary dollars generated by BEP positions. The percentages to be applied to the salary dollars are presented in the following table.

	<u>Classified Personnel</u>
Retirement & Social Security and Medicare	8.53% 7.65%
Total	16.18%

FORMULA for Classified: Salary dollars multiplied by .1618 = benefits

EXAMPLE:

\$120,000 Multiplied by .1618 Equals \$19,416.00

## CLASSROOM COMPONENT

### INSURANCE

Insurance is calculated based upon the number of positions generated by the BEP. The insurance premium is based on the average weighted premiums of teachers that are participants in the state education plan as of October 1. For FY17 (July allocations) the premium amount is \$9,098.79. To determine the factor used to calculate the classroom insurance component, the minimum (45%) of the average premium that the state pays is divided by 75%, because the state pays 75% of the classroom component costs. This factor (.60) is then multiplied by \$9,098.79 to arrive at \$5,459.27. The classroom insurance premium for FY17 is \$5,459.27.

EXAMPLE:

350 Positions Multiplied by \$5,459.27 Equals \$1,910,745

Insurance premium information is provided by the Department of Finance and Administration.

The insurance component is recalculated in January if there is a premium increase effective January 1. The FY17 BEP allocations will increase in January.

## CLASSROOM COMPONENT

### AT-RISK

The at-risk component is based on a 1:15 class size reduction for grades K-12, based on identified at-risk students. Since the inception of at-risk funding, \$509.46 had been the targeted amount of at-risk funding per student. Prior to BEP 2.0, the formula funded only 33% of K-3 at-risk; since BEP 2.0 100% of at-risk is funded.

In 2016 the Tennessee General Assembly passed the BEP Enhancement Act (Public Chapter 1020) re-defining at-risk students as those students meeting direct certification eligibility guidelines pursuant to 42 U.S.C. §§ 1751-1769. To keep funding equal to FY16, the at-risk unit cost was increased to reflect the fact that the number of direct certification students is significantly lower than the number of students receiving free and reduced lunch (the former definition of at-risk.) This revised unit cost was inflated one year using CBER's (UT Center for Business Economic Research) deflator schedule. At-risk funding for FY17 is \$842.57 per at-risk student.

FORMULA: System identified at-risk ADM multiplied by \$842.57 = allocation

#### EXAMPLE:

156 multiplied by \$842.57 = \$131,441

## CLASSROOM COMPONENT

### SUBSTITUTE TEACHERS

Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is then averaged and inflated up two fiscal years using CBER's (UT Center for Business Economic Research) deflator schedule.

The Substitute teacher for FY17 is allocated at the rate of \$61.75 per pupil.

FORMULA: System ADM multiplied by \$61.75 = allocation

EXAMPLE:

1,247 multiplied by \$61.75 Equals \$77,002.25

## CLASSROOM COMPONENT

### ALTERNATIVE SCHOOLS

The prior year per ADM amount for alternative schools is inflated one year per the CBER deflator schedule.

Alternative School funds for FY17 are allocated at the rate of \$3.75 per pupil in grades K – 6 and additional funds of \$31.75 per pupil in grades 7 – 12.

<u>Grade Level</u>	<u>Funding Level</u>
K – 6	\$3.75
7 – 12	\$31.75

FORMULA for K – 12: System K – 12 ADM multiplied by \$3.75 = allocation

EXAMPLE:

567 Multiplied by \$3.75 Equals \$2,126.25

FORMULA for 7 – 12: System 7 – 12 ADM multiplied by \$31.75 = allocation

EXAMPLE:

4,729 Multiplied by \$31.75 Equals \$150,145.75

## CLASSROOM COMPONENT

### DUTY FREE LUNCH

The prior year per ADM duty free lunch amount is inflated one year per the CBER deflator schedule.

Duty Free Lunch funds for FY17 are allocated at the rate of \$11.75 per pupil.

FORMULA: System ADM multiplied by \$11.75 = allocation

EXAMPLE:

2,247 Multiplied by \$11.75 Equals \$26,402.25

## CLASSROOM COMPONENT

### TEXTBOOKS

Textbook sales forecast information is received from the Office of Curriculum and Instruction, Textbook Services. This information is averaged with the two prior years to calculate a three-year average for textbook costs. The three-year average is then inflated one year using the CBER deflator schedule.

Textbook funds for FY17 are allocated at the rate of \$76.75 per pupil.

FORMULA: System ADM multiplied by \$76.75 = allocation

EXAMPLE:

1,047 Multiplied by \$76.75 Equals \$80,357.25

Textbook needs estimate is provided by the Office of Textbook Services, Department of Education.

## CLASSROOM COMPONENT

### MATERIALS AND SUPPLIES

Regular Materials and Supplies includes Regular and Alternative Materials and Supplies, and Regular and Alternative Fee Waivers. Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Regular Materials and Supplies for FY17 are allocated at the rate of \$78.75 per regular student.

FORMULA: Regular ADM multiplied by \$78.75 = allocation

EXAMPLE:

4,627 Multiplied by \$78.75 Equals \$364,376.25

Special Education Materials and Supplies includes Special Education Materials and Supplies, and Special Education Fee Waivers. Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Special Education Materials and Supplies for FY17 are allocated at the rate of \$36.50 per special education student.

FORMULA: Special Education Identified & Served multiplied by \$36.50 = allocation

EXAMPLE:

256 Multiplied by \$36.50 Equals \$9,344.00

Vocational Materials and Supplies includes Vocational Materials and Supplies, and Vocational Fee Waivers. Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Vocational Education Materials and Supplies for FY17 are allocated at the rate of \$157.75 per vocational education student.

FORMULA: Vocational Education FTEADM multiplied by \$157.75 = allocation

EXAMPLES:

147 Multiplied by \$157.75 Equals \$23,189.25



## CLASSROOM COMPONENT

### INSTRUCTIONAL EQUIPMENT

Regular Instructional Equipment includes Regular Instruction Equipment and Alternative Instruction Equipment. Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Regular Instructional Equipment for FY17 is allocated at the rate of \$64.25 per regular student.

FORMULA: Regular ADM multiplied by \$64.25 = allocation

EXAMPLE:

4,627 Multiplied by \$64.25 Equals \$297,284.75

Total expenditure data for Special Education Equipment from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Special Education Instructional Equipment for FY17 is allocated at the rate of \$17.25 per special education student.

FORMULA: Special Education Identified & Served multiplied by \$17.25 = allocation

EXAMPLE:

256 Multiplied by \$17.25 Equals \$4,416.00

Total expenditure data for Vocational Education Equipment from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Vocational Education Instructional Equipment for FY17 is allocated at the rate of \$99.75 per vocational student.

FORMULA: Vocational Education FTEADM multiplied by \$99.75 = allocation

EXAMPLE:

147 Multiplied by \$99.75 Equals \$14,663.25

## CLASSROOM COMPONENT

### CLASSROOM-RELATED TRAVEL

Regular Classroom-related Travel included Regular Instruction Travel and Alternative Education Travel. Total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Regular Instructional Travel funds for FY17 are allocated at the rate of \$14.50 per regular student.

FORMULA: Regular ADM multiplied by \$14.50 = allocation

EXAMPLE:

4,627 Multiplied by \$14.50 Equals \$67,091.50

Special Education Classroom-related Travel total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Special Education Travel funds for FY17 are allocated at the rate of \$17.25 per special education student.

FORMULA: Special Education Identified & Served multiplied by \$17.25 = allocation

EXAMPLE:

256 Multiplied by \$17.25 Equals \$4,416.00

Vocational Classroom-related Travel total expenditure data from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Vocational Education Travel funds for FY17 are allocated at the rate of \$50.50 per vocational FTE ADM.

FORMULA: Vocational Education FTEADM multiplied by \$50.50 = allocation

EXAMPLE:

148 Multiplied by \$50.50 Equals \$7,474.00

## CLASSROOM COMPONENT

### EXIT EXAMS

Funding for exit exams is based on grades 11 and 12 ADM's. A three-year weighted average of the costs of ACT and SAT is used to determine the unit cost. The three-year average is inflated up two years using the CBER deflator schedule. Work Keys is based on the actual cost of the exam.

For FY17 the funding for grade 11 is \$39.50, and funding for grade 12 is \$18.00.

FORMULA: Grade 11 ADM's times \$39.50 = allocation

FORMULA: Grade 12 Vocational students ADM's times \$18.00 = allocation

#### EXAMPLE:

987 (Grade 11 ADM's) Multiplied by \$39.50 Equals \$38,986.50

144 (Grade 12 Vocational ADM's) Multiplied by \$18.00 Equals \$2,592.00

## CLASSROOM COMPONENT

### TECHNOLOGY

\$40,000,000 is distributed to each system based on their percent of ADM's to total ADM's. Average rate per ADM for FY17 is \$41.61.

FORMULA: System ADM multiplied by \$41.61 = allocation

EXAMPLE:

2,467 Multiplied by \$41.61 Equals \$102,651.87

## CLASSROOM COMPONENT

### VOCATIONAL CENTER TRANSPORTATION

Vocational Center Transportation funds for FY16 are allocated based upon the number of students transported times the number of miles in a one-way trip times a unit cost factor of \$30.85. The unit cost factor is derived from the reported actual expenditures from prior year data and then inflated up two years using the CBER deflator schedule.

FORMULA: Vocational Center FTEADM multiplied by average one-way trip times \$30.85

#### EXAMPLE:

537 (FTEADM) Multiplied by 2.1 (miles) Equals 1,127.7 Multiplied by \$30.85 Equals \$34,789.55

**NON-CLASSROOM COMPONENT (STATE SHARE 50%)**

**SUPERINTENDENT**

Each county is allocated one Superintendent. Each system within a county receives a proportional share of the position based upon the system's proportion of the county ADM.

EXAMPLE:

<u>System</u>	<u>ADM</u>	<u>Proportion/ Allocation</u>
A	4,327	.53
B	1,342	.17
C	2,437	.30
Total	8,106	1.00

The allocation is multiplied by the superintendent's salary for FY17. This salary is \$106,400.

## NON-CLASSROOM COMPONENT

### TECHNOLOGY COORDINATORS

Systems receive a base of one technology coordinator plus an additional coordinator for every 6,400 pupils.

<u>Technology Coordinator</u>	<u>Funding Ratio</u>
System ADM	6,400:1

FORMULA: System ADM Divided by 6,400 = Positions

#### EXAMPLES:

6,600 Divided by 6,400 Equals 1.03  
plus base of 1.00 Equals 2.03 total

8,400 Divided by 6,400 Equals 1.31  
plus base of 1.00 Equals 2.31 total

The number of positions is multiplied by the state instructional salary unit cost as set by the annual appropriations bill to determine the total component support. For FY17 the state instructional salary unit cost is \$44,430.

**NON-CLASSROOM COMPONENT**

**SYSTEM SECRETARIAL SUPPORT PERSONNEL**

System Secretarial Support personnel are generated based upon the following schedule.

<u>System ADM</u>	<u>Positions Allocated</u>
Below 500	1.0
500-1,250	2.0
1,251-1,999	3.0
Above 1,999	3.0 (plus 1 for every additional 1,000)

**EXAMPLE:**

<u>Enrollment</u>	<u>Positions</u>
258	1.0
585	2.0
1,347	3.0
3,210	4.0

The number of positions is multiplied by the salary for FY17 of \$39,800. Salaries are adjusted for any pay raises approved by the Legislature.



**NON-CLASSROOM COMPONENT`**

**SCHOOL SECRETARIAL SUPPORT PERSONNEL**

School Secretarial Support personnel (secretaries) are allocated based upon the following schedule.

<u>System Enrollment</u>	<u>Positions Allocated</u>
Below 225	0.5
225-374	1.0
Above 374	1.0 (plus 1 for every additional 375)

EXAMPLE:

<u>Enrollment</u>	<u>Positions</u>
220	.5
315	1.0
500	1.5

The number of positions is multiplied by the salary for FY17 of \$31,100. Salaries are adjusted for any pay raises approved by the Legislature.

**NON-CLASSROOM COMPONENT**

**CUSTODIANS**

Custodians for FY14 are allocated on the basis of 1 per 22,376 square feet. The number of square feet is determined by allowing square feet per student based upon the following schedule.

<u>Grades</u>	<u>Allocation</u>
K-4	100 square feet per ADM
5-8	110 square feet per ADM
9-12	130 square feet per ADM

FORMULA: Square feet divided by 22,376 equals custodians

EXAMPLE:	Grades	ADM	Square Feet
	K-4	426	42,600
	5-8	400	44,000
	9-12	367	47,710
		Total	134,310
			134,310 Divided by 22,376 Equals 6.00

The number of positions is multiplied by the salary for FY17 of \$23,800. Salaries are adjusted for any pay raises approved by the Legislature.

## NON-CLASSROOM COMPONENT

### RETIREMENT & SOCIAL SECURITY

Benefits are calculated based upon the amount of salary dollars generated by BEP positions. The percentages to be applied to the salary dollars are presented in the following table.

	<u>Certificated Personnel</u>	<u>Classified Personnel</u>
Social Security and Medicare	7.65%	7.65%
Retirement	9.04%	8.53%
Total	16.69%	16.18%

FORMULA for Certificated: Salary dollars multiplied by .1669 = benefits

EXAMPLE:

\$350,000 Multiplied by .1669 Equals \$58,415.00

FORMULA for Classified: Salary dollars multiplied by .1618 = benefits

EXAMPLE:

\$125,000 Multiplied by .1618 Equals \$20,225.00

## NON-CLASSROOM COMPONENT

### INSURANCE

Insurance is calculated based upon the number of positions generated by the BEP. The insurance premium is based on the average weighted premiums of teachers that are participants in the state plan as of October 1. For FY16 (July allocation) the premium amount is \$9,098.79.

To determine the factor used to calculate the non-classroom insurance component, the minimum (45% for superintendent and technology coordinator) of the average premium that the state pays is divided by 50%, because the state pays 50% of the non-classroom component costs. This factor (.90) is then multiplied by \$9,098.79 to arrive at \$8,188.91. The non-classroom insurance premium for the superintendent and technology coordinator positions for FY17 is \$8,188.91.

EXAMPLE:

3 Positions Multiplied by \$8,188.91 Equals \$24,566.73

To determine the factor used to calculate the non-classroom insurance component, the minimum (30% for support staff) of the average premium that the state pays is divided by 50%, because the state pays 50% of the non-classroom component costs. This factor (.60) is then multiplied by \$9,098.79 to arrive at \$5,459.27. The non-classroom insurance premium for support personnel for FY16 is \$5,459.27.

EXAMPLE:

350 Positions Multiplied by \$5,459.27 Equals \$1,910,744.50

Insurance premium information is provided by the Department of Finance and Administration.

The insurance component is recalculated in January if there is a premium increase effective January 1. The FY17 BEP allocations will increase in January.

## NON-CLASSROOM COMPONENT

### NON-INSTRUCTIONAL EQUIPMENT

Non-Instructional Equipment includes equipment expenditures from Other Student Support, Office of the Principal, Finance, Human Resources, Maintenance, Operations, Transportation, and Central and Other Support. Total expenditure data for Non-Instructional Equipment from three consecutive prior years is divided by same year ADM. The three years expenditure data per ADM is averaged, and then inflated up two fiscal years using the CBER deflator schedule.

Non-Instructional Equipment funds for FY17 are allocated at the rate of \$20.75 per pupil.

FORMULA: ADM multiplied by \$20.75 = allocation

EXAMPLE:

2,247 Multiplied by \$20.75 Equals \$46,625.25

## NON-CLASSROOM COMPONENT

### PUPIL TRANSPORTATION

The BEP funds transportation based on the estimated cost of the transportation services the school system provides. The transportation funding is based upon a formula, which takes into consideration the number of pupils transported and the number of miles the students are transported. In order to determine transportation funding, information from the Annual Transportation Report and Annual Financial Report is required.

Three-year averages of data, which determine the funding for each system, are:

- Three-year average transportation cost per ADM.
- Ratio of three-year average daily transported to ADM.
- Ratio of three-year average mile traveled to ADM.
- Percent of ADT to total ADM.

These three-year averages are then inflated up two fiscal years.

After calculating the three-year averages of actual transportation expenditures and inflating them up two fiscal years, the BEP formula then uses a statistical model (multiple regression) to estimate the impact of four different factors on each system's transportation spending over the three years prior to the current BEP funding year. Those four factors, based on three-year averages are:

- Average daily students transported (ADT)
- Average daily special education students transported (SpEdADT)
- Daily one-way miles driven (miles)
- ADM

The model estimates the average, statewide effects (coefficients) of these factors on transportation expenditures and multiplies those estimated effects by each system's respective factors to calculate the estimated cost to the system of providing transportation services.

Transportation cost allocations for each school system for FY17 are found in Appendix E.

## NON-CLASSROOM COMPONENT

### MAINTENANCE AND OPERATIONS

Funds for Maintenance and Operations for FY17 are allocated based upon a rate of \$3.27 per square foot. The prior year rate is inflated up one year using the CBER deflator schedule.

The number of square feet is determined by allowing square feet per student based upon the following schedule.

<u>Grades</u>	<u>Allocation</u>
K-4	100 square feet per Grade Level ADM
5-8	110 square feet per Grade Level ADM
9-12	130 square feet per Grade Level ADM

FORMULA: Square feet multiplied by \$3.27 = Allocation

EXAMPLE:		
<u>Grades</u>	<u>Grade Level ADM</u>	<u>Square Feet</u>
K-4	426	42,600
5-8	400	44,000
9-12	367	47,710
	Total	134,310
134,310 multiplied by \$3.27 equals \$439,193.70		

## NON-CLASSROOM COMPONENT

### MAINTENANCE AND OPERATIONS STAFF BENEFITS

Benefits and insurance are calculated based upon the amount allocated for maintenance and operations. Sixty (60) percent of square footage funding is allocated toward salary for benefit calculations. Benefit percentages to be applied to the salary dollars are presented in the table below.

FORMULA for Estimated Salary: Square Footage Funding Multiplied by .60= Estimated Salary

EXAMPLE:

\$350,000 Multiplied by .60 Equals \$210,000.00

FORMULA for Benefits: Estimated Salary Multiplied by .1618 = Benefits

EXAMPLE:

\$210,000 Multiplied by .1618 Equals \$33,978.00

FORMULA for Maintenance and Operations Insurance:

Insurance is based on the non-classroom total insurance premium's percent of salary. Salary allocation is multiplied by the non-classroom insurance rate of 18.91%.

EXAMPLE:

\$210,000 Multiplied by .1891 Equals \$39,711.00



## NON-CLASSROOM COMPONENT

### CAPITAL OUTLAY

The cost of different types of schools is calculated based on the following factors:

- 100 square feet per student in elementary school
- 110 square feet per student in middle school
- 130 square feet per student in high school
  
- \$139.41 per square foot for construction for elementary schools
- \$140.00 per square foot for construction for middle schools
- \$142.37 per square foot for construction for high schools
  
- 10% additional for equipment per school
- 7% additional for architects' fees per school
- 6% for twenty years of debt retirement

These factors resulted in a cost of:

- \$14,022,823 per elementary school
- \$23,235,579 per middle school
- \$37,233,456 per high school

Forty years is considered to be the useful life of a school.

The average daily membership is used to determine the number of square feet per school system. Thus if a school system has 2,250 students, divided 500 elementary, 750 middle and 1,000 high school, the square foot figures would be 50,000 elementary, 82,500 middle and 130,000 high school. The total cost would be \$74,491,857. Dividing the total cost by 40 to determine the single year cost results in \$1,862,296 in capital outlay funds.

## COST DIFFERENTIAL FACTOR

### COST DIFFERENTIAL FACTOR

The county cost differential factor (CDF) is used to adjust BEP funding in systems where the cost of living in the county is greater than the statewide average. The BEP uses CDF to adjust salary components. The CDF multiplies the average wage in each of a set of nongovernmental industries by the proportion of the statewide labor force employed in that industry. Counties with above-average wages according to this index receive an increase, and counties with average or below-average wages do not. In those counties with an increase, BEP-generated salaries, Tennessee Consolidated Retirement System contributions (TCRS), and FICA contributions for systems are multiplied by the county CDF. The adjustment is applied only in systems where the ratio between county non-governmental wages and statewide non-governmental wages is greater than one. No adjustment is made to systems with ratios less than one (county non-government wages are less than statewide non-government wages).

In 2016 the Tennessee General Assembly passed the BEP Enhancement Act (Public Chapter 1020). As a result, CDF was eliminated from the BEP formula. However, because the BEP Enhancement Act has not been fully phased in, systems receiving CDF adjustments are currently receiving 25% of the total calculated CDF.

FORMULA: Salaries multiplied by CDF multiplied by 25% = Cost Adjustment

#### EXAMPLE:

BEP-generated salaries:

\$1,000,000 Times 116.98 % Times 25% Equals \$1,042,450

Cost Differential Factors for FY17 can be found in Appendix A.

## FISCAL CAPACITY

### TACIR INDEX / FOX INDEX

The fiscal capacity index is the primary equalization instrument in the BEP formula. It is a statistical estimate of a county's relative ability to raise revenue for education. The state and local share for each school system is based on an equalization formula that is applied to the BEP.

Fiscal capacity and cost differential factors should not be confused. In general, the fiscal capacity index analyzes and adjusts for a county's ability to pay for education. CDF takes into consideration cost of living differences.

Although the state funds 70, 75, and 50 percent of the total BEP generated instructional, classroom and non-classroom components, respectively, the state and local shares for individual districts vary considerably. Through the fiscal capacity index, the BEP directs more state funds to systems in counties with less ability to fund education with local resources. A school system in a county with high fiscal capacity has greater ability to raise revenues through local sources, such as property tax or the local option sales tax; a school system in a county with low fiscal capacity has less ability to raise local revenues. Because of this, the BEP requires systems in counties with higher fiscal capacity to fund a greater portion with local dollars.

In 2016 the Tennessee General Assembly passed the BEP Enhancement Act (Public Chapter 1020). As a result, the TACIR index and the Fox index are equally weighted in the equalization formula.

The fiscal capacity index is applied at the county level. Therefore, the state and local shares for a county system would be the same as the state and local shares for a city system residing within the same county.

FORMULA: 
$$\frac{\text{Total BEP funds generated in a category} \times \text{Average local share} \times \text{County fiscal capacity index}}{\text{County's local funded amount}} =$$

County's total generated BEP funds in a category minus County's local funded amount = County's state funded amount

#### EXAMPLE:

Local BEP-funded instructional component:

$\$3,000,000,000 \times 30\% \times .14 = \$126,000,000$

$\$275,000,000 \text{ minus } \$126,000,000 = \$149,000,000$

TACIR Index for FY17 is found in Appendix B.

Fox Index for FY17 is found in Appendix C.

The blended fiscal capacity index for FY17 is found in Appendix D.

## FINAL COMPARISONS

### MINIMUM FUNDING

A system is on minimum funding if the total state BEP funds it generates in the current year are less than the sum of its 2015-16 BEP appropriation, adjusted for loss in enrollment, plus increases in instructional salaries and benefits. The instructional increase amount is determined by multiplying the system's current instructional positions by the increase in salary, insurance premiums or TCRS contributions. This amount is then multiplied by the system's equalized state share percentage and then added to 2015-16 BEP appropriation amount to determine the system's minimum funding. In the current year, a system receives the greater of minimum funding or the amount it generates.

FORMULA: Increase in salary (and/or TCRS and/or insurance) Multiplied by the number of BEP-instructional positions times Equalized state share percentage = Mandatory Increase

#### EXAMPLE:

Instructional Salary and Benefits Increase:

\$3,090.33 Times 478 positions times .65 Equals \$960,166

APPENDIX A

COST DIFFERENTIAL FACTORS FOR FY17

<u>System</u>	<u>CDF%</u>	<u>System</u>	<u>CDF%</u>	<u>System</u>	<u>CDF%</u>
Anderson County	105.17%	Gibson County SSD	71.28%	Moore County	84.87%
Clinton City	105.17%	Giles County	75.25%	Morgan County	81.15%
Oak Ridge City	105.17%	Grainger County	71.93%	Obion County	77.59%
Bedford County	73.45%	Greene County	75.95%	Union City	77.59%
Benton County	70.20%	Greeneville City	75.95%	Overton County	75.12%
Bledsoe County	63.94%	Grundy County	56.21%	Perry County	60.74%
Blount County	97.65%	Hamblen County	77.18%	Pickett County	62.92%
Alcoa City	97.65%	Hamilton County	97.88%	Polk County	66.05%
Maryville City	97.65%	Hancock County	59.11%	Putnam County	77.65%
Bradley County	85.25%	Hardeman County	78.61%	Rhea County	69.39%
Cleveland City	85.25%	Hardin County	87.41%	Dayton City	69.39%
Campbell County	77.06%	Hawkins County	80.67%	Roane County	97.10%
Cannon County	71.65%	Rogersville City	80.67%	Robertson County	77.05%
Carroll County	70.64%	Haywood County	75.93%	Rutherford County	93.56%
H Rock-Bruceton SSD	70.64%	Henderson County	71.09%	Murfreesboro City	93.56%
Huntingdon SSD	70.64%	Lexington City	71.09%	Scott County	71.21%
McKenzie SSD	70.64%	Henry County	74.56%	Oneida SSD	71.21%
South Carroll Co SSD	70.64%	Paris SSD	74.56%	Sequatchie County	65.74%
West Carroll Co SSD	70.64%	Hickman County	73.88%	Sevier County	79.58%
Carter County	73.15%	Houston County	67.48%	Shelby County	117.89%
Elizabethton City	73.15%	Humphreys County	91.50%	Arlington City	117.89%
Cheatham County	87.14%	Jackson County	70.50%	Bartlett City	117.89%
Chester County	73.00%	Jefferson County	83.12%	Collierville City	117.89%
Claiborne County	72.48%	Johnson County	92.60%	Germantown City	117.89%
Clay County	63.34%	Knox County	100.13%	Lakeland City	117.89%
Cocke County	72.32%	Lake County	64.66%	Millington City	117.89%
Newport City	72.32%	Lauderdale County	69.62%	Smith County	75.42%
Coffee County	87.69%	Lawrence County	73.43%	Stewart County	80.92%
Manchester City	87.69%	Lewis County	61.33%	Sullivan County	99.59%
Tullahoma City	87.69%	Lincoln County	71.42%	Bristol City	99.59%
Crockett County	74.32%	Fayetteville City	71.42%	Kingsport City	99.59%
Alamo City	74.32%	Loudon County	92.23%	Sumner County	88.62%
Bells City	74.32%	Lenoir City	92.23%	Tipton County	77.31%
Cumberland County	74.54%	McMinn County	76.97%	Trousdale County	64.89%
Davidson County	119.77%	Athens City	76.97%	Unicoi County	91.44%
Decatur County	74.83%	Etowah City	76.97%	Union County	72.72%
DeKalb County	72.50%	McNairy County	68.23%	Van Buren County	68.94%
Dickson County	77.24%	Macon County	68.28%	Warren County	72.93%
Dyer County	77.30%	Madison County	85.66%	Washington County	84.16%
Dyersburg City	77.30%	Marion County	76.58%	Johnson City	84.16%
Fayette County	88.59%	Richard City SSD	76.58%	Wayne County	70.10%
Fentress County	70.57%	Marshall County	69.48%	Weakley County	66.87%
Franklin County	74.62%	Maury County	92.64%	White County	69.74%
Humboldt City	71.28%	Meigs County	72.60%	Williamson County	128.19%
Milan SSD	71.28%	Monroe County	81.10%	Franklin SSD	128.19%
Trenton SSD	71.28%	Sweetwater City	81.10%	Wilson County	97.13%
Bradford SSD	71.28%	Montgomery County	83.88%	Lebanon SSD	97.13%

**APPENDIX B**

<b>TACIR INDEX FOR FY17</b>					
<u>System</u>	<u>TACIR INDEX</u>	<u>System</u>	<u>TACIR INDEX</u>	<u>System</u>	<u>TACIR INDEX</u>
Anderson County	1.10%	Gibson County SSD	0.51%	Moore County	0.08%
Clinton City	1.10%	Giles County	0.31%	Morgan County	0.09%
Oak Ridge City	1.10%	Grainger County	0.09%	Obion County	0.40%
Bedford County	0.50%	Greene County	0.74%	Union City	0.40%
Benton County	0.15%	Greeneville City	0.74%	Overton County	0.14%
Bledsoe County	0.04%	Grundy County	0.08%	Perry County	0.06%
Blount County	1.79%	Hamblen County	0.96%	Pickett County	0.04%
Alcoa City	1.79%	Hamilton County	6.14%	Polk County	0.11%
Maryville City	1.79%	Hancock County	0.02%	Putnam County	1.17%
Bradley County	1.42%	Hardeman County	0.17%	Rhea County	0.32%
Cleveland City	1.42%	Hardin County	0.34%	Dayton City	0.32%
Campbell County	0.37%	Hawkins County	0.44%	Roane County	0.66%
Cannon County	0.08%	Rogersville City	0.44%	Robertson County	0.77%
Carroll County	0.22%	Haywood County	0.19%	Rutherford County	4.44%
H Rock-Bruceton SSD	0.22%	Henderson County	0.28%	Murfreesboro City	4.44%
Huntingdon SSD	0.22%	Lexington City	0.28%	Scott County	0.18%
McKenzie SSD	0.22%	Henry County	0.38%	Oneida SSD	0.18%
South Carroll Co SSD	0.22%	Paris SSD	0.38%	Sequatchie County	0.12%
West Carroll Co SSD	0.22%	Hickman County	0.12%	Sevier County	2.70%
Carter County	0.42%	Houston County	0.05%	Shelby County	15.66%
Elizabethton City	0.42%	Humphreys County	0.24%	Arlington City	15.66%
Cheatham County	0.34%	Jackson County	0.06%	Bartlett City	15.66%
Chester County	0.10%	Jefferson County	0.49%	Collierville City	15.66%
Claiborne County	0.23%	Johnson County	0.11%	Germantown City	15.66%
Clay County	0.05%	Knox County	8.27%	Lakeland City	15.66%
Cocke County	0.33%	Lake County	0.04%	Millington City	15.66%
Newport City	0.33%	Lauderdale County	0.19%	Smith County	0.19%
Coffee County	0.82%	Lawrence County	0.39%	Stewart County	0.12%
Manchester City	0.82%	Lewis County	0.09%	Sullivan County	2.44%
Tullahoma City	0.82%	Lincoln County	0.31%	Bristol City	2.44%
Crockett County	0.12%	Fayetteville City	0.31%	Kingsport City	2.44%
Alamo City	0.12%	Loudon County	0.70%	Sumner County	2.28%
Bells City	0.12%	Lenoir City	0.70%	Tipton County	0.51%
Cumberland County	0.69%	McMinn County	0.66%	Trousdale County	0.08%
Davidson County	15.57%	Athens City	0.66%	Unicoi County	0.16%
Decatur County	0.11%	Etowah City	0.66%	Union County	0.08%
DeKalb County	0.19%	McNairy County	0.21%	Van Buren County	0.03%
Dickson County	0.66%	Macon County	0.18%	Warren County	0.42%
Dyer County	0.52%	Madison County	1.77%	Washington County	1.95%
Dyersburg City	0.52%	Marion County	0.35%	Johnson City	1.95%
Fayette County	0.40%	Richard City SSD	0.35%	Wayne County	0.09%
Fentress County	0.14%	Marshall County	0.35%	Weakley County	0.28%
Franklin County	0.41%	Maury County	1.13%	White County	0.21%
Humboldt City	0.51%	Meigs County	0.07%	Williamson County	5.89%
Milan SSD	0.51%	Monroe County	0.48%	Franklin SSD	5.89%
Trenton SSD	0.51%	Sweetwater City	0.48%	Wilson County	1.99%
Bradford SSD	0.51%	Montgomery County	2.70%	Lebanon SSD	1.99%

APPENDIX C

FOX/CBER INDICES FOR FY17

<u>System</u>	<u>CBER INDEX</u>	<u>System</u>	<u>CBER INDEX</u>	<u>System</u>	<u>CBER INDEX</u>
Anderson County	1.07%	Gibson County SSD	0.48%	Moore County	0.10%
Clinton City	1.07%	Giles County	0.34%	Morgan County	0.14%
Oak Ridge City	1.07%	Grainger County	0.17%	Obion County	0.38%
Bedford County	0.52%	Greene County	0.79%	Union City	0.38%
Benton County	0.16%	Greenville City	0.79%	Overton County	0.19%
Bledsoe County	0.10%	Grundy County	0.11%	Perry County	0.09%
Blount County	2.01%	Hamblen County	0.95%	Pickett County	0.06%
Alcoa City	2.01%	Hamilton County	6.14%	Polk County	0.16%
Maryville City	2.01%	Hancock County	0.05%	Putnam County	1.14%
Bradley County	1.38%	Hardeman County	0.22%	Rhea County	0.37%
Cleveland City	1.38%	Hardin County	0.41%	Dayton City	0.37%
Campbell County	0.45%	Hawkins County	0.56%	Roane County	0.78%
Cannon County	0.11%	Rogersville City	0.56%	Robertson County	0.86%
Carroll County	0.25%	Haywood County	0.21%	Rutherford County	4.39%
H Rock-Bruceton SSD	0.25%	Henderson County	0.28%	Murfreesboro City	4.39%
Huntingdon SSD	0.25%	Lexington City	0.28%	Scott County	0.20%
McKenzie SSD	0.25%	Henry County	0.39%	Oneida SSD	0.20%
South Carroll Co SSD	0.25%	Paris SSD	0.39%	Sequatchie County	0.16%
West Carroll Co SSD	0.25%	Hickman County	0.19%	Sevier County	2.85%
Carter County	0.51%	Houston County	0.07%	Shelby County	13.19%
Elizabethton City	0.51%	Humphreys County	0.26%	Arlington City	13.19%
Cheatham County	0.41%	Jackson County	0.08%	Bartlett City	13.19%
Chester County	0.13%	Jefferson County	0.64%	Collierville City	13.19%
Claiborne County	0.30%	Johnson County	0.16%	Germantown City	13.19%
Clay County	0.06%	Knox County	8.07%	Lakeland City	13.19%
Cocke County	0.39%	Lake County	0.05%	Millington City	13.19%
Newport City	0.39%	Lauderdale County	0.20%	Smith County	0.20%
Coffee County	0.75%	Lawrence County	0.40%	Stewart County	0.14%
Manchester City	0.75%	Lewis County	0.11%	Sullivan County	2.48%
Tullahoma City	0.75%	Lincoln County	0.37%	Bristol city	2.48%
Crockett County	0.12%	Fayetteville City	0.37%	Kingsport City	2.48%
Alamo City	0.12%	Loudon County	0.89%	Sumner County	2.44%
Bells City	0.12%	Lenoir City	0.89%	Tipton County	0.58%
Cumberland County	0.85%	McMinn County	0.68%	Trousdale County	0.07%
Davidson County	14.95%	Athens City	0.68%	Unicoi County	0.18%
Decatur County	0.13%	Etowah City	0.68%	Union County	0.16%
DeKalb County	0.25%	McNairy County	0.24%	Van Buren County	0.07%
Dickson County	0.68%	Macon County	0.21%	Warren County	0.46%
Dyer County	0.47%	Madison County	1.65%	Washington County	2.02%
Dyersburg City	0.47%	Marion County	0.39%	Johnson City	2.02%
Fayette County	0.50%	Richard City SSD	0.39%	Wayne County	0.14%
Fentress County	0.18%	Marshall County	0.35%	Weakley County	0.30%
Franklin County	0.52%	Mauzy County	1.20%	White County	0.26%
Humboldt City	0.48%	Meigs County	0.11%	Williamson County	5.55%
Milan SSD	0.48%	Monroe County	0.57%	Franklin SSD	5.55%
Trenton SSD	0.48%	Sweetwater City	0.57%	Wilson County	2.09%
Bradford SSD	0.48%	Montgomery County	2.53%	Lebanon SSD	2.09%

## APPENDIX D

### TACIR/FOX MIX FOR FY17

<u>System</u>	<u>50/50 INDEX</u>	<u>System</u>	<u>50/50 INDEX</u>	<u>System</u>	<u>50/50 INDEX</u>
Anderson County	1.09%	Gibson County SSD	0.49%	Moore County	0.09%
Clinton City	1.09%	Giles County	0.33%	Morgan County	0.11%
Oak Ridge City	1.09%	Grainger County	0.13%	Obion County	0.39%
Bedford County	0.51%	Greene County	0.76%	Union City	0.39%
Benton County	0.15%	Greeneville City	0.76%	Overton County	0.17%
Bledsoe County	0.07%	Grundy County	0.09%	Perry County	0.07%
Blount County	1.90%	Hamblen County	0.95%	Pickett County	0.05%
Alcoa City	1.90%	Hamilton County	6.14%	Polk County	0.14%
Maryville City	1.90%	Hancock County	0.04%	Putnam County	1.16%
Bradley County	1.40%	Hardeman County	0.20%	Rhea County	0.35%
Cleveland City	1.40%	Hardin County	0.37%	Dayton City	0.35%
Campbell County	0.41%	Hawkins County	0.50%	Roane County	0.72%
Cannon County	0.10%	Rogersville City	0.50%	Robertson County	0.81%
Carroll County	0.23%	Haywood County	0.20%	Rutherford County	4.41%
H Rock-Bruceon SSD	0.23%	Henderson County	0.28%	Murfreesboro City	4.41%
Huntingdon SSD	0.23%	Lexington City	0.28%	Scott County	0.19%
McKenzie SSD	0.23%	Henry County	0.38%	Oneida SSD	0.19%
South Carroll Co SSD	0.23%	Paris SSD	0.38%	Sequatchie County	0.14%
West Carroll Co SSD	0.23%	Hickman County	0.15%	Sevier County	2.78%
Carter County	0.47%	Houston County	0.06%	Shelby County	14.43%
Elizabethton City	0.47%	Humphreys County	0.25%	Arlington City	14.43%
Cheatham County	0.38%	Jackson County	0.07%	Bartlett City	14.43%
Chester County	0.12%	Jefferson County	0.56%	Collierville City	14.43%
Claiborne County	0.26%	Johnson County	0.14%	Germantown City	14.43%
Clay County	0.06%	Knox County	8.17%	Lakeland City	14.43%
Cocke County	0.36%	Lake County	0.04%	Millington City	14.43%
Newport City	0.36%	Lauderdale County	0.20%	Smith County	0.19%
Coffee County	0.79%	Lawrence County	0.39%	Stewart County	0.13%
Manchester City	0.79%	Lewis County	0.10%	Sullivan County	2.46%
Tullahoma City	0.79%	Lincoln County	0.34%	Bristol City	2.46%
Crockett County	0.12%	Fayetteville City	0.34%	Kingsport City	2.46%
Alamo City	0.12%	Loudon County	0.79%	Sumner County	2.36%
Bells City	0.12%	Lenoir County	0.79%	Tipton County	0.54%
Cumberland County	0.77%	McMinn County	0.67%	Trousdale County	0.08%
Davidson County	15.26%	Athens City	0.67%	Unicoi County	0.17%
Decatur County	0.12%	Etowah City	0.67%	Union County	0.12%
DeKalb County	0.22%	McNairy County	0.22%	Van Buren County	0.05%
Dickson County	0.67%	Macon County	0.20%	Warren County	0.44%
Dyer County	0.50%	Madison County	1.71%	Washington County	1.99%
Dyersburg City	0.50%	Marion County	0.37%	Johnson City	1.99%
Fayette County	0.45%	Richard City SSD	0.37%	Wayne County	0.11%
Fentress County	0.16%	Marshall County	0.35%	Weakley County	0.29%
Franklin County	0.47%	Maury County	1.17%	White County	0.23%
Humboldt City	0.49%	Meigs County	0.09%	Williamson County	5.72%
Milan SSD	0.49%	Monroe County	0.53%	Franklin SSD	5.72%
Trenton SSD	0.49%	Sweetwater City	0.53%	Wilson County	2.04%
Bradford SSD	0.49%	Montgomery County	2.61%	Lebanon SSD	2.04%



**APPENDIX E**

**DISTRICT TRANSPORTATION ALLOCATIONS FOR FY17**

<u>System</u>	<u>ALLOCATION</u>	<u>System</u>	<u>ALLOCATION</u>	<u>System</u>	<u>ALLOCATION</u>
Anderson County	2,629,751	Gibson County SSD	1,283,178	Moore County	412,888
Clinton City	0	Giles County	1,552,109	Morgan County	1,690,457
Oak Ridge City	1,060,554	Grainger County	1,543,946	Obion County	1,305,941
Bedford County	2,718,764	Greene County	2,666,279	Union City	248,495
Benton County	923,403	Greeneville City	498,639	Overton County	1,321,809
Bledsoe County	896,577	Grundy County	798,878	Perry County	453,938
Blount County	4,944,617	Hamblen County	2,984,649	Pickett County	265,317
Alcoa City	360,249	Hamilton County	17,064,069	Polk County	891,974
Maryville City	993,309	Hancock County	469,824	Putnam County	2,786,761
Bradley County	3,942,262	Hardeman County	1,545,832	Rhea County	1,840,094
Cleveland City	1,149,944	Hardin County	1,266,844	Dayton City	0
Campbell County	1,819,413	Hawkins County	3,006,586	Roane County	2,190,435
Cannon County	725,240	Rogersville City	0	Robertson County	3,289,186
Carroll County	1,668,403	Haywood County	1,244,783	Rutherford County	12,782,141
H Rock-Bruceton SSD	0	Henderson County	1,412,458	Murfreesboro City	1,645,281
Huntingdon SSD	0	Lexington City	0	Scott County	1,072,535
McKenzie SSD	0	Henry County	1,795,048	Oneida SSD	269,630
South Carroll Co SSD	0	Paris SSD	469,887	Sequatchie County	747,054
West Carroll Co SSD	0	Hickman County	1,375,904	Sevier County	5,290,926
Carter County	2,400,718	Houston County	545,474	Shelby County	33,256,488
Elizabethton City	403,883	Humphreys County	1,015,556	Arlington City	1,059,541
Cheatham County	2,311,502	Jackson County	627,651	Bartlett City	2,136,204
Chester County	991,924	Jefferson County	2,398,767	Collierville City	1,899,471
Claiborne County	2,099,076	Johnson County	892,508	Germantown City	1,213,845
Clay County	378,710	Knox County	20,812,467	Lakeland City	314,357
Cocke County	1,653,399	Lake County	262,358	Millington City	680,247
Newport City	0	Lauderdale County	1,615,777	Smith County	1,221,822
Coffee County	1,633,804	Lawrence County	2,522,009	Stewart County	959,578
Manchester City	153,345	Lewis County	610,790	Sullivan County	4,501,171
Tullahoma City	395,276	Lincoln County	1,404,419	Bristol City	774,428
Crockett County	868,295	Fayetteville City	222,559	Kingsport City	1,286,403
Alamo City	0	Loudon County	1,909,534	Sumner County	9,387,063
Bells City	0	Lenoir City	498,632	Tipton County	4,326,613
Cumberland County	2,315,334	McMinn County	2,126,179	Trousdale County	439,115
Davidson County	27,499,624	Athens City	303,625	Unicoi County	989,790
Decatur County	716,542	Etowah City	41,567	Union County	1,453,030
DeKalb County	1,220,822	McNairy County	1,722,777	Van Buren County	284,396
Dickson County	2,767,981	Macon County	1,463,996	Warren County	2,202,947
Dyer County	1,922,074	Madison County	4,966,351	Washington County	3,362,281
Dyersburg City	0	Marion County	1,471,630	Johnson City	1,887,814
Fayette County	1,795,023	Richard City SSD	0	Wayne County	868,820
Fentress County	1,440,536	Marshall County	1,660,111	Weakley County	1,838,364
Franklin County	2,353,315	Maury County	4,283,700	White County	1,410,564
Humboldt City	222,717	Meigs County	745,838	Williamson County	10,683,002
Milan SSD	583,955	Monroe County	2,300,252	Franklin SSD	1,249,591
Trenton SSD	439,967	Sweetwater City	189,384	Wilson County	5,576,422
Bradford SSD	181,203	Montgomery County	11,319,636	Lebanon SSD	1,093,822
<b>Total State Allocation</b>	<b>\$324,356,021</b>				

## **APPENDIX F**

SPECIAL EDUCATION OPTIONS 1-10
--------------------------------

### **Option 1 Consultation**

Minimum of 2 contacts per month, except OT/PT (minimum of 3 contacts per year). Time must be reported.

Direct Services equal less than 1 hour per week.

Related Services equal less than 1 hour per week.

Related Services include: Psychological, School Social Work, Speech/Language, School Health, Counseling, Vision, Hearing, Occupational and Physical Therapy.

NOTE: Recreation Therapy and Other Related Services are EXCLUDED.

### **Option 2 Direct Services**

Direct Services more than or equal to 1, but less than 4 hours per week; or, any one Related Service more than or equal to 1, but less than 4 hours per week.

Includes/Excludes same as Option 1.

### **Option 3 Direct Services**

Direct Services more than or equal to 4, but less than 9 hours per week; or, any one Related Service more than or equal to 4, but less than 9 hours per week.

Includes/Excludes same as Option 1.

### **Option 4 Direct Services**

Direct Services more than or equal to 9, but less than 14 hours per week; or, any one Related Service more than or equal to 9, but less than 14 hours per week.

Includes/Excludes same as Option 1.

### **Option 5 Direct Services**

Direct Services more than or equal to 14, but less than 23 hours per week; or, any one Related Service more than or equal to 14, but less than 23 hours per week.

Includes/Excludes same as Option 1.

### **Option 6 Ancillary Services**

Attendant provided so that the student can have at least 4 hours per day in less restrictive and general education settings.

**Option 7 Direct Services**

Special Education services 23 or more hours per week; or, any one Related Service 23 or more hours per week.

Includes/Excludes same as Option 1.

**Option 8 Self-Contained or CDC**

The sum of all direct services plus related services listed below plus up to 10 hours per week of special education educational assistant in the general program equals 32.5 or more hours per week.

In addition, at least two Related Services from those specified below must be received for at least the minimum times listed.

Psychological Services	1 hour per week
Counseling Services	1 hour per week
Speech/Language Services	1 hour per week
Vision Services	1 hour per week
Hearing Services	1 hour per week
Occupational Therapy	3 contacts per year, with time span reported
Physical Therapy	3 contacts per year, with time span reported

**Option 9 Residential Services**

Provided at least 24 hours per day.

**Option 10 Hospital / Homebound**

Provided 3 or more hours per week.

**APPENDIX G**

CBER DEFLATOR SCHEDULE

**IHS Global Insight, Inc. Short-Term Forecast, September 2015**

**Price Deflators for Government Purchases**

**Chained Price Index, SA (2009=100.0)**

Qtr	State & Local	State & Local Personnel	State & Local Fixed
	Consumption	Costs	Capital & Other
	Purchases		Consumption
	JPGSLC	JPGSLCWSS	JPGSLCKF & JPGSLCO
	<b>Consumption</b>	<b>Wages &amp; Salaries</b>	<b>Noncompensation</b>
2009.1	99.240	99.037	99.985
2009.2	99.596	99.719	99.316
2009.3	100.282	100.424	99.772
2009.4	100.881	100.820	100.872
2010.1	102.116	101.946	102.306
2010.2	102.960	103.140	102.064
2010.3	103.611	103.878	102.454
2010.4	104.538	104.225	105.363
2011.1	105.557	104.515	108.951
2011.2	106.834	105.403	111.670
2011.3	107.167	105.715	112.077
2011.4	106.845	105.239	112.255
2012.1	108.052	106.392	113.658
2012.2	107.901	106.454	112.675
2012.3	108.291	106.854	112.943
2012.4	109.269	107.906	113.684
2013.1	109.886	108.639	113.928
2013.2	110.178	109.212	113.090
2013.3	110.926	109.923	114.029
2013.4	111.325	110.536	113.539
2014.1	111.973	110.994	114.970
2014.2	112.523	111.672	115.014
2014.3	113.226	112.468	115.334
2014.4	112.965	112.971	112.165
2015.1	112.091	113.498	105.922
2015.2	112.602	114.170	105.869
2015.3	112.974	114.748	105.466
2015.4	113.317	115.318	104.959
2016.1	113.876	115.936	105.319
2016.2	114.593	116.618	106.191
2016.3	115.244	117.316	106.679
2016.4	115.812	118.021	106.754
2017.1	116.519	118.749	107.381
2017.2	117.319	119.518	108.296
2017.3	118.100	120.321	108.996

2017.4	118.817	121.124	109.397
2018.1	119.593	121.935	110.047
2018.2	120.386	122.780	110.648
	<b>State &amp; Local Consumption Purchases</b>	<b>State &amp; Local Personnel Costs</b>	<b>State &amp; Local Fixed Capital &amp; Other Consumption</b>
	JPGSLC	JPGSLCWSS	JPGSLCKF & JPGSLCO
<b>Qtr</b>	<b>Consumption</b>	<b>Wages &amp; Salaries</b>	<b>Noncompensation</b>
2018.3	121.183	123.628	111.262
2018.4	122.008	124.528	111.821
2019.1	122.863	125.464	112.385
2019.2	123.719	126.416	112.895
2019.3	124.590	127.384	113.418
2019.4	125.444	128.361	113.832

## APPENDIX H

DETAILED INSTRUCTIONS FOR CALCULATION OF BEP FORMULA
--

Appendix G details the actual calculation of the BEP formula by the State Department of Education (DOE) personnel. This information will be of primary interest to DOE personnel, as well as others who calculation of BEP funding. The files referred to, and the links contained therein, reside on the server at the DOE, and are accessible to appropriate staff members.

### Calculating the Basic Education Program (BEP)

The BEP Blue Books details current teacher to pupil funding ratios along with current unit costs for all components in the BEP and is accessible at [www.tn.gov/sbe/bep.html](http://www.tn.gov/sbe/bep.html). Any changes in funding ratios, deletions, additions, or structural changes to the BEP formula must first be approved by the State Board of Education and/or the General Assembly. The Department of Education is authorized annually to update unit costs based on inflation and salaries as specified in the Appropriations Act. Also, each year's fiscal capacity indices and Cost Differential Factors (CDF) may be incorporated into the formula without prior approval.

The BEP file is maintained and calculated by the Office of Local Finance within the Department of Education.

The calculation instructions are divided into four major sections:

- I. The Budget File
- II. Calculating April, May and June Estimates and the July Final File
- III. January Revised BEP File
- IV. BEP Growth Calculation and Payments to LEAs

Exhibit 1 Function of the Tabs in the BEP File

Exhibit 2 Checklist of BEP Component Updates

Exhibit 3 Volunteer School System – sample allocation sheet

## BEP timeline:

Month	Day	Activity
July	01	Year-End ADMs due from LEAs
	05	Final BEP Allocations sent to LEAs
	05	Summary Funding Sheets sent to LEAs
	15	Transportation Report Due from LEAs
August	01	Annual Financial Report expenditure data due from LEAs
	15	Inflation factors due from Department of Finance and Administration
September	15	Budget due to DOE Budget Office
October	15	Textbook data due from Office of Curriculum and Instruction
	15	Testing data (SAT, ACT, Work Keys) from Office of Assessment and Evaluation
	15	1 <sup>st</sup> month ADMs due from LEAs
November	01	Health Insurance premium data from Department of Finance and Administration
	01	Receive <u>RS Means Square Footage Costs</u> publication
	15	2 <sup>nd</sup> month ADMS due from LEAs
December	01	CDF from UT-CBER (\$25,194 contract)
	01	Mid-year health insurance premium increase data due from Department of Finance and Administration
	15	3 <sup>rd</sup> month ADMs due from LEAs
January	01	January revised allocations sent to LEAs
	15	4 <sup>th</sup> month ADMs due from LEAs
	20	Download ADMs for Growth allocations
	30	Get direct certification eligible data from Office of School Nutrition
February	01	1 <sup>st</sup> growth payment to LEAs
	01	Get ELL October headcount from Office of Federal Programs
	15	5 <sup>th</sup> month ADMs due from LEAs (school based and system totals)
March	01	Fiscal capacity index from TACIR (\$50,800 contract)
	15	6 <sup>th</sup> month ADMs due from LEAs
April	05	April Estimated BEP allocations sent to LEAs
	15	7 <sup>th</sup> month ADMs due from LEAs
May	05	May Estimated BEP allocations sent to LEAS
May	15	8 <sup>th</sup> month ADMs due from LEAs
June	05	June Estimated BEP allocations sent to LEAs
	15	75% of final BEP payment sent to LEAs
	15	9 <sup>th</sup> month ADMs due from LEAs

	30	25% of final BEP payment sent to LEAs (adjusted for growth)
	30	Final growth payment sent to LEAs
	30	Vocational and transportation data from Vocational Education

## I Budget File

*NOTE: For purposes of this document, FY17 is the fiscal year for which we are budgeting and 2014-2015 is the fiscal year just completed.*

The BEP file is an Excel workbook comprised of several worksheets. The department starts with the July Final file from the previous fiscal year as the basis for the budget file. The budget file then becomes the basis for the April Estimate. In like manner each succeeding file becomes the basis for the next file. The order of BEP files is as follows: Budget, April Estimate, May Estimate, June Estimate, July Final, January Revised, and Growth. Finance and Administration may request several updates to the Budget file prior to the April Estimate.

File Location: H:\Local Finance\FY16\January\FY16January Revised.

New file saved as: H:\Local Finance\FY17\Budget\FY17budget.

### A. Update Average Daily Membership (ADMs)

Based on total ADMs from the previous three years, the department estimates a percentage that ADMs will grow during the current year. A formula is inserted into the ADMs tab that inflates the regular, vocational and special education ADMs from the previous year by the estimated growth percentage. (This formula is inserted in each grade, system vocational, vocational education total, each special education option, elementary subtotal, middle subtotal, high school subtotal, 11<sup>th</sup> grade, and 12<sup>th</sup> grade Vocational estimate.)

### B. Update 3yr Avg (3 Year Average) Unit Costs:

File Location: H:\Local Finance\FY16\Budget\Unit Cost\2016 Unit Cost.

New file saved as: H:\Local Finance\FY17\Budget\Unit Cost\2017 Unit Cost.

#### 1. Inflation Indices

The department requests the current year's **Price Deflators for Government Purchases** from Finance and Administration. In the Inflation tab, a column is inserted for 2017. Using the Price Deflators, all previous years' quarter 2 indices are replaced, and the quarter 2 indices for **2017** in the Inflation tab are inserted as follows: consumption to combined, wages and salaries to compensation, and non-compensation to non-compensation. All three percentage changes for 2017 are also calculated in the Inflation Tab, current year.



*NOTE: In steps 2-6 below, the **higher** of the current year's unit cost or the inflated 3 year average as the unit cost is used in the BEP budget file. This maintains at least current year's unit costs for these components.*

**2. Equipment, Supplies and Materials, Travel, and Substitutes**

The department uses Discoverer to query expenditures for the fiscal year just completed from the Annual Financial Report to input into the Equipment, Supplies and Materials, Travel, and Substitutes tabs. The oldest year's data is deleted in each tab, and the latest year's data is copied forward and titled as the fiscal year just completed. Amounts from the appropriate query are used to overwrite the amounts in the column for the fiscal year just completed. Listed below are the account codes from the State Chart of Accounts that are used run each query.

**Equipment**

Regular Instruction	Special Education	Vocational Education	Alternative Education	Non-Instructional
71100-722	71200-725	71300-730	71150-790	72320-701
72110-704	72220-790	72230-790	72215-790	72410-701
72120-735				72510-701
72130-790				72610-720
72210-790				72620-701
				72620-717
				72810-701
				72810-709
				72810-790

**Supplies and Materials**

Regular Instruction	Special Education	Vocational Education	Alternative Education	Fee Waivers
71100-429	71200-429	71300-429	71150-429	71100-535
71100-499	71200-499	71300-499	71150-499	71150-535
72130-499	72220-499	72230-499	72215-499	71200-535
72210-499				71300-535

**Travel**

Regular Instruction		Special Education	Vocational Education	Alternative Education
72130-355	72130-524	72220-355	72230-355	72215-355
72210-355	72210-524	72220-524	72230-524	72215-524

72110-355	72110-524
72120-355	72120-524
72410-355	72410-524

**Substitute Teachers**

71100-195	71150-195	71200-195	71300-195	72210-195
71100-198	71150-198	71200-198	71300-198	72210-198
71100-369	71150-369	71200-369	71300-369	72210-369
71100-370	71150-370	71200-370	71300-370	72210-370

**3. 3 yr avg tab**

The 3 yr avg tab is used to calculate a three year average per pupil expenditure for Regular Instructional Equipment, Vocational Equipment, Special Education Equipment, Non-Instructional Equipment, Regular Instruction Materials and Supplies, Vocational Education Materials and Supplies, Special Education Materials and Supplies, Regular Travel, Vocational Education Travel, Special Education Travel, Academic Exit Exams, and Vocational Exit Exams. Each line item pulls from the appropriate tab within the workbook.

Regular Instruction Equipment is the sum of Regular Instruction Equipment and Alternative Instruction Equipment. Regular Materials and Supplies is the sum of Regular and Alternative Materials and Supplies, and Regular and Alternative Fee Waivers. Vocational Education Materials and Supplies is the sum of Vocational Materials and Supplies and Vocational Fee Waivers. Special Education Materials and Supplies is the sum of Special Education Materials and Special Education Fee Waivers.

In the 3 yr avg tab, 2 columns are deleted—the oldest year of expenditures and the oldest year of per pupil expenditures. Then two columns are inserted, one for the latest year of expenditures and another for the latest year of per pupil expenditures. Formulas are pasted into the latest year of expenditures column that pull from the correct tab and correct year within that tab. Formulas that calculate the per pupil expenditure for this year are entered in the latest year of per pupil expenditures. In this column, the Regular, Vocational, and Special Education ADMs for the school year just completed are entered. Finally, the 3 YR AVG column is verified to be the average of the per pupil expenditure for the previous three years.

In cell J11 (2015-16), the department changes the formula to include the non-compensation percentage inflation for the current fiscal year (2015-2016) from the inflation tab. In cell K11 (2016-17), the department changes the formula to include the non-compensation percentage inflation for the upcoming fiscal year (2016-17). Column J inflates the three year average to the current fiscal year. Column K then inflates the average from column J to the upcoming fiscal year. Column L then

rounds the amount from column K to the nearest \$.25. In column M, the department enters the unit costs used in the current year's BEP file.

#### **4. Substitutes**

The department inserts the previous year's substitute expenditures into the Substitutes tab. It then calculates the three year average expenditures per pupil. This amount is inflated up two fiscal years by multiplying it by the compensation inflation index, and rounded to the nearest \$.25. Finally the department records the previous year's substitute unit cost.

#### **5. Textbooks**

The department request BEP sales forecast from the Office of Curriculum and Instruction, Textbook Services. For the fiscal year just completed, the actual costs of textbooks are input into the Books tab. The three year average for textbooks calculates in the 3 yr avg tab. Finally, the department enters the unit cost used in the current year's BEP into Column M.

#### **6. Academic and Vocational Exit Exams**

In the ACT tab, the department enters the current year cost of the ACT, SAT, and Work Key exams, as well as the current year's number of purchases of ACT and SAT to arrive at the weighted average cost of SAT and ACT. Each year's average cost is pulled into the **3 yr avg** tab, which inflates the three year average forward two years. In Column M on 3 yr avg tab, enter the unit costs used in the current year's BEP file are entered in Column M on 3 yr avg tab.

#### **7. Alternative Schools, Duty Free Lunch, Maintenance and Operations, At-Risk**

In the other costs tab, the department inflates up the previous year's unit cost for Alternative Schools per Regular ADM, Alternative Schools per 7-12 and Vocational ADM, Duty Free Lunch, Maintenance and Operations, and At Risk unit Cost by multiplying those times the combined inflationary rate for the upcoming fiscal year.

#### **8. Enter new Unit Costs into BEP budget spreadsheet.**

The department Inputs the unit costs calculated in steps 2-7 above into the appropriate row of Column B of the Assumptions tab in the BEP budget file.

### **C. Update Additional Unit Costs**

The department enters additional unit costs from appropriate sources directly into Column B of the Assumptions tab of the BEP budget file.

### **1. State Funded Percentages**

The state funded percentages of 70% for instructional salaries, 70% for instructional benefits, 75% for classroom, and 50% for non-classroom change only if legislation is passed to change the state funding percentages for these categories.

### **2. FICA and TCRS rates**

The current FICA rate of 7.65% changes only if the combined employer's tax rate for social security and Medicare is changed by Congress. TCRS provides the department with both the certified and non-certified retirement rates.

### **3. Health Insurance Premium**

The average teacher group health insurance annual premium as determined by F&A is entered by the department four times into: 1) Instructional Insurance, 2) Other Classroom Insurance, 3) Non Classroom Insurance, and 4) Superintendent and Technology Coordinator Insurance. The resulting premium amounts arrived at in Column D are used in the formula.

#### ***Explanation of Pre-determined factors (Column C of the Assumptions tab)***

To determine the factor used to calculate the instructional insurance component, the minimum (45%) of the average premium that the state pays is divided by 70%, because the state pays 70% of instructional component costs. This factor (.64) in Column C is then multiplied by the average premium to arrive at the premium in Column D. 45% of the total annual average premium is derived when the premium amount from column D is multiplied by the equalized state percentage for instructional components of 70%.

Factors of (.60), (.60), and (.90) respectively, are multiplied times the average premium in Column B to arrive at the health insurance premium used in the formula for Classroom, Non-Classroom, and Superintendent/Technology Coordinators. These factors ensure that on average the state pays 45% of the average premium for educational assistants, superintendents, and technology coordinators and 30% of the average premium for the non-classroom positions of system secretaries, school secretaries, and custodians.

### **4. Percent Personnel**

The formula allocates 45% of Transportation costs and 60% of Maintenance and Operation costs to personnel in the non-classroom category. These percentages do not change.

### **5. School Building Construction**

This section includes the factors necessary to calculate the capital outlay funds generated in the non-classroom category. Only the cost per square foot for elementary, middle, and high schools are changed annually.

The department calculates the costs per square foot using the following spreadsheet:

H:/Local Finance/FY17/budget/unit costs/3yr avg sq. ft. cost.

In this spreadsheet, the department inserts the current square footage costs by type of school and related architect costs from the RS Means Square Footage Costs publication. In addition, the current year's city cost indices for Tennessee are entered into the spreadsheet. The three year average construction costs net of the three year average architect's fees are multiplied by the three year average Tennessee city cost index. These subtotals are then inflated up one year by multiplying those times the non-compensation inflation factor for the budget year. The result is rounded to the nearest dollar. The department inputs the resulting square footage costs by school type into Column B of the Assumptions tab of the BEP budget file. The Capital tab calculates the total capital outlay generated for each system.

## **6. Salaries**

In Column B of the Assumptions tab, the department inputs the salary unit cost used in the current year's BEP file for: Teacher Certificated, Other Certificated, Nurses, Teacher Aides, School Secretaries, System Secretaries, Custodians, and Superintendents.

These salaries are multiplied by a raise factor in Column C. For Teacher Certificated, Other Certificated, and Nurses, the department inputs a factor of "1" plus the percent state raise (as determined by F&A) (For example a factor of 1.025 indicates a raise of 2.5%.)

In Column C, for the remaining salaries, the department inputs a factor of "1" plus the same percentage state raise from above. The resulting salaries in Column D are used in the formula.

## **D. Update Transportation Allocations**

### **1. Transportation**

File Location: H:\Local Finance\FY16\budget\unit cost\2014trans.xls

New file saved as: H:\Local Finance\FY17\budget\unit cost\2015trans.xls.

The department Inserts the total transportation expenditures by district for the fiscal year just completed (2015) into the Expenditures tab. The oldest year's expenditure data is deleted. The previous two years' expenditures are inflated up to (2015) using the appropriate inflationary factors calculated in the Assumptions tab of the BEP budget file. (Each year's transportation inflation index is the sum of 45% of that year's compensation index and 55% of that year's non-compensation index.) The three year average expenditures are calculated in (2015) dollars and inflated up two years (2016 and 2017) using the appropriate fiscal years' transportation inflation indices.

The department pulls ADT (average daily students transported), Special Education ADT, and daily one-way miles driven for the fiscal year just completed (2015) from LEAs' Transportation reports. These counts along with the previous year's ADM are inserted into the Counts tab. The oldest year's data is deleted. This tab then calculates the three year average ADT, Special Education ADT, one-way miles driven, and ADM.

For each district providing transportation, the Regression tab calculates the dependent variable of transportation cost per ADM. It also calculates the independent variables of ADT per ADM, Miles per ADM, and Special Education ADT per ADM. A fourth independent variable of type indicates whether or not the district is a county or non-county district (a value of 1 is for a county district and a value of 0 is for a non-county district).

Given these independent variables and the dependent variable, the department uses the multi-variable linear regression tool (*named Regression*) in Excel to calculate coefficients for each variable. The new coefficients are input into the Regression tab. Based on these coefficients, this tab calculates a Transportation Cost per ADM for each district. The Results tab then multiplies the Transportation Cost per ADM by each district's ADM to arrive at a Predicted Cost (of Transportation). The calculated Predicted Costs are inserted into the Total Transportation column in the Non-classroom tab of the BEP budget file.

## **2. Vocational Center Transportation**

File Location: H:\Local Finance\FY16\budget\unit cost\Vocctr16.xls

New file saved as: H:\Local Finance\FY17\budget\unit cost\Vocctr17.xls.

In the Vocctr tab, the department links each district to the FTE ADM times one way mileage total from the Vocational transportation report obtained from Vocational Education. In the Unit Cost tab, the previous year's unit cost is inflated up one year using the budget year's non-compensation index. The Vocctr tab then multiplies each district's FTE ADM one-way mileage times this unit cost to arrive at each district's allocation. The department pastes these allocations from the Vocctr tab into the Vocational Center Transportation column in the Classroom tab of the BEP budget file.

## **E. Finishing the Initial Budget File**

Once the department has updated ADMs, transportation allocations, vocational transportation allocations, and all unit costs for which data is available, five final steps need to be completed before the budget file is submitted to F&A.

*NOTE: In the current year, each system should receive the greater of 1) the total state BEP funds it generates or 2) minimum funding*

## **1. Update Minimum Funding**

For FY17, minimum funding is equal to 2015-16 appropriations. Also in FY17, the minimum amount of funding for systems previously on stability is adjusted to reflect decreases in enrollment that occurred in 2014-15. Beginning in FY18, the department will recalculate the FY16 BEP file using ADM decreases that have occurred since 2015-16.

## **2. Update values for Mandatory Increase**

The values in Cells C3:C6 in the Insurance tab are updated to include the applicable health insurance premium amounts from the previous year's July Final file Assumptions tab.

## **3. Run the Mandatory Increase Macro**

*NOTE: Macros must be activated before this step can be completed.*

For this step, the *Calculate the Mandatory Increase on Stability* macro is used. The Assumptions tab contains the macro button. This macro requires the input of the certificated health insurance premium from the previous year and current year, certificated raise, and previous year and current year certificated and non-certificated TCRS rates. Column AJ in the BEPFINAL tab then calculates the mandatory increase amount for systems on stability.

## **4. Total BEP Funding**

The total BEP funding each district is projected to receive is reflected in Column V of the BEPFINAL tab. The values in Column X are the greater of 1) the total state BEP funds that a system generates or 2) minimum funding.

## **5. Reconciling**

After the BEP is calculated, a fellow staff member in the Office of Local Finance checks the calculation, beginning with the previous year's July Final file and updating it with all of the above changes. Each time the BEP file is calculated, the various inputs are sent to the other staff member to include in his/her version of the BEP file. If these inputs are loaded correctly in the staff member's BEP file, the total allocations in Column V of both BEP files should agree. If the totals do not agree, the discrepancies are investigated and necessary corrections made in either file until the total allocations in each file agree.

## **II Calculating April, May, and June Estimates and July Final file**

Beginning in April, BEP estimates are sent to the LEAs. The budget file becomes the basis for the April Estimate file. The April Estimate is the basis for the May Estimate. The May

Estimate is the basis for the June Estimate. The June Estimate is the basis for the July Final. Each of these files is compiled in the corresponding month.

## **A. Update Additional Counts**

### **1. At Risk Counts**

The department obtains the number of direct certified eligible children (At Risk). The At Risk counts are inserted into the At Risk tab of the BEP file.

### **2. ELL Counts**

The department obtains the number of ELL (English Language Learners) children for the previous year from the Office of Federal Programs. The ELL numbers are inserted into the ELL column of the ADMs tab of the BEP file.

## **B. Update CDF and Fiscal Capacity**

### **1. CDF (Cost Differential Factor)**

In 2016 the Tennessee General Assembly passed the BEP Enhancement Act (Public Chapter 1020). As a result, the CDF was eliminated from the BEP formula. However, because the BEP Enhancement Act has not been fully phased in, LEAs with CDF adjustments receive 25% of their CDF adjustment.

The department obtains current CDF factors from the University of Tennessee, Center for Business and Economic Research (CBER). A new column in the CDFs tab of the BEP budget file is inserted, and the current CDF factors are copied into that column. The current indices are multiplied by 25%. Column C is linked to this 25% CDF column. Column C is linked to salary and benefit calculations in the instructional, classroom, and non-classroom tabs of the BEP file.

### **2. How Fiscal Capacity is used in the BEP Formula**

On average, the state funds 70, 70, 75, and 50 percent of the total BEP generated instructional salaries, instructional benefits, classroom, and non-classroom categories, respectively. However, each district's state and local share of these categories varies based on its fiscal capacity. Counties with high fiscal capacity are required to fund a greater portion of the total BEP generated dollars with local funds.

Each county's index is the proportion of its fiscal capacity to total statewide fiscal capacity. The indices are expressed as a percentage and all 95 county indices total 100%.

Each district's fiscal capacity index is a 50/50 blend of its county's TACIR index and CBER index. The blended indices feed into the Equalizing tab of the BEP file. In the Equalizing tab, the total BEP generated dollars for the instructional salaries, instructional benefits, classroom, and non-classroom categories are multiplied respectively by the average state funding percentages of 70, 70, 75, and 50. The total state funds for each category are subtracted from the total BEP generated funds for each category to arrive at the total local funded amounts of each category. The total local funded amount of each category is multiplied by each county's blended fiscal capacity index to determine the amount of each



category that that county will fund. Based on ADMs, multiple districts within the same county are allocated a proportionate share of their county's local funded amount.

### **3. TACIR (Tennessee Advisory Commission on Intergovernmental Relations) Fiscal Capacity Index**

The department obtains the current fiscal capacity indices from TACIR. A new column is inserted in the TACIR tab of the BEP file. The current indices are pasted into the new column. Column C is updated to reflect the current fiscal capacity indices. Column C is linked to the TACIR-FOX Mix tab of the BEP file.

### **4. CBER (Fox) Fiscal Capacity Index**

The CBER fiscal capacity index is also referred to as the Fox fiscal capacity index, because it was developed by UT economist, Dr. Bill Fox.

The department obtains the current fiscal capacity indices from the University of Tennessee, Center for Business and Economic Research (CBER). A new column is inserted into the FOX tab of the BEP file. The current indices are pasted into the new column. Column C is updated to reflect the current fiscal capacity indices. Column C is linked to the TACIR-FOX Mix tab of the BEP file.

### **5. TACIR-FOX Mix tab**

In the TACIR-FOX Mix tab, the Prior Scenario column is linked to the previous year's fiscal capacity indices. The Current Scenario column calculates the blended fiscal capacity index. This calculation limits the change that can occur in the index from the previous year to 30%. A column for the current year's fiscal capacity indices is inserted. The indices from the Current Scenario column are pasted into the column that was inserted. Column C reflects the current blended fiscal capacity indices and links to the Equalizing tab in the BEP file.

## **C. Update ADMs and School Based Positions**

### **1. Update ADMs**

LEAs report the number of students identified and served in special education (I&S) and regular and vocational ADMs by funding period or month via an upload into the Education Information System (EIS). Each funding period or month consists of twenty instructional days. ADMs and I&S from the first reporting period are due on October 15. ADMs and I&S from the second period are due on November 15. Each successive period's ADMs and I&S are due 30 days from the prior submission.

Following each month's reporting deadline, Local Finance staff members query EIS and aggregate the ADMs and I&S into a spreadsheet named *XXADMsbudget*, where *XX* represents the current fiscal year and *budget* represents the BEP file being compiled. Each ADMs spreadsheet is located in *H:\Common\FNA\Finance\SCHFINAN\BEP\ADM\SY20XX\budget*, where *XX* represents the current fiscal year and *budget* represents the BEP file being compiled.

BEP funding is based on weighted average ADMs for periods 2, 3, 6, and 7. Period 2 is weighted 12.5%. Period 3 is weighted 17.5%. Period 6 and period 7 are weighted 35% each. As ADMs and I&S are collected throughout the year, the most recent period downloaded substitutes for any of the weighted periods that have not been submitted.

In the BEP file, the department edits the links to the previous ADMs spreadsheet to the appropriate month's ADMs file. The ADMs and I&S link to the ADMs tab of the BEP file. When calculating the estimates for LEAs, the estimated growth factor from the budget file is not used. Instead, current year ADMs as available are used.

## **2. Update School Based Positions**

LEAs report ADMs by school for the fifth funding period or month. Local Finance staff members compile these ADMs by school into a spreadsheet named *20XX School Based Positions*, where *XX* represents the current fiscal year. This spreadsheet calculates the number of librarians, library assistants, principals, assistant principals, and school secretaries that each LEA earns based on school staffing ratios detailed in the BEP Blue Book. Each School Based Positions spreadsheet is located in *H:\Common\FNA\Finance\SCHFINAN\BEP\ADM\SY20XX\budget*, where *XX* represents the current fiscal year and *budget* represents the BEP file being compiled.

In the BEP file, the department edits the links to the previous School Based Positions spreadsheet to the appropriate month's School Based Positions file. The number of school based positions link to the Positions tab in the BEP file.

## **3. Update Charter Schools Capital Calculation**

In the Charter Schools tab, the list of current charter schools is updated (including those opening during the upcoming school year.) Each charter school's enrollment is updated by grade to reflect each school's year end enrollment. Projected enrollment is used for new charter schools. The non-classroom percentage for each LEA is changed to reflect the current year's value. The calculations are reviewed to ensure that each charter school will receive the proper amount of capital outlay funds based on its enrollment. One-tenth of these charter school capital outlay amounts will be withheld from the host LEA and paid monthly directly to the respective charter school by the department.

## **4. Update Achievement School District Allocation**

In the ASD tab, the list of current schools run by the Achievement School District is updated (including those opening during the upcoming school year.) Each ASD school's enrollment is updated by school to reflect the projected enrollment for the coming year. Actual local revenues from the Maintenance of Effort Test are input by participating LEA. Once budgets are finalized in October after the July Final has been completed, the actual local revenues are replaced by budgeted local revenues for the coming year. The department calculates the per pupil amount to withhold from the respective LEA and totaled to determine the allocation for the Achievement School District.

## **D. Finishing the current BEP file and July Final**

Once the CDF, fiscal capacity, and ADMs and I&S have been updated, the mandatory increase macro is run (as detailed above.) Again, total BEP allocations for each LEA are reflected in Column X of the BEP Final tab. (ADMs and I&S may be updated multiple times as ADMs are downloaded. As a result, multiple BEP files may be created and compiled throughout the year until the July Final file is compiled.)

The department emails each LEA their How To and Allocation sheets as each month's BEP file (April, May, June, and July) is completed.

In early July, the department downloads ADMs and I&S and verifies the data for accuracy. After reviewing and making any necessary corrections, these ADMs and I&S are linked into the July Final BEP file. Finally the mandatory increase macro is run. Total Allocations from the BEP Final tab are the amounts LEAs will be funded in the upcoming fiscal year. One-tenth of this final allocation is paid to the LEAs starting on August 15 and on the fifteenth day of each succeeding month through April 15, and the remainder due each LEA shall be paid in June. The department submits this file to F&A.

### **III January Revised BEP**

If there is a health insurance premium increase in January, the department updates the health insurance premiums in the Assumptions tab of the previously completed July Final BEP file using the premium amount from F&A. (The FY17 July Final file is updated to become the FY17 January Revised file.) The mandatory increase macro is rerun. The difference between each LEA's January Revised BEP allocation and allocation from the July Final file is divided by five and added to each LEA's original monthly allocation. These revised monthly allocations are paid to the LEAs starting January 15 and on the fifteenth day of each succeeding month through April 15. The final payment will be paid to the LEAs in June.

## IV BEP Growth Calculation and Payments to LEAs

TCA 49-3-351(d) states “If the LEA's current year ADM and I&S, taken as a whole, exceeds by more than two percent (2%) the prior year's ADM and I&S, taken as a whole, then that LEA's allocation of state funds shall be calculated on the basis of the current year's ADM and I&S less the first two percent (2%) by which it exceeds the prior year's ADM and I&S. If the funds appropriated for that purpose are insufficient to provide for the LEA's increased allocations, the commissioner shall apply a pro rata reduction to the increased amount each LEA is otherwise eligible to receive. If the funds appropriated for that purpose exceed the amount required to fund growth in excess of two percent (2%), then that percentage may be lowered to a percentage that may ensure that all funds appropriated are allocated and disbursed to LEAs. An estimated fifty percent (50%) of the appropriated amount shall be distributed to such an eligible LEA by February 1, with the remainder, subject to any adjustment of numbers by the department of education that may affect the remaining amount, to be distributed by the following June 30.”

Each year in January, BEP growth funding is calculated by using current ADMs and I&S in the previous year's July Final file. For example, in January 2017, ADMs and I&S from the 2016-2017 school year would be used in the FY17 July Final file. First the current year's ADMs and I&S are linked into the July Final file and saved as FY17 Growth. For each LEA, the department calculates the variance between the BEP allocation from Column M of the BEP Final tab in the Growth file and the BEP allocation from Column M of the BEP Final tab in the July Final file. All positive variances as a result of this calculation added together represent 100% growth funding. If this aggregate amount does not exceed the appropriation for BEP growth funding, then those LEAs with growth would receive half their growth amount on February 1.

However, if 100% growth funding exceeds the appropriation for growth, then the department recalculates the Growth file using current year's ADM and I&S less the first two percent (2%) by which it exceeds the prior year's ADM and I&S. The department again calculates each LEAs' variance between the BEP allocation in Column M of the BEP Final tab in the Growth file and the BEP allocation in Column M of the BEP Final tab in the July Final tab. Should the sum of all positive variances exceed the appropriation of growth, the department recalculates the Growth file using higher percentages of ADM growth until the calculated growth funding amount is equal to the appropriation amount. Likewise, should the 2% growth funding amount be less than the appropriation for growth, the department recalculates the Growth file using lesser percentages of ADM growth until the calculated growth funding amount is equal to the appropriation amount. After arriving at the calculated growth funding amount, one-half of the estimated growth is distributed to the LEAs on February 1.

This same process is repeated in June to calculate the final growth funding for LEAs. On June 30, LEAs are paid any remaining growth funds that were not paid to them in February. If an LEA were paid estimated growth funds in February and as result of the June calculation it generated no growth funds, the amount of the February growth payment is withheld from that LEAs June 30 BEP payment.

The June growth calculation completes a full year's cycle of BEP calculations.

## **Exhibit 1: Function of tabs in the BEP file**

**ADMs**—contains regular and vocational ADMs and Special Education I&S, along with student counts in Elementary, Middle, and High Schools, also details ELL students and number of students taking ACT in 11<sup>th</sup> grade and vocational students taking Work Keys exam in 12<sup>th</sup> grade.

**ADM history**—each time ADMs are updated, a macro can be run to paste the ADM values into this tab

**Assumptions**—all unit costs and funding ratios are input on this tab

**At Risk**—contains the count of students eligible for direct certification pursuant to 42 U.S.C. §§1751-1769

**BEP Final**—details the amount of state funding generated amounts in instruction, classroom, and non-classroom categories, also adds any stability, baseline, and mandatory increase amounts to arrive at the total BEP allocation for each LEA

**BEP Allocation**—a printable detail of an individual LEA's state and local funding in each category and in total

**CDFs**—contains the Cost Differential Factors for each LEA

**Classroom**—calculates the funding amounts for classroom components

**Equalizing**—using the fiscal capacity indices, allocates the local funded amounts by category to each LEA

**Equipment**—calculates equipment dollars earned in classroom and non-classroom categories

**FOX**—contains the CBER fiscal capacity indices for each LEA

**How to**—a printable detail of calculations to arrive at an individual LEA's positions and dollars earned in each category

**Instructional**—calculates the funding amounts for instructional positions and benefits

**Insurance**—details the health insurance premiums earned in each category

**Non-Classroom**—calculates the funding amounts for non-classroom components

**Positions**—based on funding ratios, calculates all positions earned

**TACIR**—contains the TACIR fiscal capacity indices

**TACIR-FOX mix**—calculates fiscal capacity indices by averaging TACIR and CBER indices

**Exhibit 2: Checklist of BEP component updates**

<b>Unit Costs and Other Costs:</b>
Inflation Indices
Equipment (Instructional, Vocational, Special Ed, Non-Instructional)
Materials and Supplies (Regular, Vocational, Special Ed)
Travel (Regular, Vocational, Special Ed)
Exit Exams (Academic, Vocational)
Substitutes
Textbooks
Alternative Schools
Duty-Free Lunch
Maintenance and Operations per pupil
Certified and Non-Certified Salaries
Certified and Non-Certified TCRS rates
Health Insurance Premiums
Construction costs/square foot (elementary, middle, and high)
Regular Transportation allocations
Vocational Transportation allocations
<b>Update Student Counts:</b>
ADMs (Regular , Vocational)
Special Ed Identified and Served
School based positions
ELL
At Risk
Charter School enrollment
<b>Update other factors:</b>
Minimum funding values
CDF
TACIR fiscal capacity indices
FOX fiscal capacity indices





# EXHIBIT 3: VOLUNTEER COUNTY 2016-2017 BEP ALLOCATION

## Volunteer County

### Instructional Salary Components

Position Classification	ADMs		Ratio		Positions	Notes/Minimums/Maximums/Totals
<b>Instructional</b>						
<b>Teachers</b>						
<b>Regular</b>						
K-3	886	+	20.0	=	44.30	
4-6	672	+	25.0	=	26.89	
7-9	667	+	25.0	=	26.68	ratio adjusted for duty-free period (one of six)
10-12	524	+	22.08	=	23.73	ratio adjusted for duty-free period (one of six)
<b>Career Technical</b>	242	+	16.67	=	14.54	ratio adjusted for duty-free period (one of six)
<b>Special Education</b>						
Option 1	76	+	91.0	=	0.84	FTE voc. ed. served
Option 2	257	+	58.5	=	4.39	
Option 3	117	+	58.5	=	2.00	
Option 4	29	+	16.5	=	1.74	
Option 5	36	+	16.5	=	2.21	
Option 6	1	+	16.5	=	0.06	
Option 7	30	+	8.5	=	3.58	
Option 8	11	+	8.5	=	1.35	
Option 9	0	+	8.5	=	0.00	
Option 10	2	+	8.5	=	0.18	
<b>ESL</b>	17	+	25	=	0.68	
<b>Translators</b>	17	+	250	=	0.07	
<b>Art</b>						
K-6	1,558	+	525	=	2.97	
<b>Music</b>						
K-6	1,558	+	525	=	2.97	
<b>Physical Education</b>						
K-4	1,105	+	350	=	3.16	
5-6	453	+	265	=	1.71	
<b>Librarians</b>						
K-8	(see Blue Book)				6.00	
9-12	(see Blue Book)				2.50	
<b>School Counselors</b>						
K-6	1,558	+	500	=	3.12	
7-12 + Voc. Ed.	1,433	+	350	=	4.10	min = one per county, split based on share of total ADM FTE voc. ed. served at home system
<b>Supervisors</b>						
<b>Sys-wide Instr.</b>	(see Blue Book)				4.03	
<b>Sp. Ed.</b>	560	+	750	=	0.75	
<b>Vocational</b>	242	+	1,000	=	0.24	
<b>Sp. Ed. Assess.</b>	560	+	600	=	0.93	
<b>Principals</b>						
(see Blue Book)					6.50	
<b>Asst. Principals</b>						
<b>Elementary (k-8)</b>						
see Blue Book					0.00	
<b>Secondary (9-12)</b>						
see Blue Book					0.50	
<b>Other Professional</b>						
<b>Social Workers</b>	use share				1.52	min = one per county, split based on share of total ADM
<b>Psychologists</b>	use share				1.21	min = one per county, split based on share of total ADM
<b>Total All Professional Positions</b>						
					195.45	
System BEP Instructional Salary			x	\$	44,430.00	
County CDF			x		100.00%	
<b>Total Salary Allocation</b>					<u>\$8,683,747</u>	-----> \$8,683,747 ----> <b>\$8,683,747</b>
<b>State Percent for Instructional Salary Components</b>						x 88.94%
<b>Total State Instructional Salary Allocation</b>						<b>\$7,723,401</b>

### Instructional Benefits Components

<b>Total Salary Allocation</b>					\$8,683,747	----->	\$8,683,747	
Combined Social Security & Retirement Rates			x		<u>16.69%</u>	----->		
<b>Total Social Security &amp; Retirement Allocation</b>					\$1,449,317	----->	1,449,317	
Total All Professional Positions					195.45			
Insurance Premium Amount			x	\$	<u>5,849.22</u>	----->		
<b>Total Insurance Premium Allocation</b>					\$1,143,218	----->	1,143,218	
<b>Total Instructional Benefits Allocation</b>							\$2,592,535 ---->	<b>\$2,592,535</b>
<b>State Percent for Instructional Benefit Components</b>							x	88.94%
<b>Total State Instructional Benefits Allocation</b>								<b>\$2,305,824</b>

**Classroom Components**

<b>Nurses</b>	3,032	+	3,000	=	1.01	min = one per system	
Salary Allocation					44,430.00		
<b>Total Salary Allocation for Nurses</b>					\$44,901.13	----->	\$44,901
<b>Assistants</b>							
<b>Instructional</b>							
K-6	1,558	+	75	=	20.78		
<b>Special Education</b>							
Options 5,7,8	78	+	60	=	1.31		
<b>Library</b>							
see Blue Book					0.50		
<b>Total All Assistant Positions</b>					22.58		
Salary Allocation for Assistants				x	\$22,100.00		
<b>Total Salary Allocation for Assistants</b>					\$499,106	----->	499,106
<b>Total Salary Allocation for Nurses and Assistants</b>					\$544,007	<-----	\$544,007
County CDF				x	100.00%		
<b>Total Salary Allocation for Nurses and Asst. w/CDF</b>					\$544,007	----->	\$544,007
Combined Social Security & Retirement Rates				x	16.18%		
<b>Total Social Security &amp; Retirement Allocation</b>					\$88,020	----->	88,020
Total All Non-professional Education Positions					23.59		
Insurance Premium Amount				x	\$ 5,459.27		
<b>Total Ins. Allocation for Nurses and Assistants</b>					\$128,809	----->	128,809
<b>Total Allocation for Nurses and Assistants</b>							\$760,837 ----> 760,837
<b>Other Classroom Allocations</b>							
<b>At Risk</b>							
Total Eligibles	1,239	x	\$ 842.57	=	\$1,043,939.13		
<b>Substitute Teachers</b>							
Total ADM	3,032	x	\$ 61.75	=	\$187,214.37		
<b>Alternative Schools</b>							
Total ADM	3,032	x	\$ 3.75	=	11,369.29		
7-12 + CTE	1,433	x	\$ 31.75	=	45,510.67	FTE voc. ed. at home system	
<b>Duty-free Lunch</b>							
Total ADM	3,032	x	\$ 11.75	=	35,623.79		
<b>Textbooks</b>							
Total ADM	3,032	x	\$ 76.75	=	232,691.55		
<b>Classroom Materials &amp; Supplies</b>							
reg. k-12 + Opt. 7-9	2,790	x	\$ 78.75	=	219,674.34		
Career Technical	242	x	\$ 157.75	=	38,222.23	FTE voc. ed. served	
Sp. Ed.	560	x	\$ 36.50	=	20,445.32		
<b>Instructional Equipment</b>							
reg. k-12 + Opt. 7-9	2,790	x	\$ 64.25	=	179,226.37		
Career Technical	242	x	\$ 99.75	=	24,169.05	FTE voc. ed. served	
Sp. Ed.	560	x	\$ 13.25	=	7,421.93		
<b>Classroom-related Travel</b>							
reg. k-12 + Opt. 7-9	2,790	x	\$ 14.50	=	40,447.97		
Career Technical	242	x	\$ 50.50	=	12,235.96	FTE voc. ed. served	
Sp. Ed.	560	x	\$ 17.25	=	9,662.51		
<b>Exit Exams</b>							
Academic grade 11	249	x	\$ 39.50	=	9,854.63		
Career Technical grade 12	61	x	\$ 18.00	=	1,090.33		
<b>Career Technical Education Center Transportation</b>							
see Work Sheet #1					105,340.72		
<b>Technology</b>							
Total ADM	3,032	x	\$ 41.61	=	126,162.75		
<b>Total Other Allocations</b>					\$ 2,350,302.92	----->	2,350,303
<b>Total All Classroom Allocations</b>							\$3,111,139
<b>State Percent for Classroom Components</b>						x	91.25%
<b>Total State Classroom Allocation</b>							\$2,838,876

**Non-classroom Components**

**Position Classification**

**Superintendent**

				1.00	max = one per county, split based on share of total ADM	
Salary Allocation			x	\$106,400		
County CDF			x	<u>100.00%</u>		
<b>Total Salary Allocation</b>				\$106,400	----->	\$106,400
Combined Social Security & Retirement Rates			x	<u>16.69%</u>		
<b>Total Social Security &amp; Retirement Allocation</b>				\$17,758	----->	17,758

**Technology Coord**

	3,032	+	6,400		1.47	
Salary Allocation					\$44,430	
County CDF					<u>100.00%</u>	
<b>Total Salary Allocation</b>					\$65,477	-----> \$65,477
Combined Social Security & Retirement Rates					<u>16.69%</u>	
<b>Total Social Security &amp; Retirement Allocation</b>					\$10,928	-----> 10,928

Total Superintendent and Technology Coord Positions					2.47	
Insurance Premium Amount			x	<u>\$ 8,188.91</u>		
<b>Total Ins. Allocation for Supt and Tech Coord.</b>					\$20,257	-----> <u>20,257</u>

**System Secretarial Support**

(see Blue Book)					4.03	
Salary Allocation			x	\$39,800		
County CDF			x	<u>100.00%</u>		
<b>Total Salary Allocation</b>				\$160,466	----->	160,466
Combined Social Security & Retirement Rates			x	<u>16.18%</u>		
<b>Total Social Security &amp; Retirement Allocation</b>				\$25,963	----->	25,963

**School Secretaries**

(see Blue Book)					9.00	
Salary Allocation			x	\$31,100		
County CDF			x	<u>100.00%</u>		
<b>Total Salary Allocation</b>				\$279,900	----->	279,900
Combined Social Security & Retirement Rates			x	<u>16.18%</u>		
<b>Total Social Security &amp; Retirement Allocation</b>				\$45,288	----->	45,288

**Custodians**

calculated sq. footage	341,841.33	+	22,376	=	15.28	from Work Sheet #2
Salary Allocation				x	\$23,800	
County CDF				x	<u>100.00%</u>	
<b>Total Salary Allocation</b>					\$363,596	-----> 363,596
Combined Social Security & Retirement Rates				x	<u>16.18%</u>	
<b>Total Social Security &amp; Retirement Allocation</b>					\$58,830	-----> 58,830

Total Sys. and Sch. Support Positions					28.31	
Insurance Premium Amount			x	<u>\$ 5,459.27</u>		
<b>Total Ins. Allocation for Sys. and Sch. Support</b>					\$154,546	-----> <u>154,546</u>

<b>Total Allocation for Non-classroom Positions</b>						\$1,309,410 ----> \$1,309,410
---	--	--	--	--	--	-------------------------------

**Non-classroom Components (Cont'd)**

**Other Non-classroom Allocations**

**Non-instructional Equipment**

Total ADM 3,032 x \$ 20.75 = \$62,910.09 -----> 62,910

**Pupil Transportation**

1,690,457

**Maintenance & Operations**

calculated sq. footage 341,841.33 x \$ 3.27 = 1,117,821.16 from Work Sheet #2

**CDF & Benefits for Transportation and M&O Personnel**

45% of Pupil Transportation \$ 760,705.69

60% of M&O 670,692.70

Total Allocation for Trans & M&O Personnel Salaries \$ 1,431,398.39 -----> 1,431,398

County CDF Adjustment x 0.00%

**CDF Allocation for Trans & M&O Salaries**

\$ - -----> 0

Total Allocation for Trans & M&O Salaries w/CDF \$ 1,431,398.39

Combined Social Security & Retirement Rates x 16.18%

**Ret/FICA Allocation for Trans & M&O Personnel**

\$ 231,600.26 -----> 231,600

Total Allocation for Trans & M&O Salaries w/CDF \$ 1,431,398.39

Non-classroom Ins. Prem. % of Salary x 18.91% divide ins. prem. allocations by salary allocations

**Insurance Allocation for Trans & M&O Personnel**

\$ 270,662.25 -----> 270,662

**Other Transportation and M&O**

55% of Pupil Transportation \$ 929,751.40

40% of M&O 447,128.46

Total Allocation for Other Trans & M&O \$ 1,376,879.86 -----> 1,376,880

**Capital Outlay**

(see Work Sheet #2) 2,418,749.01 -----> 2,418,749

**Total Other Non-classroom Allocations**

\$5,792,200 ----> 5,792,200

**Total All Non-classroom Allocations**

\$7,101,610

**State Percent for Non-classroom Components**

x 84.72%

**Total State Non-classroom Allocation**

**\$6,016,162**

**Total State Allocation**

**\$18,884,262**

**Work Sheet #1: Career Technical Education Center Transportation**

FTEADM transported 489

Average one-way miles to center x 7

Unit Cost x \$ 30.85

**Total Career Technical Education Center Transportation**

105,340.72

**Work Sheet #2: Capital Outlay**

**ADMs**

**Square Footage Requirement**

k-4	1,120	x	100	=	111,960.13
5-8	935	x	110	=	102,883.80
9-12	977	x	130	=	126,997.41

**Total Square Footage Requirement** 341,841.33

**Estimated Cost of Construction**

k-4 sq. footage	111,960	x	\$ 139.41	=	15,608,361.25
5-8 sq. footage	102,884	x	\$ 140.00	=	14,403,731.42
9-12 sq. footage	126,997	x	\$ 142.37	=	18,080,621.45

**Subtotal Estimated Cost of Construction** 48,092,714.12 -----> \$48,092,714

Equipment Allocation Rate x 10.0%  
4,809,271.41 -----> 4,809,271

**Subtotal Estimated Cost of Construction** 48,092,714.12

Architect's Fees x 7.0%  
3,366,489.99 -----> 3,366,490

**Total Estimated Cost of Construction** \$56,268,476

**Estimated Annual Cost of Construction**

Debt Service Period	@	20 years
Debt Service Rate	@	<u>6.00% interest</u>
Amortization Cost		\$96,749,960
Life Expectancy	÷	<u>40 years</u>

**Grand Total Capital Outlay Funding** \$2,418,749

## APPENDIX I

### FISCAL CAPACITY MODEL COMPARISON

#### FISCAL CAPACITY

The original county-level fiscal capacity model was developed by the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) and adopted by the State Board of Education to fulfill the requirement in the Education Improvement Act to equalize funding for the BEP. The BEP Enhancement Act of 2016 codified the combination of two fiscal indices (TACIR and CBER), with each weighted at 50%.

#### TACIR MODEL

The purpose of the TACIR model is to ensure that the burden of funding schools is approximately equal across the state, given different local tax bases and other factors related to the ability to raise funds for education. The TACIR model estimates the per pupil amount that each county area can afford to pay to fund education.

The TACIR model is based on six components:

1. **Per Pupil Own-Source Revenue** – Amount of local money that the school systems in the county report that they spend on education, divided by enrollment (average daily membership).
2. **Per Pupil Equalized Property Assessment** – Total property assessment for the county area, equalized by the appropriate county appraisal-to-sales ratio, and then divided by ADM. This is a measure of the local ability to raise revenue.
3. **Per Pupil Taxable Sales** – Local sales tax base divided by ADM-measure of the local ability to raise revenue.
4. **Per Capita Income** – Per capita income is included in the fiscal capacity model as a proxy measurement for ability to pay for education; and for all other local revenue not accounted for by property or sales taxes.
5. **Tax Burden** – Ratio of total equalized residential and farm assessment in each county divided by the total equalized property assessment. This variable is intended as a proxy for a county's potential ability to export taxes. A high residential/farm ratio indicates a low ability to pass taxes on to non-residents.
6. **Service Burden** – Included as a reflection of spending needs. It equals average daily membership divided by county population. The greater the number of pupils per 100 residents, the greater the fiscal burden for each taxpayer.

The TACIR model uses multiple regression analysis to determine the fiscal capacity index. The model is based on a set of averages. The analysis takes one factor at a time and compares it for all counties. From this process, an average weight is calculated for each factor. The average weight is multiplied by the value of each factor for each county and summed. This produces a per pupil fiscal capacity amount.

The State Board and Department of Education use a percent of total measure of fiscal capacity rather than a per pupil measure. Once TACIR determines per pupil capacity for each county, this value is multiplied by average daily membership. This produces a county-wide measure of total fiscal capacity. The values of the 95 counties are summed, and each county is expressed as a proportion of the total. The fiscal capacity index for each county is this proportion.

The TACIR indices for each county are calculated annually by TACIR and reported to the State Department of Education in March each year.

## CBER Model

The UT Center for Business and Economic Research (CBER) model was developed for BEP 2.0 in order to simplify the fiscal capacity methodology. The CBER model is intended to be less complex and more transparent than the TACIR model and to provide a reasonable relative measure of the fiscal capacity of counties.

Property taxes and sales taxes are the only two variables used in the CBER model. The CBER model applies uniform tax rates to a standard set of tax bases. Fiscal capacity is calculated by multiplying each county's sales tax and property tax base times the average tax rate for each tax base across the state. The tax rates are calculated as the average use of each base by local governments for education.

The most recent average tax rates used for the FY 17 BEP are 1.2126% for property tax and 1.5987% for sales tax. The CBER fiscal capacity indices for each county are calculated annually by CBER and reported to the State Department of Education by May of each year.

FORMULA: (Equalized Assessed Property plus IDBs (3 year average) Multiplied by Average State Property Tax Rate for Education) Plus (Sales Tax Base (3 year average) Multiplied by Average State Sales Tax Rate for Education) Divided by State Total

### Volunteer County

Equalized Assessed Property plus IDBs (3 year average)      \$19,130,924,199

Sales Tax Base (3 year average)      \$10,702,878,267

= (\$19,130,924,199 x 1.2126%) + (\$10,702,878,267 x 1.5987%)

=            \$231,981,587            +            \$171,106,915

=    \$403,088,052

=    \$403,088,502 / \$3,092,641,835 (state total)

=    13.03% (CBER Fiscal Capacity Index)