# Study of Vermont State Funding for Special Education

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# I. Introduction

The Agency of Education was directed, under Section 3 of No. 148 of the 2016 Acts and Resolves of the Vermont General Assembly, to undertake a study of special education funding and practice and in particular, evaluate the feasibility of implementing a census-based funding model in Vermont.

In part, the Assembly's direction stems from concerns about how much the state spends on special education for students with disabilities, as well as a possible misalignment between state funding mechanisms and other policy initiatives that encourage districts and schools to implement multi-tiered system of supports (MTSS) for struggling students. The manner in which the state allocates supplemental funding to localities for special education also has been criticized for:

1) Administrative costs to state and local agencies
2) Incentives for local educators to identify, categorize and place students according to financial priorities, rather than student needs and fiscal pressure
3) Discouraging cost containment, given that districts are largely reimbursed for their costs
4) Difficulties in planning and budgeting for future special education resources and costs

Several recent policy reports have responded with calls for the Assembly to redesign Vermont's special education funding formula as a census-based block grant. Such an approach would distribute state funding to localities on the basis of total student enrollment in supervisory unions or school districts, rather than explicitly tying special education funding to reimbursable expenses for students with disabilities.

In their report on adequate spending levels for Vermont schools, Odden and Associates (2016) recommend a census approach to fund "core special education services" for students with mild and moderate disabilities. Alongside a census block grant, they advocate for the state assuming 100% of the costs for students with "severe and profound" disabilities. The authors suggest that these reforms might result in $142 million in annual savings in what is spent on special education for school-aged children in Vermont. The savings rest on the assumption that fewer students will be identified for special education – in large part due to an additional $95 million annual state investment in "extra help" resources that enable schools to provide additional instructional assistance to struggling students before they are identified for special education.

Similarly, in its report to the Vermont House Committee on Education, students at The Rockefeller Center at Dartmouth College identified a census-based funding model as a promising policy option (Ahmed & Mishra, 2016). The authors argue that such a model would remove barriers to improving the efficacy and cost-effectiveness of special education in Vermont, especially efforts to implement proactive service delivery models, minimize overreliance on paraprofessionals, and lessen the bureaucratic burden placed on special educators.

While both reports suggest that reforms to Vermont's approach to funding special education are warranted and recommend that the state implement a census-based block grant funding approach, neither study explicitly examines the feasibility of implementing various census-based models for funding special education in Vermont.

The purpose of this report is to evaluate both Vermont's existing special education funding formula and different scenarios for implementing a census-based funding model. The report's findings result from a study undertaken by a team of experts in special education policy, practice, and finance at the University of Vermont and the American Institutes for Research (AIR). Key objectives for this study were to:

1) Develop a comprehensive profile of special education costs and describe the factors influencing costs.
2) Provide a systematic examination of Vermont's existing approach to funding special education, particularly how the existing funding mechanisms may facilitate or impede policy priorities for improving the effectiveness and efficiency with which students with disabilities are served.
3) Identify and prioritize design considerations for potential funding formula reforms.
4) Offer concrete examples for how a census-based funding model might be implemented in Vermont, including implications for overall state appropriations and funding for supervisory unions.

## Study Design

We undertook an in-depth analysis of Vermont's special education expenditure and child count data and explored possible links between service-delivery trends, cost, and the state's existing special education funding policies. The study was informed by input from a broad range of stakeholders and is grounded in data derived from multiple sources. This initial effort served as an important point of departure for evaluating the State's existing special education funding policy.

To assess the strengths and weaknesses of the state's current approach to funding special education, we sought input from a broad range of stakeholders, including:

1) Interviews with state officials responsible for overseeing and implementing Vermont's special education funding formula.
2) Interviews with supervisory union, district, and school leaders about their experiences implementing the State's special education funding formula.
3) Interviews with parents of students with disabilities who currently receive special education and related services.
4) Focus groups with representatives from organizations that represent the interests of education and social service professionals – both generally and specific to students with disabilities – as well as other citizen groups (e.g., parent and family-based organizations).
5) A statewide survey with special education administrators (co-sponsored with the Vermont Counsel of Special Education Administrators).
6) Focus groups with teachers on whether, and in what ways, the funding formula influences their processes for identifying, classifying, and serving students with and without disabilities.[1]

Rather than report separate findings from distinct sources, we present an integrated, thematic summary of key issues and considerations that emerged across our interviews, focus groups, and survey.

[1] See Appendix A for a detailed description of the data and analytic strategies employed in this study.

A key objective for this study was to simulate the likely effects of adopting different census-based special education funding policies in Vermont. In this report, we develop seven examples for how a census-based funding model could be implemented in Vermont and four companion strategies for an extraordinary cost reimbursement mechanism. The parameters for these simulations were based on our review and appraisal of special education funding policies employed in other states as well as Vermont's unique context and conditions. The results from the scenario simulations are bottom-line estimates for state appropriations for each option as well as an analysis for how each model would impact the amount of state funding supervisory unions would receive. These perspectives are critical to the subsequent evaluation of policy alternatives.

## Report Organization

The remainder of the report is organized as follows. The report's second chapter provides relevant background and context about special education costs and funding mechanism, including Vermont's existing special education funding formula. This is followed by a descriptive profile of special education child count and spending in Vermont. The fourth chapter offers key findings about the strengths and weaknesses of Vermont's current funding formula and concludes with relevant design considerations for future reforms. Chapter five presents findings from our simulations for implementing a census-based funding model. The report concludes with a summary of the study's findings and implications for reforming the state's approach to funding special education.

# II. Special Education Costs & Funding

The cost of special education is linked to student identification, classification, placement, and services received. It is also important to recognize that inherent in different approaches to funding special education are incentives and disincentives that impact whether and how students with disabilities receive services. Accordingly, state special education funding policies need to consider not only how finance mechanisms impact state and local education agencies' bottom-line expenditures, but also the ways in which they influence decision-making about students—in turn, impacting expense. The interrelated nature of student need, services provided, and cost is a necessary starting point for developing core principles that can be used to guide reforms.

In the following sections, we present a framework for understanding special education costs and review current research on what is typically spent on special education and related services. We then describe the special education funding policy landscape, including Vermont's current approach to funding special education.

## Framework for Understanding Special Education Costs

The cost of special education is inextricably linked to three factors: 1) the number of students identified as having a disability; 2) their disability and extent of need; and 3) the services and supports included on students' IEPs (Figure 1).

The federal Individual with Disabilities Education Act (IDEA) requires that all states provide students with disabilities a Free Appropriate Public Education (FAPE) in the least restrictive environment (LRE). In Vermont, a student qualifies for special education if he or she possesses a disability according to federal and state disability criteria *and* this disability adversely affects educational performance, and there is a need for specially designed instruction outside of what is offered to their grade-level peers. In addition to these key criteria, evaluation teams must determine that the student is in need of specialized instruction not available within the school's standard system of support. A student's needs are addressed through an Individualized Education Program (IEP) that is written by an IEP team consisting of education professionals, school leaders, and parents. IEPs identify the specific supports and services to which a student is entitled.

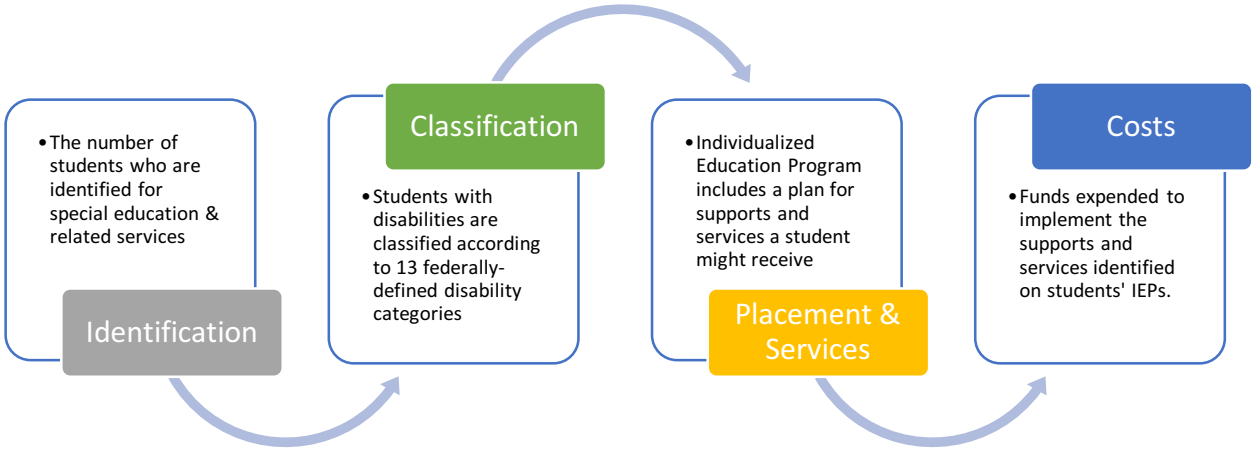
Local educational agencies are responsible for implementing students' IEPs – either by providing those services directly through their own staff resources or indirectly through a contract with another agency or with a private consultant or contractor. States are responsible for overseeing the implementation of students' IEPs but not for actual implementation.

The cost of special education is equivalent to what is spent on the resources used to implement students' IEPs. States and localities responsible for implementing students' IEPs may use whatever federal, state, local, or private funding is available to provide the supports and services specified on the IEP. Regardless of specification, these resources must be made available at no cost to students or parents.

While the cost of the supports and services on a student's IEP may be an unexpressed criterion in decision-making, IDEA does not explicitly allow cost to be considered when developing an IEP. That is, when an IEP deems a service necessary, cost considerations do not release states or localities

from their obligations to provide this service. However, where more than one appropriate configuration of services is available to meet a student's needs, cost may be considered when selecting among the alternatives.

**Figure 1: Framework for Understanding Special Education Costs**




## Estimating the Cost of Special Education

There is a shortage of information about what is spent by states and localities on special education and the true costs of the resources involved (Kolbe & O'Reilly, 2005). Federal education finance surveys only require states and districts to report what was spent on special education personnel employed by school districts; other expenses are grouped according to broad function and object classifications (e.g., student supports) that include both general and special education spending.[2] No other national survey collects school district-level data on special education spending. Moreover, few states require districts and schools to itemize special education expenditures — the exception being states with reimbursement-funding models, where districts must justify their allowable costs. However, even in these states the data infrastructure for compiling this information into meaningful synopses of district and school spending on special education is poor.

As a result, several studies have attempted to build estimates of special education costs from the "bottom up" – that is, by identifying the full package of resources required to implement students' IEPs, and then valuing these resources. The most comprehensive and notable effort was the Special Education Expenditure Project (SEEP), funded by the U.S. Department of Education's Office of Special Education Programs (ED/OSEP). The SEEP compiled a nationally representative survey of special education expenditures under Part B of IDEA. During the 1999-2000 school year, extensive data were collected from a sample of districts and schools in 50 states and the District of Columbia.

[2] For instance, basic information on the amount spent for special education personnel is available from the Annual Survey of Local School Governments (F-33), conducted by the U.S. Census Bureau. However, spending on district personnel likely significantly underestimates total special education spending by school districts (Kolbe & O'Reilly, 2005).

The resulting Student Resource Cost Database provided a snapshot of the costs of providing special education services to a national sample of nearly 10,000 students with disabilities.

The SEEP produced expenditure weights that represented spending ratios comparing spending on a special education student with a particular disability with spending on the average regular education student. For instance, the SEEP found it cost an average of 2.2 times more to serve a student identified with an emotional disturbance than to educate an average general education student. The SEEP also identified a generalized weight for the "average" special education student as equal to 1.9 times spending for the typical general education student. Applying this weight, the study found that the national average for spending per student with an IEP was $12,474, compared to $6,556 for a general education student (a difference of about 90%) (Chambers, Shkolnik, & Perez, 2003). Although the SEEP spending ratios were developed nearly 20 years ago, the study is frequently cited as generating the most reliable estimates for special education costs.

By comparison, many states appropriate funds for special education based on what they can afford, leaving the remaining responsibility for funding to localities. This state-specific "funds available" budgeting approach likely influences overall spending; however, given data limitations and the complexity of parsing special and general education spending, there is limited information as to what extent this might artificially constrain spending.

Recognizing the need for better information on what constitutes appropriate levels of spending for special education, some states (e.g., Colorado, Montana, Maryland) have begun to incorporate special education in their funding adequacy cost studies (Aportela, Picus, Odden & Fermanich, 2014). Maryland's study represents the most recent and comprehensive adequacy study to incorporate special education in its estimates. In this study, Augenblick, Palaich and Associates (2016) reported the additional costs (above base education funding) for students with "mild" disabilities as between $6,140 and $7,338 (depending on a student's grade level); the range of costs for students with "moderate" disabilities as between $11,499 and $14,391; and the range of costs for students with "severe" disabilities as between $36,096 - $43,591. The additional "district-level" cost per student with an IEP was $2,745. Taken together, district- and school-level costs were equated to a weighted average for the three categories of disability: 1.82 for mild disabilities; 2.35 for moderate disabilities; and 4.62 for severe disabilities.[3]

## Funding Special Education

Under IDEA, federal special education funds are distributed through three state grant programs and several discretionary grant programs. Part B (Section 611) of the law provides the lion's share of federal grants to state and local education agencies to offset part of the costs of providing special education for students ages 3-21.[4] Federal funds are distributed to states based on a complex formula tied to historical trends in the number of students with disabilities in a state, student population ages 3 through 21, and an adjustment for the share of students living in poverty. States pass through IDEA Part B funds onto local education agencies using a similar calculation. IDEA

[3] The weights assume the additional, or marginal, cost associated with serving students with disabilities, over-and-above a base cost amount of $11,607 per general education student (Augenblick, Palaich, and Associates, 2016).

[4] IDEA Part C provides state grants for pre-kindergarten programs and early intervention services. Parts D and E authorize discretionary grants to state and local education agencies for other related activities (e.g., research, evaluation, personnel training).

funding must be used to supplement state, local, and other federal funds and not supplant those funds. In other words, federal funds should be added to the funds that state and localities make available for special education.

At its inception, Congress set the maximum target for the federal contribution at 40% of the excess cost of educating students with disabilities. In practice, however, the federal share has not approached this level; most recent estimates suggest that the federal funding pays for about 16% of the total cost of providing special education to school-aged children with disabilities nationwide (U.S. Department of Education, 2016). Accordingly, the responsibility for paying for special education and related services for students with disabilities largely falls to state and local education agencies.

While the federal government does not require states to provide funding for special education, all states appropriate some form of supplemental funding for local education agencies. However, there is considerable variability in both the amount of funding provided and the mechanisms used to distribute state funds. For instance, while Wyoming fully funds special education statewide, Arkansas only provides funding for students with "high-need" disabilities (Millard & Aragon, 2015). Other states supplement federal and local dollars to greater and lesser extents.

State funds are allocated according to funding policies comprised of various mechanisms for distributing funds. While each state's policy is unique, the mechanisms contained in these policies fall into six broad categories, each with its own strengths and weaknesses. (See Figure 2 for a summary description of funding mechanisms.)

1. Embedded
   Some states choose to incorporate special education funding in their base education funding model. This results in one, rather than two separate, state funding formulas for localities. For instance, Connecticut does not specifically designate money for students with disabilities – however, districts use general education formula funds to pay for special education (Millard & Aragon, 2015).

2. Flat grants
   States can opt to provide districts with a flat grant amount for each student with a disability in that district. The grant can either be a generalized amount for all students with disabilities, or tiered according to disability type or severity. For instance, Colorado districts received $1,250 for each student with a disability for the SY 2014-15, and an additional $6,000 for students with certain high-cost disabilities (ECS, 2015). In New Hampshire, districts received an additional $1,881.98 for each special education student, on top of the base-per-pupil cost of $3,498.30 (Millard & Aragon, 2015).

3. Capitated
   Capitated funding mechanisms, including a census-based funding approach, allocate state funds to local education agencies based on the number of non-disabled students within a school district. Typically, the funding takes the form of a flat grant paid to a district per student identified in its Average Daily Membership (ADM) headcount. Typically, districts are minimally restricted in how they may use funds — including the ability to spend the state's allocation on non-disabled students who might benefit from early intervention and academic supports. Currently, both New Jersey and California operate census-based funding systems

(Millard & Aragon, 2015). In New Jersey, however, one-third of state funding is categorical — i.e., must be spent on students with IEPs — with the remaining two-thirds operating as a block grant that can be spent on services and supports for students with and without IEPs.

4. Weighted

   Weighted funding formulae apply some multiplier to a base-funding amount to generate supplemental funding for special education. In 1999-2000, the Special Education Expenditure Project (SEEP) reported a multiplier of 1.9 for the generalized costs of educating students with disabilities, over and above the national average for per pupil spending on general education. This generalized weight has been reaffirmed by several recent studies (Augenblick, Palaich & Associates, 2014). That said, states have chosen a wide range of generalized weights for their funding formula – e.g., Oregon provides an additional weight of 1.0 per student with IEP, up to 11% of the district's ADM (Millard & Aragon, 2015). Some states apply multiple generalized weights tied to different concentrations of students with IEPs – e.g., 1.277 in Maine for each student with an IEP in a district, up to 15% of total students, and .38 for all students with IEPs above 15% (Millard & Aragon, 2015).

   Other states apply multiple weights to students based on disability categories (e.g., mild, moderate, severe), and by a particular disability (e.g., speech and language impairment; autism), or where or how a student is educated (e.g., resource room; out-of-district vs. in-district placement). For instance, Oklahoma's formula incorporates 11 additional weights corresponding to distinct disability categories – e.g., .05 for speech or language impairments and 2.5 for emotionally disturbed students (Millard & Aragon, 2015).

5. Reimbursement

   As of FY 2014-15, five states reimburse districts for some share of their actual (allowable) expenditures on special education and related services for students with IEPs. The reimbursement percentage varies across states – ranging from 26.79% in Wisconsin to 100% in Wyoming (Millard & Aragon, 2015). School districts must provide states with documentation about their expenditures and are reimbursed on a retrospective basis for their spending.

6. Catastrophic, extraordinary, or excess-cost funding for high-need students

   At least 30 states have contingency funds that distribute additional funding to school districts that experience catastrophic, extraordinary, or excess special education costs. Contingency funds operate as state-funded "insurance policies" for school districts that face "extraordinary" costs associated with providing the services required by an individual student's IEP. Since high-need students are unevenly distributed across school districts within a state, the extraordinary cost of providing services for these students can place disproportionate pressures (or financial risk) on certain school districts (Baker & Ramsey, 2010). High-need students require intensive or unique supports that can exceed normal standards for costs – up to 5.5 to 8.7 times greater than the average spending for general education students for the students in the top 5% of costs, and up to 8.8 to 13.6 times larger for students in the top 1% of per student expenditures (Chambers, Khkolnik, & Perez, 2003).

> Over time, three general policy models have been adopted by states: 1) the state pays a percentage of additional costs over-and-above a set spending threshold, with a cap on the total amount that can be reimbursed; 2) the state pays for a percentage of additional cost over-and-above a set spending threshold, but without a cap on the state's reimbursement; and 3) districts apply for additional funding from the state (Griffith, 2008). Additionally, some states have adopted different spending caps depending on a student's placement (e.g., within or outside of the district).

Nascent research suggests that state funding for special education holds potential for encouraging or discouraging certain school district behaviors and actions. Of particular concern is the potential for a link between state funding and local decision-making over disability identification, placement, and service delivery. For instance, Cullen (2003) found that about 40% of the growth in Texas' special education enrollment between 1992 and 1997 was due to changes in incentives to identify disabilities. Kwak (2008) also found that changes in how special education was funded in California affected the percentage of students identified by local school districts for special education. In their national study of funding special education by capitation, Dhuey and Lipscomb (2011) found that disability rates fell in states during periods of capitation reforms, primarily in subjectively diagnosed categories and in early and late grades. Capitation also was associated with a rising local share and falling state share of funding.

Figure 2 summarizes the potential strengths and weaknesses for potential state-funding mechanisms. It is noteworthy that all mechanisms have both pros and cons. In an effort to capitalize on the strengths of different approaches — as well as to minimize weaknesses — many states combine mechanisms to create hybrid funding formulae. For instance, many states combine weighted student or census-based funding formulae with extraordinary cost reimbursement mechanisms. One advantage to combining funding mechanisms is that it allows states to more closely align certain funding formula elements with policy priorities. That said, with additional design elements and parameters comes administrative complexity and oftentimes less transparency and predictability.

**Figure 2: Special Education Funding Mechanisms**

| | Description | Examples[a] | Strengths | Weaknesses |
|---|---|---|---|---|
| Embedded | - State funding is incorporated into the overall school funding formula | Connecticut | - Administratively simple & transparent<br>- Predictable for state and local financial planning | - Localities may limit services if funding amount is insufficient to meet student need<br>- Assumes special education costs are uniform across the state |
| Flat grants | - Districts receive a stipulated grant amount for the *actual or assumed number of students with IEPs*, either in addition to or on top of state funding for general education. Lump sum does not vary across school districts. | New Hampshire & Massachusetts | - Administratively simple & transparent | - May incentivize over-identification of students with disabilities to garner additional resources from state<br>- Assumes special education costs are uniform across the state<br>- In cases where a dollar amount is set in statute, the funding level must be periodically reviewed to ensure it accurately reflects service delivery costs |

| | Description | Examples[a] | Strengths | Weaknesses |
|---|---|---|---|---|
| Capitated | - Amount of special education funding a locality receives is based on total number of students within a school district. The per capita grant does not vary across school districts. | California & New Jersey | - Administratively simple & transparent<br><br>- Predictable for state and local financial planning<br><br>- When provided as a block grant, funding can be used to support policy initiatives focused on early intervention with struggling students and flexible service delivery models that allow students with and without disabilities to concurrently receive services from the same provider | - Assumes an equal distribution of incidence and need among students with disabilities across school districts within a state<br><br>- Localities may limit services if funding amount is insufficient to meet student need<br><br>- Potential for significant cost liabilities for local education agencies that enroll high-cost/high-need students with disabilities |
| Weighted | - Single (or generalized) weights are applied to a base funding amount for each student with an IEP or % of students with disabilities to generate additional funding for districts.<br><br>- Multiple weights associated with student disability or services provided are applied to a base funding amount to generate additional funding for districts | Maryland (single weight; 1.9)<br><br>Maine (tiered weights tied to disability percentage)<br><br>Texas (multiple weights tied to student placement & services) | - Administratively simple & transparent<br><br>- The amount of funding available for special education automatically adjusts to changes in education costs captured in the base funding amount | - Weights generate different funding amounts depending on states' base per pupil funding. For instance, in a high spending state the allocation will be larger than in a low spending state. This raises questions about whether weights generate an appropriate level of supplemental funding for services (e.g., either too much or too little).<br><br>- Multiple weights tied to disability percentages or student placement/services may incentivize over-identification and servicing for students with disabilities |

| | Description | Examples[a] | Strengths | Weaknesses |
|---|---|---|---|---|
| Cost Reimbursement | - Reimbursement based on teachers or classrooms that serve students with IEPs; or<br>- Reimbursement for a percentage of allowable expenditures | Michigan (28.62%)<br>Wisconsin (26.79%)<br>Vermont (60%)<br>Wyoming (100%) | - Discourages service limitations<br>- May protect districts against significant cost liabilities | - Lacks simplicity/transparency<br>- Administratively costly to manage<br>- May encourage over-identification and -servicing for students with disabilities<br>- Encourages silos among services and supports for students with disabilities, apart from those available to struggling general education students. |
| Contingency funding for extraordinary costs/high-need students | - Districts receive additional funds to cover per student costs, over and above some normed standard | 33 states (including Vermont) have some form of contingency funding for extraordinary costs/high need students | - Discourages service limitations for high-need/high-cost students<br>- Protects districts against significant cost liabilities | - Unpredictable<br>- Disincentives cost containment at or above the normed standard for reimbursement |

[a] Source: State Funding for Students with Disabilities: All States All Data, Education Commission of the States (June 2015). Retrieved from: http://ecs.force.com/mbdata/mbquest3D?rep=SD10

## Funding Special Education in Vermont

In Vermont, special education and related services for students with disabilities are largely funded by a combination of federal and state categorical grants, and local education funds. The majority of funding comes from state and local sources, with just about 6% of total funding coming from federal grants.[5] In recent years, approximately 60% of remaining costs have been funded by state appropriations, with the remainder funded through local education budgets.

Vermont's formula relies upon multiple funding mechanisms to distribute funding to localities, consisting of three integrated parts:

1. Standard mainstream block grant
   The State operates a block grant that is linked to schools' ADM, which is calculated using average special education teacher salaries (16 VSA Section 2961). Eligibility for reimbursement from this block grant is contingent on Local Education Agencies (LEAs) contributing an amount not less than 40% of a mainstream salary standard equivalent to:

   a. 9.75 FTE special education teaching positions per 1,000 ADM
   b. The school district's share of 1.0 FTE administrators per supervisory union or district

   Where a supervisory union or district exceeds 1,500 ADM, the entity receives additional funding for administrative costs.

   The state typically distributes block grant funding prior to the beginning of the school year (e.g., August) to ensure localities have sufficient cash on hand until they receive reimbursement for actual expenditures, which occurs throughout the fiscal year.

2. Extraordinary-services reimbursement
   Vermont also operates a funding program to assist localities with paying for the costs of high-need or high-cost students with disabilities. Such students may be unevenly distributed across localities within the state and can pose disproportionate spending pressures on localities – particularly for small school districts with more limited financial capacity.

   This mechanism provides additional funding – that is, on top of its standard mainstream block grant – to supervisory unions or districts in instances where more than $50,000 is spent for special education and related services for a student in a particular school year. The state reimburses 90% of the funds spent in excess of the $50,000 threshold, as well as approximately 60% of allowable spending up to $50,000. For FY 2016, 564 of students with IEPs statewide were eligible for extraordinary-services reimbursements from the state.

[5] Altogether, for FY2016 Vermont received about $19.6 million in federal IDEA funding for its special education programs, about 6% of the total amount spent for students in grades K-12. State and local education agencies also may seek reimbursement from the federal Medicaid program for medically-related and necessary services provided to students with disabilities in educational settings.

3. Special education expenditures reimbursement
   The third component of the state's funding model reimburses localities for allowable special education expenditures (as identified by the State Board of Education) not already paid for with federal aid, the state's mainstream block grant or extraordinary services reimbursement, and other state funding sources. The state's reimbursement percentage is adjusted annually to achieve a 60% state share of spending across all three funding components. For FY2016, the percentage of costs reimbursed by the state was about 57%.

State funding for special education is categorical and may only be used to pay for allowable costs related to providing services and supports necessary to ensure students with disabilities access to a free and appropriate public education in the least restrictive environment, as specified on a student's IEP. As such, supervisory union and district flexibility is limited in how funds can be spent. State special education funds cannot be spent on services or supports for students without IEPs, unless students are served alongside students with IEPs. Even then, the State allows for no more than 20% of funds to be used for students without IEPs. Similarly, federal funding for special education is also largely categorical; however, IDEA provides flexibility in spending for a small share of funds (15%), allowing localities to use IDEA funding to pay for early intervening services for non-disabled students.

Administering the State's existing funding formula requires activities on the part of both the Vermont Agency of Education (AOE) and local school districts. To obtain funds, school districts must submit an annual service plan to AOE that projects the cost of special education for the upcoming year. Then, throughout the school year, districts submit expenditure reports that summarize allowable costs for which they seek reimbursement. AOE staff review the service plans and expenditure reports to both recommend an annual appropriation, as well as monitor school district spending. In addition, AOE conducts periodic audits of school districts' special education expenditure reports. Audits involve AOE staff working directly with school district personnel to reconcile all spending against the Agency's guidelines.

## Summary

- The cost of special education is inextricably linked to the number of students identified as having a disability, their disability and extent of need, and the services and supports included on students' IEPs.

- The cost of special education is what is spent to implement IEPs for students with disabilities. States and localities may use whatever federal, state, local or private funding that is available to pay for services; however, services must be made available at no cost to students or parents when they are enrolled in public school.

- When an IEP deems a service necessary, cost considerations do not release states or localities from their obligations to provide a service. However, where more than one appropriate configuration of services is available and appropriate to a student's need, cost may be considered when selecting among the alternatives.

- Very little information is available to help determine what is spent by states and localities on special education. Fiscal data from national surveys and state and district accounting systems do not clearly parse special and general education spending.

- The most reliable national estimates of special education costs come from the 1999-2000 SEEP and its resulting expenditure weights. Taken together, the SEEP suggests that the cost of educating a student with a disability is, on average, 1.9 times greater than that for a typical regular education student.

- Recent state-specific education funding adequacy cost studies that incorporate special education in their considerations provide cost estimates for students with mild, moderate, and severe disabilities – with average unit costs ranging between an additional $6,140 and $43,591 (over-and-above base spending) per student with an IEP.

- Federal funding pays for a relatively small share of special education costs; the remaining responsibility falls to state and local education agencies. While the federal government does not require states to provide funding for special education, all states appropriate some form of supplemental funding for LEAs.

- State funds are allocated according to different funding policies and distributed according to different mechanisms. These mechanisms fall into six broad categories: 1) embedded funding; 2) flat grants; 3) capitated funding; 4) weighted student formulas; 5) reimbursement models; and 6) catastrophic, extraordinary, or excess cost funding for high-need students.

- All state funding formulae have pros and cons with respect to how they might influence local decision-making over disability identification, placement, and service delivery.

- Vermont's special education formula combines a block grant and reimbursement mechanism with an extraordinary cost provision for high-cost students. Historically, the state appropriates sufficient funding to reimburse localities for about 60% of their total spending on special education and related services.

# III. Special Education in Vermont

Both the number of students receiving special education and the extent of their needs influence what is spent each school year by the state and localities on special education. Policies and programs both in educational systems (e.g., MTSS implementation) and within the community (e.g., capacity of health and social service systems to support children and families outside of schools) can influence the extent of need for special education and the range of services and support schools must provide.

In this chapter, we explore trends in the share of Vermont students receiving special education and related services. This is followed by an overview of state and local special education spending. We conclude by leveraging findings from our interviews, focus groups, and surveys with special education professionals statewide to better understand why the state has seen steady increases in both special education child count and spending.

## Special Education Child Count

### Percentage of Students Receiving Special Education

During the 2015 school year, approximately 16% of all Vermont students in grades K-12 were identified for special education (Table 1). While the share of Vermont's K-12 students eligible for special education was somewhat higher than the national average of 13%, it was on par with that of neighboring states. For instance, 15% of school-aged students in New Hampshire and 16% of those in Rhode Island were identified for special education, and nearly 18% of students in Maine and Massachusetts were similarly identified.

Students with specific learning disabilities (SLD) comprise the largest share of students who received special education in Vermont during the 2015 school year (Table 1). It is noteworthy that the percentage of students with IEPs identified as SLD is less than the national average — 35% vs. 40%. Similarly, the share of Vermont students identified as having a speech or language impairment is nearly half that of the national average — 10% vs. 18%. Special education professionals interviewed for this study suggested that Vermont's somewhat lower percentage of students with "mild" disabilities (such as SLD and speech and language impairments) may be due to the state's policies and practices for implementing MTSS, which prescribes intervening services and supports for students who encounter academic difficulties, prior to evaluating for a learning disability.[6]

Nearly 20% of Vermont's students with disabilities were identified as having other health impairments (OHI) — exceeding the national average by about 4% but on par with levels found in neighboring New Hampshire and Maine (Table 1). OHI encompasses a range of chronic or acute health conditions that adversely affect a child's educational performance, including: asthma, moderate ADD/ADHD, diabetes, epilepsy, heart conditions, leukemia, and Tourette syndrome. The OHI designation may also be applied to students who have "limited strength, vitality, or alertness with respect to the educational environment" (IDEA Regulations §300.8(c)(9)).

[6] Schools may not use the fact that a student receives Tier 1 or Tier 2 services through its MTSS as a rationale to delay an evaluation for special education where such an evaluation is warranted.

Vermont has among the highest rates in the nation of children identified with emotional disturbance. During the 2015 SY, nearly 18% of Vermont's special education students were identified with this condition (Table 1). This is three times the national average (18% vs. 6%), and substantially higher than rates in neighboring states (9% in New Hampshire, 8% in Maine, and 11% in Massachusetts). Disabilities that manifest as behavioral issues that impact students' abilities to learn typically fall under the category of emotional disturbance.

### Trends in Special Education Child Count

Between the 2013 and 2015 school years, Vermont saw a .5% increase in the share of K-12 students who receive special education (Table 2). This uptick was slightly higher than that for Students with IEPs nationally (.5% vs. .3%, respectively).

The largest gain was in the share of students identified with OHI — a nearly 1% increase during the three-year time frame — and students with SLD (.6%) (Table 2). That said, growth in the share of Vermont students with OHI was similar to that found nationwide (1% and 1.2%, respectively). Meanwhile, the share of Students with IEPs in Vermont with speech or language impairments declined by 1.6% between 2013 and 2015. Nationwide, there was nearly a 1% increase in the share of students with autism spectrum disorders (ASD) (Table 2). However, in Vermont, the share of students with ASD increased by just .5%.

## Table 1: Percentage of Students with Disabilities (Ages 6-21), By Disability Category (SY 2015)

| | | Percentage of All Students With Disabilities | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Percent of All Students | Autism Spectrum Disorder (ASD) | Deaf-blind | Emotional Disturbance | Hearing Impairment (Including Deafness) | Intellectual Disability | Multiple Disabilities | Orthopedic Impairment | Other Health Impairment (OHI) | Specific Learning Disability (SLD) | Speech or Language Impairment | Traumatic Brain Injury | Visual Impairment (Including Blindness) |
| | | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Vermont | 16.1 | 8.9 | 0.0 | 17.6 | 0.6 | 6.0 | 2.0 | 0.3 | 19.8 | 34.5 | 9.6 | 0.3 | 0.2 |
| National Average | 13.3 | 9.3 | 0.0 | 5.9 | 1.1 | 7.1 | 2.1 | 0.7 | 15.4 | 39.8 | 17.7 | 0.4 | 0.4 |
| Selected Comparison States | | | | | | | | | | | | | |
| New Hampshire | 15.0 | 10.1 | 0.0 | 8.9 | 0.8 | 3.3 | 1.5 | 0.2 | 21.7 | 40.0 | 12.8 | 0.3 | 0.5 |
| Maine | 17.7 | 9.4 | 0.0 | 7.7 | 0.4 | 2.6 | 10.3 | 0.1 | 21.6 | 32.5 | 15.0 | 0.1 | 0.1 |
| Massachusetts | 17.6 | 11.0 | 0.1 | 10.8 | 0.7 | 6.2 | 2.6 | 0.7 | 14.7 | 29.9 | 16.4 | 6.5 | 0.4 |
| Rhode Island | 15.8 | 11.1 | 0.0 | 8.5 | 0.7 | 4.0 | 1.9 | 0.3 | 18.4 | 39.8 | 14.7 | 0.3 | 0.3 |
| Delaware | 15.3 | 8.1 | 0.2 | 4.7 | 1.1 | 8.4 | 0.0 | 1.2 | 14.1 | 51.8 | 9.7 | 0.4 | 0.4 |
| Kentucky | 13.5 | 7.4 | 0.0 | 5.9 | 0.8 | 17.5 | 2.6 | 0.5 | 18.3 | 20.8 | 25.4 | 0.3 | 0.6 |
| South Dakota | 14.3 | 6.1 | 0.0 | 6.5 | 0.8 | 9.9 | 2.9 | 0.3 | 14.9 | 39.7 | 18.1 | 0.3 | 0.3 |

Note: The percentage of students with disabilities (IDEA) in states and nationwide are as of the state-designated child count date between October 1 and December 1, 2015.
Source: US Department of Education, Part B Data Display (by State), Publication Year 2017 (https://osep.grads360.org/#report/apr/publicView).

**Table 2: Trends in Percentage of Students with IEPs Ages 6-21, Vermont & National Averages (2013-2015)**

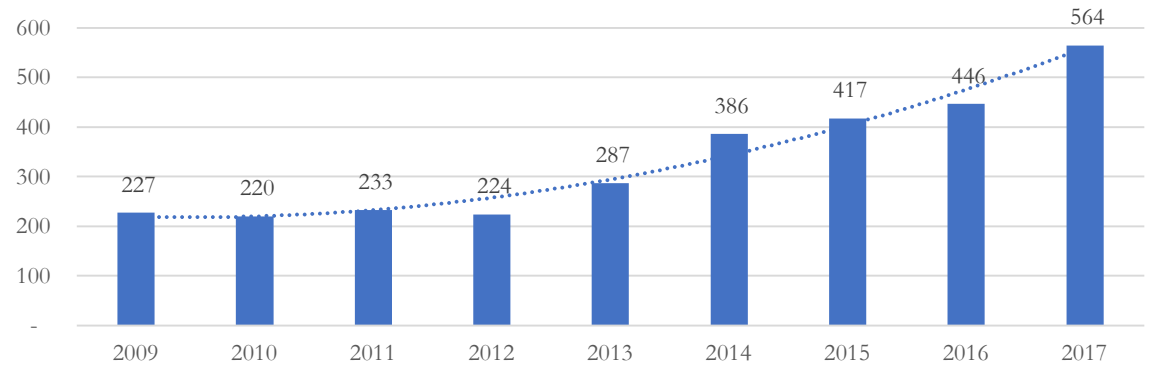
| | Vermont | | | National | | |
|---|---|---|---|---|---|---|
| | 2013 (%) | 2014 (%) | 2015 (%) | 2013 (%) | 2014 (%) | 2015 (%) |
| Percent of All Students | 15.6 | 15.9 | 16.1 | 13.0 | 13.3 | 13.3 |
| By Disability Category | | | | | | |
| Autism Spectrum Disorder (ASD) | 8.4 | 8.6 | 8.9 | 8.4 | 8.9 | 9.3 |
| Deaf-blind | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Emotional Disturbance | 17.6 | 18.0 | 17.6 | 6.2 | 6.0 | 5.9 |
| Hearing Impairment (Including Deafness) | 0.7 | 0.7 | 0.6 | 1.2 | 1.2 | 1.1 |
| Intellectual Disability | 6.4 | 6.1 | 6.0 | 7.3 | 7.2 | 7.1 |
| Multiple Disabilities | 1.9 | 2.0 | 2.0 | 2.2 | 2.2 | 2.1 |
| Orthopedic Impairment | 0.3 | 0.4 | 0.3 | 0.9 | 0.8 | 0.7 |
| Other Health Impairment (OHI) | 18.9 | 19.4 | 19.8 | 14.2 | 14.8 | 15.4 |
| Specific Learning Disability (SLD) | 33.9 | 34.0 | 34.5 | 40.4 | 40.1 | 39.8 |
| Speech or Language Impairment | 11.2 | 10.3 | 9.6 | 18.3 | 18.1 | 17.7 |
| Traumatic Brain Injury | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 |
| Visual Impairment (Including Blindness) | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |

Note: Denominator is all children with disabilities (IDEA) ages 6-21, excluding those with developmental delays. Data reported for IDEA Child Count and Educational Environments to the US Department of Education.
Source: US Department of Education, Part B Data Display (by State), Publication Year 2017 (https://osep.grads360.org/#report/apr/publicView).

### Trends in the Number of "High Cost" Students with IEPs

Figure 3 shows the trend in the number of students with IEPs qualifying for the state's extraordinary cost reimbursement between FY 2009 and FY 2017. Prior to 2013, the number of IEPs who qualified for an extraordinary cost reimbursement was relatively constant. However, since 2013, there has been a 75% increase in the number of qualifying IEPs. In 2017, 564 students with IEPs ages 3 and older had allowable expenditures in excess of $50,000 during the fiscal year.

Figure 3: Number of IEPs Qualifying for State's Extraordinary Cost Reimbursement (FY 2009-2017)




Source: Independent analysis using data provided by the Vermont Agency of Education.

### Variability in Identification Across Supervisory Unions & School Districts

The potential for geographic differences in the mix of students with disabilities is relevant to consider when identifying strategies for reforming Vermont's special education funding formula. Disability type is often operationalized as a proxy for student need for services, with high-incidence disabilities such as SLD and speech and language impairments considered "mild" disabilities requiring less intense and therefore less costly services. Disabilities such as traumatic brain injury (TBI) and certain types of hearing and vision impairments are considered more "severe" with students requiring more intensive and costly services and supports.

Table 3 characterizes the variability among Vermont's supervisory unions/districts in the distribution of students with IEPs in specific disability categories. Here, the mean represents the average percentage of students with a particular disability across Vermont's supervisory unions/districts. For comparison, we also report the percentage at the 50$^{th}$ percentile. Cases where the supervisory union/district mean exceeds the 50$^{th}$ percentile in a disability category, for instance, suggest that a few supervisory unions/districts have higher-than-average shares of students with IEPs with a particular disability, thus inflating the overall mean. The extent of differences among supervisory unions/districts is further characterized by comparing the minimum and maximum percentages of students with IEPs with certain disabilities.

Overall, we find that for many disability categories, the mean percentage is larger than the percentage at the 50th percentile, suggesting that the trend is for some supervisory unions/districts to have much higher concentrations of students with certain disabilities than the statewide supervisory union average. For example, the mean percentage of students with emotional disturbances in supervisory unions is 16.8%, whereas the 50th percentile is 15.7%.

We see similar patterns with regard to differences between the mean and the 50th percentile for the distribution of students with intellectual disabilities, multiple disabilities, OHI, SLD, and speech and language impairments.

Table 4 characterizes differences among supervisory unions/districts in the share of students with disabilities placed out-of-district. Statewide, supervisory unions/districts place an average of about 6% of students in either special day or residential schools. However, percentages vary across supervisory unions/districts, with at least one district placing nearly 14% of its students with disabilities out-of-district, while others place fewer than 1%. Compared to residential placements, there is more variability among supervisory unions/districts in the share of students placed in separate schools. Four supervisory unions place more than 10% of their students in separate schools, while others place almost no students with disabilities in separate schools.

The explanation for such differences among Vermont's supervisory unions likely involves a complex interplay between demographic characteristics; the location of special programs and services that attract families and students with certain types of disabilities; and differences in the policies, programs, and practices in place within supervisory unions and school districts. In our review of the patterns across supervisory unions and school districts, as well as our interviews with special education professionals and stakeholder groups, we found evidence that all three factors are likely at work.

## Table 3: Differences in the Share of Students with IEPs, by Disability Type, Across Supervisory Unions/Districts (FY 2016)

| | Distribution of IEPs Across Primary Disability Categories | | | |
|---|---|---|---|---|
| | Mean | 50th Percentile | Minimum | Maximum |
| | (%) | (%) | (%) | (%) |
| Autism Spectrum Disorder (ASD) | 9.2 | 9.2 | 0.0 | 22.2 |
| Deaf-blind | 0.0 | 0.0 | 0.0 | 0.8 |
| Emotional Disturbance | 16.8 | 15.7 | 4.6 | 34.0 |
| Hearing Impairment (Including Deafness) | 0.7 | 0.6 | 0.0 | 3.2 |
| Intellectual Disability | 6.2 | 5.2 | 0.0 | 17.8 |
| Multiple Disabilities | 2.0 | 1.6 | 0.0 | 9.9 |
| Orthopedic Impairment | 0.5 | 0.0 | 0.0 | 11.1 |
| Other Health Impairment (OHI) | 20.5 | 20.6 | 6.0 | 37.8 |
| Specific Learning Disability (SLD) | 34.4 | 34.6 | 8.5 | 72.7 |
| Speech or Language Impairment | 9.4 | 9.2 | 0.0 | 27.4 |
| Traumatic Brain Injury | 0.3 | 0.0 | 0.0 | 1.9 |
| Visual Impairment (Including Blindness) | 0.2 | 0.0 | 0.0 | 1.9 |

Note: Percentages represent the students with a particular disability as a percentage of the total number of students with an IEP in a supervisory union/district. Total IEP count does not include students identified with Developmental Delays.
Source: Independent analysis using data provided by the Vermont Agency of Education.

## Table 4: Percentage of Students with Disabilities Placed Out-of-District by Vermont Supervisory Unions (FY 2014)

| | Mean | 50th Percentile | Minimum | Maximum |
|---|---|---|---|---|
| | (%) | (%) | (%) | (%) |
| Out -of-district placements | 5.8 | 5.6 | 0.6 | 13.8 |
| By Location | | | | |
| Residential placements | 1.0 | 0.8 | 0.0 | 2.9 |
| Separate Schools | 4.8 | 4.7 | 0.0 | 11.9 |

Note: Percentages represent the students placed out-of-district as a percentage of the total number of students with an IEP in a supervisory union/district.
Source: Independent analysis using data provided by the Vermont Agency of Education.

## Special Education Expenditures

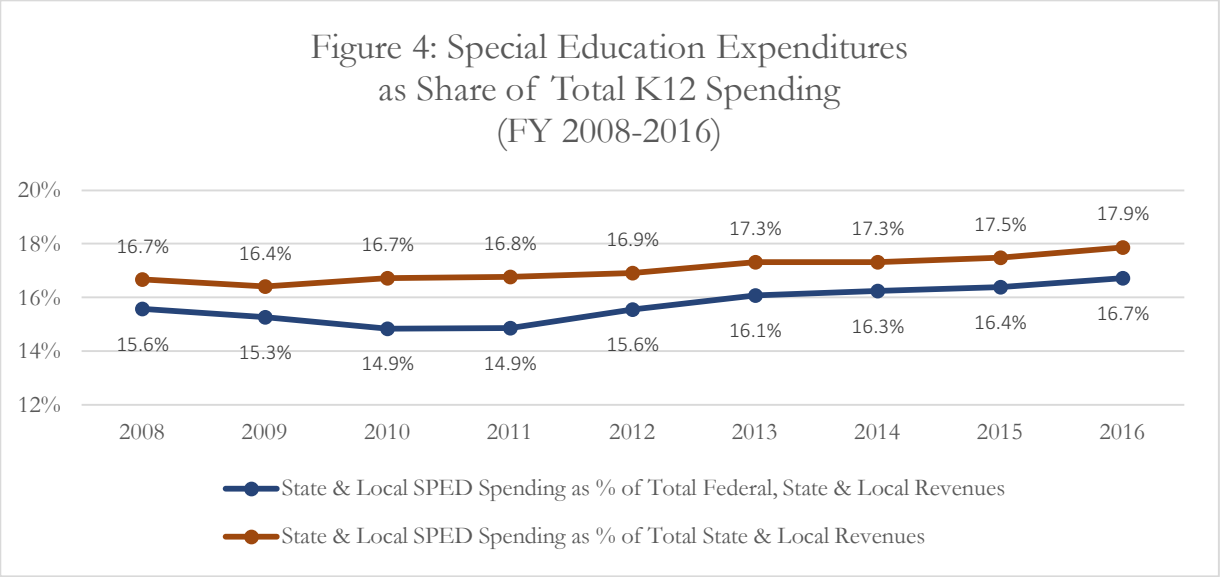
### Trends in State & Local Expenditures on Special Education

In Vermont, the amount spent by the state and localities on special education has steadily increased over time (Table 5). In the most recent time period (FY 2013-FY 2016), total spending from state and local sources increased by about 14%, at an average rate of about 4% per year.

Although a comparatively small share of overall spending, state reimbursements to localities for extraordinary costs associated with serving high-need students with disabilities saw the largest growth (Table 5). State expenditures for extraordinary cost reimbursements increased nearly 28% between the 2013 and 2016 fiscal years, with the largest increase (16%) occurring most recently, between FY 2015 and FY 2016. The growth in extraordinary cost reimbursement spending could be the result of either growth in the number of students receiving special education services that cost in excess of $50,000 per school year; an increase in overall spending on supports and services for high-need students; or some combination of a change in incidence and cost.

It is also the case that special education spending, as a share of total spending on K-12 education, has increased over time (FY 2008-FY 2016) (Figure 4). Since FY 2012, special education spending as a share of overall state and local spending for K-12 education in Vermont has increased by about 1%. This suggests that, over this time period, special education spending has garnered a steadily increasing share of state and local dollars available for education, generally.

Trends in special education spending as a share of total spending suggest that special education costs may be limiting the funds available for general education. Nearly two-thirds of special education directors (62.1%) statewide who participated in our survey either "agreed" or "somewhat agreed" that special education in their supervisory union or district had "encroached" on general education funding. Moreover, most special education directors (81.1%) "agreed" or "somewhat agreed" that changes in their supervisory union's or district's budgets were due to increased special education costs.




Note: For FY 2010 and FY 2011 Vermont received additional one-time federal monies from the American Recovery and Reinvestment Act of 2009 (ARRA), increasing the total amount of funding available for K-12 education.

## Table 5: State & Local Spending on Special Education (FY 2008-FY 2016)

| | Fiscal Year | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2008** | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** |
| State Spending | | | | | | | | | |
| Reimbursement Formula | $124,716,100 | $125,788,524 | $126,855,152 | $126,353,838 | $132,210,810 | $138,178,560 | $144,741,288 | $149,478,388 | $157,891,972 |
| Block grant | $33,569,468 | $30,278,628 | $30,785,592 | $31,198,518 | $30,980,954 | $30,732,184 | $30,647,080 | $31,064,812 | $31,582,404 |
| Reimbursement | $91,146,632 | $95,509,896 | $96,069,560 | $95,155,320 | $101,229,856 | $107,446,376 | $114,094,208 | $118,413,576 | $126,309,568 |
| % Year-to-year Change | | 5% | 1% | -1% | 6% | 6% | 6% | 4% | 7% |
| Extraordinary cost reimbursement | $6,566,837 | $8,095,032 | $8,376,816 | $8,376,436 | $8,541,391 | $10,992,045 | $11,542,990 | $12,299,063 | $14,282,780 |
| % Year-to-year Change | | 23% | 3% | 0% | 2% | 29% | 5% | 7% | 16% |
| Total State Spending (Reimbursement Formula & Extraordinary Costs) | $131,282,937 | $133,883,556 | $135,231,968 | $134,730,274 | $140,752,201 | $149,170,605 | $156,284,278 | $161,777,451 | $172,174,752 |
| % Year-to-year Change | | 2.0% | 1.0% | -0.4% | 4.5% | 6.0% | 4.8% | 3.5% | 6.4% |
| Local Spending | $90,763,823 | $93,504,403 | $95,117,262 | $95,343,875 | $98,751,105 | $103,863,779 | $109,167,010 | $112,780,331 | $116,074,894 |
| % Year-to-year Change | | 3.0% | 1.7% | 0.2% | 3.6% | 5.2% | 5.1% | 3.3% | 2.9% |
| Total State & Local Spending | $222,046,760 | $227,387,959 | $230,349,230 | $230,074,149 | $239,503,306 | $253,034,384 | $265,451,288 | $274,557,782 | $288,249,646 |
| % Year-to-year Change | | 2.4% | 1.3% | -0.1% | 4.1% | 5.6% | 4.9% | 3.4% | 5.0% |

Note: Dollars represent actual year-to-year spending and have not been adjusted for inflation.
Source: Independent analysis using data provided by the Vermont Agency of Education.

### Trends in Spending on Students Qualifying for Extraordinary Cost Reimbursement by State

Special education students with allowable expenses in excess of $50,000 in a given fiscal year are eligible for additional state dollars from the extraordinary cost reimbursement funding provision. In FY 2016, on average, the state reimbursed localities an additional $32,000 per qualifying IEP, over and above other state funding received through its block grant and cost reimbursement mechanisms. Taken together, state funding from all three mechanisms amounted to about $56,700 per qualifying IEP, compared to local spending of about $28,500 per qualifying IEP.

Since 2013, however, average total spending per qualifying IEP has declined. That is, while the number of qualifying IEPs has increased, the average expenditure per student was somewhat less than in past years.

This trend is of particular interest in light of findings from our qualitative interviews with special education professionals and state officials. In these conversations, respondents repeatedly shared their concern that the existing threshold ($50,000) had not been adjusted in statute for inflation, and, as a result, less costly students were qualifying for the state's extraordinary cost reimbursement. This has triggered both an increase in the number of qualifying IEPs as well as growth in spending for extraordinary cost reimbursements to localities. Additionally, there were concerns that a fixed-dollar threshold could encourage localities to opt for more expensive placements and services in an effort to garner additional state funding.

**Table 6: Extraordinary Cost Reimbursements Per Qualifying IEP (FY 2009-2016)**

| | | | State & Local Spending on Qualifying IEPs | | |
|---|---|---|---|---|---|
| FY | # of IEPs Qualifying for Extraordinary Cost Reimbursement | Average State Reimbursement Per Qualifying IEP (Actual) | Average Spending Per Qualifying IEP (Estimated) | Local Share | State Share |
| 2009 | 227 | $28,929 | $81,822 | $28,182 | $53,640 |
| 2010 | 220 | $36,796 | $90,475 | $29,048 | $61,428 |
| 2011 | 233 | $35,952 | $89,547 | $28,955 | $60,592 |
| 2012 | 224 | $38,131 | $91,944 | $29,194 | $62,750 |
| 2013 | 287 | $38,300 | $92,130 | $29,213 | $62,917 |
| 2014 | 386 | $29,904 | $82,895 | $28,289 | $54,605 |
| 2015 | 417 | $29,494 | $82,444 | $28,244 | $54,199 |
| 2016 | 446 | $32,024 | $85,227 | $28,523 | $56,704 |

Note: Average state reimbursement per qualifying IEP was calculated as follows: (Total state appropriation for extraordinary cost reimbursement mechanism/number of qualifying IEPs). When calculating average spending per qualifying IEP, we assumed that the state's extraordinary cost reimbursement was 90% of total costs beyond $50,000, with the remaining 10% paid for by local education agencies. For the first $50,000 spent, the state reimbursed localities for 60% of allowable expenditures and localities were responsible for the remaining 40%.

## Special Education Expenditures Per Student with an IEP

For FY 2016, supervisory unions and school districts spent an additional $21,840 per special education student (over and above base per-pupil funding) to implement students' IEPs.[7] Average spending per IEP by supervisory unions and school districts is somewhat higher than spending per IEP for the supervisory union at the 50th percentile. This highlights the fact that a few supervisory unions spend considerably more per IEP than others, thus inflating the overall average.

Since FY 2014, average spending per IEP by supervisory unions and school districts has increased 8%, or $1,683 per IEP. As noted earlier in this report, spending on high-cost students has been a primary driver for increasing IEP costs.

**Table 7: State & Local Special Education Expenditures Per IEP (FY 2008-2016)**

| | | | Average Spending Per IEP by Supervisory Unions/School Districts | | | |
|---|---|---|---|---|---|---|
| FY | IEP Count | Total State & Local Spending per IEP | Mean | 25th percentile | 50th Percentile | 75th Percentile |
| 2008 | 10,632 | $20,885 | $18,267 | $14,602 | $17,722 | $19,497 |
| 2009 | 10,655 | $21,341 | $18,347 | $15,592 | $17,997 | $20,298 |
| 2010 | 10,716 | $21,496 | $18,107 | $15,469 | $17,681 | $20,494 |
| 2011 | 10,519 | $21,872 | $18,237 | $16,142 | $17,380 | $19,785 |
| 2012 | 10,471 | $22,873 | $19,670 | $16,829 | $18,459 | $20,818 |
| 2013 | 10,481 | $24,142 | $21,045 | $16,968 | $19,470 | $22,949 |
| 2014 | 11,262 | $23,571 | $20,157 | $16,333 | $19,583 | $22,234 |
| 2015 | 11,300 | $24,297 | $20,637 | $17,381 | $19,373 | $22,360 |
| 2016 | 11,218 | $25,695 | $21,840 | $18,176 | $20,879 | $24,311 |

Note: IEP count includes students with IEPs in the disability categories listed in Table 1 *and* students identified with developmental delays (ages 3-6). State and local spending per IEP includes funding generated through the state's special education formula (block grant and reimbursement mechanisms) and excess cost reimbursement. Spending is reported in actual dollars and has not been adjusted for time-variant differences in costs.
Source: Independent analysis using data provided by the Vermont Agency of Education.

[7] We report both total state and local spending per IEP *and* the average spending per IEP by supervisory unions and school districts. The former represents the cost of the average IEP and was calculated as the total spending (state and local)/total number of IEPs in a given year. The latter represents the average spending (from state and local sources) by supervisory unions per IEP. In our discussion, we highlight average spending per IEP for supervisory unions for two reasons: 1) supervisory unions are the primary unit of analysis for the model simulations presented in Chapter 5; and 2) averaging across supervisory unions ensures that average spending by each supervisory union has equal weight in our cost calculations and is not overly influenced by comparatively high spending by certain supervisory unions.

## Special Education Expenditures Per K-12 ADM

Special education spending also can be understood in terms of the amount spent per K-12 ADM – that is, on average, how much is spent on students with IEPs when spending is averaged across all students in all grades. Considering special education spending per student in this way is aligned with considering how existing spending might translate into per-capita grant amount for special education.

During FY 2016, supervisory unions and school districts spent, on average, an additional $2,971 per pupil.[8] As was the case with average spending per IEP, the supervisory union mean is higher than the value at the 50th percentile, calling attention to the fact that a few supervisory unions spend considerably more than others on special education per-pupil.

Special education spending per K-12 ADM has been steadily increasing over time. Between FY 2014 and FY 2016, average K-12 ADM spending by supervisory unions and school districts increased about 11%, or roughly $300 per pupil. The increase in special education spending per pupil has been driven by two conditions: 1) declining K-12 resident enrollments; and 2) increased special education spending as a share of total education spending (Figure 3).

**Table 8: State & Local Special Education Expenditures Per K-12 ADM (FY 2008-2016)**

| | | | Average Spending Per K12 ADM by Supervisory Unions/School Districts | | | |
|---|---|---|---|---|---|---|
| FY | K12 Resident ADM | Total State & Local Spending Per K12 ADM | Mean | 25th percentile | 50th Percentile | 75th Percentile |
| 2008 | 89,747 | $2,474 | $2,059 | $1,791 | $1,989 | $2,289 |
| 2009 | 87,723 | $2,592 | $2,152 | $1,958 | $2,139 | $2,320 |
| 2010 | 86,480 | $2,664 | $2,193 | $1,974 | $2,167 | $2,421 |
| 2011 | 85,202 | $2,700 | $2,228 | $1,976 | $2,215 | $2,469 |
| 2012 | 84,028 | $2,850 | $2,379 | $2,123 | $2,368 | $2,656 |
| 2013 | 83,139 | $3,044 | $2,537 | $2,196 | $2,521 | $2,810 |
| 2014 | 82,523 | $3,217 | $2,676 | $2,331 | $2,658 | $3,016 |
| 2015 | 81,169 | $3,383 | $2,800 | $2,833 | $2,464 | $3,107 |
| 2016 | 80,017 | $3,602 | $2,971 | $2,550 | $2,882 | $3,199 |

Note: Average Daily Membership (ADM) for resident students in Kindergarten through grade 12. State and local spending per IEP includes funding generated through the state's special education formula (block grant and reimbursement mechanisms) and excess cost reimbursement. Spending is reported in actual dollars and has not been adjusted for time-variant differences in costs.
Source: Independent analysis using data provided by the Vermont Agency of Education.

[8] As was the case with spending per IEP, we report both total spending per K-12 ADM *and* average spending per K-12 ADM by supervisory unions and school districts. For the same reasons outlined in the previous footnote, our discussion focuses on average spending by supervisory unions and school districts rather than on total special education spending per pupil.

## Understanding Trends in Special Education Child Count & Spending

In our interviews with special education professionals, focus groups with stakeholders, and a statewide survey with special education directors, we sought clues about the factors driving increased rates of identification for and spending on special education in Vermont.

### Factors Influencing the Nature & Extent of Student Need

Our interviews and surveys with special education professionals in Vermont identified a constellation of factors that may account for the state's comparatively high percentage of students with disabilities. On the one hand, professionals characterized the range of student behavioral issues encountered in schools as unprecedented — particularly in low-income, rural areas where families face a broad range of social and public health issues (including opioid addiction).

Interviews with education professionals in the field identified five factors that influence the nature and extent of student need.

- ***The nature and extent of student need has grown more severe, as well as more complex.***
  Professionals observed that there has been a steady increase in the number of students experiencing early-life trauma, many of whom arrive at school with significant emotional and behavioral needs. A key flashpoint has been with very young children entering pre-school or early elementary grades with challenging needs. One professional described the conditions in the field as, "EEE is exploding with high-needs students."

  Professionals attributed much of the shift in student need to complex family conditions associated with opioid addiction. One special education professional observed:

  > *"[The] trauma of being born addicted or just being in a house that's totally dysregulated and dysfunctional because of their parents' addiction…we've seen an increase in little ones coming to us that have significant self-regulation and emotional needs."*

- ***An increased demand for mental health services has been met with limited service capacity.***
  Education professionals talked about increased student needs requiring more mental health services. Though student need has increased, many education professionals with whom we spoke noted that mental health services outside of schools are either unavailable for students or are already at capacity to deliver treatment. The result has been increased pressure on schools to provide, and pay for, services that historically have been provided by organizations external to schools.

- ***Mobility of high-needs students with IEPs has created challenging adjustments at the local level.***
  Special education professionals observed that savvy parents of high-need students relocate to Vermont given the "magnetic properties" of the state's special education system and its well-resourced districts. This has resulted in families moving significantly disabled students from neighboring states to Vermont. Additionally, within the state, families are moving to communities that have well-resourced or specialized programs, or even a reputation for

referring (and paying for) students with significant disabilities to attend specialized schools (both within and outside of Vermont). A special education director reflected on this pattern as follows:

> *"… We spend more on special education than almost every state. And so, when parents are looking, where do I go for my child – and all of us who have children know that we will go to the ends of the Earth for our children, and when you have a child with a disability, if you have a child who has a medical condition, you send your child to the best physician you can find. You do the same thing if you have a child with a significant disability. You want to find the best school district; the place that will accept them, that will bring them in, that will love and care for them and do really good work to mitigate the disability. And I do know that we have that reputation for sure."*

In the context of this type of student movement, driven in part by the attraction to out-sourcing student services, teachers and principals talked about the tensions in this dynamic. Tensions revolved around the struggle to provide unique educational programs for intense service needs, and the acknowledgement that onsite capacity was limited. Some educators talked about the tension involved in letting a student go to be served elsewhere, often to a more restricted and/or self-contained school setting.

- ***Weak funding for comprehensive and early support systems, coupled with clearer funding processes, has meant more students have been "made eligible" for services.*** Quite consistently, interviewees explained how Vermont's funding for broad student service-delivery models like MTSS – particularly Tier 2 supports and interventions for general education students — had led to the overuse of special education as a tool for securing both the additional help needed to support struggling students and as a way to access additional funding. The result was that student needs that could not be met through wraparound services like ESTs, early intervening services, or through poorly coordinated Section 504 programming, ended up being addressed using special education teacher time.

  Special educators interviewed for the study routinely talked about the need to work with non-classified students to meet their academic needs and goals because there were no other options for these students to receive the help they needed to succeed. Because they were employed as special educators who must account for their time with IEP minutes, these teachers swept general education students into their small and large group instruction along with students with IEPs. Teachers described this as a matter of doing their job as educators despite the bureaucracy of the separate systems of general and special education.

  In a lengthy response, a high school special education director provided a rich description of how insufficient general education resources for the implementation of MTSS have led to increased special education student identification — and, by extension, costs:

  > *"Remember, we were talking about the lack of Tier 2 – where the funding structures are not flexed – and as we're listing how they talk about the ideal where we would have smaller groups of teachers with a special educator attached to flexibly to work with a group of kids. That allows you to provide Tier 2 in a flexible situation. Where you have those structures, it's special education. And then there's this little tiny pocket of Tier 2, like the EST coordinator, and you don't have good practice*

*around ownership and sense of belonging in the classroom. What ends up happening is, you end up pushing kids … to ask for a referral to special education.*

*"So, it's all interconnected. Where you have lack of ownership and lack of sense of belonging and a thin [MTSS] Tier 2 support … [you do] whatever you can [to] piece together financially because under the funding structures … pushing kids up into Tier 3, trying to get them labeled as disabled so that they can get special education … Special education ends up [being] the answer to everything.*

- ***Intensifying student needs and weak in-house capacity to serve these students has led to expensive fee-based service contracts with outside providers and student placements in special schools.***

  Building upon the rich description above, special educators (administrators and teachers) spoke often about the high costs of contracting with service providers for out-of-school and even out-of-district placements for students with intense needs. Both services are often deemed to be expensive, as are the specialized transportation requirements associated with bringing a child to services.

  Out-of-district placements were readily identified as an important cost driver in special education, in part because it is a readily identifiable service mechanism. Interviewees would identify outsourced services while speaking about other cost drivers.

  But in the context of limited capacity to work with students with intense needs, interviewees talked about the mechanisms that stimulate outsourcing of services. One director of special education described the processes that lead to alternative placements:

  *"What typically happens is that ... It can be a number of things, but often, it's a student's behavior that escalates to such an extent that there are safety concerns for the student and for others. Non-responsiveness to behavioral programming that we would expect the student to respond to. It's usually safety and magnitude of dangerous behavior. It can be, and has been sometimes particularly, students on the autism spectrum who … have both a combination of significant developmental needs as well as significant behaviors. ... Those are the primary profiles. We have exhausted all the resources and all of the expertise that we have, and we're not feeling like we're sufficiently meeting their needs."*

  Educators try a variety of in-house services and determine, as one interviewee stated:

  *"When it's at the point where it's just not working — and its data-driven, the behavior plan's been implemented with fidelity, [but] it isn't working for this child — [they] need something on and above. And then we … explore different options. We tend to try to hang on to kids because we don't want them necessarily to leave. We still consider [them] our kid."*

Administrators also spoke about the important gatekeeping role they play in balancing advocacy from parents and educators, and the observable costs of out-of-district placements. Administrators were also keenly aware of the fiscal incentives associated with outsourcing services. One superintendent explained it as, "If you're hiring, say, a one-on-one para locally, you're absorbing all of that cost. Whereas again if you said the student has reached capacity and they need a therapeutic

day-treatment program, we're going to send them out, [and] you now only have part of the cost." Here, out-sourcing educational services, presumably triggers the extra-ordinary needs aid which heavily discounts the provision of services for the student and district. In this example, the superintendent acknowledges the delicate role educators play in determining when local capacity is reached and outsourcing may be justified.

### Factors Contributing to Special Education Costs

We used our statewide survey with special education directors as an opportunity to examine the extent to which the issues and trends identified in our interviews with selected special education professionals and stakeholder focus groups were generalizable to the larger state context.[9] Specifically, we asked special education directors to indicate the extent to which, based on their experience, four broad categories of factors contribute to increased special education spending: 1) demographic trends and changes in student need; 2) service delivery pressures; 3) administrative and funding requirements; and 4) changes in availability of services and supports outside of schools (Table 9).

Special education directors statewide affirmed the mounting pressures on Vermont's special education system due to changes in the types and extent of challenges faced by students. Nearly all special education directors (92%) reported that "the nature and extent of student need" contributed to the cost of providing special education "to a great extent," and about half identified "transportation needs for students with IEPs" as driving costs "to a great extent."

By comparison, special education directors felt that external service delivery pressures exerted less influence on special education costs. Nearly half of directors (49%) reported that parent pressure to provide services or to place students in special schools had "very little" or no impact on costs; another 46% indicated that parent pressures exerted a "moderate" influence on costs. Among service-delivery pressures, supervisory union and district reliance on outside providers, however, may play a stronger role. About three-quarters of special education directors (76%) identified outside providers as contributing to special education costs to a "great" or "moderate" extent.

Special education directors confirmed that administrative and funding requirements have contributed to increasing special education costs. Most indicated that "rules and regulations that govern how students with and without IEPs can be served by special educators" *and* "rules about what is an allowable or reimbursable expense under the State's special education funding formula" contributed to growing special education spending to a "great" or "moderate" extent (81% and 92%, respectively). However, their responses were mixed with respect to the role played by administrative and paperwork requirements, with nearly one-third indicating that these requirements influenced costs "to a great extent," while another 30% felt they had "very little" impact.

The lack of resources outside of school to address student and family needs were identified as a significant factor in rising special education costs in schools. Three-quarters of special education directors (76%) said an "inadequate supply of community-based health and social service agencies" had greatly impacted special education spending in schools. Changes in the amount and types of services available from other government agencies were also identified as cost drivers for school-

[9] The statewide survey with special education directors in supervisory unions and school districts was administered during Fall 2107. A total of 37 individuals participated, for a 65% response rate.

based spending, with 89% of special education directors indicating that such changes had impacted special education spending to a "great" or "moderate" extent.

**Table 9: Factors Contributing to the Cost of Providing Special Education**

| | A Great Extent | Moderate Extent | Very Little | Not At All |
|---|---|---|---|---|
| *Demographic Trends & Student Need* | | | | |
| The nature and extent of student need | 91.9% | 8.1% | | |
| Transportation needs for students with IEPs | 51.4% | 32.4% | 16.2% | |
| *Service Delivery Pressures* | | | | |
| Parent pressure to provide services to students or to place students out-of-district | 4.0% | 45.9% | 45.9% | 2.7% |
| Reliance on outside providers | 27.0% | 48.6% | 24.3% | |
| *Administrative & Funding Requirements* | | | | |
| Rules and regulations that govern how students with and without IEPs can be served by special educators | 48.6% | 32.4% | 18.9% | |
| Rules about what is an allowable or a reimbursable expense under the State's special education funding formula | 48.6% | 43.2% | 8.1% | |
| Administrative and paperwork requirements for state and federal funding | 32.4% | 32.4% | 29.7% | 5.4% |
| *Changes in Availability of Services & Supports Outside of Schools* | | | | |
| An inadequate supply of community-based health and social service agencies in your communities | 75.7% | 16.2% | 8.1% | |
| Changes in the amount and types of services available from other government agencies | 45.9% | 43.2% | 10.8% | |

Source: Statewide survey with special education directors in supervisory unions and school districts (n=37; Response rate=64.9%).

## Summary

Chapter 3, summarized below, examines trends in child count and spending patterns using a blend of state and federal demographic and fiscal data. Factors related to these patterns are explored using qualitative data from interviews and surveys with education professionals.

### Child Count

- The percentage of students with disabilities in Vermont exceeds the national average but is comparable to rates found in neighboring states. Over the past three years, the overall share of K-12 students receiving special education in Vermont has increased at a rate similar to the national average.

- Vermont's special education population has the largest share of students with emotional disturbance of any state in the nation — and nearly three times the averages seen in neighboring states. The share of Vermont students with other health impairments also exceeds the national average but is on par with neighboring states.

- Since 2013, there has been a 75% increase in the number of IEPs qualifying for extraordinary cost reimbursements from the State.

- There is considerable variability among Vermont's supervisory unions and school districts in the distribution of students with certain types of disabilities. The trend is for some supervisory unions and districts to have much higher concentrations of students with disabilities than other locations.

- There is also considerable variability in the rate at which supervisory unions and school districts place students with disabilities in separate schools or residential placements outside their home school district.

### Special Education Spending

- The amount spent by the State and localities on special education and related services increased by about 14% between FY 2013 and FY 2016.

- Although a comparatively small share of overall spending, the amount spent on state reimbursements to localities for extraordinary costs associated with serving high-need students with disabilities increased 28% between FY 2013 and FY 2016.

- Increased special education spending may be crowding out, or encroaching upon, the revenues available for K-12 general education.

- For FY 2016, on average, supervisory unions and school districts spent an additional $21,840 per special education student, over and above base per-pupil funding for general education. Spending per IEP increased 8%, or $1,683, since FY 2014. This level of spending translates into an additional $2,971 per K-12 resident ADM.

## Factors Influencing Child Count & Spending

- Intensification in the nature and extent of student need has put upward pressure on the number of students identified for special education and has increased spending on special education and related services.

- Increased demand and limited capacity for community-based mental health and social services has shifted responsibility for providing these services to schools. In the face of their own capacity limitations, schools have responded by either contracting with private providers or paying for students to attend special schools or programs outside the district.

- Families with students with significant disabilities relocate to Vermont to take advantage of the state's well-resourced special education system. Within the state, families move to districts and schools with specialized programs and reputations for providing intensive services for students with severe and profound disabilities.

- Weak funding for comprehensive and early support systems, as well as Tier 2 supports and interventions, has resulted in more students being identified for special education, to secure both the instructional resources needed as well as funding from the state's special education reimbursement mechanism.

- Administrative requirements and rules defining allowable costs under the state's special education funding formula may create inefficiencies in service delivery that contribute to higher overall spending.

# IV. Perspectives of the Special Education Funding System and Its Functioning

In our interviews with special education professionals, focus groups with stakeholders, and through a statewide survey with special education directors, we explored perspectives on how Vermont's special education funding formula functions. Questions focused on major components of the funding system, relationships between parts, as well as evaluative questions about strengths, weaknesses, and relationships between other state initiatives. Throughout the interviews and survey work, questions focused globally, first, on how interviewees understood the funding system and its component parts, before turning to questions about satisfaction with its operation. Interviews were selected from among a range of actors in the special education community statewide, including parents with disabled children, teachers, administrators, and so on. The sample was geographically wide as were the professional roles.

Interviews were conducted to generate illustrative examples from constituents, and though 42 interviewees participated in the study, their statements are only representative of their points of view or those of their organizations. The interviews are not meant to be generalizable sentiments or across all representative parties (e.g., all parents, all principals, all LEAs). The patterns are particular to the respondents in this study only. In contrast with the interview findings, survey data that is interspersed in this chapter represents a high response rate from the population of special education directors at work in supervisory unions across the state. These survey findings may be considered more representative of the entire population of special education directors.

Table 9 offers a summary of the major cross-cutting themes as reported by the constituents interviewed for the study. This table helps summarize overarching perceptions across the interviewee groups, as well as highlight some of the nuanced differences across them. Since the fiscal policy implementation process occurs across the range of actors (e.g., state education officials to classroom teachers), vantage points combine with professional roles and contexts to shape how the funding system is understood.

**Table 9. Stakeholder Input on Vermont's Existing Special Education Funding Formula - Summary Results from Interviews, Focus Groups, & Survey**

| | How well is the funding system understood? | Satisfaction with the funding system | Strengths with the funding system | Weaknesses of the funding system | Considerations for Reforming State's Funding Formula |
|---|---|---|---|---|---|
| State Officials (Interviews) | State Officials have a great deal of understanding of funding system and components and are frequently clarifying for others | Policy does what it is supposed to do. However, the funding formula impedes related SPED programs and implementation. Existing formula is complicated and time consuming to implement. | Clear policy and accountability mechanisms allow them to monitor what districts and schools are doing. | Administrative burden, regarding reimbursement bureaucracy and auditing, is a real and present cost. AOE recognizes spending is above average but unclear whether the spending level is appropriate. Funding mechanisms for out-of-district placements may push children away from in-district services | • Maintain predictability<br>• Include high-cost student adjustment mechanism<br>• Small schools need financial protection from the cost of serving low-incidence, high-need students<br>• Flexibility in how state funding can be spent |
| Representatives from Disability Advocacy and Policy Community (Focus Groups) | Stakeholders possess limited understanding of the funding formula and components, but they have expectations for the formula. | Overall, satisfied with funding formula; there seems to be sufficient resources in the system. | The system seems to be working because children's needs are being met, particularly those needing extraordinary services. | Like SPED directors, SPED funding and comprehensive systems of support are in two directions. Potentially new requirements for SPED students in independent schools will create new gray area for children. | • Maintain predictability<br>• Include high-cost student adjustment mechanism<br>• Small schools need financial protection from the cost of serving low-incidence, high-need students<br>• Flexibility in how state funding can be spent<br>• Sensitivity towards disadvantaged students or schools<br>• Increase performance accountability associated with SPED funding. |

| | How well is the funding system understood? | Satisfaction with the funding system | Strengths with the funding system | Weaknesses of the funding system | Considerations for Reforming State's Funding Formula |
|---|---|---|---|---|---|
| Parents (Interviews) | Do not have an understanding of the funding formula, but they have expectations for the formula. | Satisfied if their children's needs are being met with appropriate services irrespective of the funding formula. | The system is strong and operating well, as long as their child's needs are met. | No clear weaknesses identified in interviews. | • State funding is sufficient to ensure student needs are met |
| | **How well is the funding system understood?** | **Satisfaction with the funding system** | **Strengths with the funding system** | **Weaknesses of the funding system** | **Funding system redesign considerations** |
| Special education directors (Interviews and Statewide Survey) | Strong understanding of funding block grant and reimbursement components. Understanding varies with respect to certain components of SPED grants. | Overall satisfaction level with funding formula. They recognize problems readily. | It is clear where the resources are coming from, and what will be reimbursed. | Funding formula cordons off resourcing students in need to those in Special Education only, while comprehensive systems (e.g., MTSS) creates demand for other students. | • Maintain predictability<br>• Include high-cost student adjustment mechanism<br>• Flexibility in how state funding can be spent |
| School principals/district officials (Interviews/site visits) | Overall, do not have an understanding of the funding formula and components. Building level administrators understand how allowable costs contribute to how they group students and implement SPED. | Mixed satisfaction levels with the funding formula. The rising costs are visible and apparent. Dissatisfaction around the limitations of categorical funding. | It's clear where the resources are coming from and what will be reimbursed. State's share at 60% is helpful. | The funding system around allowable costs, staffing, SPED, PBIS and MTSS is very challenging to implement, with limited guidance for leadership. | • Maintain predictability<br>• Small school needs<br>• Flexibility in resource allocation<br>• Include high-cost student adjustment mechanism<br>• Sensitivity towards disadvantaged students or schools<br>• Increase performance accountability associated with SPED funding. |

| | How well is the funding system understood? | Satisfaction with the funding system | Strengths with the funding system | Weaknesses of the funding system | Considerations for Reforming State's Funding Formula |
|---|---|---|---|---|---|
| Teachers (Interviews and Focus Groups) | Teachers understand allowable costs, for the most part, and implications for who they teach. | Teachers want to help children and blame restrictiveness in formula in their ability to do that. | Either through collaboration in-school, across district, or through contracting with service providers student needs can be met and cost isn't a consideration. | The system frustrates efficient service delivery for children in need by creating forced boundaries. | • Flexibility in how state funding can be spent |

## General Knowledge of Funding System

Not unexpectedly, both general and technical knowledge of Vermont's special education funding model varied among interviewees and survey respondents. Stakeholders from educational organizations and advocacy groups had limited operational knowledge of the funding system and its component parts (i.e., block grant, reimbursement, extraordinary aid) but discussed its importance when talking about specialized services needed for students (e.g., services for children with autism). This awareness level contrasts with more detailed understandings among special education directors (interview and survey data). Among state officials, intimate knowledge of both the law and mechanics of the funding system were reserved to just a few individuals at the state level.

Special education directors were surveyed about their specific understanding of discrete federal and state special education funding mechanisms. Table 10 reports these results that demonstrate nearly 100% understanding of key funding mechanisms like IDEA-Part B sub grants, Medicaid, and at the State level the block grant or extraordinary aids. However, understanding was more mixed for key funds like Federal IDEA-Part B early intervening funds and the personnel development grants (SPDG). For example, about half (47.1%) of special education directors reported having "very little" or no understanding of how federally-funded state personnel development grants may be used.

**Table 10: Extent of Understanding of How Special Education-Related Funding May be Used – Special Education Directors**

| | A Great Extent | Moderate Extent | Very Little | Not at All |
|---|---|---|---|---|
| ***Selected Federal Funding Sources*** | | | | |
| Federal IDEA-Part B Subgrants | 85.7% | 14.3% | 0.0% | 0.0% |
| Federal IDEA-Part B, Preschool Grants for Children with Disabilities | 62.9% | 22.9% | 11.4% | 2.9% |
| Federal IDEA-Part B, Comprehensive Early Intervening Funding | 52.9% | 26.5% | 17.6% | 2.9% |
| Medicaid reimbursements | 79.4% | 20.6% | 0.0% | 0.0% |
| State personnel development grants (SPDG) | 29.4% | 23.5% | 35.3% | 11.8% |
| ***Selected State Funding Sources*** | | | | |
| State SPED Block Grant (Non-Extraordinary) | 68.6% | 28.6% | 2.9% | 0.0% |
| Extraordinary reimbursement | 79.4% | 20.6% | 0.0% | 0.0% |

Source: Statewide survey with special education directors in supervisory unions and school districts (n=37; Response rate=64.9%)

The Special Education Directors were also asked their perceptions of the extent to which their district/SU business officials understood differences between federal and state Special Education Funding streams. Table 11 reports these findings, and may be compared with the same questions posed in Table 10. Special Education Directors reported much higher baseline understandings of several grants, like Federal Part B Pre-School Intervention Grants, or funds for Comprehensive Early Intervening Funds, as well as State extraordinary aids.

**Table 11: Extent of Understanding of How Special Education-Related Funding May be Used – District or Supervisory Union Business Officials (As Reported by Special Education Directors)**

| | A Great Extent | Moderate Extent | Very Little | Not at All |
|---|---|---|---|---|
| ***Selected Federal Funding Sources*** | | | | |
| Federal IDEA-Part B Subgrants | 68.6% | 22.9% | 8.6% | 0.0% |
| Federal IDEA-Part B, Preschool Grants for Children with Disabilities | 57.1% | 14.3% | 28.6% | 0.0% |
| Federal IDEA-Part B, Comprehensive Early Intervening Funding | 41.2% | 20.6% | 38.2% | 0.0% |
| Medicaid reimbursements | 68.6% | 22.9% | 8.6% | 0.0% |
| State personnel development grants (SPDG) | 44.1% | 17.6% | 38.2% | 0.0% |
| ***Selected State Funding Sources*** | | | | |
| State SPED Block Grant (Non-Extraordinary) | 62.9% | 31.4% | 5.7% | 0.0% |
| Extraordinary reimbursement | 71.4% | 17.1% | 11.4% | 0.0% |

Source: Statewide survey with special education directors in supervisory unions and school districts (n=37; Response rate=64.9%)

## General Satisfaction with Funding System

There is general agreement and satisfaction with the funding system in that the policy acts as it should. No party interviewed stated that funding levels were inadequate, and most indicated that levels were appropriate, though likely high (State officials). Satisfaction levels among the interviewees hinged around whether restrictiveness in the funding formula impeded their focal areas of interest. For instance, teachers talked about satisfaction in the context of whether they were allowed or disallowed from working with children in need. These types of satisfaction levels are discussed below.

Special education directors statewide were split in assessment of whether the existing funding formula allocates funding in an equitable manner - slightly less than two-thirds "agreed" that the funding formual was "fair"; however, about 40% of special education directors indicated disagreement (see Table 12). Most special education directors (80%) also indicated that they found the existing system system administratively inefficient (see Table 12). That said, the majority of special education directors (65.7%) reported that they "agreed" that the existing formula understandable (see Table 12).

Special education educators and administrators and, to a large extent even advocates, mentioned general satisfaction with funding levels. There were no significant statements or discussion patterns where interviewees stated that funding levels were low. Conversations among these interviewees focused on the mechanics of meeting the needs of children and the operations involved in aligning existing staff or securing specialists for intervention. Many argued that the funds are present; it is just that services require administrative attention to bring them to bear on student needs. One principal summarized this sentiment as follows, "And so when I came here last year as my first year, I walked into a $500,000 deficit and so then as the school year started and we got three new students … all of them needed one-on-ones [i.e., needed one on one teachers and/or aides]. I'm thinking to myself how is this budget possibly going to do this, because these people were not in the budget. We managed, but it was hard."

Similarly, stakeholders from advocacy organizations generated discussion about overall strong levels of resources in the funding system and their satisfaction with that. During a focus group, one respondent stated, "I've seen schools invest in the training and education of their support staff and special ed staff so that they can create a team, a dynamic team. [This] actually has created expertise and they provide consultation to other local communities. I think this has been a positive…how people have been very creative in…funding and then supporting experts in areas."

## Strengths and Weakness of Funding System

While several areas of strength emerged through interviews and survey data, a broader and more nuanced portrait of weaknesses also emerged. When asked how satisfied Special Education Directors were with the funding system, 33.3% indicated satisfaction, 39.4% indicated some dissatisfaction, and 27.3% indicated that they were dissatisfied. This is a global measure, and the results were mixed. Through interviews, strengths and weaknesses emerged with specific parts of the system.

Respondents' portrayals of strengths and weaknesses of the existing funding system revolved around predictability or knowing what types of educational services may be funded (a strength) and strong concerns over how the limited flexibility in special education funding (a weakness) contributed to weak systems of support services (e.g., PBIS, MTSS, EST). Each of these specific components is discussed in turn below.

### Predictability of Funding is a Strength

Though many interviewees lacked operational knowledge of the major components of the funding system, they indicated that the fact that funds are readily observable helps to promote a sense of predictability in the funding system. State officials talked about how the fiscal accountability mechanisms of the policy created oversight and monitoring capabilities that improved understanding. At the local level, educational administrators talked about knowing where the funding was coming from as a source of reliability and contentment. Knowing what will be reimbursed through clear criteria and auditing was discussed by principals and special education directors as leading to a greater sense of predictability.

Here, the interview data is well-supported by survey findings with the special education directors. Well more than half of Vermont Special Education Directors agreed that the current Special

Education Funding system provides predictable sources of revenue (see Table 12). The survey responses show that 42.9% "somewhat agree" and an additional 25.7% "Agree" that the system provides a predictable source of funding for budgeting and planning purposes. A slightly greater proportion affirm that the system protects districts/SU from unforeseen or extraordinary costs associated with serving high needs students.

> *We get more reimbursement than other places that comes back into the districts. It's certainly not 100 percent but generally, it's roughly 60 percent. That is more than other places across the country and how their funding system works.*

> *The predictability. Meaning I don't, we talked about the consistency and all the, some of the benefits of that but one of the benefits is also the predictability.*

**Table 12: Special Education Director Perspectives on Existing State Funding Formula**

| | Agree | Somewhat Agree | Somewhat Disagree | Disagree |
|---|---|---|---|---|
| ***General Support for Existing Funding System*** | | | | |
| The funding system is fair. | 20.0% | 40.0% | 31.4% | 8.6% |
| The funding system is understandable. | 20.0% | 45.7% | 17.1% | 17.1% |
| The funding system is administratively efficient | 5.7% | 14.3% | 40.0% | 40.0% |
| ***Predictability of Existing Funding System*** | | | | |
| Provides predictable source of funding for budgeting and planning purposes | 25.7% | 42.9% | 17.1% | 14.3% |
| Protects districts/SU from unforseen or extraordinary costs associated with serving high needs students | 28.6% | 34.3% | 25.7% | 11.4% |
| ***Alignment of Existing Funding System with Related Policies*** | | | | |
| Promotes best practices for serving students with IEPs | 5.7% | 14.3% | 31.4% | 48.6% |
| Is consistent with other policies that encourage districts and schools to develop multi-tiered systems of support. | 2.9% | 4.3% | 25.7% | 57.1% |
| Provides sufficient funding to provide appropriate services and supports to students with disabilities. | 14.3% | 25.7% | 34.3% | 25.7% |

Source: Statewide survey with special education directors in supervisory unions and school districts (n=37; Response rate=64.9%)

### Adequate Attention to Extraordinary Needs Aid is a Strength

Similar to comments above about the predictability of funding, a slightly greater proportion of all special education directors (62.9%) affirmed that the system protects districts/SU from unforeseen or extraordinary costs associated with serving high-needs students (see Table 12). There was ample evidence in responses to the open-ended survey questions, and throughout the interviews with educators and State agency personnel, that from their perspective, the extraordinary needs aid portion of the funding formula was an important component of the state's approach to funding special education.

Comments also included some cautionary language however. Many special education directors, as well as state agency personnel, noted that because the extraordinary needs aid threshold had been stable at $50k since inception, and never adjusted for inflation, that more children were qualifying for aid than was probably intended in the founding legislation. Many intimated that the fund was helpful and appreciated but also likely set too low. Others also remarked that services were likely ordered for children approaching $50k in services annually. One Superintendent noted,

> *There is a bit of an incentive particularly knowing that you're going to get the high level of reimbursement beyond the 50,000 anyway and you're already spending practically 50,000 internally to serve that child. I can see where it makes it easier for school systems to think about sending a child knowing that well you're going to get the 90% back anyway. Don't really worry about the fact that it costs 90,000 or 100,000 because …It's going to add a couple of thousand more than if it was a 60,000 a year placement. Ethically ... I don't want to portray that that's how we operate…That's not how we think.*

In part because of the singular focus that high-needs services and children require, a great number of educators, stakeholders, and related administrators spoke about the critical support that extraordinary needs aid splays at the district level. Interviewees across the board had a hard time imagining a situation where this portion of the funding formula would be removed.

### Perspectives on the Administrative Burden are Mixed

The conventional wisdom about the special education funding system is that it is administratively burdensome on special educators, particularly directors and staff responsible for administering teacher time studies and drafting reports to the State. State officials are routinely badgered about the administrative hurdles placed on special educators as a function of the reimbursement system. Slightly more than half of special education directors (57%) reported that their special education teachers spent 11-25% of their time on administrative tasks, including paperwork. That said, nearly one-third of special education directors (32.4%) reported that special education teachers in their district spent 25-50% of their time on administrative tasks, and 5% indicated that teachers spent more than half of their time on these tasks.

To a certain extent this study itself originated among concerns that administrative tasks surrounding funding of special education services had grown sizably. And second, that this growth had become quite burdensome. Many respondents through interviews and open-ended survey responses agreed with this perspective. Statements to this effect include that reimbursement "is a complicated, cumbersome process and adds to the amount of paperwork required." Another school administrator stated that a weakness of the system hinged around "the amount of administrative time, documentation, and legwork needed to achieve funding and reimbursement—the procurement process."

Local educators are required to document how they spend their time. "Time studies" occur two times per year over a two-week period. Collating the reports from special educators and para-educators into AOE spreadsheets is time intensive for administrative assistants if available, and to a certain degree, special education directors who proof, and if necessary, seek clarification from educators.

A common refrain among interviewees like educators and principals about conducting time studies is that they duplicate information that is already presented in the IEP. The exercise is frustrating. A number of respondents questioned whether there was a better accountability mechanism for documenting teaching time in special education. One teacher stated, "What if you took from the IEP document itself….to me, there has to be an easier way of doing that, rather than having everybody write down what they're already doing. Its already documented, what has to be done. It's already in an IEP!"

Another special education director commented on the auditing process of time studies, arguing that the inspection was also time consuming. They stated "…I think there should be some level of trust that that's what people are doing, so do we really need to document it? When we are audited, we're audited by folks who are not educators, so there's not a good understanding of what really happens in schools, and it's a frustrating process. So, there's another many hours!"

## Funding Flexibility Limits Special Education Service Delivery

Consistent data from interviews and the survey portray a funding system that restricts the flexible delivery of educational services to children in need. Globally, the survey data expressed in Table 12 portray a system where nearly 80% of special education directors feel as though the funding does not promote best practices for serving children on IEPs. Previously, a majority of those respondents agreed that the system was fair and understandable, but other evidence portrays limitations in how resources may be grouped. One survey respondent remarked that the funding system truly limited an "all hands-on deck" approach to attempt activities that might boost student learning, implying that comprehensive or wrap around services were difficult to muster as a result of the funding system. Interviewees made statements like the "funding silos are very, very challenging," "restricts flexibility to use funds across tiers of support," and "not flexible enough to do preventative work."

Across all interviews, there was no more frequently mentioned issue than the degree of flexibility for teachers to work with all students. While the funding system does allow for special education teachers to work in small groups with general education students (within specified limits), this policy is not well understood. Some teachers were unwilling to discuss or admit how they worked with general education students with particular learning needs. However, more frequently, teachers from all ranks, in and out of special education, talked about working with general education students, somewhat "under the radar" (as described in Chapter 3).

Administrators were aware of this practice, and they were primarily concerned with losing potential state reimbursement funding as a result. All educators and administrators alike discussed the advantages of pairing experts with students, with and without classified needs. They discussed the flexibility they strive to create and maintain to provide such services. However, when faced with funding such flexibility, concerns arise. One special education director offered an elaborated

explanation of the process of providing services for non-classified, though needy students, and pulling back on such services based on the anticipated foregone reimbursement that would result.

> *Originally, I remember when we had the conversation with the principals, they thought they couldn't do something like have somebody working with a special education child if it was a Title teacher or general ed teacher, and it made more sense for that person to be working with them.*
>
> *Then we said, "No, it's just you're blurring the lines in terms of the funding sources." You're not going to get reimbursement, but you might be assisting the child with somebody that has more knowledge than even a special educator in terms of, say, a content area. They might have more expertise in elementary level or primary level math and you've got a K to 8 school, so you've got a 7th, 8th grader who's needing math support in a particular area, basic skill area, and that it makes more sense for that person to be providing that service.*
>
> *That's when you get the pushback [From Principals] when all of a sudden, the light bulb goes off, "oh no that's coming out of my local budget though if I use that teacher in that regard to help that student and I won't get reimbursement and revenue from that?"*
>
> *It ties back into that state decision that offers your special educator, it should be centralized. If you're not, you should be a local employee. It creates different categories of people that people that are funded locally and people that are funded through some other system.*

In some ways funding inflexibility is a hallmark of a well-defined special education policy, one that seeks to disconnect services from categorical and non-categorical activities. However, educators and administrators across the interviews stated that this division was problematic and limited their efficient design of services.

## The Funding System is Misaligned with Local Efforts to Create Multi-Tiered Systems of Support

A particularly coherent and widespread critique of the special education funding formula is its misalignment with policy initiatives that encourage districts and schools to implement MTSS.

Special education directors reported dissatisfaction with how the funding system interacts with MTSS policies. When asked if the funding system is consistent with other policies that encourage districts and schools to develop multi-tiered systems of support, 82.8% of respondents disagreed (see Table 12). Similarly, most special education directors (80%) indicated that the existing funding system promotes best practices for serving students with IEPs (see Table 12).

Special education directors also expressed concerns about whether the existing system provides sufficient funding to ensure appropriate services and supports for students with disabilities (see Table 12). In this vein, interviewees identified two hurdles. The first common perception was that funding for MTSS is low or nonexistent, with few strategies available to resource Tier 1 or 2 services.[10] This may create pressure to push children into Tier 3 to receive services through

[10] It is important to note that the State's existing special education funding formula is not intended to reimburse school districts for the cost of providing Tier 1 and Tier 2 services, or other general costs associated with implementing its

classification and identification as a special education student. The second hurdle is that the funding system includes restrictions on the extent to which and how special educators work with students receiving supports within Tier 2 but who do not have IEPs. This tension frustrates educators who spoke about the desire to simply help children in need, particularly when they have the capacity to include them. A director of special education talked about this tension at length, stating:

> *In the context of an authentic system of MTSS, a continuum of instruction and a continuum of learning ...We have tried to create those constructs here by getting people to blur the lines and work together. No matter what we do, we still bump into you are a special educator, you are a general educator, you are a Title teacher, this is the money and we have to track the money, you have to do your time study and I have to do my accountability for…If, I could change anything, would just be give me the money and let me have more discretion. I have enough faith in my ethic and belief. I have enough faith in my collective colleagues and our ethic.*

The absence of integration between special education and MTSS programming, many argued, is a potential prompt for over-identification of students in special education. One survey respondent explained,

> *In order to have a true MTSS, the funding streams should be blended. We still do not have the flexibility to use special education staff to serve all students. I do believe the number of students being referred for special education would decrease if special education staff could be used to serve all students. With the funding formula the way it is, school administrators are more likely to refer children for special education so that those students can be served by special education.*
>
> *We have a special ed teacher who's coming off maternity leave who is a Gillingham expert. Now, she happens to be a middle school special ed teacher. I can't use her in elementary with regular ed kids who we think might be dyslexic, because it has to be paid out of general ed money. It's a waste. That here's a woman who is highly skilled, but we can't use her, we can't use that exceptional skill.*

Coupled with the prior section focused on limited funding flexibility, this current section identifies how the funding system is at odds or opposed to other state initiatives designed to promote early identification and treatment of student needs. The State's existing funding formula may be working against other policy initiatives intended to promote early intervening services and MTSS.

## Summary

- The Special Education Funding system is complicated to understand. Administrators and educators at the Supervisory Union and classroom levels have a more basic awareness of system components but a greater appreciation for how resources may or may not be used to help group students by need and educate them with and without direct services from special education. For educators, knowledge of the funding system revolves around what constitutes allowable teaching behaviors.

MTSS. As currently designed, funding for these services is supposed to be available from local districts' general education budgets.

- There is general agreement and satisfaction with the funding system in that the policy acts as it should. No party interviewed stated that funding levels were inadequate. Satisfaction levels hinge around whether restrictiveness in the funding formula impede areas of interest: parents are most concerned about their children's needs, principals are concerned about whether the needs of children are being met, and teachers are most concerned about whether they may teach any child in need.

- Respondents' portrayals of strengths and weaknesses of the existing funding system revolved around **predictability** or knowing what types of educational services may be funded (a strength), and strong concerns over how the **limited flexibility** in Special Education funding (a weakness) contributed to weak systems of support services (e.g., PBIS, MTSS, EST). These two observations, not surprisingly, were also well-supported design considerations when interviewees were asked to contemplate reforms to the funding system.

## Design Considerations for Funding Reform

Respondents were directly asked to identify enhancements to the existing funding formula, and in light of potential revisions, to also specify what components of the funding system should be maintained or enhanced. To a large extent these responses reinforced sentiments expressed previously when identifying areas of satisfaction, dissatisfaction, strengths and weaknesses.

In summary, three popular design considerations revolved around:

1. Maintaining funding predictability
2. Improving funding flexibility for delivery of comprehensive services
3. Maintaining a mechanism to fund high-cost student needs

To a lesser extent, the unique needs of small school environments and communities were identified as a design consideration for a new funding formula.

Additionally, interviewees from advocacy organizations and school principals noted an interest for improved performance accountability mechanisms as part of the funding formula reform. For instance, when asked about their perceptions of a census-based funding formula, most were comfortable with the general design, as long as the state also implemented a monitoring framework that would track differences in service delivery and student outcomes across school districts. The concern was that not all school districts have equal capacity to use a flexible source of funding in the most efficient and effective ways and that the State should monitor, and ultimately hold accountable, school districts to ensure that best practices were implemented, and student outcomes improved under a new funding approach.

# V. Funding Model Simulations

A key objective for this study was to simulate different approaches to implementing a census-based funding mechanism in Vermont. We report findings from seven simulation examples for a census-based funding formula and one example, for comparison, of a weighted student formula. We also present several potential models that the state might adopt for an excess cost-reimbursement mechanism. In the sections that follow, we describe the approach used in our simulations, including our design considerations and cost assumptions.

## Census-based Funding Mechanisms

### Assumptions

A census-based funding mechanism allocates state funding for special education on a per capita basis rather than on the number or percentage of students eligible for special education in a school district. Frequently, census-based mechanisms allocate supplemental funding in the form of flexible per capita block grants, with few restrictions on the purposes for which funds may be used – including the ability to use funding to support students with and without IEPs.

The move away from categorical funding for special education, with strict rules that tie funding to providing services exclusively to students with IEPs, is well-aligned with other state policy initiatives that emphasize interventions and flexible groupings among students both with and without IEPs-particularly policies that encourage districts and schools to adopt MTSS. In addition, census-based mechanisms are viewed as improving predictability and transparency regarding state funding for special education (Dhuey & Lipscomb, 2013).

However, the extent to which a census-based mechanism is an appropriate and fair approach to providing localities with supplemental funding for special education costs is contingent on several key assumptions about the nature and extent of student need across school districts.

First, census-based funding mechanisms provide a flat grant to localities, per resident student. For instance, a locality might receive $1,500 per K12 ADM in a given fiscal year. However, providing a fixed amount per capita *assumes that the proportion of students with disabilities is the same* (i.e., there is an even distribution) across school districts. In that way, a flat grant equitably distributes funding across jurisdictions – that is, supervisory unions and districts receive similar funding per capita for proportionally similar numbers of students with IEPs.

Similarly, implicit in a census-based mechanism are assumptions about special education costs across jurisdictions. To the extent that there is *similar demand for special education and related services, and the cost of providing those services is equivalent*, a fixed amount per capita will proportionally offset special education costs across jurisdictions. However, as the nature and extent of student need differs, *or* the cost of providing special education varies, the local responsibility for funding special education may be larger in some places than others.

### Vermont's Experience with Census-based Funding

In the late 1990s, Vermont was among the first states in the country to adopt a census-based funding mechanism for special education. At that time, policymakers sought to align the state's

policy priorities for localities implementing comprehensive Educational Support Systems (ESS) and Educational Support Teams (ESTs) for struggling students. Prior to implementing these policies, Vermont had gone through a period of growth in special education spending – believed to be driven, in part, by local practices for "over identifying" struggling students to receive special education, rather than providing the types of supports students needed in the general education setting.

The state's census-based block grant was intended to provide localities with a flexible source of supplemental funding to support schools' ESSs and ESTs and, by extension, the cost of implementing students' IEPs. At the same time, policymakers hoped to stem the tide of growing special education enrollments and costs. Policymakers also sought a more predictable and transparent funding formula that protected against unpredictable changes in state appropriations for special education.

In the early 2000s, Vermont did away with its census-based funding formula, initiating a series of reforms that moved the state toward its existing reimbursement-based funding approach. This change was largely due to concerns about small districts' and schools' abilities to fully absorb the excess costs of providing special education for their students. Even with an extraordinary cost reimbursement, small districts and schools had less of a financial buffer when faced with above-average incidence and need.

## Establishing a Census-based Grant Amount

Census-based funding mechanisms distribute a state's supplemental funding for special education across all students, not just those eligible for special education. Unlike reimbursement mechanisms that provide localities with funding in response to actual expenses, a census-based funding formula provides districts with a per capita grant based on estimates of what the state believes *should* be spent on special education and related services in a given fiscal year.

Generally, when implementing a census-based mechanism, the amount a state allocates on a per capita basis is determined as follows:

**Equation 1:**

$$\text{Per capita grant amount} = \frac{(\text{Number K12 students with IEPs} * \text{Excess cost per IEP})}{\text{K12ADM}} * \text{State share of spending}$$

Here, total estimated spending for special education is divided by the number of K-12 students enrolled statewide. Some percentage of this amount is then identified as the state's grant amount. Operationalizing this formula requires assumptions about the:

1. Average excess costs of providing special education, per IEP
2. The number of students with IEPs
3. State's share (%) of total special education spending

Below, we outline the assumptions adopted when simulating different census-based funding models for Vermont.

## Estimating Average Excess Cost

Very little is known about how much *is spent* for the average special education student or how spending levels *vary* according to student disability classification or placement. Existing accounting structures and reporting guidelines (both national and state) typically do not require districts and schools to parse spending in ways that translate into reliable estimates for actual spending on special education and related services.[11] However, spending estimates may be more reliable in states like Vermont where localities must document expenditures to receive reimbursement from the state's funding formula.

Consequently, actual spending may not correspond with what *should be spent on* special education. Actual spending can be distorted by other policies, programs, and practices that influence service delivery and costs. Therefore, cost estimates based on actual spending are potentially unreliable proxies for what should be spent to provide an *appropriate* and *adequate* level of services and supports for Vermont's students with IEPs.

Given these complications, we generated multiple estimates for the average excess cost per special education student with the goal of triangulating among estimates to determine the most reasonable and value estimate for what it *should cost* to provide services and supports for Vermont's students with IEPs.

Specifically, we developed cost estimates according to three general strategies:

1. Average supervisory union/district spending per special education student in Vermont
2. Disability-specific weights derived from the Special Education Expenditure Project (SEEP)
3. Disability category weights and cost-of-service estimates from the Maryland adequacy study

Table 13 summarizes the cost estimates resulting from the different strategies. We discuss our approach to calculating these cost estimates in the sections that follow.

### *Average spending per special education student in Vermont*

We used average special education spending by Vermont's supervisory unions and school districts as a proxy for the excess cost of serving the "typical" student with an IEP in Vermont. Averaging spending across supervisory unions and districts minimizes the influence of spending outliers (both at the student and supervisory union/district levels) and represents the best *status quo* estimate for the average cost per IEP in Vermont. For FY 2016, on average, Vermont supervisory unions and school districts spent $21,840 per special education student in excess of base funding for general education (Table 13).

### *Disability category-specific weights from Special Education Expenditure Project (SEEP)*

Using data from the SEEP, the Center for Special Education Finance (CSEF) at the American Institutes of Research (AIR) produced expenditure weights that represented spending ratios comparing spending for a special education student with a particular disability to spending for the average regular education student. Weights were developed for each of the 13 disability categories identified by IDEA. For instance, the SEEP found that it cost, an average, 2.2 times more to serve a

[11] See prior discussion in Section 2 of this report for a more detailed summary of the challenges with estimating special education costs.

student identified with an emotional disturbance than to educate the average general education student. The SEEP also identified a generalized weight for the "average" special education student as equal to 1.9 times spending for the typical general education student.[12] Although the SEEP spending ratios were developed nearly 20 years ago, the study is frequently cited as generating the most reliable estimates for special education costs.

We applied SEEP's disability-specific weights to Vermont's distribution of students with disabilities to create a disability-adjusted excess cost per IEP. In effect, this cost estimate represents the weighted average across disability categories of the excess cost for serving students with IEPs in Vermont. (See Appendix C for calculation.)

The resulting estimate for excess cost per IEP was $11,033 (Table 13). This figure is approximately $10,800 *less* than what Vermont's supervisory unions and school districts spent, on average, per IEP for special education and related services during the 2016 fiscal year.

For comparison purposes, we also applied the generalized SEEP weight to a national estimate of base per pupil spending for general education students, as well as estimates for base per pupil spending in New Hampshire, Maine, and Massachusetts.[13] The result was a range of estimates for excess costs per IEP, from $10,138 (national average) to $15,105 (Massachusetts) (Table 13).

The national estimate for excess cost per special education student was approximately half of the average amount spent by Vermont supervisory unions/districts per IEP for FY2016 (a difference of $11,702 per IEP; Table 13). The magnitude of the difference was about the same for Maine, and somewhat less for New Hampshire and Massachusetts.

[12] The SEEP's generalized weight was calculated as the average of the disability category-specific weights weighted for the incidence of students with disabilities in each category (Chambers, Khkolnik, & Perez, 2003).
[13] National and state averages for per pupil spending were taken from the U.S. Department of Education's FY 2014 Common Core of Data (CCD). We subsequently applied the Comparable Wage Index (CWI) to standardized spending across jurisdictions to reflect spending in FY 2014 Vermont dollars (Taylor & Fowler, 2006).

**Table 13: Estimates for the Excess Cost of Providing Special Education**

| | Excess Cost Per IEP | Difference from Average Supervisory Union/District Excess Cost Per IEP |
|---|---|---|
| | (Col 1) | (Col 2) |
| **Actual Expenditures** | | |
| Average Supervisory Union/District Expenditures (FY2016) | $21,840 | |
| **SEEP Adjusted Per IEP Costs** | | |
| Vermont | | |
| *Disability-specific Weights* | $11,033 | ($10,807) |
| National & State Comparisons *(Generalized Weight; FY2014)** | | |
| *National* | $10,138 | ($11,702) |
| *New Hampshire* | $11,994 | ($9,847) |
| *Maine* | $10,680 | ($11,160) |
| *Massachusetts* | $15,105 | ($6,736) |
| **Maryland Adequacy Study** | | |
| All Disability Groupings | | |
| *Resource Costs** | $11,707 | ($10,134) |
| *Disability Grouping Weights* | $14,050 | ($7,791) |
| Mild/Moderate Disabilities Only | | |
| *Resource Costs** | $9,491 | |
| *Disability Grouping Weights* | $11,438 | |
| Severe Disabilties | | |
| *Resource Costs** | $33,731 | |
| *Disability Grouping Weights* | $40,000 | |

Note: Cost estimates prefaced with * were adjusted using the Comparable Wage Index (CWI) to represent costs in Vermont dollars (Taylor & Fowler, 2006).

### *Excess cost estimates from the Maryland adequacy study*

Recognizing the need for state-specific information on what constitutes appropriate levels of spending for special education, some states (e.g., Colorado, Montana, Maryland) have begun to incorporate special education costs in their funding adequacy cost studies (Aportela, Picus, Odden, & Fermanich, 2014). The most recent study was conducted in Maryland (2016). This study provides two ways for estimating the cost of special education:

1. **Resource-based Cost Estimate**
   A Professional Judgment Panel consisting of education experts identified the additional resources required to provide appropriate special education services. They then valued these resources to establish values for the excess cost for students with mild, moderate, and severe disabilities in the elementary, middle, and secondary grades

2. **Disability-grouping Weights**
   The excess cost values generated by the Professional Judgment Panel were used to create weights for each disability grouping (mild, moderate and severe) that can be applied as a multiplier to base per pupil regular education spending.

The estimates provided in Maryland's adequacy study are the most up-to-date values for special education costs available. Moreover, Maryland is an aspirant state with regard to educational quality; the state's educational system is consistently ranked among the best in the nation. This suggests that the resource packages and their identified costs are consistent with high-quality educational programming.

Table 14 applies the excess cost estimates generated from the Maryland adequacy study to the Vermont context.

First, we adjusted the Maryland-based cost estimates to reflect spending in Vermont dollars (Table 14, Columns 1 & 2).[14] We subsequently created a weighted average across grade levels using the proportion of Vermont students enrolled at the elementary and secondary grades. The resulting estimates represent the excess costs associated with providing special education for Vermont students with mild, moderate, and severe disabilities, based on the resource cost estimates generated by the Maryland adequacy study (Column 3). Resulting estimates for the excess cost per special education student range from an additional $7,486 for students with mild disabilities to $12,423 and $33,731 for students with moderate and severe disabilities, respectively.

Second, we applied Maryland's disability-grouping weights to average spending per general education student in Vermont (Table 14, Columns 4 & 5). The resulting excess cost estimates were $9,061, $14,917, and $40,000 for students with mild, moderate, and severe disabilities, respectively.

[14] We used the Comparable Wage Index (CWI), an education-specific geographic cost index, to adjust the resource-based cost estimates from the Maryland adequacy study to reflect costs in Vermont dollars. See Taylor & Fowler (2006) for additional information on the CWI.

**Table 14: Estimates for the Excess Cost of Special Education Identified by the Maryland Adequacy Study**

| | Estimates Professional Judgment Models for Special Education Costs | | | Estimates Based on Special Education Weights | |
|---|---|---|---|---|---|
| | Elementary School (Col 1) | High School (Col 2) | Average Excess Cost Per IEP (Col 3) | Maryland Disability Category Weights (Col 4) | Average Excess Cost Per IEP (Col 5) |
| *Disability category* | | | | | |
| Mild | $7,087 | $7,955 | $7,486 | 0.82 | $9,061 |
| Moderate | $11,362 | $13,668 | $12,423 | 1.35 | $14,917 |
| Severe | $30,981 | $36,960 | $33,731 | 3.62 | $40,000 |

Note: Column 3 reflects the weighted average for Vermont enrollment, based on the actual distribution of Vermont students in the elementary and secondary grades during the 2015-2016 school year. Maryland's disability-grouping weights were applied to estimated base spending amount of $11,050 per general education student in Vermont (FY2016). All estimates are reported in Vermont dollars.

We then created a single estimate for excess cost based on the weighted average of Vermont students with IEPs in each disability grouping. To do this, we created a cross walk between the actual distribution of Vermont students with IEPs across disability categories and the three categories used in the Maryland study. The cross walk was based on a national scan of state policies and practice for grouping students with IEPs according to broader need-based categories.[15]

Table 15 presents our assumptions about the distribution of students with IEPs across these categories. We classified 53.6% of Vermont's students with IEPs as having a mild disability, 37.1% as moderate, and 9.1% as severe.[16]

We used these percentages to estimate the number of IEPs in Vermont that corresponded with each disability category. We multiplied the resulting IEP counts by the estimates for excess cost per IEP presented in Table 4 (Columns 3 & 5). This resulted in two weighted averages for excess cost adjusted for the characteristics of Vermont's special education student population: 1) $11,707, based on Maryland's resource-cost estimates; and 2) $14,050, based on Maryland's disability-grouping weights.[17] Both estimates are considerably less than what Vermont's supervisory unions and school districts spent, on average, per IEP during FY2016.

[15] We classified 100% of Vermont special education students with specific learning disabilities and speech and language impairments as having mild disabilities; students with orthopedic and OHI as moderate; and students with hearing impairments, multiple disabilities, traumatic brain injuries, and visual impairments as severe. For special education students with autism and intellectual disabilities, states recognize heterogeneity in need within the category. As a result, we allocated the share of students with these disabilities across the moderate and severe disability categories according to the percentage of time spent in regular classrooms and placed out of district. For instance, in Vermont, about 12% of students with autism spend <40% of their day in regular classrooms or are placed in separate schools or residential facilities. We considered this percentage of students with autism as having a severe disability, and the remainder as moderate. We used a similar strategy to allocate the percentage of students with emotional disturbances across the mild, moderate and severe disability categories. Estimates for the percentage of time spent in regular classrooms/educational environment, by disability category, were taken from the Vermont's Part B Data Display, 2017 (https://osep.grads360.org/#communities/pdc/documents/11887).

[16] By comparison, Maryland's adequacy study assumed that 67% of the state's special education students had mild disabilities, 25% moderate, and 8% severe.

[17] We also created similar estimates for the excess cost associated with only providing special education and related services for students categorized as having mild or moderate disabilities ($9,491 resource-based; and $11,438 disability-grouping weights). We used these estimates in our simulation model that implemented Odden & Associates' (2016) recommendations for a census-based funding model.

**Table 15: Disability Category Groupings Based on Vermont's Special Education Student Population (2015)**

| | Disability Groupings | | |
|---|---|---|---|
| | Mild | Moderate | Severe |
| Autism Spectrum Disorder (ASD) | | 8.1% | 1.1% |
| Deaf-blind | | | 0.0% |
| Emotional Disturbance | 9.8% | 3.2% | 3.6% |
| Hearing Impairment (Including Deafness) | | | 0.7% |
| Intellectual Disability | | 4.8% | 1.4% |
| Multiple Disabilities | | | 2.0% |
| Orthopedic Impairment | | 0.5% | |
| Other Health Impairment (OHI) | | 20.5% | |
| Specific Learning Disability (SLD) | 34.4% | | |
| Speech or Language Impairment | 9.4% | | |
| Traumatic Brain Injury | | | 0.3% |
| Visual Impairment (Including Blindness) | | | 0.2% |
| Percentage, by Disability Grouping | 53.6% | 37.1% | 9.3% |

Note: The percentage of Vermont students with autism was distributed as follows: 13% as severe (<40% of day in regular classroom or placed out-of-district) and 87% as moderate. The percentage of students with intellectual disabilities was distributed as follows: 22% assigned to severe (<40% of day in regular classroom or placed out-of-district) and 78% assigned to moderate. The percentage of students with emotional disturbances was distributed as follows: 58.7% as mild (>80% in regular classrooms); 19.3% as moderate (<80% in regular classrooms); and 21.2% as severe (out-of-district placements). Estimates for the percentage of time spent in regular classrooms/educational environment were taken from the Vermont's Part B Data Display, 2017 (https://osep.grads360.org/#communities/pdc/documents/11887).

### Number of Students with Disabilities

To calculate the per capita grant amount for a census-based funding model, we also needed to make assumptions about the number of students with disabilities in Vermont. (See Equation 1, above.) In our simulations, we considered two estimates for the number of students with disabilities in Vermont:

1. Actual number of students with IEPs in Vermont (11,218 IEPs).[18]

2. The estimated number of students with IEPs in Vermont, assuming the national average for incidence (10,642 IEPs).[19]

We multiplied our estimates for the number of students with disabilities by each of the excess cost estimates generated above. (See Table 13). We then divided this total by the number of resident K12 students in Vermont (K-12 ADM) for the 2016-17 school year to produce per capita spending equivalents.

[18] IEP count is for 2016 school year. See Table 7.

[19] The national average for percentage of students with disabilities was 13.3% for the 2015 school year (the most recent year available). Number of IEPs calculated as 13.3% of Vermont's 2016 K12 ADM (80,017; see Table 8).

Table 16 presents our estimates for excess spending for students with disabilities under different assumptions for the number of students with IEPs in Vermont. These values represent what could be considered appropriate and adequate spending for special education, per capita (K-12 ADM), under our two different assumptions for the number of students with IEPs in Vermont.

The highest estimate is $3,062 per capita (K-12 ADM), which represents the scenario closest to status quo spending and special education child count in Vermont. The lowest estimate is $1,467 per capita.[20] This estimate assumes that the number of students with IEPs in Vermont is on par with national estimates for the percentage of students with disabilities (see footnote 16 for calculation) and that the excess cost per special education student is $11,033 (SEEP adjusted per IEP cost).

### *Adjusting for Concentrated Student Poverty*

One of the most frequent critiques of census-based funding mechanisms is its assumption that the nature and extent of student need is equally distributed across school districts. This is a legitimate concern. For instance, when studying Pennsylvania's and New Jersey's experiences implementing census-based funding mechanisms, Baker and Ramsey (2010) found families of children with disabilities to be non-randomly and non-uniformly distributed across geographic spaces in those states. An earlier study in California reached similar conclusions about the uneven distribution of disability rates across school districts, particularly when it came to severe and/or high-cost students (Parrish et al., 1998; 2003). Earlier in this report, we also described the uneven distribution of students with disabilities across Vermont's supervisory unions and school districts.

In Vermont and elsewhere, the unequal distribution of students with disabilities may be due to local policies and preferences regarding special education eligibility and service delivery. There is also sizable research literature that suggests demographic factors outside of schools' control play an important role – especially poverty and families' socio-economic status. Poverty creates a high-risk environment that increases the probability that learning problems will lead to learning and socioemotional disabilities (e.g., National Research Council, 2002). For instance, when studying Pennsylvania's and New Jersey's census-based funding systems, researchers found that the incidence of high-cost and high-need disabilities in a school district were associated with poverty (Pennsylvania Department of Education, 2000; Baker & Ramsey, 2010).

In response, other studies recommend poverty-based adjustments for census grant amounts to direct additional resources toward school districts with more severely disabled students (e.g., Parrish et al., 1998; 2000). We also include poverty-based adjustments for the census grant amounts used in our simulations. Specifically, in our simulations, we direct additional funding to Vermont supervisory unions that fall at or above the 75$^{th}$ percentile (statewide) for the percentage of low-income students—equivalent to at least 50% of students eligible to participate in the Free or Reduced-Price Lunch program. [21]

[20] Per capita spending for mild and moderate disabilities is only somewhat lower, $1,161 per student. However, given that this estimate does not include costs for serving students with severe disabilities it is not directly comparable to the other estimates presented in Table 16.

[21] See Appendix D for a description of the data and methods used to construct the poverty adjustments.

Table 17 presents our estimates for a per capita spending amounts, incorporating poverty adjustments. We use these spending estimates as proxies for per capita grant amounts in our simulation examples for a census-based funding formula.

**Table 16: Estimates for Special Education Spending, Per K-12 Student**

| | Per Capita Spending Equivalent (K12 ADM) | |
|---|---|---|
| | Spending Based on Actual Number of IEPs in Vermont (Col 1) | Spending Based on Reducing Number of IEPs to National Average (Col 2) |
| **Actual Expenditures** | | |
| Average Supervisory Union/District Expenditures (FY2016) | $3,062 | $2,905 |
| **SEEP Adjusted Per IEP Costs** | | |
| Vermont | | |
| *Disability-specific Weights* | $1,547 | $1,467 |
| **Maryland Adequacy Study** | | |
| All Disability Groupings | | |
| *Resource Costs** | $1,641 | $1,557 |
| *Disability Grouping Weights* | $1,970 | $1,869 |
| Mild/Moderate Disabilities Only | | |
| *Resource Costs** | $1,209 | $1,161 |
| *Disability Grouping Weights* | $1,457 | $1,400 |

Note: The per ADM spending equivalents are calculated as follows: ((Estimated cost per IEP*Number of IEPs in Vermont for 2016)/K12 ADM for 2016). Cost estimates prefaced with * were adjusted using the Comparable Wage Index (CWI) to represent costs in Vermont dollars (Taylor & Fowler, 2006).

**Table 17: Estimates for Per Capita Special Education Spending with Poverty Adjustments**

| | Actual # of IEPs in Vermont | | | Reduced # of IEPs (per National Average) | | |
|---|---|---|---|---|---|---|
| | | Poverty-Adjusted Excess Spending Per IEP | | | Poverty-Adjusted Excess Spending Per IEP | |
| | Per Capita Spending | Poverty Adjustment | Per Capita Spending With Adjustment | Per Capita Spending | Poverty Adjustment | Per Capita Spending With Adjustment |
| **Actual Expenditures** | | | | | | |
| Average Supervisory Union Expenditures | $3,062 | $74 | $3,136 | $2,905 | $69 | $2,974 |
| **SEEP Adjusted Per IEP Costs** | | | | | | |
| Vermont | | | | | | |
| *Disability-specific Weights* | $1,547 | $49 | $1,596 | $1,467 | $46 | $1,514 |
| **Maryland Adequacy Study** | | | | | | |
| All Disability Groupings | | | | | | |
| *Resource Costs* | $1,641 | $39 | $1,681 | $1,557 | $37 | $1,594 |
| *Disability Grouping Weights* | $1,970 | $63 | $2,033 | $1,869 | $59 | $1,927 |
| Mild/Moderate Disabilities Only | | | | | | |
| *Resource Costs* | $1,209 | $27 | $1,236 | n/a | n/a | n/a |
| *Disability Grouping Weights* | $1,457 | $43 | $1,500 | n/a | n/a | n/a |

Note: See Appendix D for a description of the data and methods used to construct the poverty adjustments. Poverty-adjusted spending for mild/moderate disabilities, based on national estimates for special education child count, were not used in our simulations and, as a result, are not reported.

## State Share of Special Education Costs

Vermont's existing special education funding formula is designed so that, on average, the state assumes responsibility for 60% of special education costs, with localities responsible for the remaining 40%.

In our simulations, we assume that the state grant will be equivalent to 60% of the per capita spending amounts reported in Table 17.

## Other Design Considerations

Our simulations include two additional design considerations.

First, we estimate the state's total appropriation based on K12 ADM *and* PK12 ADM. Effectively, this means that the state could appropriate supplemental funding for special education based on either a supervisory union's total K12 enrollment or the number of students enrolled in grades PK12. The latter approach would provide supervisory unions with additional funding to support

early intervention and supports for struggling students (with and without IEPs) at the preschool and early elementary grades.

Second, census-based funding mechanisms may or may not place restrictions on how funds can be used. Census-based block grant models allow localities to spend their per capita grants on students with and without disabilities with no restrictions. However, other models require a certain percentage of the census grant to be spent exclusively on special education and related services with the remaining funds available for spending on students with and without IEPs. For example, New Jersey's census-based funding mechanism requires that one-third of localities' per capita grant be allocated as categorical aid for special education with the remainder serving as a block grant with no spending restrictions.

In our simulations, we suggest that the state consider a 30/70 split between categorical and block grant funding. Maintaining the categorical nature of some percentage of the funds responds to concerns expressed by stakeholders in our focus groups about the need to hold supervisory unions accountable for using state funding to serve students with disabilities.

## Census-based Funding Model Simulations

Table 18 summarizes the design parameters and results for eight simulation examples. For examples that describe potential census-based funding models, we assume that supervisory unions will receive state funding as a flexible block grant. The amount received is based on the census grant amount multiplied by the number of students enrolled (per K12 ADM). Appendices E-L estimate supervisory union-level block grant amounts for each simulation example.[22]

Examples 1-7 simulate the cost implications for implementing a census-based funding formula under different assumptions for the percentage of K12 students with disabilities in Vermont and possible per capita grant amounts. For comparison purposes, simulation Example 8 estimates the cost associated with implementing a weighted funding model.

### Simulation Example 1

Example 1 presents a status quo model using the actual percentage of students with disabilities in Vermont (SY 2016) and the amount spent by supervisory unions and school districts, on average, per IEP during FY2016.

In this example, the state's total appropriation for special education, allocated as per capita grants to supervisory unions, would be $147.6 million. This is about $10.3 million *less* than the state's FY 2016 spending on special education, according to the existing block grant and reimbursement mechanisms. Supervisory unions would receive $1,837 per student, equivalent to 60% of per capita spending amount ($3,062). Supervisory unions at or above the 75$^{th}$ percentile for student poverty would receive $1,881 per student.

As discussed above, the state could opt to allocate census-based funding on the basis of PK12 ADM. This would effectively provide supervisory unions with additional funding for early

[22] We assumed supervisory union and school district configurations that will be in place for FY18. However, these configurations may change in the future due to mergers and school closures occurring in response to Vermont Act 46.

intervention and special education for young children. The cost to the state would be about $160.4 million, about $2.5 million more than actual FY2016 state spending on special education through its existing block grant and reimbursement mechanisms.

### Simulation Examples 2 & 3

Examples 2 and 3 assume that the number of students with IEPs in Vermont is unchanged from SY2016. We then calculate costs based on two different estimates for per capita special education spending: 1) SEEP's disability-specific weights (Example 2); and 2) resource-based costs from Maryland's adequacy study (Example 3).

For Example 2, the estimated state appropriation would be $74.7 million, about $83.2 million *less* than actual FY2016 state spending on special education (block grant and reimbursement mechanisms). Supervisory unions would receive $928 per student, and high-poverty supervisory unions would receive $958 per student.

The state appropriation is somewhat higher for Example 3—approximately $79 million, a savings of about $78.8 million over FY2016. The per capita grant amount would be $985 per student, and $1,008 per student in high-poverty supervisory unions.

### Simulation Examples 4 & 5

Simulation Examples 4 & 5 assume that the percentage of students with disabilities in Vermont is equivalent to the national average (13.3%) – about 2.8 percent lower than the actual percentage of students with disabilities in Vermont (SY 2016). This is the percentage assumed by Odden & Associates (2016) in their recommendations for a census-based funding model. In part, their recommendation was based on other states' experiences; census based funding mechanisms have been associated with reductions in the percentage of students identified for special education, although the size of this change has varied across states (Dhuey & Lipscomb, 2011).

We calculate costs based on two different estimates for per capita special education spending: 1) SEEP's disability-specific weights (Example 2); and 2) resource-based costs from Maryland's adequacy study (Example 3).

For Example 4, the state appropriation would be about $70.8 million, a savings of approximately $87.1 million over FY2016 state spending (block grant and reimbursement mechanisms). The state's grant amount to supervisory unions would be $880 per student. High poverty supervisory unions would receive $908 per student.

State costs are somewhat higher in Example 5. Here, the state appropriation would be closer to $75.1 million, a savings of about $82.8 million over FY 2016 state spending (net state reimbursements for extraordinary costs). The census grant amount to supervisory unions would be $934 per student and $956 per student in high poverty supervisory unions.

## Table 18: Summary Findings from Simulations for Census-based Funding Formula

| | Census-based Models | | | | | | | Weighted Formula |
|---|---|---|---|---|---|---|---|---|
| | All Disabilities Groups | | | | | Mild/Moderate Disabilities Only | | Maine Model |
| **Description** | State allocates funding for special education and related services to supervisory unions on a per capita basis, tied to K-12 ADM in a given fiscal year. A portion of the funding would be categorical, which must be spent on students with disabilities (IEPs). The remaining funds would be a block grant, eligible to be spent on services and supports for struggling students with and without IEPs. | | | | | State allocates funding for **students with mild and moderate disabilites** to supervisory unions on a per capita basis, tied to K-12 ADM in a given fiscal year. A portion of the funding would be categorical, which must be spent on students with disabilities (IEPs). The remaining funds would be a block grant, eligible to be spent on services and supports for struggling students with and without IEPs. Schools receive 100% of funding for "severe" needs students with IEPs through a separate extraordinary cost reimbursement mechanism. (See Table 19.) | | Funding is based on a multi-step weighted adjustment. **Step 1**: applies 1.238 weight (for the excess cost for students with IEPs) to all students up to 15% of K12 students with disabilities in a SU. **Step 2**: Applies a prevalence adjustment (.38 weight) to all students with IEPs in excess of 15% of K12 students with disabilities in a SU. **Step 3**: Two-part extraordinary cost reimbursement for students with IEPs served within and outside the SU. |
| | **Example 1** | **Example 2** | **Example 3** | **Example 4** | **Example 5** | **Example 6** | **Example 7** | **Example 8** |
| | **(Status Quo)** | **(Actual VT Incidence/Natl. Cost Estimates)** | | **(Natl. Avg. for Incidence/Natl. Cost Estimates)** | | | | |
| **Assumptions** | | | | | | | | |
| Students with Disabilities | Vermont (2016) 11,218 | Vermont (2016) 11,218 | 11,218 | National Average (2015) 10,642 | 10,642 | Mild & Moderate Disabilities 90.7% of Vermont's 2016 K-12 ADM | | Actual % of students with disabiliteis in a supervisory union |
| Excess Cost Assumption | Actual Average Vermont Supervisory Union Expenditures | Vermont Disability-specific Weights (SEEP) | Resource Costs (MD Adequacy) | Vermont Disability-specific Weights (SEEP) | Resource Costs (MD Adequacy) | Resource Costs (MD Adequacy) | Disability Grouping Weights (MD Adequacy) | |
| Census Grant Amount (K-12 ADM) | | | | | | | | Weights (1.238 up to 15% Students with Disabilities and .38 >15%) applied to K12 per ADM regular education funding ($11,050 in Vermont for 2016) |
| Per Capita | $1,837 | $928 | $985 | $880 | $934 | $725 | $874 | No adjustment for concentrated poverty. |
| Per Capita, with Poverty Adjustment | $1,881 | $958 | $1,008 | $908 | $956 | $742 | $900 | |
| State Share of Costs | 60% | 60% | 60% | 60% | 60% | 60% | 60% | 100% of weighted excess costs |
| Estimated Cost to State | | | | | | | | |
| Based on K-12 ADM | $147,633,732 | $74,684,055 | $79,134,027 | $70,844,738 | $75,067,533 | $58,271,514 | $70,321,628 | $111,340,713 |
| Difference from 2016 State Formula Costs | ($10,258,236) | ($83,207,913) | ($78,757,942) | ($87,047,231) | ($82,824,435) | ($99,620,454) | ($87,570,341) | ($46,551,256) |
| Based on PK-12 ADM | $160,350,742 | $81,117,402 | $85,950,546 | $76,947,354 | $81,533,763 | $76,379,154 | $76,379,154 | N/A |
| Difference from 2016 State Formula Costs | $2,458,773 | ($76,774,567) | ($71,941,423) | ($80,944,614) | ($76,358,206) | ($81,512,814) | ($81,512,814) | N/A |

### Simulation Examples 6 & 7

Simulation Examples 6 and 7 operationalize Odden & Associates' (2016) recommendations for implementing a census-based funding formula. Specifically, in their adequacy report, they suggest that the state adopt a census-based mechanism that provides a per capita grant equal to the costs associated with providing special education to students with mild and moderate disabilities. The state would reimburse localities for 100% of the costs of providing special education to students with severe disabilities.

For this simulation, we assume that about 91% of students with IEPs in Vermont have mild or moderate disabilities. We then apply the two cost estimates from the Maryland adequacy (resource-based costs and disability category weights) to estimate the state's appropriations under the different cost assumptions.

We find that implementing Odden & Associates' proposal for a census-based funding system would require between $58.3 and $70.3 million in state appropriations – $87.6 – to $99.6 million less than FY2016 state special education funding (block grant and reimbursement mechanisms).

However, these savings do not reflect the additional cost associated with the state reimbursing supervisory unions for 100% of the costs associated with providing special education and related services to students with severe disabilities. We estimate that state funding for "severe" needs students would be approximately $86 million per fiscal year (Table 19). With this additional cost, the state's spending for special education would be on par with FY2016 appropriations for the existing block grant and reimbursement funding mechanisms.

### Simulation Example 8

For comparison purposes, our final simulation estimates the costs associated with adopting a weighted student funding mechanism. Formulas that incorporate weights typically tie supplemental funding to the number or percentage of students with disabilities in a school district. There are considerable differences in the magnitude of the per pupil weights used by states in their funding formulas as well as decisions about whether to apply one generalized or multiple disability—or resource—specific weights (Miller & Aragon, 2015).

Example 8 replicates Maine's multi-step weighted funding model. The Maine model relies on multiple weights to incentivize districts to limit special education identification to less than 15% of their student population. Specifically, funds are allocated according to a three-step process. In step 1, the state applies a 1.238 weight to all students with IEPs up to 15% of K12 enrollment in a school district. As a second step, it applies a prevalence adjustment of 0.38 for each IEP in excess of 15% of K12 students with disabilities in a school district. In a third step, it provides funding through a two-tiered extraordinary cost mechanism with a qualification threshold for spending on students with IEPs who are educated within a district and a second, higher spending threshold for students placed outside a district.

In our simulation, we apply the first weight to our estimate for base per pupil regular education funding ($11,050 for FY 2016) and allocate this amount for each IEP in a supervisory union up to 15% of K-12 ADM. We subsequently apply the prevalence adjustment to our base per pupil funding amount and allocate this additional funding increment per IEP in excess of 15% K-12 ADM.

The resulting state appropriation – not including the two-tiered extraordinary cost reimbursement – is approximately $111.3 million. This is about $46.6 million less than what the state spent on special education for FY2016 by way of its block grant and reimbursement funding mechanisms.

### Summary: Evaluating the Simulations for a Census-based Funding Mechanism

Each simulation represents a savings over the amount spent by the state in FY 2016 for its existing block grant and cost reimbursement funding mechanisms. One way to interpret this finding is that the current reimbursement mechanism has resulted in higher-than-average special education costs statewide. This is evident in what was spent by supervisory unions, on average, per IEP during FY 2016. Compared to the benchmarks developed for this study, Vermont spends on order of 1½ to 2 times more per special education student than the national average, or in other comparison states.

That said, these spending patterns cannot be readily interpreted as "over spending" or "inefficiency" on the part of the state's supervisory unions, school districts, and schools. Odden & Associates (2016) noted that that some portion of what is categorized as state and local spending for students with disabilities, is, in fact, used to support Tier 1 and 2 interventions for general education students. This same theme came up in the interviews, focus groups, and survey conducted for this study.

However, in practical terms, what this may mean is that Vermont's per IEP spending is not entirely comparable with other national and state estimates that do not include supplemental spending for students without IEPs. For example, when developing cost estimates for special education, the SEEP and state-level adequacy studies exclusively look at the resources required to provide appropriate services for students with disabilities.

It also implies that a move to a census-based mechanism, with a per capita grant to localities equivalent to estimates for average excess costs per IEP, may need to be accompanied by a companion funding initiative that provides additional resources for struggling students who are not identified for special education. Accessing supplemental funding for struggling students through the state's existing special education funding formula may not be an undesirable practice, particularly in light of the state's policy priorities for implementing MTSS. In our interviews, focus groups, and survey, we learned that districts and schools access special education funding to provide additional supports for struggling students without IEPs. Odden & Associates (2016) call upon the state to provide supplemental funding to localities to help pay for interventions with "at risk" students who have not been identified for special education. They recommend an annual state appropriation of $95 million for this purpose.

With this context, we call attention to two simulations that we think provide the most appropriate and equitable strategies for implementing a census-based funding mechanism in Vermont: Simulation Examples 2 and 3. Our recommendation is based on two interrelated considerations.

First, in this study, we did not uncover conclusive evidence that, on average, supervisory unions and school districts "over identify" students for special education – rather, our findings suggest that schools are dealing with more complex and difficult constellations of student need brought on by factors like the opioid crisis, chronic poverty, and family stress. Furthermore, Vermont's overall percentage of students with disabilities is consistent with that found in other states in the region. Taken together, these observations suggest that the existing number of students with IEPs in

Vermont may be the most reliable estimate for the actual incidence of students with disabilities in the state. Given these conditions, we are not confident that a change in the state's funding formula will result in lower identification rates that are on par with the national average.

Second, we cannot ignore the fact that Vermont's current spending per special education student is comparatively high. It is noteworthy that our alternative estimates for excess cost – all of which were grounded in findings from comprehensive studies of special education resources and spending in other states and nationally – were not only considerably lower but were also close in value, ranging between about $11,000 and $14,000 per IEP. The consistency among these estimates adds to their credibility as benchmarks for what constitutes an appropriate additional spending, on average, for a special education student in Vermont.

Based on simulation Examples 2 and 3, and assuming the existing cost sharing arrangement between the state and localities (60% state share), setting the state's census grant amount at $930-$985 per resident K12 could provide adequate supplemental funding to support supervisory unions' special education programs. For supervisory unions with a relatively large share of students eligible for free or reduced-price lunch, our findings suggest a census grant amount of $958-$1,008 per resident K12 student.

## Extraordinary Cost Reimbursement

Census-based funding mechanisms are usually paired with an extraordinary cost reimbursement mechanism, or contingency fund, that provides additional funding to localities responsible for serving high-need, high-cost students. In our simulations, we consider four potential models for an extraordinary cost mechanism that could serve alongside the census-based or weighted student funding mechanisms considered above. Specifically, we present simulations for a:

1. Fixed threshold model that is consistent with the state's existing extraordinary cost reimbursement mechanism (Example 1)

2. Threshold model that uses a base cost multiplier to establish the threshold value for a given fiscal year (Example 2)

3. Two-tiered threshold model with different threshold amounts for students served within a school district and a higher threshold for students placed outside of a district (Example 3)

4. A "severe" needs model that attempts to implement recommendations made by Odden and Associates (2016) for a funding mechanism where the state reimburses localities for 100% of the costs associated with serving "severe need" students (Example 4)

Table 19 summarizes the findings for each simulation example.

### Extraordinary Cost Reimbursement – Model 1

Model 1 represents a status quo model. Students with IEP costs in excess of $50,000 would qualify for the state's excess cost reimbursement funding. As is the case with the state's existing excess cost mechanism, the state would reimburse supervisory unions for 90% of their spending in excess of $50,000 and for 60% of spending up to $50,000.[23]

For simulation Model 1, the total appropriation for the extraordinary cost mechanism would be about $31.9 million.[24]

### Extraordinary Cost Reimbursement – Model 2

Model 2 represents a modified status quo model. Instead of a fixed dollar threshold, the reimbursement threshold is tied to a multiplier linked to base regular education spending. The advantage to using a multiplier as opposed to specifying a fixed amount in statute is that it automatically updates for changes (up and down) in base per pupil spending.

In this example, we assume a multiplier of 4.62, equivalent to $51,051 for FY 2016. The suggested multiplier is based on the weight that was identified in the Maryland adequacy study for students with "severe" disabilities. For this simulation, we assume that 4% of IEPs would qualify for reimbursement at this threshold. This translates to an estimated state appropriation of $30.7 million, inclusive of the 90% reimbursement for spending over $51,051 and 60% below $51,051.

### Extraordinary Cost Reimbursement – Model 3

In our third model, we assume two reimbursement multipliers tied to whether a student is placed within or outside of a supervisory union (e.g., separate school or residential placement). This type of reimbursement mechanism is intended to minimize financial incentives to place students in costly out-of-district placements and, instead, develop programs and service delivery models that serve high need students within their home district or school.

In Model 3, we assume that of the 564 IEPs qualifying for reimbursement under the state's existing extraordinary cost mechanism, 75% would qualify for a reimbursement at the Step 1 rate (within district services), with the remaining IEPs qualifying at the Step 2 rate (out-of-district placement). The multiplier for setting the Step 1 threshold is the same as what we used in simulation Example 2 (i.e., 4.62; the weight for severe needs students that was developed by the Maryland adequacy study). The multiplier for determining the Step 2 threshold amount is 5.9 times base per pupil costs. This multiplier corresponds with SEEP-based research on the excess costs associated with serving the top 5% of high need students.

Applying these weights, threshold spending levels for FY2016 would be: $51,051 for Step 1, and $65,195 for Step 2. As was the case with simulation Examples 1-2, the state would reimburse supervisory unions for 90% of their spending over the threshold amount and 60% for spending below the threshold, net the census grant amount. The estimated state appropriation for this extraordinary cost reimbursement model is $36.2 million per fiscal year.

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[23] In all of our extraordinary cost models, we assume that allowable costs are net the census grant amount for that student as well as federal revenues from IDEA, Medicaid, and other sources.

[24] Our cost estimates are based on average actual spending for IEPs that qualified for the state's existing extraordinary cost reimbursement mechanism during FY2016.

### Extraordinary Cost Reimbursement – Model 4

Simulation Example 4 attempts to implement the "severe" need reimbursement model recommended by Odden & Associates (2016) in their adequacy study. They propose that the state reimburse supervisory unions for 100% of excess costs associated with serving "severe" needs students with disabilities; however, they do not define what constitutes a severe needs student. Instead, they assume that 2% of Vermont students would meet this description. By contrast, when developing our disability grouping cross walk (Table 13,) we assume that approximately 9% of students with IEPs would meet this criterion. Alternatively, for FY2016, 5% of IEPs qualified for the state's existing high-cost student reimbursement. We use all three estimates as proxies for the share of "severe needs" students with disabilities in Vermont.

Depending on the assumption for the number of severe needs students, the state appropriation ranges between $19.1 and $86.0 million per fiscal year. The cost estimates assume the average level of spending per IEP qualifying for reimbursement from the state's existing extraordinary cost mechanisms during FY 2016.

### Summary: Evaluating the Simulations for an Extraordinary Cost Reimbursement Mechanism

Each simulation for an extraordinary cost reimbursement mechanism assumes that the State continues to provide supplemental support for high-needs, high-cost students with disabilities. We learned in our interviews, focus groups, and survey that the existing extraordinary cost mechanism is an essential feature of Vermont's special education funding formula. That said, stakeholders interviewed for our study criticized the existing mechanism for:

1. Not going far enough to incentivize supervisory unions and school districts to find ways to serve high-need students in their home district or school and, instead, place students in costly specialized schools out-of-district.

2. A fixed dollar threshold amount that is stipulated in statute. This makes it difficult for the threshold to adapt to changes in education costs. In particular, a fixed threshold runs the risk of being set too low, relative to average excess spending per IEP.

Given this context, we suggest that the state consider adopting a two-tiered threshold model, such as what is presented as simulation Example 3.

In addition, based on input from special education professionals in our interviews, focus groups, and survey, we also recommend that a new statewide expert panel be constituted for the purpose of reviewing supervisory union requests for extraordinary cost reimbursement. This is not intended to be punitive, but rather to provide local educators with additional expertise in thinking about what are the most appropriate services and supports for their highest need students.

## Table 19: Summary Findings from Extraordinary Cost Reimbursement Mechanism Simulations

| | Model 1<br>Fixed Threshold<br>(Status Quo) | Model 2<br>Threshold Based on Multiplier<br>(Modified Status Quo) | Model 3 | Example 4<br>"Severe" Need Model | | |
|---|---|---|---|---|---|---|
| | | | Two-step Threshold Model | Model A | Model B | Model C |
| **Description** | State reimburses supervisory unions for IEP costs in excess of $50,000. | Reimbursement amount is tied to a threshold calculated as a multiplier on the base regular education spending amount. | Threshold amounts for reimbursement are tied to whether a student is placed within- or out-of-supervisory union (e.g., separate school residential placement). | State reimburses supervisory union for 100% of costs associated with serving "severe" need students with disabilities. Model reflects the general assumptions proposed by Odden et al. (2016) in their recent report on spending adequacy. | | |
| **Cost Assumpions** | | | | | | |
| Estimated # Qualifying IEPs/%High Cost Students | 5% of IEPs (564 for 2016) | 4% of IEPs (541 for 2016) | 5% of IEPs (564 for 2016; 75/25% split for within and outside supervisory union placement) | 5% of IEPs (564 for 2016) | 9% of IEPs (1,009 for 2016) | 2% of IEPs (224 for 2016) |
| Threshold Amount | $50,000 | 4.62 x Statewide Average Regular Education Per Pupil Spending ($51,051 for 2016) | *Within SU* : 4.62 x Statewide Average Regular Education Per Pupil Spending ($51,051 for 2016)<br>*Outside of SU*: 5.9 x Statewide Average Regular Education Per Pupil Spending $65,195 for 2016) | Qualifying IEPs would be based on a definition of what consitutes a severe need student, presumably based on student disability and the package of supports and services included on IEP. | | |
| Allowable Costs | Allowable costs are for services and supports identified on a student's IEP, and are net: the State's per ADM special education formula allocation; the supervisory union's average per pupil regular education spending; and federal Title Vib, Medicaid, and other private party reimbursements. | | | | | |
| State Reimbursement Parameters | 60% of costs <Threshold Amount<br>90% of costs >Threshold Amount | 60% of costs <Threshold Amount<br>90% of costs >Threshold Amount | 60% of costs <Threshold Amount<br>90% of costs >Threshold Amount | 100% of spending | | |
| **Estimated Cost to State** | $31,981,016 | $30,676,825 | $36,191,554 | $48,067,795 | $85,993,627 | $19,090,756 |

## Summary

### Census-based Funding Mechanisms

- Census-based funding mechanisms can serve as an appropriate and fair approach to allocating supplemental funding to localities when two conditions are met: 1) the proportion of students with disabilities is constant across localities; and 2) there is similar demand for special education and related services across localities and the cost of providing these services is equivalent.

- In the 1990s, Vermont pioneered the use of a census-based funding mechanism for special education. In the early 2000s, Vermont did away with its census-based funding approach and adopted a reimbursement mechanism in response to concerns about small districts' and schools' abilities to fully absorb the excess costs associated with providing special education for their students.

- Currently, New Jersey and California rely on census-based funding mechanisms to allocate supplemental funds to localities for their special education costs.

### Determining Census Grant Amount

- On average, the amount spent by Vermont's supervisory unions and school districts per special education student is $21,840. This is 1½ - 2 times greater than other national and state estimates for the average excess cost per special education student.

- Based on national and state estimates for special education costs, the expected spending equivalent per K-12 student is between $1,547 and $3,062. Assuming that the state pays 60% of special education costs, the corresponding per capita grant amount under a census-based funding model would be between $880 and $1,881 per student.

- We recommend an additional per capita grant amount for supervisory unions that serve a disproportionately high percentage of low-income students. Supplemental funding could take the form of a poverty adjustment added to the state's census grant amount.

### Recommendations Based on Simulations

- Based on findings of our census-based funding model simulations (Examples 2-3), a grant amount of $930-$985 per student should provide adequate supplemental funding to support supervisory unions' special education programs.

- For supervisory unions that serve a disproportionately high percentage of low-income students, we recommend a larger grant amount equal to $958-$1,008 per student.

- A census-based funding mechanism may reduce state appropriations for special education and related services. However, to maintain current levels of instructional support for "at risk" students, cuts to state appropriations for special education may need to be offset with increased state spending for Tier 1 and Tier 2 interventions (MTSS) for general education students who have not been identified for special education.

- The state should maintain an extraordinary cost reimbursement funding mechanism. However, we recommend adopting a two-tiered threshold model (simulation Example 3) in lieu of its existing fixed threshold model.

# VI. Conclusion

For over a decade, the State of Vermont has largely relied on a cost reimbursement approach to provide local education agencies with supplemental funding to offset the expenses associated with meeting federal and state requirements to educate students with disabilities. The State typically reimburses localities about 60% of allowable expenditures, up to $50,000 per special education student; and 90% of spending over $50,000 through its extraordinary-services reimbursement. The State's policy for reimbursing localities for what they spend to educate students with disabilities has provided supervisory unions and school districts with a stable and predictable source of funding for their special education programs.

At the same time, however, the State's funding policy has been a source of concern. The existing policy may be misaligned with other state policy goals, particularly those that ask local educators to implement multi-tiered systems of support (MTSS). Well-developed MTSS provide early intervention and support for struggling students – with and without disabilities – and take form as a seamless system of supports and services that incorporate both general and special education resources. We found that special education professionals – including state officials and local educators – feel that the rules governing the state's reimbursement formula limit flexibility in how they provide supports and services for students, and pushes local educators toward service delivery silos and away from effective and efficient multi-tiered student support systems.[25] This not only weakens, but also likely works against, efforts to distribute resources within districts and schools in ways that best serve students at the lowest possible cost.

Vermont's existing funding policy may also incentivize local educators to identify students for special education. This practice is not so much the result of intentional efforts to garner additional state funding, but rather the result of committed educators whose primary goal is to provide struggling students with the academic, socio-emotional, and mental health services they need to be successful and healthy. By identifying students for special education, they are able to develop and implement Individualized Education Programs (IEPs) that are jointly funded by the state and locality. This effectively lowers the tax price to localities for serving struggling students below that of similar services provided to students without IEPs and, the current model of service delivery, local educators may seek to offset the costs of serving struggling students by identifying them for special education.

It also is difficult to ignore the fact that Vermont spends substantially more per student with an IEP than the national average or other peer states. The primary driver for Vermont's increase in spending has not so much been larger numbers of students with disabilities, but rather how much is spent to execute special education students' IEPs. Spending per IEP is driven both by student need and decisions about the services delivered. While there is some evidence to suggest that schools may be encountering students with a more complex constellation of needs, it is not entirely clear what contributes to comparatively high spending per IEP – higher need *or* local decision making about the services and supports that students receive.[26] Districts have some latitude they develop and

[25] The existing state funding formula limits the amount of special education staff time that can be used to support general education students. The current limitation is 20%. However, there is widespread misunderstanding among special education personnel statewide about this limitation.

[26] In their companion report, The District Management Group (2017) explores special education service delivery in a select number of Vermont supervisory unions and school districts. The report's findings suggest that there may be

implement their models for service delivery and there may be opportunities to adopt more cost effecrtive approaches to serving students with IEPs (District Management Group, 2017).

The number of students qualifying for the State's extraordinary cost reimbursement has also increased in recent years as has the cost of serving these students. There is some evidence to suggest that local decisions about services and placement have been influenced by the opportunity to gain additional state funding when the cost per IEP exceeds the existing $50,000 qualification threshold. This may be particularly true when decisions are made about whether to place students outside their home school districts, in either separate programs and schools or residential placements. Not only do these practices potentially increase spending, they also raise questions about whether the State's existing reimbursement formula encourages student placements in more restrictive educational environments.

Finally, we find evidence that the costs of administering the State's current formula are not inconsequential. The existing reimbursement mechanisms requires that localities develop detailed prospective service plans as well as document and justify how they spend state money. AOE is responsible for monitoring and holding localities accountable and has dedicated staff (equivalent to at least three FTEs) dedicated to these efforts; these staff are not involved with assisting localities with service delivery, but instead their time is committed to administering the existing funding formula.

## Implementing a Census-based Funding Formula in Vermont

Findings from this and other recent studies suggest that changes to the State's existing special education funding formula are needed. A key objective for this study was to evaluate whether a census-based block grant approach is an appropriate path forward for reform in Vermont.

Odden and Associates (2016) recommended that the State implement a census-based mechanism to allocate supplemental funding for students with mild and moderate disabilities. The recommended grant amount was $684 per student enrolled in a supervisory union.[27] Through a separate reimbursement mechanism, the State would pay 100% of costs for high need students. The report also recommended a new $95 million annual state investment in "extra help" resources for schools to provide additional instructional assistance to struggling students before they are identified for special education. Similarly, in its report to the Vermont House Committee on Education, students from the Rockefeller Center at Dartmouth College called for reforming the State's funding formula and identified a census-based funding model as the preferred policy option.

Recommendations that the State implement a census-based approach to funding special education should be evaluated in terms of the fit between the policy's known strengths and weaknesses and Vermont's other policy goals – specifically:

opportunities to expand best practices for special education in ways that provide cost savings, while maintaining or improving quality in services.

[27] The census grant amount recommended by Odden & Associates (2016) also assumes significant investments on the part of the State and localities in early intervention, larger districts and schools, two days of full day pre-kindergarten in public school buildings, and more robust funding for MTSS through a State appropriation for "extra help" resources.

1) Ensuring that students with disabilities receive appropriate services and supports in the least restrictive environment.

2) Implementing MTSS for struggling students in Vermont school districts.

3) Ensuring that state and local spending on special education represents investments in best practices for providing supports and services for students with disabilities and that these practices are implemented in the most cost-effective way possible.

Findings from this study suggest that to accomplish these goals, the State must maintain a predictable and stable source of supplemental funding to assist localities in meeting their obligations to educate students with disabilities. However, in doing so, there is a need to introduce additional flexibility in how state funding can be used – both to support new and innovative service delivery models as well as to improve the cost-effectiveness with which services are provided. There is also a need to reduce costly administrative and procedural requirements associated with accounting for and justifying how state funds have been spent. A census-based funding mechanism meets these criteria with four main benefits:

- It provides localities with a fixed dollar amount for each student – both general and special education – enrolled in a school district. This dollar amount is easily communicated and predictable for state and local budgeting.

- A census grant does not tie funding to the number of students identified for special education or the services they receive.

- If allocated entirely as a block grant, localities have discretion with how they spend the census grant, including the flexibility to use state support to pay for services and supports for struggling students with and without a special education designation.

- While the State and localities still need to meet requirements for documenting how federal dollars have been spent, current State requirements for accounting and monitoring expenditures are relaxed. That said, localities are still responsible for ensuring that students with disabilities are identified for special education and receive services and supports appropriate to their needs.

Based on our simulations, a census grant amount of $930-985 per student should provide adequate funding to support supervisory unions' special education programs (See Simulation Examples 2 and 3 specifically). This is about *half* of what supervisory unions receive, on average, from the state on a per student basis currently. The census grant amounts used in our simulations are consistent with national benchmarks for spending on special education for students with disabilities.

Our simulations present other options for a census grant amount. These options include more restrictive assumptions about what special education should cost in Vermont and whether the State would restrict funding through this model for just students with mild or moderate disabilities (See Simulation Examples 4-6).

However, the extent to which a census-based mechanism is an appropriate and fair approach to providing localities with supplemental funding for special education costs is contingent on two key assumptions about the nature and extent of student need across Vermont's supervisory unions. Specifically:

1) Providing a fixed amount per capita assumes that the proportion of students with disabilities is the same (i.e., there is an even distribution) across supervisory unions. In that way, a flat grant amount equitably distributes funding across jurisdictions – i.e., supervisory unions and districts receive similar funding per capita for proportionally similar numbers of special education students.

2) Implicit in a census-based mechanism are assumptions about special education costs across jurisdictions. To the extent that there is similar demand for special education and related services and the cost of providing those services is equivalent, a fixed amount per capita will proportionally offset special education costs across jurisdictions. However, as the nature and extent of student need differs *or* the cost of providing special education varies, the local responsibility for funding special education may be larger in some places than others.

Findings from this study suggest that there may be differences across supervisory unions in the proportion of students with disabilities and that these differences may translate into comparatively higher or lower costs.

These concerns suggest that as the State considers a census-based funding approach, it is important to carefully consider:

1) **Poverty adjustments to the census grant amount.**
Adjustments to the census grant that allow for potential differences in the distribution of students with disabilities across supervisory unions, especially the relationship between poverty and student need.[28]

   For each census grant amount identified in our simulations, we provide a poverty-weighted adjustment. In our simulations, we assumed a poverty adjustment for supervisory unions at or above the 75$^{th}$ percentile statewide for the percentage of students eligible for free or reduced-price lunch.

2) **Extraordinary cost reimbursement.**
An extraordinary cost reimbursement approach should be paired with a census-based mechanism to provide fiscal safeguards for localities that educate high-needs students. We recommend that the State adopt a two-part threshold model in lieu of its existing fixed threshold model. Supervisory unions would qualify for extraordinary cost reimbursement at different thresholds depending on whether a student is served within or outside of the home school district.

[28] Poverty adjustments to the census grant amount are distinct from other povery adjustments incorporated in base per pupil (general) education funding. The poverty adjustment for the census grant provides extra resources on the basis that supervisory unions with concentrated poverty may experience a higher incidence of students with disabilities.

In addition, we recommend that a new statewide expert panel be constituted for the purpose of reviewing supervisory union requests for extraordinary cost reimbursement. Such a review would occur prior to awarding the extraordinary cost reimbursement. External review is not intended to be punitive, but rather responds to stakeholder input about capacity at the local level to address the complex needs of students with severe disabilities.

The panel would provide local educators with additional expertise in thinking about what are the most appropriate services and supports for their highest need students. Ideally, the panel would be staffed by experts in special education and related services who can assess the appropriateness of a student's IEP, as well as representatives from stakeholder groups representing the persons with disabilities. AOE would staff and manage the review process and panel.

In all cases, the simulations presented in this report suggest that implementing a census-based funding approach would decrease state appropriations for special education and, by extension, reduce the amount of supplemental funding localities receive from the state. That said, existing funding is necessary given current practices; *simply reducing spending would likely result in children going unserved and localities not meeting their obligations under federal and state law.*

To achieve savings without potential harmful impacts for students, a move to a census-based funding mechanism must be tightly coupled with shifts in practice and service delivery models. As practices shift, costs can come down while services stay the same or actually improve and expand. To do so, however, it will take time, planning, and technical assistance to modify practices in ways that result in identified cost savings. We recommend:

1) **A five-year phase-in period for transitioning to a census-based model.**
   The State could set an initial grant amount at or near existing funding levels (i.e., Simulation Example 1) and reduce this initial amount over a five-year time frame to an amount consistent with what was identified in either Simulation Examples 2 or 3). A graduated approach to reducing state support will provide localities the opportunity to adjust practices to reflect new flexibility in how funds are used *and* adjust service delivery models for new funding levels.

2) **Paired with additional technical support for local educators.**
   Changing local practice in ways that realize the potential for cost savings is beyond the scope of simply modifying the State's special education funding policy. Rather, reforming the funding formula will require the Agency of Education (AOE) to provide additional technical assistance to supervisory unions on how to leverage flexibility that comes with a census-based block grant and improve cost effectiveness in service delivery. In the near term, AOE may require additional resources to accomplish these goals. However, these investments should be considered in light of the potential for long-term cost savings.

## Other Design Considerations

Developing a census-based funding mechanism for Vermont involves other decisions about elements of its design. Below we summarize key decision points that should be considered in the State's deliberations.

### Students Counted for Aid Allocation

Census-based funding mechanisms distribute funding to localities based on some assumption about the total number of students in a school district. Typically, the number of students is equivalent to a school district's K-12 Average Daily Membership (ADM), which is a count of students that is taken at different times during the school year to satisfy local, state, and federal data collection requirements. In practical terms, this count is intended to provide an accurate snapshot of a school district's enrollment in grades kindergarten through twelve.

As localities have added pre-kindergarten and early childhood education to their curriculum, a second measure – PK-12 ADM – has been developed. Like K-12 ADM, this measure provides a headcount for enrolled students that includes young children.

In developing a census-based funding mechanism, the State could allocate funding based on either K-12 *or* PK-12 ADM. The latter would effectively provide supervisory unions with additional funding for early intervention and special education for young children.

### Categorical vs. Block Grant Funding

Census-based funding mechanisms may or may not place restrictions on how funds can be used. Block grant models allow localities to spend their per capita grants on students with and without disabilities with no restrictions. However, other models require a certain percentage of the census grant to be spent exclusively on special education and related services with the remaining funds available for spending on students with and without IEPs.

We recommend that the State consider a 30/70 split between categorical and block grant funding. Maintaining the categorical nature of some percentage of the funds responds to concerns expressed by stakeholders in our focus groups about the need to hold supervisory unions accountable for using state funding to serve students with disabilities.[29]

### Accountability

The goal with a census-based mechanism would be to prioritize spending – in ways that are responsive to local context and needs – to improve services and supports for struggling students. However, this assumes that all localities have equal capacity to make appropriate decisions about how to best invest state and local resources. Stakeholders expressed concerns that some localities could struggle with this new responsibility and that it will be important to track outcomes for students with disabilities.

We recommend that the State couple a census-based approach with a robust monitoring and accountability framework that includes multiple indicators for both student outcomes as well as for how services are delivered. Indicators should be tracked at the supervisory union, district, and school levels.

[29] Requiring a portion of the census grant to be spent on students with IEPs would require some additional oversight and monitoring on the part of AOE.

### Maintenance of Effort for Federal Funding

Our simulations suggest that a census-based funding model could justify a reduction in the State's appropriations for special education. A significant decrease in appropriations, however, could trigger corresponding reductions in federal grant funding.

While states are not required to fund special education, when they do, they must maintain funding at a level of effort at or above the previous year's funding amount or risk reductions in its IDEA Part B grant. Specifically, federal law states that IDEA funding, "must be used to supplement state, local or other federal funds and not to supplant those funds) (34 CFR Section 300.202(a)(3)). States can seek a waiver from the U.S. Department of Education to decrease spending without financial penalties through an application process with the federal government. States can change their revenue sources and their funding formula without a waiver.

## Summary

The purpose of this study was to evaluate whether it was feasible and advisable for Vermont to implement a census-based funding model for special education.

We find that there is a need to reform the State's special education funding formula to an approach that is better aligned with other policy priorities, both with respect to how students are served and cost containment. Based on these criteria, a census-based model may be an appropriate policy response.

To ensure that there is sufficient funding to ensure localities meet their responsibilities to serve students with disabilities, a census-based approach should include:

1) A census grant amount of $930-985 per student.[30]

2) That 70% of grant funds be provided as a block grant with the remaining 30% as categorical funding for spending on students with IEPs.

3) A poverty adjustment that directs additional funds to supervisory unions with disproportionately higher percentages of students at risk for disability.

4) An extraordinary cost reimbursement that provides a financial safety net for localities.

5) A five-year timeline for implementing the new funding model to coincide with simultaneous changes in service delivery models on the part of supervisory unions and school districts.

6) Additional technical support and capacity building by AOE to help localities adjust service delivery models to represent newfound flexibility and the potential for innovation in how students are served.

[30] The census grant amount proposed here represents the total state payment on a per capita basis to supervisory unions. This amount would not be split between the State and localities, as is spending under the existing special education funding formula.

7) A framework for monitoring student outcomes and local service delivery to ensure that localities use resources in ways that are most effective and focused on meeting student needs.

## Bibliography


Augenblick, Palaich, & Associates. (2016, November). *Final report of the study of adequacy of funding for education in Maryland.* Denver, CO: Author.

Ahmed, W. & Mishra, M. (2016, May). *Special education practices in Vermont: Assessing the cost of performance efficacy of current programs.* (PRS Policy Brief 1516-11). Hanover, NH: The Nelson A. Rockefeller Center at Dartmouth College.

Aportela, A., Picus, L., Odden, A., & Fermanich, M. (2014, September). *A comprehensive review of adequacy studies since 2003.* Denver, CO: Augenblick, Palaich, & Associates.

Baker, B. & Ramsey, M. (2010). "What we don't know can't hurt us? Equity consequences of financing special education on the untested assumption of uniform needs." *Journal of Education Finance, 35*(3), pp. 245-275.

Chambers, J., Khkolnik, J., & Perez, M. (2003). *Total expenditures for students with disabilities: 1999-2000: Spending variation by disability.* Palo Alto, CA: Center for Special Education Finance, American Institutes for Research.

Cullen, J. (2003). "The impact of fiscal incentives on student disability rates." *Journal of Public Economics, 87*, pp. 1557-1589.

Dhuey, E. & Lipscomb, S. (2011). "Funding special education by capitation: Evidence from state finance reforms." *Education Finance & Policy, 6*(2), pp. 168-201.

Dhuey, E. & Lipscomb, S. (2013). "Funding special education by total district enrollment: Advantages, disadvantages, and policy considerations." *Education Finance & Policy, 8*(3), pp. 316-331.

Griffith, M. (2008, May). *State funding programs for high-cost special education students.* (E-State Notes: Finance – Special Education). Denver, CO: Education Commission of the States.

Griffith, M. (2015, March). *A look at funding for students with disabilities.* (Volume 16, No. 1). Denver: Education Commission of the States (Retrieved from: http://www.ecs.org/clearinghouse/01/17/72/11772.pdf)

Kolbe, T. & O'Reilly, F. (2005). *Plans to obtain special education finance data: Final report.* Washington DC: U.S. Department of Education, Office of Special Education Programs.

Kwak, S. (2010). "The impact of intergovernmental incentives on disability rates and special education spending." *Public Finance Review, 38*(1), pp. 41-73.

Millard, M. & Aragon, S. (2015, June). *State funding for students with disabilities.* (ECS 50-State Review) Denver, CO: Education Commission for the States.

National Research Council. (2002). *Minority students in special and gifted education.* Washington, DC: The National Academies Press.

Odden, A., Picus, L., Griffith, M., & Hoyer, K. (2016, January). *Using the evidence-based method to identify adequate spending levels for Vermont schools.* Los Angeles, CA: Picus, Odden & Associates.

Parrish, T. (2000). "Restructuring special education funding in New York to promote the objective of high learning standards for all students." *Economics of Education Review 19*(2000), pp. 431-445.

Parrish, T., Harr, J., Kidron, Y., Brock, L., Anand, P. (2003). *Study of the incidence adjustment in the special education funding model: Final report.* Palo Alto, CA: American Institutes for Research.

Parish, T. & Montgomery, D. (1995). *The politics of special education finance reform in three states.* Palo Alto, CA: American Institutes for Research, Center for Special Education Finance.

Pennsylvania Department of Education. (2000). *A report on special education incidence rates.* Harrisburg, PA.

Taylor, L. L., & Fowler, W. J. (2006). *A Comparable Wage Approach to Geographic Cost Adjustment* (NCES 2006-321). Washington, DC: National Center for Educational Statistics.

# Appendix A: Summary of Data Collection via Qualitative Interviews and Survey Research

## Qualitative Interviews

In our interviews with special education professionals, focus groups with disability advocacy and policy groups, and a statewide survey with special education directors, we explored perspectives on how Vermont's Special Education funding formula was understood and how well it functioned. Questions focused on major components of the funding system, relationships between parts, as well as evaluative questions about strengths, weaknesses, and relationships between other State initiatives.

A broad range of study participants were identified for interviews, representing different contact points with special education service delivery in the State of Vermont. All interviews were recorded digitally and transcribed verbatim using transcription services from *REV.com*. All interviewees consented to participation in the research study, and all interviews were conducted using a semi-structured interview protocol. Transcripts were entered into DEDOOSE qualitative research software. Thematic codes of the interviews were developed interactively. Initial codes were established out of the interview protocol, then modified following independent transcript checking by three researchers. Final codes were developed and used by a team of five researchers to process all interview transcripts (i.e., Drs. Haines, Kervick, Killeen, Kolbe as well as doctoral student Mika Moore).

The study team sought broad representation to understand how the special education funding system operates, from families with children with disabilities, classroom teachers, school and district administrators, state officials as well as representatives of state education organizations and advocacy groups. Interviews were all administered by Drs. Shana Haines (UVM), Kieran Killeen(UVM), Tammy Kolbe(UVM), or Mika Moore (UVM).

School and district level interviews, inclusive of family interviews, were administered in one of four Supervisory Union study sites, with geographic representation around the state. Primary interviews were conducted between June 15 - October 15, 2017. A total of 42 interviewees were reached distributed across the following roles:

3 Superintendents
1 Business manager
4 Special Education Directors/ Directors of Student Support Services at SU level
1 Assistant Special Education Director
10 School Principals
4 Building-based Special Education Directors
12 Special Education teachers
1 Tech integrationist
6 Parents

Additionally, interviews were sought with broad representation of State officials. Interviews were conducted with four high-level administrators in the Agency of Education, one representative of the Legislature's Joint Fiscal Office, as well as the Chairperson of the Legislature's Education

Committee. Face to face interviews with State officials were conducted by Drs. Tammy Kolbe and Kieran Killeen between August 15, 2017 - October 15, 2017.

Focus groups with representatives of educational advocacy and professional associations were conducted in the late Spring of 2017. A focus group of educational advocacy groups was held at the University of Vermont (Burlington, Vermont) on April 24, 2017. Invitations were extended to representatives from the Vermont Family Network, Coalition for Disability Rights, Law Project/Legal Aid, Federation of Families for Children's Mental Health, Autism Task Force, Association for the Blind and Visually Impaired, I-Team, Center on Disability and Community Inclusion, Vocational Rehabilitation, Parent Training and Information Center. Seven representatives of these organizations participated in the focus group.

A second focus group of educational organizations (e.g. professional and other) was held on April 26, 2017 at the Agency of Education Offices (Barre, Vermont). Invitations were extended to the Vermont School Boards Association, Superintendents Association, Principals Association, National Education Association, Council of Special Education Administrators, Independent Schools Association, Higher Education Collaborative, Curriculum Leaders Association, School Counselor's Association, Association for School Business Officials and the Community High School of Vermont. Six representatives of these organizations participated in the second focus group.

Thematic analysis of interview data and codes was performed by Drs. Killeen and Kolbe.

## Survey Research with Vermont Special Education Directors

The development of survey questions followed two steps. At first, and to identify salient topics and questions for inclusion in a statewide survey of special education directors, the Study Team sought the input of the Vermont Council of Special Education Administrators. In mid-March 2017, the VCSEA identified a list of topics of interest about the functioning of the Special Education System. Second, and following the principle qualitative data collection through educator and stakeholder interviews in the summer of 2017, as well as State official interviews in the early fall, a second list of survey questions were identified. The final survey questionnaire is pasted below in Appendix A.

The sample frame included the population of all Directors of Special Education in Supervisory Unions(N=57), the names and contact information for which was provided by the VCSEA. The survey was administered Fall 2017.

The survey was administered electronically by email contact using software from SurveyGizmo.com. A total of 37 surveys were completed for a response rate of 64.9%. No procedures for non-response were conducted.

# Appendix B: Survey with Vermont's Special Education Directors

**Survey with Vermont's Special Education Administrators**

You are invited to participate in a survey about special education practices and funding. The survey is being conducted with researchers at the University of Vermont as part of a statewide study of special education funding. The study's purpose is to help the Vermont Agency of Education and General Assembly better understand the strengths and weaknesses of the current approaches to funding, as well as identify opportunities for improvement.

The survey should take no more than 10 minutes to complete. Your participation is voluntary, and there are no penalties for not participating in the survey. However, having a sufficient number of responses will help boost the survey's findings' credibility and potential impact on policy. The survey does not collect identifying information about you and findings will be reported as a summary of responses.

**Special Education Costs**

1. There are many factors that contribute to the cost of providing supports and services for students with disabilities. When answering the following questions, please consider the extent to which the following factors impact the cost of serving students with IEPs in your district/SU.

| | A great extent | Moderate Extent | Very Little | Not at All |
|---|---|---|---|---|
| a. The nature and extent of student need | | | | |
| b. Parent pressure to provide services to students or to place students out-of-district | | | | |
| c. Reliance on outside providers | | | | |
| d. The number of referrals by general education teachers for student evaluations | | | | |
| e. Rules and regulations that govern how students with and without IEPs can be served by special educators | | | | |
| f. Rules about what is an allowable or reimbursable expense under the State's special education funding formula | | | | |
| g. An inadequate supply of community-based health and social service agencies in your communities | | | | |
| h. Changes in the amount and types of services available from other government agencies | | | | |
| i. Transportation needs for students with IEPs | | | | |
| j. Administrative and paperwork requirements for state and federal funding | | | | |
| k. An increase in the number of pre-kindergarten aged students who attend schools in your district/SU | | | | |

2. In the past three years, has the amount spent by your district or SU on special education and related services:

    a. Increased
    b. Stayed the same {SKIP TO Q5}
    c. Decreased {SKIP TO Q4)

3. What factors do you feel have contributed ***to an increase*** in spending by your district/SU?
    a. {OPEN ENDED RESPONSE} (SKIP TO Q5)

4. What factors do you feel have contributed ***to a decline*** in spending by your district/SU?
    a. {OPEN ENDED RESPONSE}

5. On average, about what percentage of their time do special education teachers in your district/SU spend on paperwork and other administrative tasks?

    a. 0-10%
    b. 11-25%
    c. 26-50%
    d. More than 50%

6. Please indicate whether you agree or disagree with the following statements:

    a. Educational leaders or school board members are concerned by the amount spent by the district/SU on special education.

        i. Strongly agree
        ii. Somewhat agree
        iii. Somewhat disagree
        iv. Disagree

    b. Altogether, there is sufficient funding (from all sources) in my district/SU to provide ***appropriate*** services and supports to students with disabilities.

        i. Strongly agree
        ii. Somewhat agree
        iii. Somewhat disagree
        iv. Disagree

    c. In my district/SU, the cost of services and supports is taken into account when developing IEPs for students with disabilities.

        i. Strongly agree
        ii. Somewhat agree
        iii. Somewhat disagree
        iv. Disagree

d. Eligibility decisions by Evaluation Planning Teams (EPTs) are influenced by financial considerations.

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

e. Increased flexibility in how the district/SU could utilize state funding for special education would improve how students with IEPs are served

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

f. Existing approaches to funding special education are barriers to consolidating services and supports for struggling students in my district/SU

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

g. Special education spending in my district/SU has limited, or encroached, on the amount of funding available for regular education

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

h. Schools in my district/SU effectively use their Educational Support Teams (ESTs) to address the needs of struggling students

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

i. Special education teachers in my district/SU are familiar with the purposes for which special education funds can and cannot be used

    i. Strongly agree
    ii. Somewhat agree
    iii. Somewhat disagree
    iv. Disagree

j. Changes in our district/SU's budget are due to increased special education costs

   i. Strongly agree
   ii. Somewhat agree
   iii. Somewhat disagree
   iv. Disagree

k. In my district/SU, personnel time studies accurately reflect how special education personnel use their time

   i. Strongly agree
   ii. Somewhat agree
   iii. Somewhat disagree
   iv. Disagree

l. My district/SU is innovative in its use of different funding sources to provide its system of supports for struggling students

   i. Strongly agree
   ii. Somewhat agree
   iii. Somewhat disagree
   iv. Disagree

**Special Education Funding**

7. To what extent do you feel **your district or supervisory union's business officials** understand how the following sources of funding can be used to pay for special education and related services?

| | A great extent | Moderate Extent | Very Little | Not at All |
|---|---|---|---|---|
| a. Vermont's special education funding formula | | | | |
| b. Federal IDEA-Part B Subgrants | | | | |
| c. Medicaid reimbursement funding | | | | |
| d. State Personnel Development Grants (SPDG) | | | | |
| l. Federal, IDEA, Part B, Preschool (Preschool Incentive) Grants | | | | |
| m. Extraordinary reimbursement funding available through the Vermont's funding formula | | | | |

8. To what extent do you feel **you** understand how the following sources of funding can be used to pay for special education and related services?

| | A great extent | Moderate Extent | Very Little | Not at All |
|---|---|---|---|---|
| e. Vermont's special education funding formula | | | | |
| f. Federal IDEA-Part B Subgrants | | | | |
| g. Medicaid reimbursement funding | | | | |
| h. State Personnel Development Grants (SPDG) | | | | |
| n. Federal, IDEA, Part B, Preschool (Preschool Incentive) Grants | | | | |
| o. Extraordinary reimbursement funding available through the Vermont's funding formula | | | | |

9. Vermont's special education funding formula reimburses districts and SU's for allowable costs associated with providing services and supports to students with IEPs.

   Please indicate whether you agree or disagree with the following statements about the State's existing funding formula.

   The existing funding formula:

| | Agree | Somewhat Agree | Somewhat Disagree | Disagree |
|---|---|---|---|---|
| a. Is fair | | | | |
| b. Provides a predictable source of funding for budgeting and planning purposes | | | | |
| c. Is understandable | | | | |
| d. Is administratively efficient | | | | |
| e. Protects districts/SUs from unforeseen or extraordinary costs associated with serving high needs students | | | | |
| f. Promotes best practices for serving students with IEPs | | | | |
| g. Is consistent with other policies that encourage districts and schools to develop Muti-tiered Systems of Support | | | | |
| h. Provides sufficient funding to provide appropriate supports and services to students with disabilities | | | | |

10. What are the strengths of the State's current approach to funding special education?

    a. {OPEN ENDED}

11. What are the weaknesses of the State's current approach to funding special education?

    a. {OPEN ENDED}

12. To what extent are you satisfied with the State's current approach to funding special education?

    a. Very satisfied
    b. Somewhat satisfied
    c. Somewhat dissatisfied
    d. Very dissatisfied

13. One potential model for reforming the State's approach to funding special education could be to provide supervisory unions with a fixed grant amount based on the total number of students with and without disabilities.

    Supervisory unions would have flexibility with how they spent these funds, including being able to use the funding to provide services for struggling students who do not have an IEP.

    The current approach to reimbursing districts/SUs for extraordinary costs associated with serving high need students would remain unchanged.

    Based on this general description, do you agree or disagree that ***if implemented*** this type of funding formula:

| | Agree | Somewhat Agree | Somewhat Disagree | Disagree |
|---|---|---|---|---|
| a. Is fair | | | | |
| b. Provides a predictable source of funding for budgeting and planning purposes | | | | |
| c. Is understandable | | | | |
| d. Would improve administratively efficiency | | | | |
| e. Protects districts/SUs from unforeseen or extraordinary costs associated with serving high needs students | | | | |
| f. Promotes best practices for serving students with IEPs | | | | |
| g. Is consistent with other policies that encourage districts and schools to develop Muti-tiered Systems of Support | | | | |
| h. Would stimulate innovation in how the district/SU provides supports to struggling students, with and without IEPs | | | | |

**Special Education Resources**

14. The following questions are about the resources used by your district to serve students with disabilities.

    Please indicate the extent to which you agree or disagree with the following statements.

| | Strongly Agree | Agree | Disagree | Strongly Disagree | Does not Apply to my District/SU |
|---|---|---|---|---|---|
| a. We have a network of outsider providers and community-based agencies available to provide supports and services beyond those available from our district/SU | | | | | |
| b. Struggling students *with* and *without* IEPs who have common needs work in groups with special education teachers or paraprofessionals on specific learning goals | | | | | |
| c. Paraprofessionals in our district have been trained to educate students with disabilities | | | | | |
| d. Special education teachers spend most of their time working with students | | | | | |
| e. Our district has a well-developed Multi-tiered System of Support (MTSS) | | | | | |
| f. Our schools utilize Educational Support Teams (ESTs) to identify and support struggling students | | | | | |
| g. Our schools have implemented systems of Positive Behavioral Intervention Services (PBIS) to provide behavioral supports to struggling students | | | | | |
| h. General education teachers have appropriate training to differentiate instruction in their classrooms | | | | | |
| i. General and special education teachers collaborate to support struggling students without IEPs | | | | | |

15. To what extent does your district/SU rely upon the following types of professionals and agencies to provide services and supports to students with IEPs.

| | A great deal | Much | Somewhat | Little | Never |
|---|---|---|---|---|---|
| a. Paraprofessionals or teacher aides | | | | | |
| b. Community-based agencies who provide services to students who attend school within the district/SU | | | | | |
| c. Out-of-district placements, including private and independent schools for students who educate students with disabilities | | | | | |
| d. General education, classroom teachers | | | | | |
| e. Psychologists and mental health professionals employed by the district/SU | | | | | |
| f. Behaviorists and other professionals trained in working with students with behavioral challenges | | | | | |

16. Are there additional thoughts you would like to share with the researchers at the University of Vermont about special education funding in Vermont?

a. Yes
b. No {SKIP TO CLOSING}

17. What are your thoughts?

a. {OPEN ENDED RESPONSE}

# Appendix C: SEEP-Adjusted Per IEP Costs

## Table C.1: SEEP Adjusted Per IEP Costs

| | Autism Spectrum Disorder (ASD) | Deaf-blind | Emotional Disturbance | Hearing Impairment (Including Deafness) | Intellectual Disability | Multiple Disabilities | Orthopedic Impairment | Other Health Impairment (OHI) | Specific Learning Disability (SLD) | Speech or Language Impairment | Traumatic Brain Injury | Visual Impairment (Including Blindness) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percentage of K12 Vermont Special Education Students with Disability (%) | 9.2 | 0.0 | 16.8 | 0.7 | 6.2 | 2.0 | 0.5 | 20.5 | 34.4 | 9.4 | 0.3 | 0.2 |
| Predicted IEP Count | 1,035 | 3 | 1,882 | 74 | 691 | 220 | 57 | 2,302 | 3,853 | 1,049 | 34 | 17 |
| | | | | | | | | | | | | |
| SEEP Weight | 2.9 | 2.9 | 2.2 | 2.4 | 2.3 | 3.1 | 2.3 | 2 | 1.6 | 1.7 | 2.5 | 2.9 |
| Per IEP Cost, Based on SEEP Weight (Applied to Vermont's Base Per Pupil Spending Amount; $11,050) | $32,044 | $32,044 | $24,309 | $26,519 | $25,414 | $34,254 | $25,414 | $22,099 | $17,679 | $18,784 | $27,624 | $32,044 |
| | | | | | | | | | | | | |
| Predicted Total Spending, Per Diability Category (FY 2016) | $33,178,957 | $107,841 | $45,759,121 | $1,963,443 | $17,561,903 | $7,531,488 | $1,453,989 | $50,871,013 | $68,125,508 | $19,702,601 | $929,660 | $539,203 |
| | | | | | | | | | | | | |
| **Weighted Average Per IEP Cost** | **$11,033** | | | | | | | | | | | |

## Appendix D: Developing an Adjustment to Special Education Funding to Account for the Incidence of Student Poverty

Our goal is to develop an adjustment for special education funding that takes into account the variation in special education that is related to the incidence of student poverty. To do so, the research team drew upon a customized large-scale data set developed using information from both the U.S. Census and the U.S. Department of Education National Center for Education Statistics (NCES). Specifically, we utilized data for the five most recent years that were available (2009-10 through 2014-15) from the following sources:

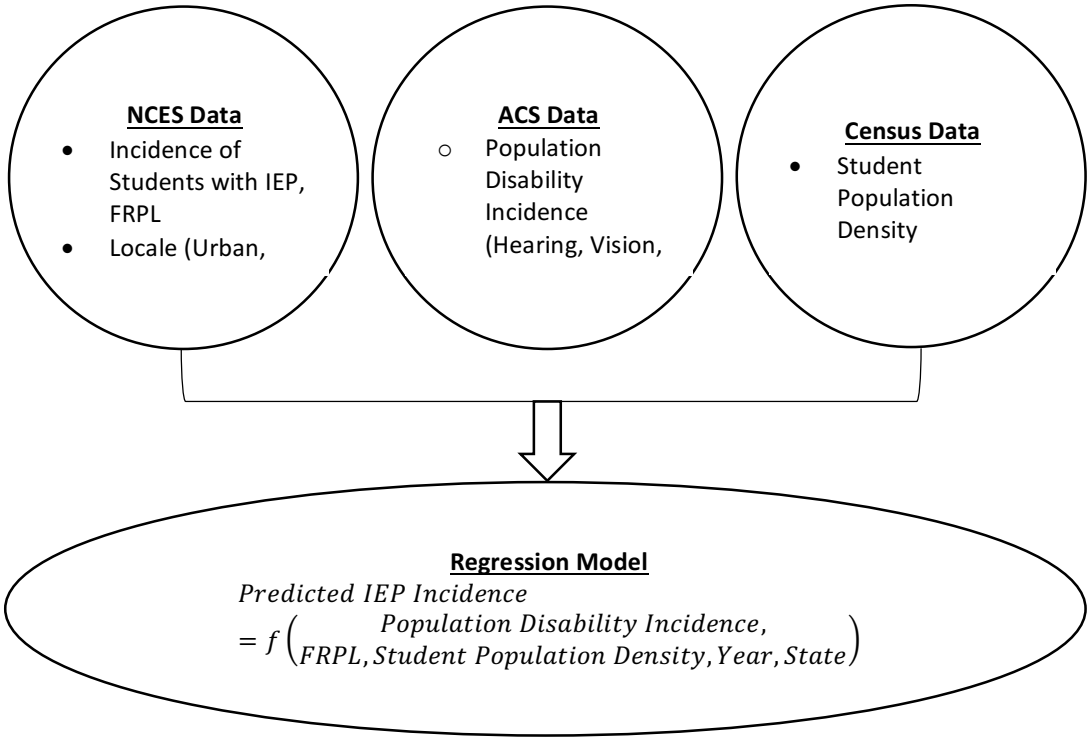
1) U.S. Department of Education National Center for Education Statistics (NCES), Common Core Data Local Education Agency Universe
2) U.S. Census American Community Survey (ACS), Public Use Microdata Sample (PUMS)
3) U.S. Census Geographic District Boundaries, School-Age Population, and Small Area Income Population Estimates (SAIPE), Childhood Poverty Estimates

Data from these three sources, from all local education agencies in the country, were used to build a model that shows how the district-level incidence of students with an Individualized Education Program (IEP) varies across states, years, and with respect to several district characteristics including the incidence of students eligible for free/reduced price lunch.

Figure 1 illustrates how the different data were combined to estimate the model. Specifically, the research team performed a regression analysis that modeled district-level IEP incidence on a variety of factors including:

- Overall incidence of disability in the population at large as reported in the Census (ACS) data
- Incidence of students eligible for the national free/reduced price lunch program (FRPL)
- Density of student population (number of students per square mile)
- Indicators of state
- Indicators of year

**Figure D.1: Leveraging Different Data Sources to Develop National Model of Special Education Incidence**




Given the outcome in this model--IEP incidence is a proportion and cannot assume values outside of 0 and 1 - we employed a fractional response regression which fits the model in such a way as to ensure that all predictions do not fall out of this logical range.[31]

It should be noted that the regression did not include data from Vermont, as we wanted to make sure the estimated relationships between district IEP incidence and those factors listed above were free of any potential over-identification bias that other research has claimed occurs in this state. In turn, our model estimated the average relationship across most other states in the country.[32] Table D.1 provides the regression output, which shows that all factors in the model proved to be statistically significant at conventional levels.

The estimated model was used to better understand the patterns of district-level IEP incidence across the country and also how it varies according to poverty. The results show that nationally IEP incidence tends to increase with larger concentrations of students eligible for FRPL. We used this relationship to show how much IEP incidence would be expected to increase with FRPL in Vermont districts if the state followed the same pattern of student needs. Specifically, we used the estimated regression equation to predict how much higher IEP incidence would be in a high FRPL district in Vermont (with FRPL equal to 98 percent) compared to one with more typical FRPL

[31] For more information on fractional response regression models please refer to https://www.stata.com/meeting/mexico16/slides/Mexico16_Dorta.pdf.

[32] It is important to note that observations for Colorado, District of Columbia, Hawaii, and outlying areas of the U.S. were dropped due to data limitations.

incidence (at the state average of 41 percent).[33] The calculations show that the difference in district incidence of FRPL from 41 to 98 percent is associated with a 2.4 percentage point increase in IEP incidence.

### Table D.1: National Regression Model of District-Level Individualized Education Program Incidence

| Variable | Coefficient | Standard Error | Z-Score | P-Value | 95%-Confidence Interval | |
|---|---|---|---|---|---|---|
| Incidence Free/Reduced Price Lunch | 0.362 | 0.045 | 8.03 | 0.000 | 0.274 | 0.450 |
| Incidence Free/Reduced Price Lunch Squared | -0.131 | 0.048 | -2.74 | 0.006 | -0.225 | -0.037 |
| Student Density | 0.000 | 0.000 | 2.59 | 0.01 | 0.000 | 0.000 |
| Incidence Free/Reduced Price Lunch x Student Density | 0.000 | 0.000 | -1.98 | 0.048 | 0.000 | 0.000 |
| Disability Incidence | 0.349 | 0.108 | 3.24 | 0.001 | 0.138 | 0.560 |
| Year Indicators (Reference Group = 2009-10) | | | | | | |
| Year = 2010-11 | -0.005 | 0.001 | -3.71 | 0.000 | -0.007 | -0.002 |
| Year = 2011-12 | -0.011 | 0.002 | -7.17 | 0.000 | -0.015 | -0.008 |
| Year = 2012-13 | -0.020 | 0.002 | -11.24 | 0.000 | -0.024 | -0.017 |
| Year = 2013-14 | -0.021 | 0.002 | -10.92 | 0.000 | -0.025 | -0.018 |
| State Indicators (Reference Group = Alabama) | | | | | | |
| Alaska | 0.236 | 0.037 | 6.36 | 0.000 | 0.163 | 0.308 |
| Arizona | 0.157 | 0.020 | 7.83 | 0.000 | 0.118 | 0.196 |
| Arkansas | 0.055 | 0.015 | 3.76 | 0.000 | 0.026 | 0.084 |
| California | -0.040 | 0.037 | -1.08 | 0.28 | -0.114 | 0.033 |
| Connecticut | 0.263 | 0.027 | 9.82 | 0.000 | 0.210 | 0.316 |
| Delaware | 0.283 | 0.028 | 10.13 | 0.000 | 0.228 | 0.338 |
| Florida | 0.238 | 0.018 | 13.18 | 0.000 | 0.202 | 0.273 |
| Georgia | 0.036 | 0.014 | 2.65 | 0.008 | 0.009 | 0.062 |
| Idaho | 0.028 | 0.026 | 1.08 | 0.281 | -0.023 | 0.079 |
| Illinois | 0.330 | 0.017 | 19.27 | 0.000 | 0.296 | 0.363 |
| Indiana | 0.319 | 0.016 | 19.49 | 0.000 | 0.287 | 0.351 |
| Iowa | 0.207 | 0.014 | 15.15 | 0.000 | 0.181 | 0.234 |
| Kansas | 0.293 | 0.017 | 17.23 | 0.000 | 0.260 | 0.327 |
| Kentucky | 0.248 | 0.015 | 16.59 | 0.000 | 0.218 | 0.277 |
| Louisiana | 0.072 | 0.020 | 3.67 | 0.000 | 0.033 | 0.110 |
| Maine | 0.308 | 0.023 | 13.62 | 0.000 | 0.263 | 0.352 |
| Maryland | 0.131 | 0.022 | 6.01 | 0.000 | 0.088 | 0.174 |
| Massachusetts | 0.398 | 0.015 | 25.75 | 0.000 | 0.368 | 0.428 |
| Michigan | 0.166 | 0.015 | 11.22 | 0.000 | 0.137 | 0.195 |

[33] For these predictions, all other continuous variables were held constant (e.g., overall disability incidence and student density).

| Variable | Coefficient | Standard Error | Z-Score | P-Value | 95%-Confidence Interval | |
|---|---|---|---|---|---|---|
| Minnesota | 0.299 | 0.017 | 18.13 | 0.000 | 0.267 | 0.332 |
| Mississippi | 0.139 | 0.016 | 8.95 | 0.000 | 0.109 | 0.170 |
| Missouri | 0.199 | 0.013 | 14.92 | 0.000 | 0.173 | 0.225 |
| Montana | 0.146 | 0.023 | 6.29 | 0.000 | 0.101 | 0.192 |
| Nebraska | 0.293 | 0.017 | 16.87 | 0.000 | 0.259 | 0.327 |
| Nevada | 0.181 | 0.031 | 5.76 | 0.000 | 0.119 | 0.242 |
| New Hampshire | 0.359 | 0.029 | 12.39 | 0.000 | 0.302 | 0.416 |
| New Jersey | 0.389 | 0.018 | 21.07 | 0.000 | 0.353 | 0.426 |
| New Mexico | 0.176 | 0.021 | 8.55 | 0.000 | 0.136 | 0.217 |
| New York | 0.313 | 0.017 | 18.86 | 0.000 | 0.280 | 0.345 |
| North Carolina | 0.149 | 0.014 | 10.5 | 0.000 | 0.121 | 0.176 |
| North Dakota | 0.239 | 0.024 | 9.86 | 0.000 | 0.191 | 0.287 |
| Ohio | 0.256 | 0.013 | 19.81 | 0.000 | 0.230 | 0.281 |
| Oklahoma | 0.315 | 0.017 | 18.72 | 0.000 | 0.282 | 0.348 |
| Oregon | 0.218 | 0.021 | 10.49 | 0.000 | 0.177 | 0.259 |
| Pennsylvania | 0.377 | 0.014 | 26.61 | 0.000 | 0.349 | 0.405 |
| Rhode Island | 0.407 | 0.024 | 16.99 | 0.000 | 0.360 | 0.454 |
| South Carolina | 0.210 | 0.019 | 11.23 | 0.000 | 0.173 | 0.247 |
| South Dakota | 0.237 | 0.018 | 12.79 | 0.000 | 0.200 | 0.273 |
| Tennessee | 0.147 | 0.015 | 10.01 | 0.000 | 0.118 | 0.175 |
| Texas | -0.028 | 0.012 | -2.36 | 0.018 | -0.051 | -0.005 |
| Utah | 0.182 | 0.020 | 8.99 | 0.000 | 0.142 | 0.222 |
| Virginia | 0.179 | 0.014 | 13.13 | 0.000 | 0.153 | 0.206 |
| Washington | 0.159 | 0.016 | 9.66 | 0.000 | 0.127 | 0.191 |
| West Virginia | 0.285 | 0.017 | 16.74 | 0.000 | 0.252 | 0.318 |
| Wisconsin | 0.246 | 0.014 | 17.57 | 0.000 | 0.218 | 0.273 |
| Wyoming | 0.304 | 0.021 | 14.69 | 0.000 | 0.263 | 0.344 |
| Intercept | -1.478 | 0.022 | -67.01 | 0 | -1.521 | -1.435 |
| Number of Observations | 64,223 | | | | | |
| Wald Statistic (Chi-Squared, df = 55) | 3,855.480 | | | | | |
| Probability > Chi-Squared | 0.000 | | | | | |
| Note: Standard errors adjusted for clustered heteroscedasticity with clusters defined by county. | | | | | | |

# Appendix E: Supervisory Union Funding Levels – Simulation Example 1

**Table E.1:**
**Example 1 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimburse. FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427 | 6.40% | $1,082,182 | $419,755 | $1,144,646 | $482,219 |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187 | 14.24% | $6,948,086 | $1,097,899 | $7,692,064 | $1,841,877 |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372 | 15.42% | $4,340,689 | ($3,899,683) | $4,800,439 | ($3,439,933) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346 | 16.13% | $3,981,229 | ($99,117) | $4,487,717 | $407,371 |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698 | 21.80% | $1,755,338 | $230,640 | $1,904,516 | $379,818 |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659 | 22.06% | $3,124,687 | ($171,972) | $3,497,632 | $200,973 |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071 | 22.90% | $6,436,600 | ($1,001,471) | $6,993,464 | ($444,607) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371 | 24.13% | $3,248,935 | $1,036,564 | $3,484,092 | $1,271,721 |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795 | 26.69% | $1,575,718 | $113,923 | $1,621,647 | $159,852 |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508 | 28.79% | $3,806,166 | $170,658 | $4,149,991 | $514,483 |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669 | 29.01% | $2,803,092 | $137,423 | $3,052,762 | $387,093 |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458 | 29.37% | $2,527,848 | ($89,610) | $2,704,895 | $87,437 |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306 | 32.40% | $2,445,193 | ($526,113) | $2,677,632 | ($293,674) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823 | 32.68% | $2,727,896 | ($758,927) | $2,926,218 | ($560,605) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982 | 33.17% | $2,642,872 | $397,890 | $2,909,261 | $664,279 |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044 | 34.36% | $3,011,132 | $709,088 | $3,158,399 | $856,355 |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011 | 36.49% | $503,475 | ($50,536) | $575,125 | $21,114 |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686 | 36.51% | $3,749,416 | ($479,270) | $4,126,457 | ($102,229) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239 | 37.16% | $4,253,736 | ($207,503) | $4,674,355 | $213,116 |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276 | 37.41% | $1,750,176 | ($648,100) | $1,869,591 | ($528,685) |

**Table E.1:**
**Example 1 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimburse. FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244 | 37.98% | $1,353,844 | $11,600 | $1,505,594 | $163,350 |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476 | 38.38% | $922,955 | ($64,521) | $991,757 | $4,281 |
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979 | 39.94% | $1,126,752 | ($568,227) | $1,217,692 | ($477,287) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966 | 40.29% | $2,404,941 | $102,975 | $2,455,647 | $153,681 |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254 | 41.07% | $1,176,796 | $71,542 | $1,304,755 | $199,501 |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252 | 41.11% | $1,421,837 | $194,585 | $1,544,560 | $317,308 |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536 | 41.68% | $1,900,621 | $350,085 | $2,032,897 | $482,361 |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091 | 42.00% | $3,513,413 | ($1,325,678) | $3,579,643 | ($1,259,448) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295 | 44.04% | $2,687,130 | ($290,165) | $2,960,867 | ($16,428) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766 | 44.07% | $4,283,516 | ($839,250) | $4,637,373 | ($485,393) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351 | 44.62% | $331,608 | $14,257 | $349,980 | $32,629 |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005 | 44.65% | $6,513,173 | ($813,832) | $7,226,912 | ($100,093) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741 | 44.65% | $2,148,932 | ($487,809) | $2,391,071 | ($245,670) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733 | 44.75% | $1,727,542 | ($49,191) | $1,872,310 | $95,577 |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456 | 45.36% | $2,446,461 | ($253,995) | $2,557,977 | ($142,479) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163 | 45.38% | $2,826,056 | $86,893 | $3,103,836 | $364,673 |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488 | 45.77% | $1,578,658 | $7,170 | $1,702,299 | $130,811 |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782 | 45.83% | $1,501,038 | $401,256 | $1,557,990 | $458,208 |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330 | 45.92% | $3,996,937 | ($937,393) | $4,363,635 | ($570,695) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,500 | 46.18% | $3,044,036 | $93,536 | $3,276,915 | $326,415 |

**Table E.1:**
**Example 1 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimburse. FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228 | 46.19% | $2,358,663 | $130,435 | $2,504,901 | $276,673 |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885 | 47.07% | $702,073 | ($70,812) | $749,839 | ($23,046) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917 | 47.39% | $3,732,256 | ($61,661) | $4,088,299 | $294,382 |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909 | 48.03% | $1,183,869 | ($142,040) | $1,231,636 | ($94,273) |
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398 | 48.11% | $1,359,245 | ($245,153) | $1,458,636 | ($145,762) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592 | 48.36% | $1,860,920 | ($379,672) | $2,069,989 | ($170,603) |
| **SU057** | **Blue Mountain Union SD*** | **370** | **405** | **20.3%** | **$874,301** | 50.25% | **$696,238** | **($178,063)** | **$761,239** | **($113,062)** |
| **SU047** | **Windham Northeast SU*** | **1,191** | **1,330** | **20.8%** | **$2,859,142** | 50.48% | **$2,239,768** | **($619,374)** | **$2,502,783** | **($356,359)** |
| **SU008** | **Caledonia North SU*** | **1,289** | **1,410** | **19.0%** | **$2,575,944** | 51.04% | **$2,425,289** | **($150,655)** | **$2,652,747** | **$76,803** |
| **SU031** | **North Country SU*** | **2,471** | **2,699** | **24.8%** | **$4,804,087** | 54.72% | **$4,648,539** | **($155,548)** | **$5,077,114** | **$273,027** |
| **SU017** | **Winooski SD*** | **743** | **853** | **22.5%** | **$1,649,146** | 55.44% | **$1,397,047** | **($252,099)** | **$1,604,280** | **($44,866)** |
| **SU035** | **Orleans Southwest SU*** | **1,085** | **1,165** | **18.6%** | **$2,543,833** | 56.05% | **$2,041,679** | **($502,154)** | **$2,192,282** | **($351,551)** |
| **SU005** | **Southwest Vermont SU*** | **2,934** | **3,085** | **22.1%** | **$5,838,947** | 59.12% | **$5,519,442** | **($319,505)** | **$5,803,529** | **($35,418)** |
| **SU020** | **Franklin Northeast SU*** | **1,455** | **1,592** | **17.8%** | **$2,238,433** | 61.37% | **$2,737,540** | **$499,107** | **$2,995,212** | **$756,779** |
| **SU034** | **Orleans Central SU*** | **987** | **1,084** | **21.4%** | **$1,844,375** | 61.96% | **$1,857,700** | **$13,325** | **$2,039,722** | **$195,347** |
| **SU011** | **St. Johnsbury SD*** | **1,020** | **1,124** | **20.7%** | **$2,043,288** | 64.42% | **$1,918,618** | **($124,670)** | **$2,115,221** | **$71,933** |
| **SU018** | **Essex-Caledonia SU*** | **709** | **754** | **13.7%** | **$1,119,208** | 66.14% | **$1,334,134** | **$214,926** | **$1,418,701** | **$299,493** |
| | | | | **State Total** | $157,891,969 | | $147,633,732 | ($10,258,236) | $160,350,742 | $2,458,773 |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix F: Supervisory Union Funding Levels – Simulation Example 2

**Table F.1: Example 2 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State Block & Reimbursement(FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427 | 6.40% | $546,687 | ($115,740) | $578,242 | ($84,185) |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187 | 14.24% | $3,509,972 | ($2,340,215) | $3,885,808 | ($1,964,379) |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372 | 15.42% | $2,192,790 | ($6,047,582) | $2,425,043 | ($5,815,329) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346 | 16.13% | $2,011,202 | ($2,069,144) | $2,267,065 | ($1,813,281) |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698 | 21.80% | $886,746 | ($637,952) | $962,106 | ($562,592) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659 | 22.06% | $1,578,502 | ($1,718,157) | $1,766,902 | ($1,529,757) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071 | 22.90% | $3,251,584 | ($4,186,487) | $3,532,895 | ($3,905,176) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371 | 24.13% | $1,641,268 | ($571,103) | $1,760,062 | ($452,309) |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795 | 26.69% | $796,007 | ($665,788) | $819,209 | ($642,586) |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508 | 28.79% | $1,922,765 | ($1,712,743) | $2,096,455 | ($1,539,053) |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669 | 29.01% | $1,416,041 | ($1,249,628) | $1,542,167 | ($1,123,502) |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458 | 29.37% | $1,276,995 | ($1,340,463) | $1,366,435 | ($1,251,023) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306 | 32.40% | $1,235,241 | ($1,736,065) | $1,352,662 | ($1,618,644) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823 | 32.68% | $1,378,054 | ($2,108,769) | $1,478,241 | ($2,008,582) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982 | 33.17% | $1,335,103 | ($909,879) | $1,469,675 | ($775,307) |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044 | 34.36% | $1,521,137 | ($780,907) | $1,595,532 | ($706,512) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011 | 36.49% | $254,341 | ($299,670) | $290,536 | ($263,475) |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686 | 36.51% | $1,894,096 | ($2,334,590) | $2,084,566 | ($2,144,120) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239 | 37.16% | $2,148,864 | ($2,312,375) | $2,361,349 | ($2,099,890) |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276 | 37.41% | $884,138 | ($1,514,138) | $944,463 | ($1,453,813) |
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244 | 37.98% | $683,923 | ($658,321) | $760,582 | ($581,662) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476 | 38.38% | $466,250 | ($521,226) | $501,007 | ($486,469) |

**Table F.1: Example 2 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State Block & Reimbursement(FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979 | 39.94% | $569,202 | ($1,125,777) | $615,142 | ($1,079,837) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966 | 40.29% | $1,214,907 | ($1,087,059) | $1,240,522 | ($1,061,444) |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254 | 41.07% | $594,483 | ($510,771) | $659,124 | ($446,130) |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252 | 41.11% | $718,271 | ($508,981) | $780,267 | ($446,985) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536 | 41.68% | $960,139 | ($590,397) | $1,026,961 | ($523,575) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091 | 42.00% | $1,774,875 | ($3,064,216) | $1,808,332 | ($3,030,759) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295 | 44.04% | $1,357,460 | ($1,619,835) | $1,495,744 | ($1,481,551) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766 | 44.07% | $2,163,908 | ($2,958,858) | $2,342,666 | ($2,780,100) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351 | 44.62% | $167,519 | ($149,832) | $176,800 | ($140,551) |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005 | 44.65% | $3,290,267 | ($4,036,738) | $3,650,827 | ($3,676,178) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741 | 44.65% | $1,085,578 | ($1,551,163) | $1,207,900 | ($1,428,841) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733 | 44.75% | $872,704 | ($904,029) | $945,837 | ($830,896) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456 | 45.36% | $1,235,881 | ($1,464,575) | $1,292,216 | ($1,408,240) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163 | 45.38% | $1,427,642 | ($1,311,521) | $1,567,968 | ($1,171,195) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488 | 45.77% | $797,492 | ($773,996) | $859,952 | ($711,536) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782 | 45.83% | $758,281 | ($341,501) | $787,051 | ($312,731) |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330 | 45.92% | $2,019,137 | ($2,915,193) | $2,204,382 | ($2,729,948) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,500 | 46.18% | $1,537,759 | ($1,412,741) | $1,655,402 | ($1,295,097) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228 | 46.19% | $1,191,528 | ($1,036,700) | $1,265,404 | ($962,824) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885 | 47.07% | $354,667 | ($418,218) | $378,797 | ($394,088) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917 | 47.39% | $1,885,428 | ($1,908,489) | $2,065,290 | ($1,728,627) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909 | 48.03% | $598,056 | ($727,853) | $622,187 | ($703,722) |

**Table F.1: Example 2 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State Block & Reimbursement(FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398 | 48.11% | $686,651 | ($917,747) | $736,861 | ($867,537) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592 | 48.36% | $940,083 | ($1,300,509) | $1,045,699 | ($1,194,893) |
| **SU057** | **Blue Mountain Union SD*** | **370** | **405** | **20.3%** | **$874,301** | 50.25% | **$354,413** | **($519,888)** | $387,502 | **($486,799)** |
| **SU047** | **Windham Northeast SU*** | **1,191** | **1,330** | **20.8%** | **$2,859,142** | 50.48% | **$1,140,133** | **($1,719,009)** | $1,274,019 | **($1,585,123)** |
| **SU008** | **Caledonia North SU*** | **1,289** | **1,410** | **19.0%** | **$2,575,944** | 51.04% | **$1,234,571** | **($1,341,373)** | $1,350,356 | **($1,225,588)** |
| **SU031** | **North Country SU*** | **2,471** | **2,699** | **24.8%** | **$4,804,087** | 54.72% | **$2,366,296** | **($2,437,791)** | $2,584,458 | **($2,219,629)** |
| **SU017** | **Winooski SD*** | **743** | **853** | **22.5%** | **$1,649,146** | 55.44% | **$711,154** | **($937,992)** | $816,644 | **($832,502)** |
| **SU035** | **Orleans Southwest SU*** | **1,085** | **1,165** | **18.6%** | **$2,543,833** | 56.05% | **$1,039,298** | **($1,504,535)** | $1,115,961 | **($1,427,872)** |
| **SU005** | **Southwest Vermont SU*** | **2,934** | **3,085** | **22.1%** | **$5,838,947** | 59.12% | **$2,809,621** | **($3,029,326)** | $2,954,233 | **($2,884,714)** |
| **SU020** | **Franklin Northeast SU*** | **1,455** | **1,592** | **17.8%** | **$2,238,433** | 61.37% | **$1,393,519** | **($844,914)** | $1,524,685 | **($713,748)** |
| **SU034** | **Orleans Central SU*** | **987** | **1,084** | **21.4%** | **$1,844,375** | 61.96% | **$945,645** | **($898,730)** | $1,038,302 | **($806,073)** |
| **SU011** | **St. Johnsbury SD*** | **1,020** | **1,124** | **20.7%** | **$2,043,288** | 64.42% | **$976,655** | **($1,066,633)** | $1,076,734 | **($966,554)** |
| **SU018** | **Essex-Caledonia SU*** | **709** | **754** | **13.7%** | **$1,119,208** | 66.14% | **$679,129** | **($440,079)** | $722,177 | **($397,031)** |
| | | | | **State Total** | $157,891,969 | | $74,684,055 | ($83,207,913) | $81,117,402 | ($76,774,567) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix G: Supervisory Union Funding Levels – Simulation Example 3

**Table G.1: Example 3 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427.00 | 6.40% | $580,067 | ($82,360) | $613,548 | ($48,879) |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187.00 | 14.24% | $3,724,284 | ($2,125,903) | $4,123,068 | ($1,727,119) |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372 | 15.42% | $2,326,678 | ($5,913,694) | $2,573,111 | ($5,667,261) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346 | 16.13% | $2,134,002 | ($1,946,344) | $2,405,487 | ($1,674,859) |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698 | 21.80% | $940,889 | ($583,809) | $1,020,851 | ($503,847) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659 | 22.06% | $1,674,882 | ($1,621,777) | $1,874,786 | ($1,421,873) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071 | 22.90% | $3,450,119 | ($3,987,952) | $3,748,607 | ($3,689,464) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371 | 24.13% | $1,741,480 | ($470,891) | $1,867,528 | ($344,843) |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795 | 26.69% | $844,610 | ($617,185) | $869,229 | ($592,566) |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508 | 28.79% | $2,040,165 | ($1,595,343) | $2,224,461 | ($1,411,047) |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669 | 29.01% | $1,502,501 | ($1,163,168) | $1,636,329 | ($1,029,340) |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458 | 29.37% | $1,354,966 | ($1,262,492) | $1,449,867 | ($1,167,591) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306 | 32.40% | $1,310,662 | ($1,660,644) | $1,435,253 | ($1,536,053) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823 | 32.68% | $1,462,196 | ($2,024,627) | $1,568,499 | ($1,918,324) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982 | 33.17% | $1,416,621 | ($828,361) | $1,559,410 | ($685,572) |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044 | 34.36% | $1,614,014 | ($688,030) | $1,692,952 | ($609,092) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011 | 36.49% | $269,871 | ($284,140) | $308,276 | ($245,735) |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686 | 36.51% | $2,009,746 | ($2,218,940) | $2,211,846 | ($2,016,840) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239 | 37.16% | $2,280,070 | ($2,181,169) | $2,505,528 | ($1,955,711) |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276 | 37.41% | $938,122 | ($1,460,154) | $1,002,130 | ($1,396,146) |
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244 | 37.98% | $725,682 | ($616,562) | $807,022 | ($535,222) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476 | 38.38% | $494,719 | ($492,757) | $531,597 | ($455,879) |

**Table G.1: Example 3 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979 | 39.94% | $603,957 | ($1,091,022) | $652,702 | ($1,042,277) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966 | 40.29% | $1,289,086 | ($1,012,880) | $1,316,266 | ($985,700) |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254 | 41.07% | $630,781 | ($474,473) | $699,369 | ($405,885) |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252 | 41.11% | $762,127 | ($465,125) | $827,909 | ($399,343) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536 | 41.68% | $1,018,763 | ($531,773) | $1,089,665 | ($460,871) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091 | 42.00% | $1,883,245 | ($2,955,846) | $1,918,745 | ($2,920,346) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295 | 44.04% | $1,440,344 | ($1,536,951) | $1,587,072 | ($1,390,223) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766 | 44.07% | $2,296,032 | ($2,826,734) | $2,485,705 | ($2,637,061) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351 | 44.62% | $177,747 | ($139,604) | $187,595 | ($129,756) |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005 | 44.65% | $3,491,164 | ($3,835,841) | $3,873,739 | ($3,453,266) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741 | 44.65% | $1,151,862 | ($1,484,879) | $1,281,652 | ($1,355,089) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733 | 44.75% | $925,990 | ($850,743) | $1,003,588 | ($773,145) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456 | 45.36% | $1,311,342 | ($1,389,114) | $1,371,116 | ($1,329,340) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163 | 45.38% | $1,514,811 | ($1,224,352) | $1,663,705 | ($1,075,458) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488 | 45.77% | $846,185 | ($725,303) | $912,459 | ($659,029) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782 | 45.83% | $804,580 | ($295,202) | $835,107 | ($264,675) |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330 | 45.92% | $2,142,421 | ($2,791,909) | $2,338,977 | ($2,595,353) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,500 | 46.18% | $1,631,651 | ($1,318,848) | $1,756,478 | ($1,194,022) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228 | 46.19% | $1,264,281 | ($963,947) | $1,342,667 | ($885,561) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885 | 47.07% | $376,322 | ($396,563) | $401,926 | ($370,959) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917 | 47.39% | $2,000,548 | ($1,793,369) | $2,191,393 | ($1,602,524) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909 | 48.03% | $634,573 | ($691,336) | $660,176 | ($665,733) |

## Table G.1: Example 3 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398 | 48.11% | $728,577 | ($875,821) | $781,852 | ($822,546) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592 | 48.36% | $997,482 | ($1,243,110) | $1,109,547 | ($1,131,045) |
| **SU057** | **Blue Mountain Union SD** | **370** | **405** | **20.3%** | **$874,301** | **50.25%** | **$373,195** | **($501,106)** | **$408,036** | **($466,265)** |
| **SU047** | **Windham Northeast SU** | **1,191** | **1,330** | **20.8%** | **$2,859,142** | **50.48%** | **$1,200,552** | **($1,658,590)** | **$1,341,533** | **($1,517,609)** |
| **SU008** | **Caledonia North SU** | **1,289** | **1,410** | **19.0%** | **$2,575,944** | **51.04%** | **$1,299,995** | **($1,275,949)** | **$1,421,916** | **($1,154,028)** |
| **SU031** | **North Country SU** | **2,471** | **2,699** | **24.8%** | **$4,804,087** | **54.72%** | **$2,491,693** | **($2,312,394)** | **$2,721,416** | **($2,082,671)** |
| **SU017** | **Winooski SD** | **743** | **853** | **22.5%** | **$1,649,146** | **55.44%** | **$748,840** | **($900,306)** | **$859,920** | **($789,226)** |
| **SU035** | **Orleans Southwest SU** | **1,085** | **1,165** | **18.6%** | **$2,543,833** | **56.05%** | **$1,094,373** | **($1,449,460)** | **$1,175,099** | **($1,368,734)** |
| **SU005** | **Southwest Vermont SU** | **2,934** | **3,085** | **22.1%** | **$5,838,947** | **59.12%** | **$2,958,511** | **($2,880,436)** | **$3,110,786** | **($2,728,161)** |
| **SU020** | **Franklin Northeast SU** | **1,455** | **1,592** | **17.8%** | **$2,238,433** | **61.37%** | **$1,467,366** | **($771,067)** | **$1,605,483** | **($632,950)** |
| **SU034** | **Orleans Central SU** | **987** | **1,084** | **21.4%** | **$1,844,375** | **61.96%** | **$995,757** | **($848,618)** | **$1,093,324** | **($751,051)** |
| **SU011** | **St. Johnsbury SD** | **1,020** | **1,124** | **20.7%** | **$2,043,288** | **64.42%** | **$1,028,411** | **($1,014,877)** | **$1,133,793** | **($909,495)** |
| **SU018** | **Essex-Caledonia SU** | **709** | **754** | **13.7%** | **$1,119,208** | **66.14%** | **$715,118** | **($404,090)** | **$760,447** | **($358,761)** |
| | | | | **State Total** | $157,891,969 | | $79,134,027 | ($78,757,942) | $85,950,546 | ($71,941,423) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix H: Supervisory Union Funding Levels – Simulation Example 4

## Table H.1: Example 4 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions

| SU ID | Supervisory Union | K12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 5.6% | $662,427 | 6.40% | $518,627 | ($143,800) | $548,562 | ($113,865) |
| SU014 | Champlain Valley SD | 3,782 | 12.7% | $5,850,187 | 14.24% | $3,329,813 | ($2,520,374) | $3,686,359 | ($2,163,828) |
| SU012 | Chittenden East SU | 2,363 | 14.5% | $8,240,372 | 15.42% | $2,080,239 | ($6,160,133) | $2,300,571 | ($5,939,801) |
| SU016 | South Burlington SD | 2,167 | 12.0% | $4,080,346 | 16.13% | $1,907,971 | ($2,172,375) | $2,150,702 | ($1,929,644) |
| SU045 | Montpelier SD | 955 | 12.5% | $1,524,698 | 21.80% | $841,231 | ($683,467) | $912,724 | ($611,974) |
| SU042 | Harwood UUSD | 1,701 | 15.3% | $3,296,659 | 22.06% | $1,497,481 | ($1,799,178) | $1,676,211 | ($1,620,448) |
| SU065 | Essex Westford SD | 3,504 | 15.2% | $7,438,071 | 22.90% | $3,084,688 | ($4,353,383) | $3,351,560 | ($4,086,511) |
| SU022 | Franklin West SU | 1,768 | 17.6% | $2,212,371 | 24.13% | $1,557,025 | ($655,346) | $1,669,723 | ($542,648) |
| SU051 | Windsor Central SU | 858 | 14.1% | $1,461,795 | 26.69% | $755,150 | ($706,645) | $777,161 | ($684,634) |
| SU007 | Colchester SD | 2,072 | 14.9% | $3,635,508 | 28.79% | $1,824,074 | ($1,811,434) | $1,988,849 | ($1,646,659) |
| SU026 | Lamoille South SU | 1,526 | 14.5% | $2,665,669 | 29.01% | $1,343,359 | ($1,322,310) | $1,463,011 | ($1,202,658) |
| SU032 | Washington Central SU | 1,376 | 14.9% | $2,617,458 | 29.37% | $1,211,450 | ($1,406,008) | $1,296,299 | ($1,321,159) |
| SU054 | Hartford SD | 1,331 | 23.4% | $2,971,306 | 32.40% | $1,171,839 | ($1,799,467) | $1,283,233 | ($1,688,073) |
| SU010 | Milton SD | 1,485 | 18.3% | $3,486,823 | 32.68% | $1,307,322 | ($2,179,501) | $1,402,366 | ($2,084,457) |
| SU001 | Addison Northeast SU | 1,439 | 13.2% | $2,244,982 | 33.17% | $1,266,575 | ($978,407) | $1,394,240 | ($850,742) |
| SU003 | Addison Central SD | 1,639 | 13.5% | $2,302,044 | 34.36% | $1,443,060 | ($858,984) | $1,513,637 | ($788,407) |
| SU064 | Rivendell Interstate SD | 274 | 19.0% | $554,011 | 36.49% | $241,286 | ($312,725) | $275,624 | ($278,387) |
| SU006 | Bennington-Rutland SU | 2,041 | 17.7% | $4,228,686 | 36.51% | $1,796,877 | ($2,431,809) | $1,977,571 | ($2,251,115) |
| SU023 | Maple Run USD | 2,315 | 20.6% | $4,461,239 | 37.16% | $2,038,568 | ($2,422,671) | $2,240,146 | ($2,221,093) |
| SU002 | Addison Northwest SD | 953 | 17.1% | $2,398,276 | 37.41% | $838,757 | ($1,559,519) | $895,986 | ($1,502,290) |
| SU033 | Mill River SD | 737 | 14.5% | $1,342,244 | 37.98% | $648,819 | ($693,425) | $721,543 | ($620,701) |
| SU041 | Washington Northeast SU | 502 | 15.9% | $987,476 | 38.38% | $442,319 | ($545,157) | $475,291 | ($512,185) |
| SU043 | Washington South SU | 613 | 21.0% | $1,694,979 | 39.94% | $539,987 | ($1,154,992) | $583,569 | ($1,111,410) |

**Table H.1: Example 4 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|
| SU052 | Windsor Southeast SU | 1,309 | 13.7% | $2,301,966 | 40.29% | $1,152,548 | ($1,149,418) | $1,176,849 | ($1,125,117) |
| SU038 | Rutland Southwest SU | 641 | 20.6% | $1,105,254 | 41.07% | $563,970 | ($541,284) | $625,293 | ($479,961) |
| SU009 | Caledonia Central SU | 774 | 14.9% | $1,227,252 | 41.11% | $681,404 | ($545,848) | $740,218 | ($487,034) |
| SU037 | Rutland Central SU | 1,035 | 15.9% | $1,550,536 | 41.68% | $910,857 | ($639,679) | $974,249 | ($576,287) |
| SU040 | Rutland City SD | 1,912 | 19.0% | $4,839,091 | 42.00% | $1,683,774 | ($3,155,317) | $1,715,515 | ($3,123,576) |
| SU036 | Rutland Northeast SU | 1,463 | 16.3% | $2,977,295 | 44.04% | $1,287,785 | ($1,689,510) | $1,418,971 | ($1,558,324) |
| SU048 | Windham Southeast SU | 2,332 | 19.0% | $5,122,766 | 44.07% | $2,052,840 | ($3,069,926) | $2,222,423 | ($2,900,343) |
| SU019 | Essex North SU | 181 | 12.7% | $317,351 | 44.62% | $158,921 | ($158,430) | $167,725 | ($149,626) |
| SU015 | Burlington SD | 3,545 | 11.9% | $7,327,005 | 44.65% | $3,121,385 | ($4,205,620) | $3,463,438 | ($3,863,567) |
| SU056 | Springfield SD | 1,170 | 20.2% | $2,636,741 | 44.65% | $1,029,858 | ($1,606,883) | $1,145,901 | ($1,490,840) |
| SU046 | Windham Central SU | 940 | 17.3% | $1,776,733 | 44.75% | $827,910 | ($948,823) | $897,289 | ($879,444) |
| SU027 | Orange East SU | 1,332 | 18.8% | $2,700,456 | 45.36% | $1,172,446 | ($1,528,010) | $1,225,890 | ($1,474,566) |
| SU030 | White River Valley SU | 1,538 | 18.1% | $2,739,163 | 45.38% | $1,354,364 | ($1,384,799) | $1,487,488 | ($1,251,675) |
| SU024 | Grand Isle SU | 859 | 16.2% | $1,571,488 | 45.77% | $756,559 | ($814,929) | $815,813 | ($755,675) |
| SU028 | Orange Southwest USD | 817 | 18.2% | $1,099,782 | 45.83% | $719,360 | ($380,422) | $746,654 | ($353,128) |
| SU061 | Barre SU | 2,176 | 23.8% | $4,934,330 | 45.92% | $1,915,499 | ($3,018,831) | $2,091,236 | ($2,843,094) |
| SU025 | Lamoille North SU | 1,657 | 18.2% | $2,950,500 | 46.18% | $1,458,829 | ($1,491,671) | $1,570,435 | ($1,380,065) |
| SU004 | Addison-Rutland SU | 1,284 | 18.0% | $2,228,228 | 46.19% | $1,130,370 | ($1,097,858) | $1,200,453 | ($1,027,775) |
| SU060 | Battenkill Valley SU | 382 | 19.4% | $772,885 | 47.07% | $336,463 | ($436,422) | $359,354 | ($413,531) |
| SU021 | Franklin Northwest SU | 2,032 | 18.7% | $3,793,917 | 47.39% | $1,788,653 | ($2,005,264) | $1,959,284 | ($1,834,633) |
| SU049 | Windham Southwest SU | 644 | 15.7% | $1,325,909 | 48.03% | $567,360 | ($758,549) | $590,251 | ($735,658) |
| SU029 | Orange North SU | 740 | 19.3% | $1,604,398 | 48.11% | $651,407 | ($952,991) | $699,039 | ($905,359) |
| SU063 | Two Rivers SU | 1,013 | 22.6% | $2,240,592 | 48.36% | $891,831 | ($1,348,761) | $992,025 | ($1,248,567) |

## Table H.1: Example 4 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions

| SU ID | Supervisory Union | K12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|
| **SU057** | **Blue Mountain Union SD** | **370** | **20.3%** | **$874,301** | 50.25% | **$336,067** | **($538,234)** | **$367,443** | **($506,858)** |
| **SU047** | **Windham Northeast SU** | **1,191** | **20.8%** | **$2,859,142** | 50.48% | **$1,081,115** | **($1,778,027)** | **$1,208,070** | **($1,651,072)** |
| **SU008** | **Caledonia North SU** | **1,289** | **19.0%** | **$2,575,944** | 51.04% | **$1,170,664** | **($1,405,280)** | **$1,280,456** | **($1,295,488)** |
| **SU031** | **North Country SU** | **2,471** | **24.8%** | **$4,804,087** | 54.72% | **$2,243,806** | **($2,560,281)** | **$2,450,675** | **($2,353,411)** |
| **SU017** | **Winooski SD** | **743** | **22.5%** | **$1,649,146** | 55.44% | **$674,341** | **($974,805)** | **$774,371** | **($874,775)** |
| **SU035** | **Orleans Southwest SU** | **1,085** | **18.6%** | **$2,543,833** | 56.05% | **$985,499** | **($1,558,334)** | **$1,058,194** | **($1,485,639)** |
| **SU005** | **Southwest Vermont SU** | **2,934** | **22.1%** | **$5,838,947** | 59.12% | **$2,664,183** | **($3,174,764)** | **$2,801,309** | **($3,037,638)** |
| **SU020** | **Franklin Northeast SU** | **1,455** | **17.8%** | **$2,238,433** | 61.37% | **$1,321,385** | **($917,048)** | **$1,445,761** | **($792,672)** |
| **SU034** | **Orleans Central SU** | **987** | **21.4%** | **$1,844,375** | 61.96% | **$896,694** | **($947,681)** | **$984,555** | **($859,820)** |
| **SU011** | **St. Johnsbury SD** | **1,020** | **20.7%** | **$2,043,288** | 64.42% | **$926,099** | **($1,117,189)** | **$1,020,997** | **($1,022,291)** |
| **SU018** | **Essex-Caledonia SU** | **709** | **13.7%** | **$1,119,208** | 66.14% | **$643,974** | **($475,234)** | **$684,794** | **($434,414)** |
| | **State Total** | | | 157,891,969 | | 70,844,738 | (87,047,231) | 76,947,354 | (80,944,614) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix I: Supervisory Union Funding Levels – Simulation Example 5

**Table I.1: Example 5 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427.00 | 6.40% | $550,293 | ($112,134) | $582,056 | ($80,371) |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187.00 | 14.24% | $3,533,125 | ($2,317,062) | $3,911,440 | ($1,938,747) |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372.00 | 15.42% | $2,207,255 | ($6,033,117) | $2,441,040 | ($5,799,332) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346.00 | 16.13% | $2,024,468 | ($2,055,878) | $2,282,019 | ($1,798,327) |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698.00 | 21.80% | $892,595 | ($632,103) | $968,453 | ($556,245) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659.00 | 22.06% | $1,588,914 | ($1,707,745) | $1,778,558 | ($1,518,101) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071.00 | 22.90% | $3,273,033 | ($4,165,038) | $3,556,200 | ($3,881,871) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371.00 | 24.13% | $1,652,094 | ($560,277) | $1,771,673 | ($440,698) |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795.00 | 26.69% | $801,258 | ($660,537) | $824,613 | ($637,182) |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508.00 | 28.79% | $1,935,448 | ($1,700,060) | $2,110,284 | ($1,525,224) |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669.00 | 29.01% | $1,425,382 | ($1,240,287) | $1,552,340 | ($1,113,329) |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458.00 | 29.37% | $1,285,419 | ($1,332,039) | $1,375,448 | ($1,242,010) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306.00 | 32.40% | $1,243,389 | ($1,727,917) | $1,361,585 | ($1,609,721) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823.00 | 32.68% | $1,387,145 | ($2,099,678) | $1,487,992 | ($1,998,831) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982.00 | 33.17% | $1,343,910 | ($901,072) | $1,479,369 | ($765,613) |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044.00 | 34.36% | $1,531,171 | ($770,873) | $1,606,057 | ($695,987) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011.00 | 36.49% | $256,019 | ($297,992) | $292,453 | ($261,558) |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686.00 | 36.51% | $1,906,590 | ($2,322,096) | $2,098,317 | ($2,130,369) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239.00 | 37.16% | $2,163,039 | ($2,298,200) | $2,376,925 | ($2,084,314) |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276.00 | 37.41% | $889,970 | ($1,508,306) | $950,693 | ($1,447,583) |
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244.00 | 37.98% | $688,434 | ($653,810) | $765,599 | ($576,645) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476.00 | 38.38% | $469,326 | ($518,150) | $504,312 | ($483,164) |

**Table I.1: Example 5 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979.00 | 39.94% | $572,957 | ($1,122,022) | $619,200 | ($1,075,779) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966.00 | 40.29% | $1,222,921 | ($1,079,045) | $1,248,705 | ($1,053,261) |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254.00 | 41.07% | $598,405 | ($506,849) | $663,472 | ($441,782) |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252.00 | 41.11% | $723,009 | ($504,243) | $785,414 | ($441,838) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536.00 | 41.68% | $966,472 | ($584,064) | $1,033,735 | ($516,801) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091.00 | 42.00% | $1,786,582 | ($3,052,509) | $1,820,261 | ($3,018,830) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295.00 | 44.04% | $1,366,415 | ($1,610,880) | $1,505,611 | ($1,471,684) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766.00 | 44.07% | $2,178,182 | ($2,944,584) | $2,358,120 | ($2,764,646) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351.00 | 44.62% | $168,624 | ($148,727) | $177,966 | ($139,385) |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005.00 | 44.65% | $3,311,971 | ($4,015,034) | $3,674,909 | ($3,652,096) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741.00 | 44.65% | $1,092,739 | ($1,544,002) | $1,215,867 | ($1,420,874) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733.00 | 44.75% | $878,461 | ($898,272) | $952,076 | ($824,657) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456.00 | 45.36% | $1,244,034 | ($1,456,422) | $1,300,740 | ($1,399,716) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163.00 | 45.38% | $1,437,059 | ($1,302,104) | $1,578,311 | ($1,160,852) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488.00 | 45.77% | $802,753 | ($768,735) | $865,625 | ($705,863) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782.00 | 45.83% | $763,283 | ($336,499) | $792,243 | ($307,539) |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330.00 | 45.92% | $2,032,456 | ($2,901,874) | $2,218,923 | ($2,715,407) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,499.80 | 46.18% | $1,547,902 | ($1,402,597) | $1,666,322 | ($1,284,178) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228.00 | 46.19% | $1,199,388 | ($1,028,840) | $1,273,751 | ($954,477) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885.00 | 47.07% | $357,006 | ($415,879) | $381,296 | ($391,589) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917.00 | 47.39% | $1,897,865 | ($1,896,052) | $2,078,914 | ($1,715,003) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909.00 | 48.03% | $602,002 | ($723,907) | $626,291 | ($699,618) |

**Table I.1: Example 5 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398.00 | 48.11% | $691,181 | ($913,217) | $741,721 | ($862,677) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592.00 | 48.36% | $946,284 | ($1,294,308) | $1,052,596 | ($1,187,996) |
| **SU057** | **Blue Mountain Union SD** | **370** | **405** | **20.3%** | **$874,301.00** | 50.25% | **$353,917** | **($520,384)** | $386,959 | **($487,342)** |
| **SU047** | **Windham Northeast SU** | **1,191** | **1,330** | **20.8%** | **$2,859,142.00** | 50.48% | **$1,138,536** | **($1,720,606)** | $1,272,233 | **($1,586,909)** |
| **SU008** | **Caledonia North SU** | **1,289** | **1,410** | **19.0%** | **$2,575,944.00** | 51.04% | **$1,232,841** | **($1,343,103)** | $1,348,464 | **($1,227,480)** |
| **SU031** | **North Country SU** | **2,471** | **2,699** | **24.8%** | **$4,804,086.90** | 54.72% | **$2,362,980** | **($2,441,107)** | $2,580,837 | **($2,223,250)** |
| **SU017** | **Winooski SD** | **743** | **853** | **22.5%** | **$1,649,146.00** | 55.44% | **$710,157** | **($938,989)** | $815,499 | **($833,647)** |
| **SU035** | **Orleans Southwest SU** | **1,085** | **1,165** | **18.6%** | **$2,543,833.00** | 56.05% | **$1,037,841** | **($1,505,992)** | $1,114,397 | **($1,429,436)** |
| **SU005** | **Southwest Vermont SU** | **2,934** | **3,085** | **22.1%** | **$5,838,947.00** | 59.12% | **$2,805,684** | **($3,033,263)** | $2,950,093 | **($2,888,854)** |
| **SU020** | **Franklin Northeast SU** | **1,455** | **1,592** | **17.8%** | **$2,238,433.00** | 61.37% | **$1,391,567** | **($846,866)** | $1,522,549 | **($715,884)** |
| **SU034** | **Orleans Central SU** | **987** | **1,084** | **21.4%** | **$1,844,375.00** | 61.96% | **$944,320** | **($900,055)** | $1,036,847 | **($807,528)** |
| **SU011** | **St. Johnsbury SD** | **1,020** | **1,124** | **20.7%** | **$2,043,288.00** | 64.42% | **$975,286** | **($1,068,002)** | $1,075,225 | **($968,063)** |
| **SU018** | **Essex-Caledonia SU** | **709** | **754** | **13.7%** | **$1,119,208.00** | 66.14% | **$678,177** | **($441,031)** | $721,165 | **($398,043)** |
| | | | | **State Total** | $157,891,968.70 | | $75,067,533 | ($82,824,435) | $81,533,763 | ($76,358,206) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix J: Supervisory Union Funding Levels – Simulation Example 6

**Table J.1: Example 6 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427.00 | 6.4% | $427,265 | ($235,162) | $544,674 | ($117,753) |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187.00 | 14.2% | $2,743,227 | ($3,106,960) | $3,660,230 | ($2,189,957) |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372.00 | 15.4% | $1,713,781 | ($6,526,591) | $2,284,265 | ($5,956,107) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346.00 | 16.1% | $1,571,860 | ($2,508,486) | $2,135,458 | ($1,944,888) |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698.00 | 21.8% | $693,039 | ($831,659) | $906,254 | ($618,444) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659.00 | 22.1% | $1,233,682 | ($2,062,977) | $1,664,331 | ($1,632,328) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071.00 | 22.9% | $2,541,284 | ($4,896,787) | $3,327,805 | ($4,110,266) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371.00 | 24.1% | $1,282,737 | ($929,634) | $1,657,888 | ($554,483) |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795.00 | 26.7% | $622,122 | ($839,673) | $771,653 | ($690,142) |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508.00 | 28.8% | $1,502,742 | ($2,132,766) | $1,974,753 | ($1,660,755) |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669.00 | 29.0% | $1,106,710 | ($1,558,959) | $1,452,642 | ($1,213,027) |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458.00 | 29.4% | $998,039 | ($1,619,419) | $1,287,111 | ($1,330,347) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306.00 | 32.4% | $965,406 | ($2,005,900) | $1,274,138 | ($1,697,168) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823.00 | 32.7% | $1,077,022 | ($2,409,801) | $1,392,427 | ($2,094,396) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982.00 | 33.2% | $1,043,453 | ($1,201,529) | $1,384,358 | ($860,624) |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044.00 | 34.4% | $1,188,848 | ($1,113,196) | $1,502,909 | ($799,135) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011.00 | 36.5% | $198,781 | ($355,230) | $273,670 | ($280,341) |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686.00 | 36.5% | $1,480,336 | ($2,748,350) | $1,963,554 | ($2,265,132) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239.00 | 37.2% | $1,679,450 | ($2,781,789) | $2,224,268 | ($2,236,971) |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276.00 | 37.4% | $691,000 | ($1,707,276) | $889,636 | ($1,508,640) |
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244.00 | 38.0% | $534,522 | ($807,722) | $716,429 | ($625,815) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476.00 | 38.4% | $364,399 | ($623,077) | $471,923 | ($515,553) |

**Table J.1: Example 6 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979.00 | 39.9% | $444,862 | ($1,250,117) | $579,432 | ($1,115,547) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966.00 | 40.3% | $949,513 | ($1,352,453) | $1,168,507 | ($1,133,459) |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254.00 | 41.1% | $464,620 | ($640,634) | $620,861 | ($484,393) |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252.00 | 41.1% | $561,367 | ($665,885) | $734,971 | ($492,281) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536.00 | 41.7% | $750,399 | ($800,137) | $967,344 | ($583,192) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091.00 | 42.0% | $1,387,158 | ($3,451,933) | $1,703,355 | ($3,135,736) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295.00 | 44.0% | $1,060,926 | ($1,916,369) | $1,408,914 | ($1,568,381) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766.00 | 44.1% | $1,691,208 | ($3,431,558) | $2,206,671 | ($2,916,095) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351.00 | 44.6% | $130,925 | ($186,426) | $166,536 | ($150,815) |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005.00 | 44.7% | $2,571,516 | ($4,755,489) | $3,438,890 | ($3,888,115) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741.00 | 44.7% | $848,437 | ($1,788,304) | $1,137,779 | ($1,498,962) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733.00 | 44.8% | $682,064 | ($1,094,669) | $890,930 | ($885,803) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456.00 | 45.4% | $965,906 | ($1,734,550) | $1,217,201 | ($1,483,255) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163.00 | 45.4% | $1,115,777 | ($1,623,386) | $1,476,945 | ($1,262,218) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488.00 | 45.8% | $623,282 | ($948,206) | $810,031 | ($761,457) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782.00 | 45.8% | $592,636 | ($507,146) | $741,362 | ($358,420) |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330.00 | 45.9% | $1,578,062 | ($3,356,268) | $2,076,414 | ($2,857,916) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,499.80 | 46.2% | $1,201,839 | ($1,748,660) | $1,559,304 | ($1,391,196) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228.00 | 46.2% | $931,242 | ($1,296,986) | $1,191,945 | ($1,036,283) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885.00 | 47.1% | $277,191 | ($495,694) | $356,807 | ($416,078) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917.00 | 47.4% | $1,473,561 | ($2,320,356) | $1,945,397 | ($1,848,520) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909.00 | 48.0% | $467,413 | ($858,496) | $586,068 | ($739,841) |

**Table J.1: Example 6 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398.00 | 48.1% | $536,654 | ($1,067,744) | $694,085 | ($910,313) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592.00 | 48.4% | $734,724 | ($1,505,868) | $984,994 | ($1,255,598) |
| **SU057** | **Blue Mountain Union SD** | **370** | **405** | **20.3%** | **$874,301.00** | 50.3% | **$274,448** | **($599,853)** | **$364,243** | **($510,058)** |
| **SU047** | **Windham Northeast SU** | **1,191** | **1,330** | **20.8%** | **$2,859,142.00** | 50.5% | **$882,888** | **($1,976,254)** | **$1,197,549** | **($1,661,593)** |
| **SU008** | **Caledonia North SU** | **1,289** | **1,410** | **19.0%** | **$2,575,944.00** | 51.0% | **$956,019** | **($1,619,925)** | **$1,269,305** | **($1,306,639)** |
| **SU031** | **North Country SU** | **2,471** | **2,699** | **24.8%** | **$4,804,086.90** | 54.7% | **$1,832,396** | **($2,971,691)** | **$2,429,334** | **($2,374,753)** |
| **SU017** | **Winooski SD** | **743** | **853** | **22.5%** | **$1,649,146.00** | 55.4% | **$550,698** | **($1,098,448)** | **$767,627** | **($881,519)** |
| **SU035** | **Orleans Southwest SU** | **1,085** | **1,165** | **18.6%** | **$2,543,833.00** | 56.1% | **$804,804** | **($1,739,029)** | **$1,048,979** | **($1,494,854)** |
| **SU005** | **Southwest Vermont SU** | **2,934** | **3,085** | **22.1%** | **$5,838,947.00** | 59.1% | **$2,175,695** | **($3,663,252)** | **$2,776,914** | **($3,062,033)** |
| **SU020** | **Franklin Northeast SU** | **1,455** | **1,592** | **17.8%** | **$2,238,433.00** | 61.4% | **$1,079,104** | **($1,159,329)** | **$1,433,170** | **($805,263)** |
| **SU034** | **Orleans Central SU** | **987** | **1,084** | **21.4%** | **$1,844,375.00** | 62.0% | **$732,282** | **($1,112,093)** | **$975,981** | **($868,394)** |
| **SU011** | **St. Johnsbury SD** | **1,020** | **1,124** | **20.7%** | **$2,043,288.00** | 64.4% | **$756,295** | **($1,286,993)** | **$1,012,106** | **($1,031,182)** |
| **SU018** | **Essex-Caledonia SU** | **709** | **754** | **13.7%** | **$1,119,208.00** | 66.1% | **$525,899** | **($593,309)** | **$678,830** | **($440,378)** |
| | | | | **State Total** | $157,891,968.70 | | $58,271,514 | ($99,620,454) | $76,379,154 | ($81,512,814) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix K: Supervisory Union Funding Levels – Simulation Example 7

**Table K.1: Example 7 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU055 | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427.00 | 6.4% | $514,951 | ($147,476) | $544,674 | ($117,753) |
| SU014 | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187.00 | 14.2% | $3,306,212 | ($2,543,975) | $3,660,230 | ($2,189,957) |
| SU012 | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372.00 | 15.4% | $2,065,495 | ($6,174,877) | $2,284,265 | ($5,956,107) |
| SU016 | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346.00 | 16.1% | $1,894,448 | ($2,185,898) | $2,135,458 | ($1,944,888) |
| SU045 | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698.00 | 21.8% | $835,269 | ($689,429) | $906,254 | ($618,444) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659.00 | 22.1% | $1,486,867 | ($1,809,792) | $1,664,331 | ($1,632,328) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071.00 | 22.9% | $3,062,824 | ($4,375,247) | $3,327,805 | ($4,110,266) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371.00 | 24.1% | $1,545,990 | ($666,381) | $1,657,888 | ($554,483) |
| SU051 | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795.00 | 26.7% | $749,798 | ($711,997) | $771,653 | ($690,142) |
| SU007 | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508.00 | 28.8% | $1,811,145 | ($1,824,363) | $1,974,753 | ($1,660,755) |
| SU026 | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669.00 | 29.0% | $1,333,837 | ($1,331,832) | $1,452,642 | ($1,213,027) |
| SU032 | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458.00 | 29.4% | $1,202,864 | ($1,414,594) | $1,287,111 | ($1,330,347) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306.00 | 32.4% | $1,163,533 | ($1,807,773) | $1,274,138 | ($1,697,168) |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823.00 | 32.7% | $1,298,056 | ($2,188,767) | $1,392,427 | ($2,094,396) |
| SU001 | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982.00 | 33.2% | $1,257,598 | ($987,384) | $1,384,358 | ($860,624) |
| SU003 | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044.00 | 34.4% | $1,432,832 | ($869,212) | $1,502,909 | ($799,135) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011.00 | 36.5% | $239,576 | ($314,435) | $273,670 | ($280,341) |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686.00 | 36.5% | $1,784,141 | ($2,444,545) | $1,963,554 | ($2,265,132) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239.00 | 37.2% | $2,024,119 | ($2,437,120) | $2,224,268 | ($2,236,971) |

**Table K.1: Example 7 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276.00 | 37.4% | $832,812 | ($1,565,464) | $889,636 | ($1,508,640) |
| SU033 | Mill River SD | 737 | 820 | 14.5% | $1,342,244.00 | 38.0% | $644,220 | ($698,024) | $716,429 | ($625,815) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476.00 | 38.4% | $439,184 | ($548,292) | $471,923 | ($515,553) |
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979.00 | 39.9% | $536,159 | ($1,158,820) | $579,432 | ($1,115,547) |
| SU052 | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966.00 | 40.3% | $1,144,379 | ($1,157,587) | $1,168,507 | ($1,133,459) |
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254.00 | 41.1% | $559,973 | ($545,281) | $620,861 | ($484,393) |
| SU009 | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252.00 | 41.1% | $676,574 | ($550,678) | $734,971 | ($492,281) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536.00 | 41.7% | $904,401 | ($646,135) | $967,344 | ($583,192) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091.00 | 42.0% | $1,671,840 | ($3,167,251) | $1,703,355 | ($3,135,736) |
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295.00 | 44.0% | $1,278,657 | ($1,698,638) | $1,408,914 | ($1,568,381) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766.00 | 44.1% | $2,038,290 | ($3,084,476) | $2,206,671 | ($2,916,095) |
| SU019 | Essex North SU | 181 | 191 | 12.7% | $317,351.00 | 44.6% | $157,794 | ($159,557) | $166,536 | ($150,815) |
| SU015 | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005.00 | 44.7% | $3,099,261 | ($4,227,744) | $3,438,890 | ($3,888,115) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741.00 | 44.7% | $1,022,559 | ($1,614,182) | $1,137,779 | ($1,498,962) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733.00 | 44.8% | $822,042 | ($954,691) | $890,930 | ($885,803) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456.00 | 45.4% | $1,164,136 | ($1,536,320) | $1,217,201 | ($1,483,255) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163.00 | 45.4% | $1,344,765 | ($1,394,398) | $1,476,945 | ($1,262,218) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488.00 | 45.8% | $751,196 | ($820,292) | $810,031 | ($761,457) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782.00 | 45.8% | $714,261 | ($385,521) | $741,362 | ($358,420) |

**Table K.1: Example 7 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330.00 | 45.9% | $1,901,923 | ($3,032,407) | $2,076,414 | ($2,857,916) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,499.80 | 46.2% | $1,448,489 | ($1,502,010) | $1,559,304 | ($1,391,196) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228.00 | 46.2% | $1,122,358 | ($1,105,870) | $1,191,945 | ($1,036,283) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885.00 | 47.1% | $334,078 | ($438,807) | $356,807 | ($416,078) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917.00 | 47.4% | $1,775,976 | ($2,017,941) | $1,945,397 | ($1,848,520) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909.00 | 48.0% | $563,338 | ($762,571) | $586,068 | ($739,841) |
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398.00 | 48.1% | $646,790 | ($957,608) | $694,085 | ($910,313) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592.00 | 48.4% | $885,509 | ($1,355,083) | $984,994 | ($1,255,598) |
| **SU057** | **Blue Mountain Union SD** | **370** | **405** | **20.3%** | **$874,301.00** | 50.3% | **$333,141** | **($541,160)** | **$364,243** | **($510,058)** |
| **SU047** | **Windham Northeast SU** | **1,191** | **1,330** | **20.8%** | **$2,859,142.00** | 50.5% | **$1,071,700** | **($1,787,442)** | **$1,197,549** | **($1,661,593)** |
| **SU008** | **Caledonia North SU** | **1,289** | **1,410** | **19.0%** | **$2,575,944.00** | 51.0% | **$1,160,470** | **($1,415,474)** | **$1,269,305** | **($1,306,639)** |
| **SU031** | **North Country SU** | **2,471** | **2,699** | **24.8%** | **$4,804,086.90** | 54.7% | **$2,224,266** | **($2,579,821)** | **$2,429,334** | **($2,374,753)** |
| **SU017** | **Winooski SD** | **743** | **853** | **22.5%** | **$1,649,146.00** | 55.4% | **$668,469** | **($980,677)** | **$767,627** | **($881,519)** |
| **SU035** | **Orleans Southwest SU** | **1,085** | **1,165** | **18.6%** | **$2,543,833.00** | 56.1% | **$976,917** | **($1,566,916)** | **$1,048,979** | **($1,494,854)** |
| **SU005** | **Southwest Vermont SU** | **2,934** | **3,085** | **22.1%** | **$5,838,947.00** | 59.1% | **$2,640,982** | **($3,197,965)** | **$2,776,914** | **($3,062,033)** |
| **SU020** | **Franklin Northeast SU** | **1,455** | **1,592** | **17.8%** | **$2,238,433.00** | 61.4% | **$1,309,878** | **($928,555)** | **$1,433,170** | **($805,263)** |
| **SU034** | **Orleans Central SU** | **987** | **1,084** | **21.4%** | **$1,844,375.00** | 62.0% | **$888,885** | **($955,490)** | **$975,981** | **($868,394)** |
| **SU011** | **St. Johnsbury SD** | **1,020** | **1,124** | **20.7%** | **$2,043,288.00** | 64.4% | **$918,034** | **($1,125,254)** | **$1,012,106** | **($1,031,182)** |
| **SU018** | **Essex-Caledonia SU** | **709** | **754** | **13.7%** | **$1,119,208.00** | 66.1% | **$638,366** | **($480,842)** | **$678,830** | **($440,378)** |

**Table K.1: Example 7 (Census-based Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK-12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) FY16) | % FRPL (SY15-16) | Predicted Funding Amount Based on K12 ADM | Change in Funding from FY16 | Predicted Funding Amount Based on PK12 ADM | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | **State Total** | $157,891,968.70 | | $70,321,628 | ($87,570,341) | $76,379,154 | ($81,512,814) |

Note: SU's listed in bold face type are eligible for per capita grant with poverty adjustment.

# Appendix L: Supervisory Union Funding Levels – Simulation Example 8

## Table L.1: Example 8 (Weighted Student Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions

| SU ID | Supervisory Union | K12 ADM (FY16) | PK12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | Predicted Funding Amount Based Weighted Formula | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|
| **SU055** | Dresden Interstate SD | 589 | 623 | 5.6% | $662,427 | $309,165 | ($353,262) |
| **SU015** | Burlington SD | 3,545 | 3,934 | 11.9% | $7,327,005 | $3,944,199 | ($3,382,806) |
| **SU016** | South Burlington SD | 2,167 | 2,443 | 12.0% | $4,080,346 | $2,435,847 | ($1,644,499) |
| **SU045** | Montpelier SD | 955 | 1,037 | 12.5% | $1,524,698 | $1,114,869 | ($409,829) |
| **SU014** | Champlain Valley SD | 3,782 | 4,187 | 12.7% | $5,850,187 | $4,487,581 | ($1,362,606) |
| **SU019** | Essex North SU | 181 | 191 | 12.7% | $317,351 | $215,479 | ($101,872) |
| **SU001** | Addison Northeast SU | 1,439 | 1,584 | 13.2% | $2,244,982 | $1,780,042 | ($464,940) |
| **SU003** | Addison Central SD | 1,639 | 1,719 | 13.5% | $2,302,044 | $2,079,839 | ($222,205) |
| **SU052** | Windsor Southeast SU | 1,309 | 1,337 | 13.7% | $2,301,966 | $1,676,987 | ($624,979) |
| **SU018** | Essex-Caledonia SU | 709 | 754 | 13.7% | $1,119,208 | $908,758 | ($210,450) |
| **SU051** | Windsor Central SU | 858 | 883 | 14.1% | $1,461,795 | $1,133,606 | ($328,189) |
| **SU026** | Lamoille South SU | 1,526 | 1,662 | 14.5% | $2,665,669 | $2,070,470 | ($595,199) |
| **SU012** | Chittenden East SU | 2,363 | 2,613 | 14.5% | $8,240,372 | $3,213,445 | ($5,026,927) |
| **SU033** | Mill River SD | 737 | 820 | 14.5% | $1,342,244 | $1,002,445 | ($339,799) |
| **SU009** | Caledonia Central SU | 774 | 841 | 14.9% | $1,227,252 | $1,077,394 | ($149,858) |
| **SU032** | Washington Central SU | 1,376 | 1,472 | 14.9% | $2,617,458 | $1,920,572 | ($696,886) |
| **SU007** | Colchester SD | 2,072 | 2,259 | 14.9% | $3,635,508 | $2,894,911 | ($740,597) |
| SU065 | Essex Westford SD | 3,504 | 3,807 | 15.2% | $7,438,071 | $1,726,973 | ($5,711,098) |
| SU042 | Harwood UUSD | 1,701 | 1,904 | 15.3% | $3,296,659 | $2,403,958 | ($892,701) |
| SU049 | Windham Southwest SU | 644 | 670 | 15.7% | $1,325,909 | $917,855 | ($408,054) |
| SU037 | Rutland Central SU | 1,035 | 1,107 | 15.9% | $1,550,536 | $1,478,793 | ($71,743) |
| SU041 | Washington Northeast SU | 502 | 540 | 15.9% | $987,476 | $719,132 | ($268,344) |
| SU024 | Grand Isle SU | 859 | 927 | 16.2% | $1,571,488 | $1,236,158 | ($335,330) |

## Table L.1: Example 8 (Weighted Student Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions

| SU ID | Supervisory Union | K12 ADM (FY16) | PK12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | Predicted Funding Amount Based Weighted Formula | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|
| SU036 | Rutland Northeast SU | 1,463 | 1,612 | 16.3% | $2,977,295 | $2,110,931 | ($866,364) |
| SU002 | Addison Northwest SD | 953 | 1,018 | 17.1% | $2,398,276 | $1,395,645 | ($1,002,631) |
| SU046 | Windham Central SU | 940 | 1,019 | 17.3% | $1,776,733 | $1,383,562 | ($393,171) |
| SU022 | Franklin West SU | 1,768 | 1,896 | 17.6% | $2,212,371 | $2,617,448 | $405,077 |
| SU006 | Bennington-Rutland SU | 2,041 | 2,246 | 17.7% | $4,228,686 | $3,026,136 | ($1,202,550) |
| SU020 | Franklin Northeast SU | 1,455 | 1,592 | 17.8% | $2,238,433 | $2,160,106 | ($78,327) |
| SU004 | Addison-Rutland SU | 1,284 | 1,363 | 18.0% | $2,228,228 | $1,912,934 | ($315,294) |
| SU030 | White River Valley SU | 1,538 | 1,689 | 18.1% | $2,739,163 | $2,295,468 | ($443,695) |
| SU025 | Lamoille North SU | 1,657 | 1,784 | 18.2% | $2,950,500 | $2,476,929 | ($473,571) |
| SU028 | Orange Southwest USD | 817 | 848 | 18.2% | $1,099,782 | $1,223,019 | $123,237 |
| SU010 | Milton SD | 1,485 | 1,593 | 18.3% | $3,486,823 | $2,223,254 | ($1,263,569) |
| SU035 | Orleans Southwest SU | 1,085 | 1,165 | 18.6% | $2,543,833 | $1,636,029 | ($907,804) |
| SU021 | Franklin Northwest SU | 2,032 | 2,225 | 18.7% | $3,793,917 | $3,067,914 | ($726,003) |
| SU027 | Orange East SU | 1,332 | 1,392 | 18.8% | $2,700,456 | $2,013,576 | ($686,880) |
| SU064 | Rivendell Interstate SD | 274 | 313 | 19.0% | $554,011 | $415,947 | ($138,064) |
| SU040 | Rutland City SD | 1,912 | 1,948 | 19.0% | $4,839,091 | $2,902,972 | ($1,936,119) |
| SU008 | Caledonia North SU | 1,289 | 1,410 | 19.0% | $2,575,944 | $1,957,702 | ($618,242) |
| SU048 | Windham Southeast SU | 2,332 | 2,524 | 19.0% | $5,122,766 | $3,543,331 | ($1,579,435) |
| SU029 | Orange North SU | 740 | 794 | 19.3% | $1,604,398 | $1,130,341 | ($474,057) |
| SU060 | Battenkill Valley SU | 382 | 408 | 19.4% | $772,885 | $584,231 | ($188,654) |
| SU056 | Springfield SD | 1,170 | 1,302 | 20.2% | $2,636,741 | $1,815,115 | ($821,626) |
| SU057 | Blue Mountain Union SD | 370 | 405 | 20.3% | $874,301 | $575,213 | ($299,088) |
| SU023 | Maple Run USD | 2,315 | 2,544 | 20.6% | $4,461,239 | $3,617,991 | ($843,248) |

**Table L.1: Example 8 (Weighted Student Funding Mechanism) - Distribution of Funding Across FY18 Vermont Supervisory Unions**

| SU ID | Supervisory Union | K12 ADM (FY16) | PK12 ADM (FY16) | % IEP of K12 ADM | Total SPED Funding from State (Block & Reimbursement) (FY16) | Predicted Funding Amount Based Weighted Formula | Change in Funding from FY16 |
|---|---|---|---|---|---|---|---|
| SU038 | Rutland Southwest SU | 641 | 710 | 20.6% | $1,105,254 | $1,001,808 | ($103,446) |
| SU011 | St. Johnsbury SD | 1,020 | 1,124 | 20.7% | $2,043,288 | $1,597,344 | ($445,944) |
| SU047 | Windham Northeast SU | 1,191 | 1,330 | 20.8% | $2,859,142 | $1,869,475 | ($989,667) |
| SU043 | Washington South SU | 613 | 663 | 21.0% | $1,694,979 | $966,601 | ($728,378) |
| SU034 | Orleans Central SU | 987 | 1,084 | 21.4% | $1,844,375 | $1,565,585 | ($278,790) |
| SU005 | Southwest Vermont SU | 2,934 | 3,085 | 22.1% | $5,838,947 | $4,714,063 | ($1,124,884) |
| SU017 | Winooski SD | 743 | 853 | 22.5% | $1,649,146 | $1,200,918 | ($448,228) |
| SU063 | Two Rivers SU | 1,013 | 1,127 | 22.6% | $2,240,592 | $1,641,545 | ($599,047) |
| SU054 | Hartford SD | 1,331 | 1,457 | 23.4% | $2,971,306 | $2,188,356 | ($782,950) |
| SU061 | Barre SU | 2,176 | 2,375 | 23.8% | $4,934,330 | $3,599,753 | ($1,334,577) |
| SU031 | North Country SU | 2,471 | 2,699 | 24.8% | $4,804,087 | $4,160,991 | ($643,096) |
| | | | | **State Total** | 157,891,969 | 111,340,713 | (46,551,256) |