BEP Calculator User Guide

December 2016

So you want to calculate the BEP?

With OREA's BEP Calculator, it's as easy as pushing a button! The BEP Calculator allows you to run the BEP for any district, county, a combination, or *all* counties and districts; see the details of all 45 of the formula's components; and track every dollar of the $4.4 billion calculation from beginning to end. You can also change any or all unit costs and rerun the calculation based on your changes.
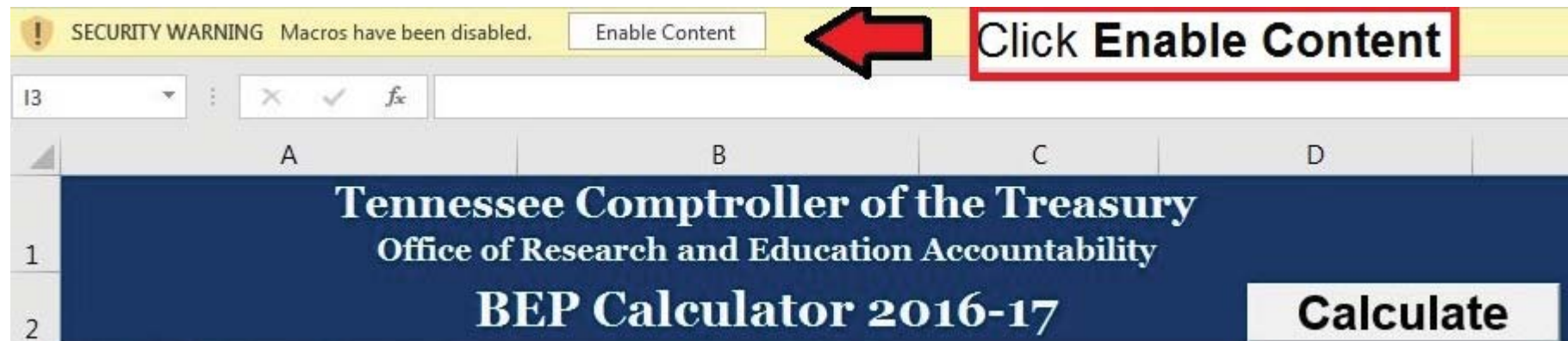
Getting Started

Before you use the Calculator, make sure active content and macros are enabled for the spreadsheet – otherwise, it won't work! When you first open the spreadsheet, a yellow bar may pop up at the top of the spreadsheet that reads, "SECURITY WARNING: Macros have been disabled." Click **Enable Content.**

If you've already disabled macros, don't worry: just exit out and try again.

> **STOP**
>
> **These are not the official BEP numbers.** The BEP Calculator incorporates the changes OREA identified in fiscal year 2016-17. As a result, the Calculator's estimates may not exactly match the values published and distributed by the Tennessee Department of Education (TDOE). TDOE plans to make these changes in fiscal year 2017-18.

Calculating the BEP for some or all districts/counties

The **Main Page** tab is where the magic happens, and where you'll find all final BEP numbers. The two blue slicers – **County** and **District** – allow you to select a county, a district, a combination, or *all* counties and districts. It may take a few seconds to select the first time around, but the spreadsheet should speed up significantly after running once.

To select multiple districts, hold the **Control** button while making your selection. To select *all* districts and counties, click the **Clear Filter** button in the upper right hand corner of each slicer.
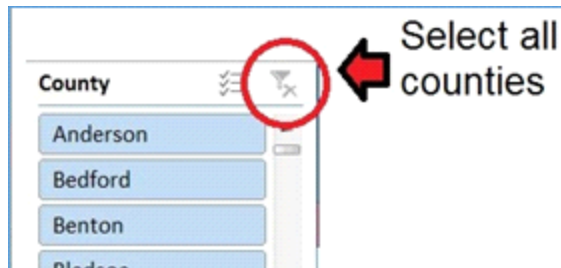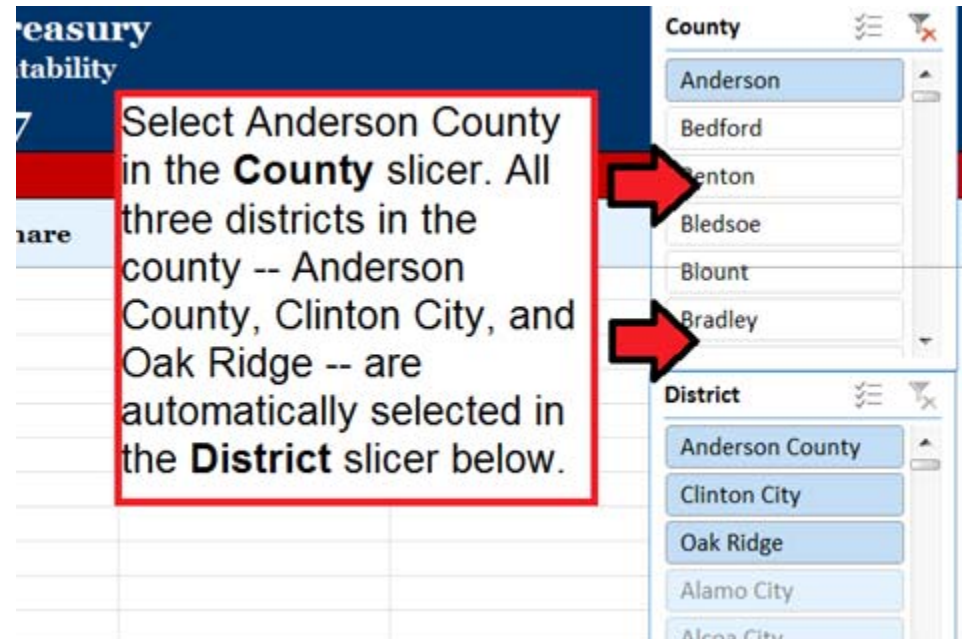
After you've picked your district or county, click the **Calculate** button.
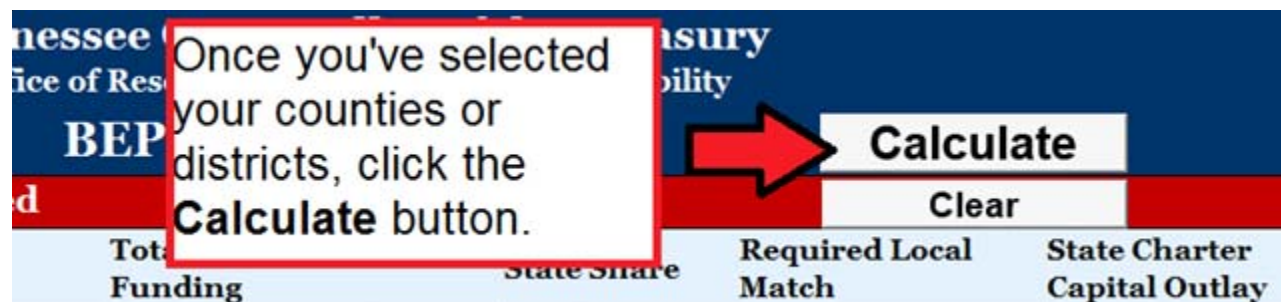
Reading Summary Data

After you've calculated the BEP for the selected districts or counties, the Calculator will provide some summary data.

1. **Total _state_ funds for all districts selected.** In this example, the state will pay $54,893,000 to the three districts in Anderson County: Anderson County Schools, Clinton City, and Oak Ridge.
2. **Districts selected.** District data is presented in alphabetical order; if multiple districts are selected, they are listed alphabetically rather than grouped by county.
3. **Total state and local allocation for each district.** The total BEP allocation for each selected district, which includes state and local funds, is displayed in Column B.
4. **State share for each district.** The state share of the BEP, which is equalized based on each county's fiscal capacity and ability to pay for education, is displayed in Column C.
5. **Required local match for each district.** The required local match for each district, determined by each county's fiscal capacity, is displayed in Column D. In practice, almost all districts contribute more local money than the required local match listed here.
6. **State share of charter school capital outlay.** Since no district in Anderson County has charter schools, this value is "N/A." For the four districts with charter schools – Davidson County, Hamilton County, Knox County, and Shelby County – the state share of the capital outlay component for charter schools is displayed in Column E. This portion of BEP funding is withheld from state payments to districts and is passed directly to charter schools.

Reading Detailed Data

After you've looked at the summary data, scroll to the right to find a detailed breakdown of every BEP component. Starting in Column J, all 45 components of the BEP are listed one by one, beginning with teaching positions generated for the Instructional categories.

County		
Anderson		
Bedford		
Benton		
Bledsoe		
Blount		
Bradley		

District		
Anderson County		
Clinton City		
Oak Ridge		

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Double click on a component to learn more!

District	Anderson County	Clinton City	Oak Ridge
Instructional Positions			
Regular Teachers			
K-3	81.35	25.75	63.14
4-6	53.47	13.93	40.11
7-9	64.75	0.00	40.40
10-12	52.73	0.00	41.25
Vocational Teachers	30.81	0.00	8.41
Special Education Teachers			

For example, Anderson County generated 81.35 teachers for grades K-3, 53.47 teachers for grades 4-6, and 64.75 teachers for grades 7-9 in the Instructional categories. By scrolling down, you can follow the BEP calculation line by line for all four categories of the BEP – Instructional Salary, Instructional Benefits, Classroom, and Non-Classroom – and finally total everything up at the bottom in Row 233.

The spreadsheet is interactive, too! Just double click on any component in Column G or I, and an explanatory box will pop up to give an overview of the component, cite any relevant statutes, and provide the details of the computation.

Translators	
Translators	
Translators are funded at the ratio set in the annual appropriations act. For fiscal year 2016-17, Public Chapter 758 set the ratio at one translator per 250 students. The Tennessee Department of Education's Office of Consolidated Planning and Monitoring counts the number of English learner students enrolled in the district as of October 1 each year. Thus, the English learner ADM, like other ADMs used in the BEP, lags one year behind the funding calculation.	
Spot Check	
Divide Column AF by 250.	

English Learner Teachers	0.88
Translators	0.09
K-6 Art	5.65
K-6 Music	5.65
P.E.	
	5.87
	3.43
Librarians	
K-8	10.50

Double click for explanatory box.

Changing funding constants and unit costs

We caution against using the BEP Calculator as a budgeting tool. Because the BEP is so complex, many components are deeply interrelated and depend upon each other. Thus, unless you have all of the updated inputs – student enrollment numbers, expenditure data, deflators, fiscal capacity indices, etc. – it is extremely difficult to accurately project the BEP for the upcoming fiscal year.

If, however, you want to play around with funding constants, such as salaries, insurance premiums, or other unit costs, head over to the **Constants** tab, which you can select at the bottom of the page. Unit costs are sorted by type (salaries, retirement contributions, transportation factors, etc.), and you can change any of them by typing a new number into the appropriate cell.

When you've finished changing unit costs, click the **Update Insurance Rate and State/Local Split** button at the top of the page. Although it may take a few moments, the spreadsheet will calculate the BEP with the new values. The calculation will take you back to the **Main Page** tab where you can see the results.

Tennessee Comptroller of the Treasury
2016-17 Funding Constants

Update Insurance Rate and State/Local Split

Calculate BEP with updated funding constants

Type in new Instructional salary unit cost

When changing unit costs, keep in mind the result of your calculation. The BEP Calculator does not include updated student enrollment data for the upcoming fiscal year, the new county Cost Differential Factor values, or updated county fiscal capacity indices. Consequently, without these updated figures, changing the unit costs does not necessarily accurately project the BEP for the next fiscal year. Rather, it calculates what the BEP *would have* generated in the current year with the given unit costs.

Other tabs

The remaining four tabs (**District ADMs, School ADMs, Transportation,** and **CTE Transportation**) contain a lot of data – enough data, in fact, to calculate the BEP! These tabs contain all of the district enrollment data that generates teachers and other positions, the school enrollment data used to calculate school based positions, the transportation data used to run the transportation regression, and a separate calculation for career and technical transportation.

You shouldn't need to change any of the data in these four tabs, or even work with these tabs at all. The tabs are protected so that you cannot accidentally change them by bumping your keyboard, but they're not password protected. Again, we recommend against using the Calculator for budget purposes, but to unlock these sheets, go to the **Review** menu on the ribbon and click **Unprotect Sheet.**

Two types of unit costs function a little differently than the others: the **TCRS and FICA** figures in the purple box, and the **Insurance** premiums in the green box. For example, the insurance premiums for each category – the Instructional premium in Cell C22, the Classroom premium in Cell C25, and the Non-Classroom premiums in Cells C29 and C32 – are calculated using a formula, rather than entered directly. Rather than changing these premiums individually, update the annual average aggregate weighted premium in Cell C18 instead. Because of the way the BEP Calculator functions, the corresponding premiums in the cells underneath will not update automatically. To change them, double click on the cell for each category – C22, C25, C29, and C32 – and press **Enter** to manually update each value.

If you have any questions or would like to do something more complicated than what is explained here, contact us at:

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