Cost Estimates & Recommended Weights for a Vermont Student-based Funding Formula

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Overview







Review of approach

Base funding amount and student weights

Considerations for special education funding

Education Cost Function (ECF)

| | Approach | Strengths | Recent State Studies | | |
|--|---|---|--|--|--|
| Education Cost Function (ECF) | Statistically models the level of resources necessary for students to attain targeted outcome. | Identifies student need factors Provides statistical estimates for a base spending amount that is equal to the cost of educating a typical student with no additional needs to common standards Provides weights that are calibrated to the base amount | Delaware (AIR), New York (AIR), Oregon (AIR), Colorado (AIR), Ohio (AIR), New Hampshire (AIR), Vermont (AIR) | ECF emp estin educ and adju | |
| Professional Judgment Panels (PJPs) | Involves convening focus groups with educators and other experts in the field to propose resource quantities for hypothetical schools to achieve specific outcomes. | Reflects field-based input on what it takes to educate students to standards and operate effective schools | Delaware (AIR), Ohio (AIR, WestEd, APA), Colorado (APA), New Mexico (AIR), Vermont (Kolbe) | | |
| Evidence- based (EB) | Researchers create model schools based on "evidence" in research literature and then identify and value the resources required to operate these schools. | Describes and provides a cost for a set of evidence-based programs, practices, and resources implemented in a model school. | Arkansas (APA/WestEd, updating Picus/Odden); Vermont (Picus/Odden) | | |

ECF provides empirically-based estimates for education costs and cost adjustments

Vermont Study of Pupil Weighting Factors (2019)

UVM/AIR used the Education Cost Function (ECF) to:

1. Identify cost factors.

- Empirically identified "need" factors that have the strongest predictive validity for differences in student outcomes (economic disadvantage, ELL, and student disability) and aspects of school context that explained differences in school spending (size, grade levels served, and population density).
- 2. Estimate a spending amount for an average student with no additional needs and the dollar adjustments to this base for identified cost factors.
 - Statistically modeled a <u>base spending amount</u> for an average student with no additional needs to meet common outcomes (equal educational opportunity), and the <u>additional spending</u> necessary to adjust for differences in student need and school context (cost factors).
- 3. Develop tax capacity weights.
 - Used base and additional spending amounts to develop weights that equalized tax capacity among districts using equalized pupils.

The same information is needed to develop pupil weights for a foundation formula.

Approach to Updating Cost Estimates

- Updated analyses from the 2019 Pupil Weighting Study to to incorporate data from the 2018/19 to the 2023/24 school years
- The updated analyses:
 - a) Generated an estimate for a **base per pupil cost**, and
 - b) Identified necessary cost adjustments to the base per pupil cost for differences in student need and school context.
 - We **inflated the cost estimates to real FY2025 dollars** using the U.S. Bureau of Labor Statistics (BLS) Employment Cost Index (ECI) to reflect spending levels for the 2024/25 school year

Base funding amounts and weights that were included in January 2025 testimony were <u>not based on updated models that used recent data</u> and were provided as <u>examples for how the ECF could be used</u> to establish a base spending amount and weights for a foundation formula.

Base Cost Per Student & Cost Adjustments from Updated ECF

| | Cost Adjustments Identified in 2019 Pupil Weighting Study | FY2025 Dollars |
|-----------------------|--|----------------|
| Base cost per student | | \$15,033 |
| Cost adjustments | | |
| Student Needs | Students experiencing economic disadvantage | \$15,033 |
| | English learners | \$20,925 |
| School Enrollment | <100 students | \$3,157 |
| | 101-250 students | \$0 |
| Population Density | <36 persons per square mile | |
| | 36 to <55 | \$1,906 |
| | 55 to <100 | \$0 |
| Grade Range | % Middle grades enrollment (grades 6- 8) | \$0 |
| | % Secondary grades enrollment (grades 9-12) | \$0 |

The base funding amount and cost adjustments are derived from regression models, that control for specific district, school, and student characteristics.

As a result:

- 1. The cost estimates are independent and represent the additional cost for the specific factor.
- 2. Are **designed to work together in a formula**, as a set of adjustments that ensure an adequate and equitable funding system.

Student Weights Derived from Updated ECF

| Base funding amour | \$15,033 | |
|---------------------------|-----------------------------|---------|
| | | Student |
| Cost adjustments | Weights | |
| Student needs | Students experiencing | 1.02 |
| | economic disadvantage | |
| | English Learners | 1.39 |
| School enrollment | <100 students | 0.21 |
| Population density | <55 persons per square mile | 0.13 |
| | | |

The updated ECF did not identify grade level as a cost factor.

What this means is that, by including more recent data in the models, no additional dollars – above the base funding amount – are required for students to attain state average outcomes.

Including weights for grade level in a model would increase funding above the amount needed to provide an adequate education at the middle and secondary grade levels.

Refined Student Weights for English Learners

| | WIDA Language Proficiency Levels | | | | |
|--------------------------------------|----------------------------------|---------------|----------|---------------|--------------------|
| Student Grade Level | Level 1 | Levels 2/3 | Level 4 | Levels 5/6 | Newcomer/ SLIFE |
| Average Cost by Proficiency Level | \$31,657 | \$21,195 | \$18,073 | \$1,795 | \$6,329 |
| Pupil weight | 2.11 | 1.41 | 1.20 | 0.12 | 0.42 |

A refined set of weights for English Learners would **account for differences in costs associated with different levels of language proficiency** and whether a student is Newcomer/SLIFE. The refined EL cost adjustments and weights were developed using a hybrid Evidence-based (EB) and Professional Judgement Panel (PJP) approach, since the number of students identified as EL in each category is too small in Vermont to develop reliable estimates using the ECF.

Existing Special Education Block Grant Does Not Align With Student-based Funding Formula

- The census-based grant is <u>not a cost adjustment</u> for the additional spending required to provide special education services to a particular student
 - Existing census-based funding approach provides a fixed grant amount per student, not per student receiving special education
- Maintaining the census-based funding would <u>effectively "double</u> <u>count" dollars in the base funding amount</u>
 - The census-based grant assumes funding for students who do and do not receive special education services; districts are able to spend grant for non-special education services, including early intervening services

Funding Adequacy for Students Receiving Special Education

- Adequacy refers to the principle that states must provide sufficient funding to ensure that <u>all</u> students receive a baseline level of education that enables them to meet state academic standards and succeed in society.
 - For children who are eligible for special education to receive an adequate education, they must receive the special education and related services identified on their IEP, which ensure they receive a free appropriate public education.
 - Accordingly, the additional spending required to implement a child's IEP, over and above what is typically required for a student's general education, is included in a state's funding obligation for ensuring an adequate education for all students in the state.

Estimates for the Additional Cost of Implementing SWDs' IEPs

| | Cost Estimates (FY2025 Dollars) | | |
|------------------------------------|---|--------------------------------------|--|
| | U.S. Department of Education Special Education Expenditure Project (SEEP) | Ohio Special Education Cost Study | |
| Average | \$22,415 | \$29,656 | |
| Low-cost disabilities | \$11,611 | \$11,872 | |
| Specific learning disability (SLD) | \$10,800 | \$9,721 | |
| (SLI) | \$12,422 | \$14,022 | |
| Medium-cost disabilities | \$14,725 | \$20,327 | |
| Emotional disturbance (ED) | \$19,386 | \$31,081 | |
| Intellectual disability (ID) | \$22,344 | \$31,320 | |
| Other health impairment (OHI) | \$17,168 | | |
| OHI (minor) | | \$18,908 | |
| OHI (major) | | \$59,948 | |
| High-cost disabilities | \$25,945 | \$37,502 | |
| Autism spectrum disorder (ASD) | \$29,847 | \$39,810 | |
| Deaf–blindness (DB) | \$25,768 | \$29,012 | |
| Hearing impairment (HI) | \$21,585 | \$30,047 | |
| Multiple disabilities (MD) | \$31,571 | \$23,797 | |
| Orthopedic impairment (OI) | \$21,354 | \$22,295 | |
| Traumatic brain injury (TBI) | \$24,435 | \$60,411 | |
| Visual impairment (VI) | \$27,057 | \$34,696 | |

Two national studies developed estimates for the cost of implementing student with disabilities' IEPs.

The SEEP is based on a national average (~10,000 students) of the **actual** special education services students received.

The Ohio study used a professional judgment approach to determine **best practices and costs**.

Special Education Weights Using Vermont Base Funding Amount

| Weighting Categories | Weights Using SEEP | Weights Using OH |
|---|--------------------|------------------|
| Overall (single weight) | 1.49 | 1.97 |
| Group 1 (Average for lowest-cost disability categories) | 0.77 | 0.79 |
| Specific learning disability (SLD) | 0.72 | 0.65 |
| Speech or language impairment (SLI) | 0.83 | 0.93 |
| Group 2 (Average for medium-cost disability categories) | 1.31 | 1.89 |
| Developmental delay (DD) | 1.31 | 2.15 |
| Emotional disturbance (ED) | 1.29 | 2.07 |
| Intellectual disability (ID) | 1.49 | 2.08 |
| Other health impairment (OHI) | 1.14 | |
| OHI (minor) | | 1.26 |
| OHI (major) | | 3.99 |
| Group 3 (Average for highest-cost disability categories) | 1.73 | 2.49 |
| Autism spectrum disorder (ASD) | 1.99 | 2.65 |
| Deaf–blindness (DB) | 1.71 | 1.93 |
| Hearing impairment (HI) | 1.44 | 2.00 |
| Multiple disabilities (MD) | 2.10 | 1.58 |
| Orthopedic impairment (OI) | 1.42 | 1.48 |
| Traumatic brain injury (TBI) | 1.63 | 4.02 |
| Visual impairment (VI) | 1.80 | 2.31 |