Vermont Legislative JOINT FISCAL OFFICE

Simplified Example of Pupil Weighting and Equalization

Chloe Wexler

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Overview

What is an equalized pupil?

- The objective of calculating equalized pupils is to create an "average" student in terms of assumed costs for a given district
- Specific categories of students are presumed to have different costs than other categories
- Cost categories that are differentiated in current law: grade of study (pre-k, secondary students), economically disadvantaged students and English language learners

	Measure	Existing Weight (Current Law)
Student Need	Economic Disadvantage	0.25
	English Language Learner (ELL)	0.2
Grade Range	% Elementary	1.0
	% Secondary	1.13
	Pre-K	0.46

Equalization Example

Let's take a simplified case of 11 districts.

District	Long-term Average Daily Membership (ADM)
A	144
B	553
C	245
D	940
E	603
F	542
G	977
H	609
I	474
J	610
K	743
Total	**6,440**

Equalization Example

Certain students within the district receive a higher weight (greater than 1). Certain students receive a lower weight (less than 1). Hypothetical weights are identified below.

District	Long-term Average Daily Membership (ADM)	Additional Weighted Students
A	144	5
B	553	-2
C	245	-3
D	940	156
E	603	6
F	542	191
G	977	247
H	609	91
I	474	38
J	610	378
K	743	140
Total	**6,440**	**1,246**

*Pre-k students are weighted as a fraction of one pupil (less than 1); therefore in this example the districts with reduction in weighted students would have a large number of pre-k students.

Equalization Example

On account of the additional weights the long-term average daily membership increases by 1,246.

District	Long-term Average Daily Membership (ADM)	Additional Weighted Students	Weighted Long-Term ADM
A	144	5	149
B	553	-2	551
C	245	-3	242
D	940	156	1,096
E	603	6	609
F	542	191	733
G	977	247	1,224
H	609	91	700
I	474	38	512
J	610	378	988
K	743	140	883
Total	6,440	1,246	7,686

Equalization Example

Recall, there are only 6,440 students in the State so a factor, <u>the equalization ratio</u>, is used to deflate the weighted population back to the actual "physical" student population.

District	Long-term Average Daily Membership (ADM)	Additional Weighted Students	Weighted Long-Term ADM
A	144	5	149
B	553	-2	551
C	245	-3	242
D	940	156	1,096
E	603	6	609
F	542	191	733
G	977	247	1,224
H	609	91	700
I	474	38	512
J	610	378	988
K	743	140	883
Total	**6,440**	**1,246**	**7,686**

$$Equalization\ Ratio = \frac{LT\ ADM_{Unweighted}}{LT\ ADM_{weighted}} = \frac{6,440}{7,686} = .8379$$

Equalization Example

Applying equalization factor to the weighted long-term ADM the student population is returned to it's original size and equalized pupils are determined.

District	Long-term Average Daily Membership (ADM)	Weighted Long-Term ADM	Equalized Pupils (EP)	Difference Between ADM and EP
A	144	149	125	-19
B	553	551	462	-91
C	245	242	203	-42
D	940	1,096	918	-22
E	603	609	510	-93
F	542	733	614	72
G	977	1,224	1,026	49
H	609	700	586	-23
I	474	512	429	-45
J	610	988	828	218
K	743	883	740	-3
Total	6,440	7,686	6,440	0

$$Equalization\ Ratio = \frac{LT\ ADM_{Unweighted}}{LT\ ADM_{weighted}} = \frac{6,440}{7,686} = .8379$$

Equalized Tax Rates

The districts equalized pupil count is used to determine tax rates.

District	Education Spending Budget	Equalized Pupils (EP)	Education Spending/EP	Tax Rate (Hypothetical Yield of $10,000)
A-1	1,875,000	125	$15,000	1.50
A-2	1,875,000	150	$12,500	1.25
A-3	1,875,000	100	$18,750	1.88

$$Education\ Spending\ per\ Equalized\ Pupil = \frac{Eduation\ Spending}{Equalized\ Pupil} = \frac{\$1.875M}{125} = \$15,000$$

$$Equalized\ Tax\ Rate = \frac{Eduation\ Spending\ per\ EP}{Yield} = \frac{\$15,000}{\$10,000} = \$1.50$$

Part 2 - How are additional weighted pupils calculated?

Additional Weights Example

Let's take a look at how additional weights are calculated.

Step 1. Determine long-term average daily membership
- ADM is the number of full time equivalent (FTE) students whose education is paid for by the district from the 11th day through the 30th day of the school year.
- A half-time student would be counted as 0.5 FTE
- A two year average of ADM is used

District	EEE/pre-k	Elementary	Secondary	State Placed Students - Elementary	State Placed Students - Secondary	Total Unweighted LT ADM
D	421	1,970	1,825	4	2	4,222

Additional Weights Example

Grade Weighting

Step 2. Apply grade specific weighting
- EEE/Pre-k students receive a weight of 0.46
- Elementary students equal 1.0
- Secondary (7-12) students are counted as 1.13

District D	EEE/pre-k	Elementary	Secondary	State Placed Students - Elementary	State Placed Students - Secondary	Total Grade weighted LT ADM
Weights	*0.46*	*1*	*1.13*	*1*	*1.13*	
LT ADM	421	1,970	1,825	4	2	4,222
Grade Weight	193.7	1,970.0	2,062.3	4.0	2.3	4,232.2

Additional Weights Example

Poverty Weighting

Step 3. Apply weight for economically disadvantaged students
- The percentage of economically disadvantage students is determine for each district
- The percentage is applied to the grade-weighted ADM
- Each economically disadvantaged grade weighted student receives an additional weight of 0.25

District	Total Grade Weighted LT ADM	Percentage of Economically Disadvantaged Students	Grade Weighted LT ADM in Poverty	Additional Poverty Weight
Weights				*0.25*
D	4,232.2	50%	2,116.1	529.03

Additional Weights Example

English Language Learner (ELL) Weighting

Step 4. Apply weight for ELL students
- The number of ELL students is determined for each district
- Each ELL student receives an additional weight of 0.20

District	Number of ELL ADM	Additional ELL Weight
Weights		*0.20*
D	300	60

Additional Weights Example

Total Long-term Weighted ADM and Equalized Pupils

Step 6. Add them up!
- Add up all additional weights to determine total weighted LT ADM
- Apply statewide equalization ratio to determine equalized pupils

District	Grade Weighted LT ADM	Additional Poverty Weight	Additional ELL Weight	Total Weighted LT ADM	Equalization Ratio	Equalized Pupils (EP)
D	4,232.2	529.03	60	4,821.23	0.93	4,483.74