

# Report on Student-to-Staff Ratios

## REPORT SUMMARY

Presentation to the Vermont General  
Assembly  
Tammy Kolbe, Task Force Chairperson

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# TASK FORCE CHARGE

Act 11 of the Special Session of 2018 Instructed AOE to constitute a task force to deliberate and prepare recommendations regarding and optimum student-to-staff ratios, including ratios that supported comparisons among Supervisory Unions/School Districts (SU/SD)

*This charge included a request that the Task Force consider whether staff-to-student ratios should be included in statute for FY2021*

# TASK FORCE RECOMMENDATIONS

1. **Not** to include in **statute** specific **thresholds or benchmarks** for student-to-staff count ratios for FY2021
2. AOE continue to **compute and report**, on an **annual basis**, the **staffing ratios** included in the Task Force report (statewide and by SU/SD)
3. **Additional research** on staffing ratios in schools that are geographically proximate to **independent schools** and in SU/SDs with expanded school choice options

# RATIONALE FOR NOT RECOMMENDING A STATEWIDE STUDENT-TO-STAFF RATIO

The Task Force **could not recommend a threshold or benchmark** for a **single staffing ratio** that could be uniformly applied to all SU/SDs

- Rationale:
  - **No empirical evidence** to support an identifying an **optimal ratio** of students-to-staff in a school district
  - A **single staffing ratio is insufficient** to understand and even evaluate staffing configurations across Vermont's SU/SDs
  - Staffing patterns, and corresponding staff ratios, **may differ across SU/SDs in ways that make sense** given differences in student need and geographic location

# FOCUS OF TASK FORCE'S WORK

To develop **meaningful and defensible definitions** for student-to-staff ratios and **data** that can be used to by policymakers and practitioners in their decision making

Specifically, the Task Force identified a need for:

- **Multiple staff count indicators**, for different categories of district/school staff
- **SU/SD groupings** that allow for **comparisons** among local agencies with **similar characteristics that may impact staffing**
- Creating a **framework that can be easily replicated** – at the state and local levels – to develop a more robust better understanding of staffing patterns **over time**

# STAFFING INDICATORS

Seven staffing categories that capture different dimensions of SU/SD personnel profiles:

1. SU/SD administrative staff
2. School administration staff
3. School principals
4. General education teachers
5. Special education teachers
6. Student support staff
7. Student “helping” staff

*For most indicators, the Task Force adopted the US Department of Education/National Center for Education Statistics (ED/NCES) definition, without modification*

# CALCULATING STUDENT-TO-STAFF RATIOS

Staffing counts were based on personnel data already reported by SU/SD's to AOE, for federal and state databases

Two-year average in student enrollment, rather than a single year

Statewide and SU/SD averages calculated for the 2017/18 school year

# FACILITATING COMPARISONS

To facilitate comparisons among SU/SDs statewide, the Task Force identified five groupings for comparison:

1. SU/SD enrollment
2. Percent of students with Individualized Education Programs (IEP)
3. Percent of students from economically-deprived backgrounds
4. Percent of students who are English Language Learners (ELL)
5. Population density of aggregated geographic area covered by a SU/SD

*SU/SDs averages were calculated using quartiles for each grouping*

# STUDENT-TO-STAFF RATIOS: STATEWIDE PROFILE

<b>Category</b>	<b>Mean</b>	<b>Median</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Standard Deviation</b>
SU/SD Administrative Staff	87.4	82.7	154.8	0.0	28.3
School Staff	5.7	5.6	7.1	4.1	0.7
School Principals	182.5	177.5	306.3	81.0	54.7
General Education Teachers	13.8	13.0	20.3	9.3	2.9
Special Education Teachers	61.0	59.2	224.6	29.4	25.1
Student Support Staff	46.8	44.7	74.0	28.0	12.0
Student "Helping" Staff	60.3	58.8	99.0	36.9	14.9

# COMPARING STUDENT-TO-STAFF RATIOS ACROSS SUPERVISORY UNIONS/SCHOOL DISTRICTS



# SU/SD ENROLLMENT

	Quartile Mean Enrollment	SU/SD Administrative Staff	School Staff	School Principals	General Education Teachers	Special Education Teachers	Student Support Staff	Student "Helping" Staff
Statewide Average (Mean)		87.4	5.7	182.5	13.8	61.0	46.8	60.3
Average by IEP Quartile								
Quartile 1 (Smallest)	476	71.3	5.3	165.0	12.6	59.6	51.1	67.7
Quartile 2	922	82.3	5.6	151.4	13.5	59.6	40.9	57.3
Quartile 3	1,362	94.6	5.8	190.4	13.3	58.2	44.9	54.8
Quartile 4 (Largest)	2,470	100.4	6.0	220.3	15.6	66.4	50.2	61.5
Difference Q4-Q1		29.1	0.7	55.3	3.0	6.8	-0.9	-6.2
% difference		40.8%	13.2%	33.5%	23.8%	11.4%	-1.8%	-9.2%

## Task Force Observations:

- SU/SDs with **larger student enrollments** also have **larger student-teacher ratios** than SU/SDs with the smallest enrollments.
- SU/SDs with **smaller student enrollments** also have **smaller student-administrative staff ratios** than SU/SDs with the largest enrollments.
- There is **minimal difference in student support staff ratios** according to differences in SU/SDs enrollment.

# SU/SD PERCENT IEP

	Quartile Mean Percent IEP	SU/SD Administrative Staff	School Staff	School Principals	General Education Teachers	Special Education Teachers	Student Support Staff	Student "Helping" Staff
Statewide Average (Mean)		87.4	5.7	182.5	13.8	61.0	46.8	60.3
Average by IEP Quartile								
Quartile 1 (Smallest)	14.0%	89.3	6.2	205.9	15.5	76.0	48.8	65.9
Quartile 2	18.1%	90.4	6.0	180.1	14.3	61.3	50.9	63.1
Quartile 3	21.8%	81.5	5.5	175.6	13.2	57.0	48.2	59.9
Quartile 4 (Largest)	26.9%	88.2	5.1	169.3	12.3	50.6	40.0	52.9
Difference Q4-Q1		-1.1	-1.1	-36.6	-3.2	-25.4	-8.8	-13.0
% difference		-1.2%	-17.7%	-17.8%	-20.6%	-33.4%	-18.0%	-19.7%

## Task Force Observations:

- SU/SDs with **higher percentages of students with IEPs** also have **lower student-teacher ratios** than SU/SDs with fewer students with disabilities.
- SU/SDs with **higher percentages of students with IEPs** have **more student support staff per enrolled student than do SU/SDs** with fewer students with disabilities.

# SU/SD PERCENT STUDENTS LIVING IN POVERTY

	Quartile Mean Percent Poverty	SU/SD Administrative Staff	School Staff	School Principals	General Education Teachers	Special Education Teachers	Student Support Staff	Student "Helping" Staff
Statewide Average (Mean)		87.4	5.7	182.5	13.8	61.0	46.8	60.3
Average by IEP Quartile								
Quartile 1 (Lowest)	10.0%	87.3	6.3	211.4	15.5	79.4	55.4	71.3
Quartile 2	20.2%	87.9	5.7	181.8	13.6	55.5	48.2	58.5
Quartile 3	26.0%	83.8	5.6	162.8	12.3	59.3	42.9	61.7
Quartile 4 (Highest)	36.8%	90.2	5.3	174.4	13.7	50.7	41.2	50.6
Difference Q4-Q1		2.9	-1.0	-37.0	-1.8	-28.7	-14.2	-20.7
% difference		3.3%	-15.9%	-17.5%	-11.6%	-36.1%	-25.6%	-29.0%

## Task Force Observations:

- SU/SDs with the **lowest percentages of students living in economically-deprived households** also have the **highest student-teacher ratios**.
- The number of **students per support staff** in an SU/SD **decreases** as the share of students residing in **economically-deprived households increases**.

# SU/SD PERCENT ENGLISH LANGUAGE LEARNERS (ELL)

	Quartile Mean Percent ELL	SU/SD Administrative Staff	School Staff	School Principals	General Education Teachers	Special Education Teachers	Student Support Staff	Student "Helping" Staff
Statewide Average (Mean)		87.4	5.7	182.5	13.8	61.0	46.8	60.3
Average by IEP Quartile								
Quartile 1 (Lowest)	0.1%	87.1	5.4	166.4	12.8	57.5	47.2	58.1
Quartile 2	0.4%	88.5	5.7	162.1	13.0	57.8	45.7	57.0
Quartile 3	0.8%	91.1	5.7	183.6	14.4	56.0	45.2	60.4
Quartile 4 (Highest)	6.3%	83.1	5.9	215.4	14.9	72.0	49.1	65.4
Difference Q4-Q1		-4.0	0.5	49.0	2.1	14.5	1.9	7.3
% difference		-4.6%	9.3%	29.4%	16.4%	25.2%	4.0%	12.6%

## Task Force Observations:

- SU/SDs with the **largest percentages of ELL students** also have the **highest student-teacher ratios**.

# SU/SD POPULATION DENSITY

	Quartile Mean Population Density (pop/mi <sup>2</sup> )	SU/SD			General	Special	Student Support	Student
		Administrative Staff	School Staff	School Principals	Education Teachers	Education Teachers	Staff	"Helping" Staff
Statewide Average (Mean)		87.4	5.7	182.5	13.8	61.0	46.8	60.3
Average by IEP Quartile								
Quartile 1 (Least pop)	27.6	82.0	5.2	132.8	11.6	60.0	43.3	57.9
Quartile 2	44.8	82.6	5.5	161.9	12.5	58.3	43.0	59.2
Quartile 3	76.3	88.3	6.0	202.8	15.1	60.8	52.3	64.4
Quartile 4 (Most pop)	891.9	95.9	6.0	229.1	15.8	64.8	48.6	59.9
Difference Q4-Q1		13.9	0.8	96.3	4.2	4.8	5.3	2.0
% difference		17.0%	15.4%	72.5%	36.2%	8.0%	12.2%	3.5%

## Task Force Observations:

- SU/SDs with **lower population density** also have a **smaller student-administrative staff ratios**.
- SU/SDs with **lower population density** have **smaller student-teacher ratios** than do SU/SDs located in more populated areas.

# CONCLUDING THOUGHTS

The Task Force report provides policymakers and practitioners with a **defensible and meaningful framework** for **calculating, evaluating, and comparing** student-to-staff ratios across Vermont's SU/SDs.

The report's descriptive profile of student-to-staff ratios **reinforces the importance** of considering **multiple indicators** and **comparisons among SU/SDs with similar characteristics**

The comparisons among SU/SDs are **intended to guide decision making** – particularly on the part of **local policymakers and practitioners** – who are in a position to **develop FTE management strategies** and **recommend policy approaches**