

Introduction to Cost Factor Adjustments

House Committee on Appropriations

Julia Richter

April 12, 2022



Overview

Broad overview of cost factor adjustments



Cost factor adjustments in words

- Like pupil weights, cost factor adjustments account for potential higher costs to schools with certain demographic characteristics
- Cost factor adjustments are set payments allocated to each district to account for the portion of students in a certain demographic category
 - Cost factor adjustment categories correspond to the same categories used for pupil weights and are calculated with the same base student counts
 - Cost factor adjustments are offsetting revenues for school districts



Cost factor adjustments *(proposed by Kolbe et. al., January 2022)*

	Cost factor	FY2023 Cost Adjustment
1	Student Need	
2	Poverty	\$10,480
3	ELL	\$25,335
4	Grade Level	
5	Middle School (6-8)	\$3,663
6	High School (9-12)	\$3,968
7	Small School	
8	<100 pupils	\$2,137
9	100-250 pupils	\$712
10	Population density (Persons per Square Mile)	
11	<36 per square mile	\$1,526
12	36-<55 per square mile	\$1,221
13	55-<100 per square mile	\$712



Reminder: Calculating tax rates under current law

- Recall calculation of tax rates in current law:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\text{per pupil spending}}{\text{property yield}}$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\text{per pupil spending}}{\text{income yield}}$$

$$\text{Per pupil spending} = \frac{\text{Education Spending}}{\text{Equalized pupils}}$$

$$\begin{aligned} \text{Education Spending} = & \\ & \text{Total voted education budget*} \\ & - \text{Federal categorical aid} \\ & - \text{State categorical aid} \\ & - \text{Tuition revenues} \\ & - \text{Prior year surpluses or deficits} \\ & - \text{Reserve funds} \end{aligned}$$

Note:* This includes the voter approved budget plus any separately warned articles approved by the voters



Calculating tax rates: Changes with cost factor adjustments

- Cost factor adjustments reduce education spending
 - Cost factor adjustments are “taken off the top” of the Education Fund

$$\begin{aligned} \text{Education Spending} = & \\ & \text{Total voted education budget}^* \\ & - \text{Cost factor adjustments} \\ & - \text{Federal categorical aid} \\ & - \text{State categorical aid} \\ & - \text{Tuition revenues} \\ & - \text{Prior year surpluses or deficits} \\ & - \text{Reserve funds} \end{aligned}$$

- Equalized Pupils are no longer used
 - Because cost factor adjustments would account for higher cost students, there would be no pupil weights and no equalized pupils
 - Instead of Equalized Pupils, Long-term Average Daily Membership (LT ADM) would be used to calculate tax rates

Note: * This includes the voter approved budget plus any separately warned articles approved by the voters



Calculating tax rates with cost factor adjustments

- Cost factor adjustments directly affect per pupil spending through LT ADM and Education Spending
- Cost factor adjustments also indirectly affect the yield

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\text{per pupil spending}}{\text{property yield}}$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\text{per pupil spending}}{\text{income yield}}$$

$$\text{Per pupil spending} = \frac{\text{Education Spending}}{\text{LT ADM}}$$

$$\begin{aligned} \text{Education Spending} = & \text{Total voted education budget}^* \\ & - \text{Cost factor adjustments} \\ & - \text{Federal categorical aid} \\ & - \text{State categorical aid} \\ & - \text{Tuition revenues} \\ & - \text{Prior year surpluses or deficits} \\ & - \text{Reserve funds} \end{aligned}$$

Note: * This includes the voter approved budget plus any separately warned articles approved by the voters



Examples



Example #1:

Two districts have the same total voted education budgets and different spending adjusted tax rates



Example #1: *District A and District B*

- 2 Districts – District A and District B¹
- Both districts have the same total voted education budget, the same level of categorical aid, and the same LT ADM
- The districts have different numbers of pupils within cost factor categories

	District A	District B
1 Long-term Average Daily Membership (LT ADM)	500	500
2 Total voted education budget ²	\$ 12,000,000	\$ 12,000,000
3 Offsetting revenues (categorical aid, etc.)	\$ 2,000,000	\$ 2,000,000
4 Cost factor adjustments	<i>Calculated on next slides</i>	
5 Local Education Spending	<i>Calculated on next slides</i>	

Notes: 1) These districts are fictional, and have been created solely for exemplary purposes, 2) This includes the voter approved budget plus any separately warned articles approved by the voters



Example #1: Calculating cost adjustments

			District A		District B	
	Cost factor	FY2023 Cost adjustment	Number of LT ADM	Cost factor adjustment	Number of LT ADM	Cost factor adjustment
1						
2	Student Need					
3	Poverty	\$10,480	15	\$157,200	55	\$ 576,400
4	ELL	\$25,335	5	\$126,675	2	\$50,670
5	Grade Level					
6	Middle School (6-8)	\$3,663	22	\$80,586	22	\$ 80,586
7	High School (9-12)	\$3,968	50	\$198,400	50	\$ 198,400
8	Small School (based on school enrollment)					
9	<100 pupils	\$2,137	0	\$ -	200	\$ 427,400*
10	100-250 pupils	\$712	0	\$ -	0	\$ -
	Population density (Persons per Square Mile)					
11	<36 per square mile	\$1,526	0	\$ -	500	\$763,000
12	36-<55 per square mile	\$1,221	0	\$ -	0	\$ -
13	55-<100 per square mile	\$712	0	\$ -	0	\$ -
14	Total cost factor adjustments:			\$562,861		\$2,096,456
15						

* This example assumes that there are >2 schools in this district within the small school (<100 pupils) cost factor category



Example #1: *District A and District B cont.*

		District A	District B
1	Total voted education budget*	\$12,000,000	\$12,000,000
2	All offsetting revenues <i>(categorical aid, etc.)</i>	\$2,000,000	\$2,000,000
3	Cost factor adjustments <i>(Calculated on previous slide)</i>	\$562,861	\$2,096,456
4	Local education spending <i>(Local ed spending = Line 1 – Line 2 – Line 3)</i>	\$9,437,139	\$7,903,544
5	LT ADM	500	500
6	Local education spending per pupil <i>(Local ed spending per pupil = Line 4 / Line 5)</i>	\$18,874	\$15,807

- *Assume:*
 - Both districts have the same total voted budget and use cost factor adjustments to reduce tax rates
 - Statewide property yield = \$11,000
 - Statewide income yield = \$13,500

Note: * This includes the voter approved budget plus any separately warned articles approved by the voters



Example #1: Calculating tax rates

Recall:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\text{per pupil spending}}{\text{property yield}}$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\text{per pupil spending}}{\text{income yield}}$$

District A:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\$18,874}{\$11,000} = \$1.72$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\$18,874}{\$13,500} = 2.80\%$$

District B:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\$15,807}{\$11,000} = \$1.44$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\$15,807}{\$13,500} = 2.34\%$$



Example #1: Summary

- In this example, District A and District B have the same total voted education budgets*. The districts have different education spending per pupil, and different spending adjusted property and income tax rates.
 - This is possible because District A and District B have different portions of students in certain demographic categories and thus different levels of cost factor adjustments subtracted from the total voted education budgets*



Note: * This includes the voter-approved budget plus any separately warned articles approved by the voters

Example #2:

Two districts have different total voted education budgets and the same spending adjusted tax rates



Example #2: *District A and District B*

- 2 Districts – District A and District B¹
- Both districts have the same level of categorical aid, the same total long-term average daily membership (LT ADM), and the same local education spending
- The districts have different total voted education budget, and different numbers of pupils within cost factor categories

	District A	District B
1 Total long-term average daily membership (LT ADM)	500	500
2 Total voted education budget ²	\$11,087,861	\$12,621,456
3 Offsetting revenues (categorical aid, etc.)	\$2,000,000	\$2,000,000
4 Cost factor adjustments	<i>Calculated on next slides</i>	
5 Local education spending	\$8,525,000	\$8,525,000
6 Local Education spending per pupil <i>(Local ed spending per pupil = Line 5 / Line 1)</i>	\$17,050	\$17,050

Notes:

- 1) These districts are fictional, and have been created solely for exemplary purposes
- 2) This includes the voter-approved budget plus any separately warned articles approved by the voters



Example #2: Calculating cost adjustments

1	Cost factor	FY2023 Cost adjustment	District A		District B	
			LT ADM	Cost factor adjustment	LT ADM	Cost factor adjustment
2	Student Need					
3	Poverty	\$10,480	15	\$157,200	55	\$ 576,400
4	ELL	\$25,335	5	\$126,675	2	\$50,670
5	Grade Level					
6	Middle School (6 - 8)	\$3,663	22	\$80,586	22	\$ 80,586
7	High School (9 - 12)	\$3,968	50	\$198,400	50	\$ 198,400
8	Small School					
9	<100 pupils	\$2,137	0	\$ -	200	\$ 427,400
10	100 - 250 pupils	\$712	0	\$ -	0	\$ -
11	Population density (Persons per square mile)					
12	<36 per square mile	\$1,526	0	\$ -	500	\$763,000
13	36 - <55 per square mile	\$1,221	0	\$ -	0	\$ -
14	55 - <100 per square mile	\$712	0	\$ -	0	\$ -
15	Total cost factor adjustments:			\$562,861		\$2,096,456



Example #2: *District A and District B cont.*

		District A	District B
1	Total voted education budget*	\$11,087,861	\$12,621,456
2	All offsetting revenues <i>(categorical aid, etc.)</i>	\$2,000,000	\$2,000,000
3	Cost factor adjustments <i>(Calculated on previous slide)</i>	\$562,861	\$2,096,456
4	Local education spending <i>(Local education spending = Line 1 – Line 2 – Line 3)</i>	\$8,525,000	\$8,525,000
5	LT ADM	500	500
6	Local education spending per pupil <i>(Local ed spending per pupil = Line 4 / Line 5)</i>	\$17,050	\$17,050

- Assume:
 - Both districts have the same local education spending per pupil and use cost factor adjustments to address higher costs associated with certain demographic characteristics
 - Statewide property yield = \$11,000
 - Statewide income yield = \$13,500

Note: * This includes the voter-approved budget plus any separately warned articles approved by the voters



Example #2: Calculating tax rates

Recall:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\text{per pupil spending}}{\text{property yield}}$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\text{per pupil spending}}{\text{income yield}}$$

District A:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\$17,050}{\$11,000} = \$1.55$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\$17,050}{\$13,500} = 2.53\%$$

District B:

$$\text{Spending adjusted property tax rate} = \$1.00 \times \frac{\$17,050}{\$11,000} = \$1.55$$

$$\text{Spending adjusted income tax rate} = 2\% \times \frac{\$17,050}{\$13,500} = 2.53\%$$



Example #2: Summary

- In this example, District A and District B have the same education spending per pupil, and the same spending adjusted property and income tax rates. The districts have different total voted education budgets*
 - This is possible because District A and District B have different portions of students in certain demographic categories and thus different levels of cost factor adjustments subtracted from the total voted education budgets*
 - For the same tax rate, District B has more money to spend in accordance with its demographics

Note: * This includes the voter-approved budget plus any separately warned articles approved by the voters



In summary

- *What are cost factor adjustments?*
 - Cost factor adjustments are set payments allocated to each district to account for the portion of students in a certain demographic category
- *How would the calculation of tax rates change with cost factor adjustments?*
 - Many aspects would not change
 - Districts would still have voter approved school budgets
 - Districts would still subtract offsetting revenues from total voted education budget
 - Remaining education spending per pupil would still be funded through spending-adjusted tax rates
 - Changes to current law:
 - Cost factor adjustments would be included in offsetting revenues
 - Education spending per pupil would be calculated with Long-term Average Daily Membership (LT ADM), and not with equalized pupils



Questions?

