The University of Vermont

COLLEGE OF EDUCATION AND SOCIAL SERVICES

Evaluating the Census-based Special Education Block Grant:

Summary of Findings from Study of Pupil Weights in Vermont's Education Funding Formula

Presentation to Act 173 Advisory Group

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Making a Difference

Legislative Request

- The Vermont Agency of Education (AOE) was directed, under Section 11 of No. 173 of the 2018 Acts and Resolves of the Vermont General Assembly (Act 173) to undertake a study that examines and evaluates whether:

  - The special education census grant should be adjusted for **differences** in the **incidence** of and **costs** associated with students with disabilities across school districts

Analytic Approach

- We respond to the Legislature's request by:

1. Examining the extent to which the **share of SWD varies across Vermont districts**, and whether observed variation is related to systematic differences in student need.

2. Evaluating whether state aid allocated by a census-based grant will result in **systematically different levels of supplemental state support to supervisory unions.**

3. Considering **two potential approaches to adjusting the census-based grant** for differences in student need across supervisory unions

Key Assumptions Underlying Census-based Funding Mechanisms

- Census-based approaches to providing state aid for special education programs assume:
  - The incidence of SWDs, and the extent of their need, is the same across districts.

- However, demand for special education services might vary across districts, due to **population-based differences** in need.

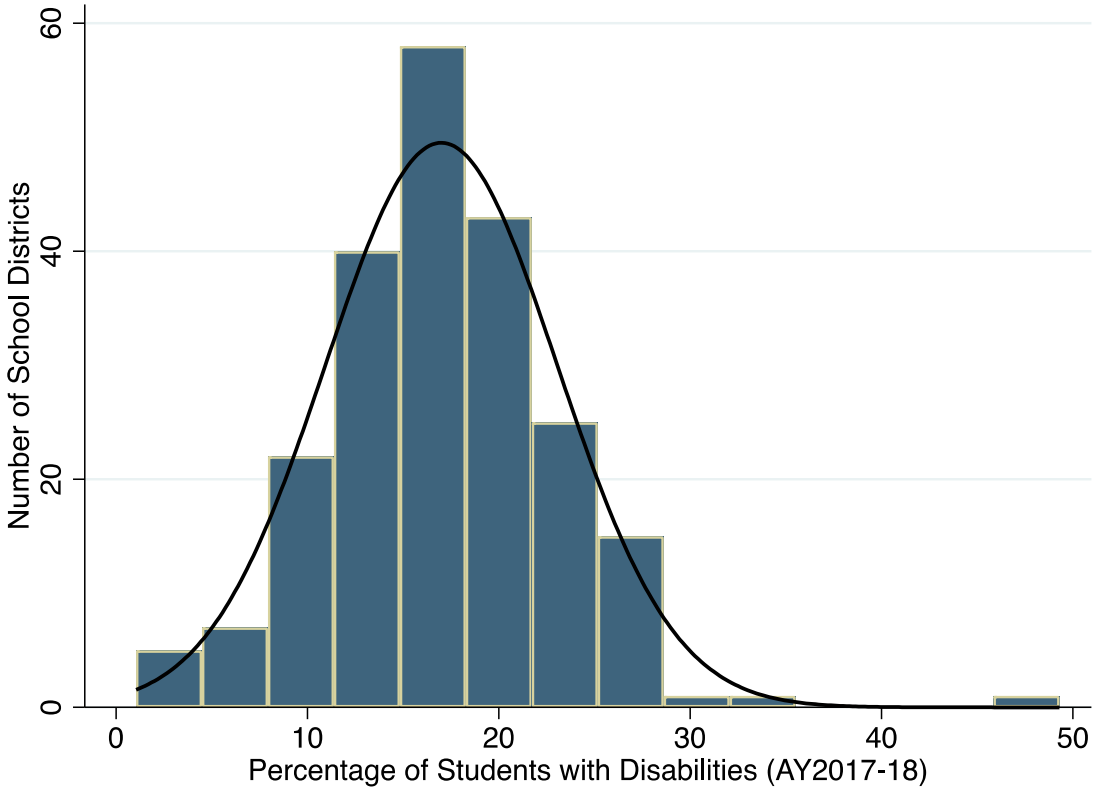
  - Where **population-based differences** in need exist, census-based system may result in situations where taxpayers in **towns with more SWDs may be responsible for a greater share of the special education costs** than other towns where there is less demand for special education and related services.

Evaluating The Assumptions

- Differences in the percentage of students with disabilities across Vermont districts
- Relationship between district poverty rate and share of students with disabilities
- Cost burden allocation

Distribution of Vermont Districts

The share of enrolled SWDs varies considerably across school districts.



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Percentage of SWD, by District Quartile

District Quartile of Percentage of Students with Disabilities	Percent of Students with Disabilities (Within Quartile Mean)	Percentage of students who are economically disadvantage (within quartile mean)
1 (Smallest)	9.6%	14.8%
2	15.3%	16.2%
3	18.9%	23.5%
4 (Largest)	24.4%	23.9%

School districts in Quartile 1 have, on average, a smaller percentage of economically-disadvantaged students, whereas school districts in Quartile 4 have a larger percentage of economically-disadvantaged students.

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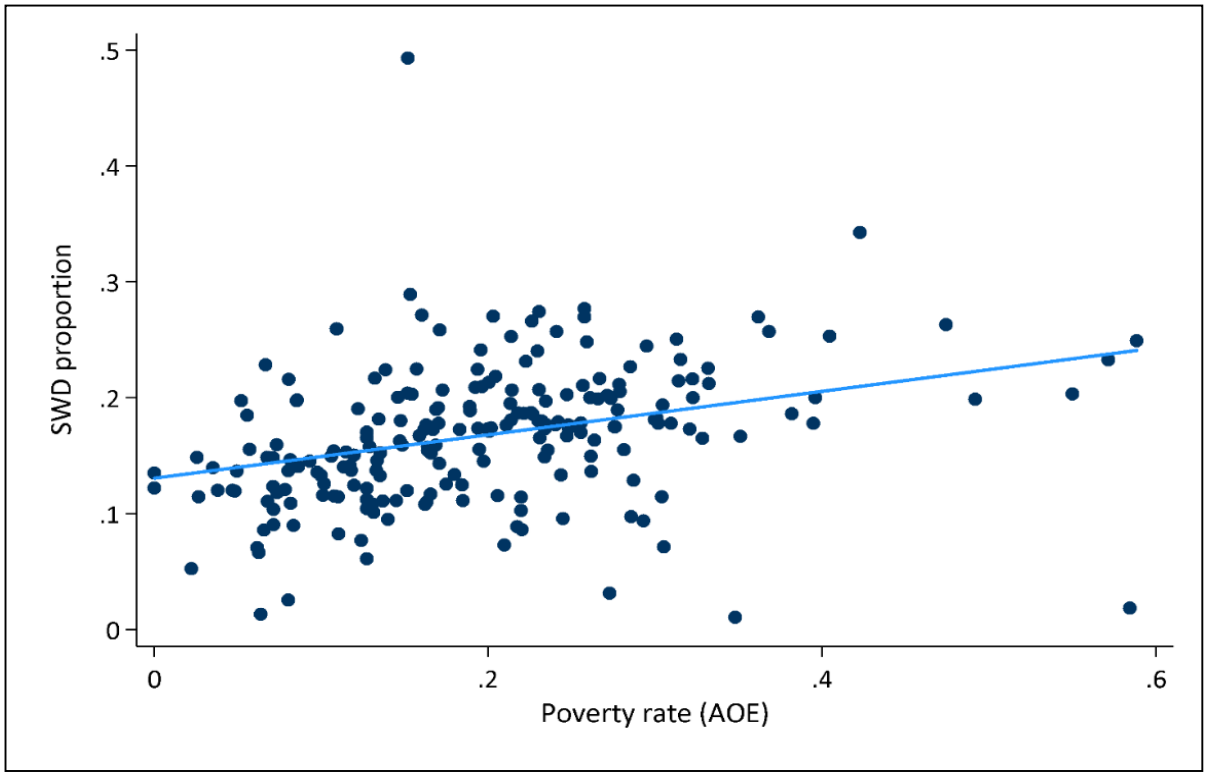
Relationship Between District Poverty Rate and % of SWD



A strong, positive correlation (r = 0.56) between the percentage of SWDs in a district and the AOE district poverty rate.

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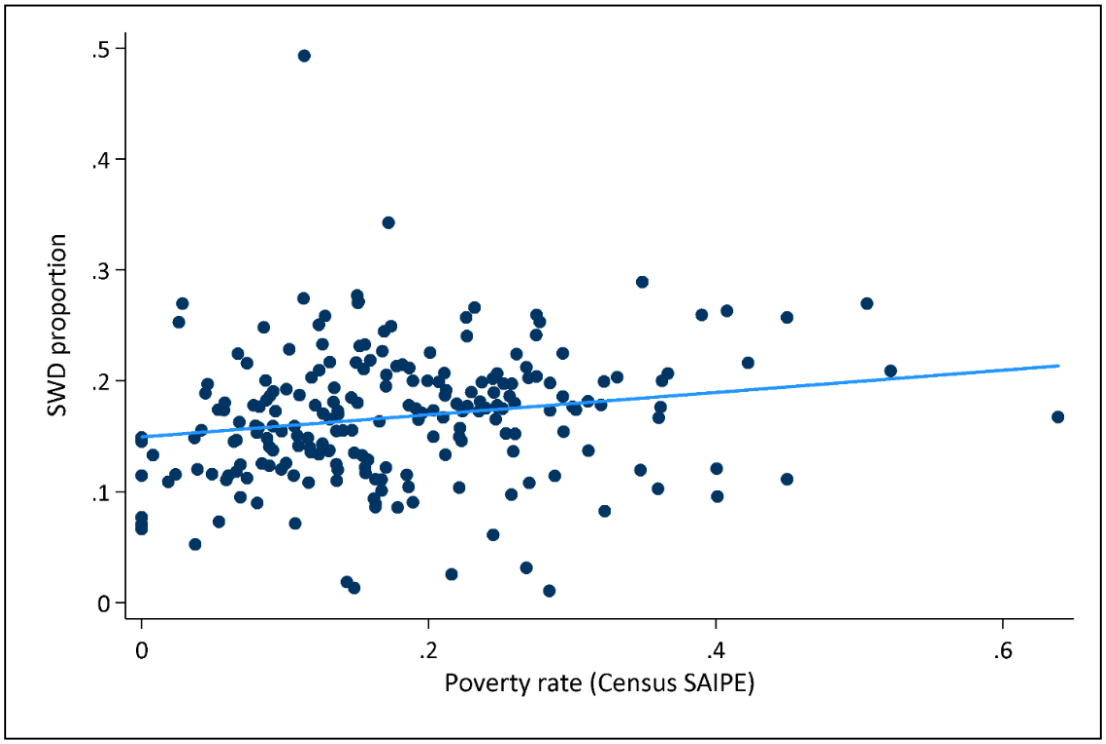
Relationship Between Local Poverty Estimates and District % SWD



A moderately-strong correlation (r = 0.38) between the percentage of SWDs in a district and a U.S. Census Bureau measure of child poverty in the community in where a district resides.

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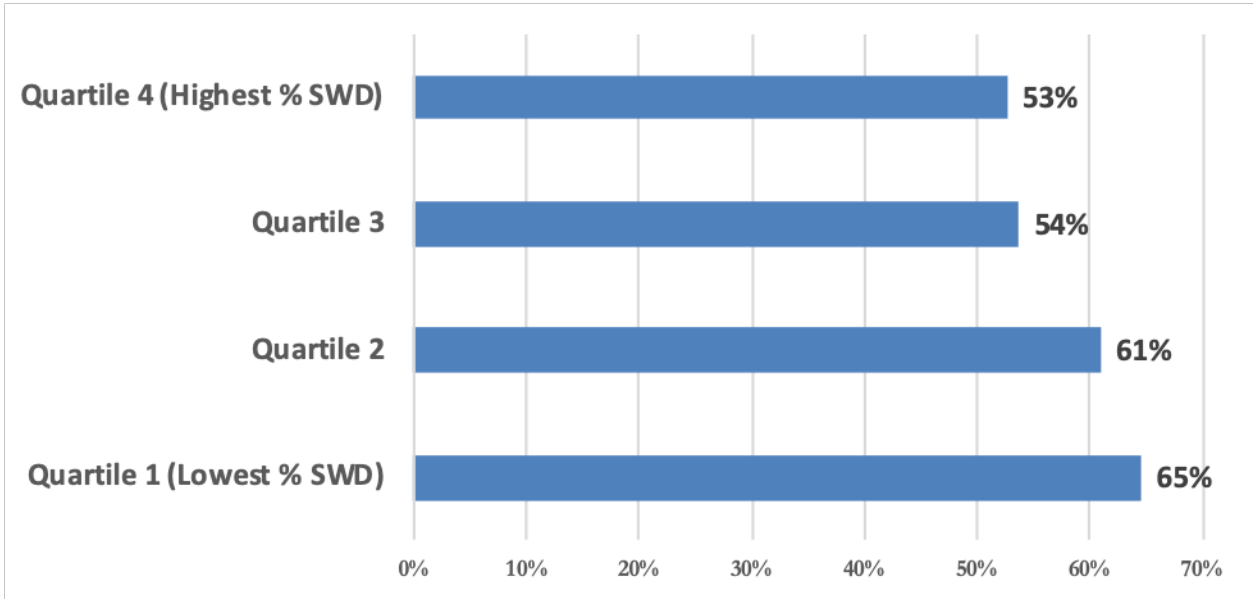
Cost Burden

State Share of Special Education Spending with Census-Based Block Grants, by Supervisory Union SWD Quartile



For supervisory unions with the largest shares of SWDs (Quartile 4), state aid would comprise about 53% of the total special education expenditures. In contrast, for supervisory unions with the smallest shares of SWDs (Quartile 1), the state share would be about 65%.

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Other Considerations

- Underlying “cause” of cross-district differences in the percentage of special education students
- Sufficiency in Resources
- Stakeholder input

Uncertainty About Causality

- The fact that there appears to be a **correlation** between the extent of economic disadvantage in a district and the percentage of students with disabilities, **should not be taken as causal evidence** that a link exists between poverty and disability.

  – Other factors to consider:
    - State and local policies
    - Local preferences/biases with respect to identifying students for special education

Sufficiency in Resources

- Inflating the census grant for differences in the demand for special education **services implies that an unadjusted census grant will result in localities having insufficient resources** to ensure SWDs access to appropriate special education and related services.

  – Other factors to consider:
    - Limited evidence to support this conclusion.
    - The effect of potential adjustments to pupil weighting in the general education funding formula

Stakeholder Input

- Stakeholders were mixed in their perspectives on potential adjustments to the census grant calculation for differences in student poverty across school districts
  - In their words:
    - At one end of continuum, *"The sky is not going to fall."*
    - At the other end of continuum, *"The correlation between poverty and disability is strong."*
    - Somewhere in the middle, *"It's too soon to tell whether the grant will be a problem."*

Adjusting the Census-based Special Education Grant Amount

- A census grant might be adjusted in two ways for differences in the level of student poverty across districts:

1. **Increase the uniform base amount** (per-capita flat grant) for districts that serve greater shares of students who are economically disadvantaged; or

2. **Inflate the count of students** to which the per-capita grant amount is applied.

Increase the Uniform Base Amount

- A census-based funding formula can **adjust the per-capita flat grant amount that is multiplied by a district's enrollment** using multipliers that correspond to varying levels of economic disadvantage in the school-aged population.
  - *Study of Vermont Funding for Special Education* recommended that a **poverty-based inflation factor** be applied to the per-capita grant.
  - Approach met with criticism:
    - Creates an arbitrary "cliff" above or below which a supervisory union would qualify for a poverty-adjusted per-capita grant
    - Little agreement on how this might be implemented using a sliding scale
    - Introduces unpredictability into SU budgets; local educators would not necessarily know year-to-year where the SU ranked statewide with respect to % SWD

Adjust Per Capita Grant Amount

- Rather than calculating a supervisory union's census grant based on the long-term PK–12 ADM, the **grant is calculated on a weighted pupil count that implicitly accounts for differences in student need across districts**.
  - Straightforward to administer; retains predictability and transparency inherent in census-based funding approach
  - Assumes that pupil weighting factors will generate sufficient additional revenue for Sus with higher levels of need

Stakeholders who participated in our interviews felt that this option was preferable to adjusting the unified base amount.

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Simulation Scenarios for Revising Special Education Census Grant Calculation

Simulation Scenarios	Student Count	Uniform Base Amount
Status Quo	FY2018 PK–12 ADM	$1,930 per capita[a]
Option 1	Equalized Pupil Count	$1,930 per capita
Option 2	Poverty-Weighted Pupil Count	$1,156[a]

[B] For total state special education appropriations to remain unchanged from what is anticipated by current law, the denominator used when calculating the uniform base amount is modified to be the number of poverty-weighted pupils (not PK–12 ADM).

Status Quo

Existing Calculation for a SUs Census Grant Amount

$\text{Census grant}_{\text{supervisory union}} =$

$\text{uniform base amount} \times \text{long-term membership}_{\text{supervisory union}}$

Calculation for the Uniform Base Amount

Uniform base amount =
(average for statewide special education spending for FY2017–2020) / FY2020 PK–12 ADM

Option 1: Multiply the Unified Base Amount by a District's Equalized Pupil Count

Option 1 assumes that **the uniform base amount is multiplied by the number of equalized pupils** in a district versus its long-term membership (as stipulated by current statute).

The simulations assume three different equalized pupil counts:

- **Option 1.1.** The actual FY2018 number of equalized pupils in a district, as derived from the State's existing funding formula.
- **Option 1.2.** The estimated number of equalized pupils in a district, as calculated using the new cost factors and Vermont-specific weights recommended by our estimation models.
- **Option 1.3.** The estimated number of equalized pupils in a school district, as calculated for Option 1.2, with one change – i.e., substitution the regional ELL weight into the calculation.

Option 2: Multiply the Unified Base Amount by a District's Poverty-weighted Pupil Count

Option 2 assumes that the **uniform base amount is multiplied by the number of poverty-weighted pupils in a district**.

The number of poverty-weighted pupils is calculated as follows:

Poverty-weighted student count$_{district}$ =
(weighted long-term membership$_{district}$) * (poverty ratio$_{district}$) *
(economic disadvantage weight)

We used 2.97 as the weight for students who are economically disadvantaged

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Option 2: Recalculating Uniform Base Amount

Option 2 **changes the statewide count of students used to calculate the uniform base amount** – i.e., the poverty-weighted student count is not deflated, as is the case with the number of equalized pupils, to the statewide PK–12 ADM in a given year.

- *Without an adjustment, the statewide count for poverty-weighted pupils will be greater than the PK–12 ADM.*

The **denominator** used when calculating the uniform base amount must **modified to be the number of poverty-weighted pupils** (not PK–12 ADM):

$$\text{Uniform base amount}_{\text{povertyweighted}} = \frac{\text{three-year average for statewide special education spending (FY2017–2019)}}{\text{statewide poverty-weighted student count (FY2018)}}$$

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Comparing Options

- Option 1 will result in a larger census grant amount for districts with higher overall educational costs (i.e., more equalized pupils).

- Option 2 will result in a larger census grant amount for districts with a higher poverty rate.

Simulations

- The report reports simulations for each district's revised census grant amount according to each option.
  - See Appendix G (pp. 135)

Summary

- We find evidence of:
  - Differences in the percentage of students with disabilities across Vermont districts.
  - A relationship between district poverty rate and share of students with disabilities.
  - The census grant calculation may result in districts with larger shares of SWD receiving disproportionately less state aid for special education
- Mixed perspectives on whether the existing census grant calculation should be modified at this time
- We simulate two options for modifying the census grant calculation
  - Both options adjust the pupil count to which the uniform base amount is applied