

Meeting Student Needs

Demographic changes, costs, and state support

A NYSASBO Analysis



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The Issue

Since the early 1900s, New York has partnered with local school districts to educate the state's children. New York provides State Aid to school districts to share in the cost of educating students and ensure that differences in local resources and student need are not barriers to providing a sound basic education for all children. Because of stark differences in student need and local resources, State Aid varies among school districts. In evaluating school finance through the twin frameworks of adequacy and accountability, it is important to examine how the state defines student need as well as how it accounts for change over time. This research note focuses on demographic trends for groups of students who have historically faced significant achievement gaps: economically disadvantaged students, students with disabilities, and English language learners.

The following questions inspired this paper:

- What are the needs, costs, and trends associated with economically disadvantaged students, student with disabilities, and English language learners?
- How do student demographics and local resources impact a district's ability to provide a sound basic education?
- What are appropriate ways for New York State to share in the cost of educating all students?

To properly frame these questions, this paper has three primary sections:

- An analysis of state enrollment trends, including general enrollment declines, sharp increases in economically disadvantaged students, rising numbers of students with disabilities, and the uneven distribution of English language learners.
- An examination of student achievement overall and across varying subgroups of students, which shows striking gaps in English language arts and math proficiency as well as in high school graduation rates.
- A discussion of state public policy to help school districts meet student needs and the primary state aid mechanisms for funding school districts. The report concludes with recommendations for legislative action.



Background

School Aid formulas are designed to provide state assistance to support the education of all children in pursuit of “a system of free common schools, wherein all the children of this state may be educated” (Section 1, Article XI, New York Constitution). New York State has met this responsibility by:

1. Providing general support for a portion of the maintenance and operation of schools, in inverse relation to the fiscal capacity of each local school district. This aid has been calculated as an amount multiplied by the number of pupils.
2. Providing additional support for a portion of the cost of educating students with needs that go beyond those of the average student. New York, like most other states, has provided additional assistance to share in the excess costs of educating economically disadvantaged students, students with disabilities, and English language learners. School districts with higher levels of student need receive more aid.

The principle underlying State Aid to school districts is that the state will share in the cost of educating children and assume additional responsibility for costs driven by student need. According to the established formulas, increasing general enrollment or student need should yield increased State Aid. However, the calculation and distribution of State Aid to school districts often does not fully reflect pupil composition. This occurs, for example, when formulas are held harmless, frozen, not fully implemented, or across-the-board increases are provided. When these aid techniques are used, it doesn't matter if a district's enrollment falls or rises or if student need grows or declines.

This paper addresses student need and corresponding state support to identify ways to improve student achievement by strengthening State Aid. It examines the demographics of schools and trends in enrollment, including the following questions: How is overall student enrollment changing over time and how are subgroups of students who typically cost more to educate changing? What do we know about the costs of educating economically disadvantaged students, students with disabilities, and English language learners? How can State Aid formulas share in the costs of a changing student body so that all students have access to a sound education and the opportunity for an education that prepares them for success in college and careers?

Part One: Demographic Trends

Overall Enrollment

Statewide enrollment has been declining slightly for years. However, not all districts have experienced these declines or the same magnitude of loss. As Figure 1 shows, over five- and ten-year periods, the clear majority of districts saw enrollments fall. Over a five-year period, 26 percent of districts had declines exceed 10 percent and over the past decade 67 percent of districts had declines greater than 10 percent.



Figure 1. Five- and Ten-Year Enrollment Trends

ENROLLMENT CHANGE	SHARE OF DISTRICTS EXPERIENCING THE CHANGE BETWEEN:	
	2011-12 and 2016-17	2006-07 and 2016-17
Enrollment Decline	84%	89%
Enrollment Declines Greater than 10%	26%	67%
Enrollment Increases	16%	11%
Enrollment Increases Greater than 10%	3%	4%

Breaking the enrollment trends down by need/resource-capacity category, as shown in Figure 2, shows that rural high-need districts have had the greatest declines. This phenomenon was carefully documented in NYSASBO’s August 2017 report, “Declining Enrollment and Growing Poverty: Demographic Challenges Facing Rural Schools.” The report found that over an earlier ten-year period ending in 2014-15, 97 percent of rural schools had enrollment declines, and 85 percent had declines greater than 10 percent. Over a five-year period, 92 percent of rural schools had enrollment declines, with 52 percent having declines greater than 10 percent. Many other school district groups lost enrollment as well. For example, average-need

school districts, which represent almost 50 percent of school districts in New York State, experienced a decline of almost 13 percent over a ten-year period.

Figure 2. Five- and Ten-Year Enrollment Trends by Need/Resource Capacity Category of School Districts

Need/Resource-Capacity Category	Five-Year Enrollment Change 2011-12 to 2016-17	Ten-Year Enrollment Change 2006-07 to 2016-17
NYC	0%	0%
Big Four (Rochester, Yonkers, Syracuse, and Buffalo)	-2%	-7%
Urban/Suburban High-Need	3%	1%
Rural High-Need	-7%	-16%
Average-Need	-6%	-13%
Low-Need	-6%	-10%

Long-term declining enrollments can strain school district finances, pose enormous staffing challenges, create excess capacity in buildings, and reduce educational and extracurricular student opportunities.



Economically Disadvantaged Students

The Census Bureau’s Small Area Income & Poverty Estimates (SAIPE) include school district level data. Figure 3 shows poverty estimates statewide and by need/resource-capacity category. Poverty rates slightly declined in 2014 and 2015, but are still 2 percent higher than they were in 2009. When looking at poverty rates across need/resource-capacity categories, Big Four school districts have the most students living in poverty, 39 percent, which is more than 10 percent higher than any other category. Between 2009 and 2015, Big Four school districts also had the largest increase in poverty at seven percent. Poverty increases in the Big Four and Urban/Suburban High-Need districts were more than twice as large as the increases in other need/resource categories.

Figure 3. Students in Poverty (SAIPE Estimates)

	2009	2010	2011	2012	2013	2014	2015	Change (2009-2015)
Statewide	19%	20%	21%	21%	22%	21%	21%	2%
NYC	27%	29%	30%	31%	30%	30%	29%	2%
Big Four	32%	33%	37%	35%	40%	38%	39%	7%
Urban/Suburban High-Need	23%	24%	28%	28%	29%	29%	28%	5%
Rural High-Need	20%	21%	24%	23%	24%	23%	22%	2%
Average-Need	10%	10%	12%	11%	12%	12%	12%	2%
Low-Need	4%	5%	6%	6%	6%	6%	5%	1%

However, economic disadvantage isn’t limited to those living in poverty. Economic hardship includes families below the poverty line as well as those who fall outside of the official poverty designation. Because economic disadvantage is broader than poverty, accurately capturing economic challenges requires looking at measures of need that cross the poverty line. Under the National School Lunch Program, students whose families are at or below 130 percent of the poverty line are eligible for free school lunches, while students whose families are at or below 185 percent of the poverty line are eligible for reduced-price lunches. A school district’s Free- and Reduced-Price Lunch (FRPL) eligibility rate¹ can be used as a broader measure of economic hardship, which is shown in Figure 4. In the most recent FRPL data, a majority of students (53 percent) statewide are eligible for FRPL; the median FRPL rate for school districts is 43 percent. Between the 2010-11 and 2016-17 school years, FRPL eligibility grew more than three percent statewide and in all parts of the state, except the already-deeply-impooverished Big Five cities, by up to nine percent.

¹ The state FRPL measure averages K-6 students eligible for free- and reduced-price lunches over the preceding three years. The 2016-17 FRPL measure is the average of a district’s fall 2013-15 FRPL eligibility rates.

Figure 4. Economically Disadvantaged Students: Percent of K-6 Students Eligible for Reduced-Price Meals

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	Change (2010-11 to 2016-17)
Statewide	50%	50%	51%	52%	52%	52%	53%	3%
NYC	78%	78%	78%	76%	75%	73%	72%	-6%
Big Four	81%	81%	81%	81%	81%	81%	80%	-1%
Urban/Suburban High-Need	65%	66%	68%	71%	72%	73%	73%	8%
Rural High-Need	52%	53%	55%	56%	57%	58%	59%	7%
Average-Need	28%	29%	31%	32%	33%	35%	36%	8%
Low-Need	7%	8%	8%	9%	10%	11%	11%	4%

Students with Disabilities

The number of students with disabilities (SWDs) has been steadily climbing. In 2015-16, 458,278 students with disabilities were enrolled in New York public schools, making up 15 percent of the student body; the median SWD rate was 13 percent. Figure 5 shows that the SWD rate has been slowly increasing over time.

Figure 5. Overall Students with Disabilities Rate

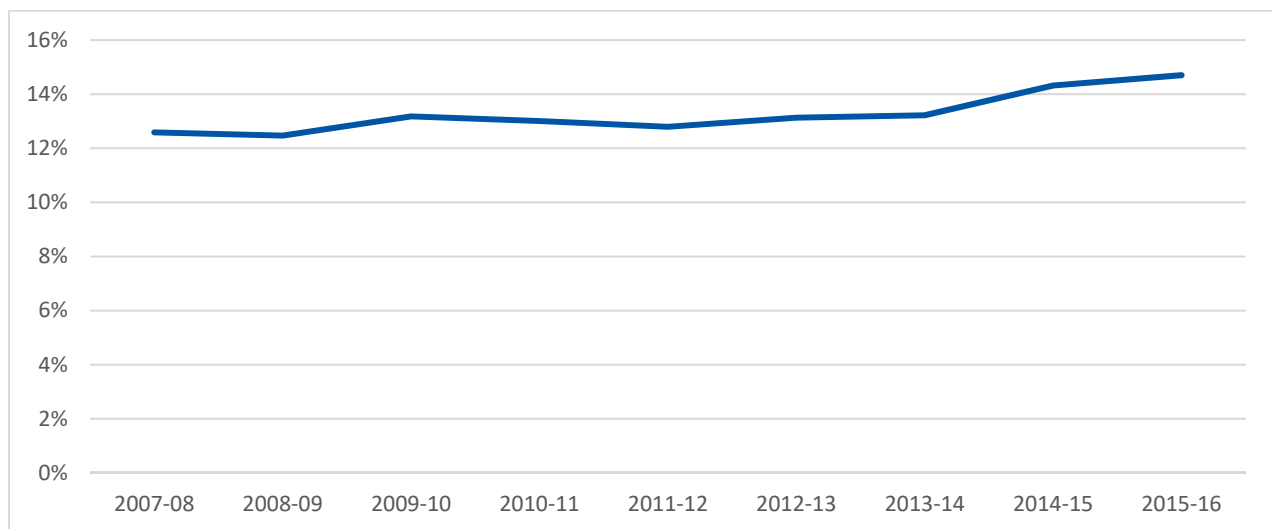


Figure 6 presents SWD rates by need/resource-capacity category of school districts; SWD rates are correlated with levels of student need, and the Big Five city school districts classify approximately 40 percent more students in special education than the more affluent low need school districts. Figure 7 shows the classification distribution for SWDs in 2015-16 and 2007-08. In both years, learning disabilities and speech or language impairments were by far the two most frequent diagnoses.

Figure 6. Students with Disabilities Rate, 2015-16

Region	Students with Disabilities Rate
Statewide	15%
NYC	17%
Big Four	17%
Urban/Suburban High-Need	13%
Rural High-Need	15%
Average-Need	13%
Low-Need	12%

Figure 7. Students with Disabilities Classification Distribution

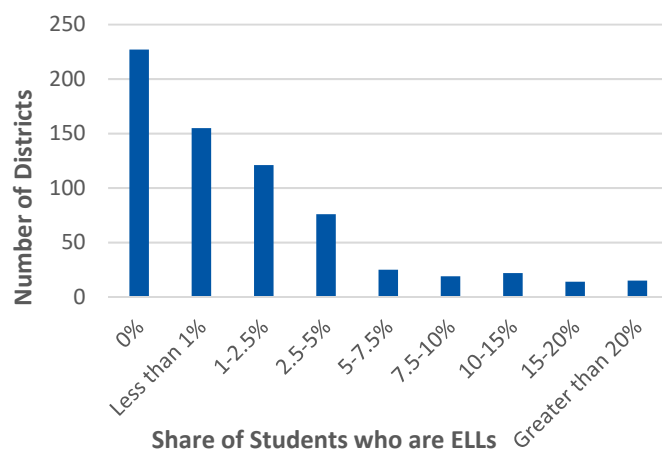
Classification	Percent of SWDs 2007-08	Percent of SWDs 2015-16
Autism	4%	7%
Emotional Disturbance	9%	5%
Learning Disability	42%	36%
Multiple Disabilities	5%	3%
Other Health Impairment	13%	16%
Speech or Language Impairment	23%	27%
All Other Classifications	5%	4%

English Language Learners

In 2016-17, nine percent of students statewide were English language learners (ELLs). Figure 8 shows the growth in the share of New York students who are ELLs. Between 2007-08 and 2016-17, the number of ELLs increased 23 percent, from 178,568 to 218,820 and the ELL share of the student body grew from 7 percent to 9 percent. Unlike students with disabilities, who are evenly distributed among school districts, ELLs are highly concentrated in a small number of school districts. As Figure 9 shows, in a majority of school districts, 56 percent, ELLs represent less than 1 percent of overall enrollment; for 69 percent of districts, ELLs account for less than 2 percent of enrollment.

Overall the median ELL rate is less than one percent. In only 9 percent of districts do English learners make up at least 10 percent of enrollment; in 3 percent of districts (17 school districts), English language learners are more than 20 percent of the student body.

Figure 8. School Districts by ELL Enrollment



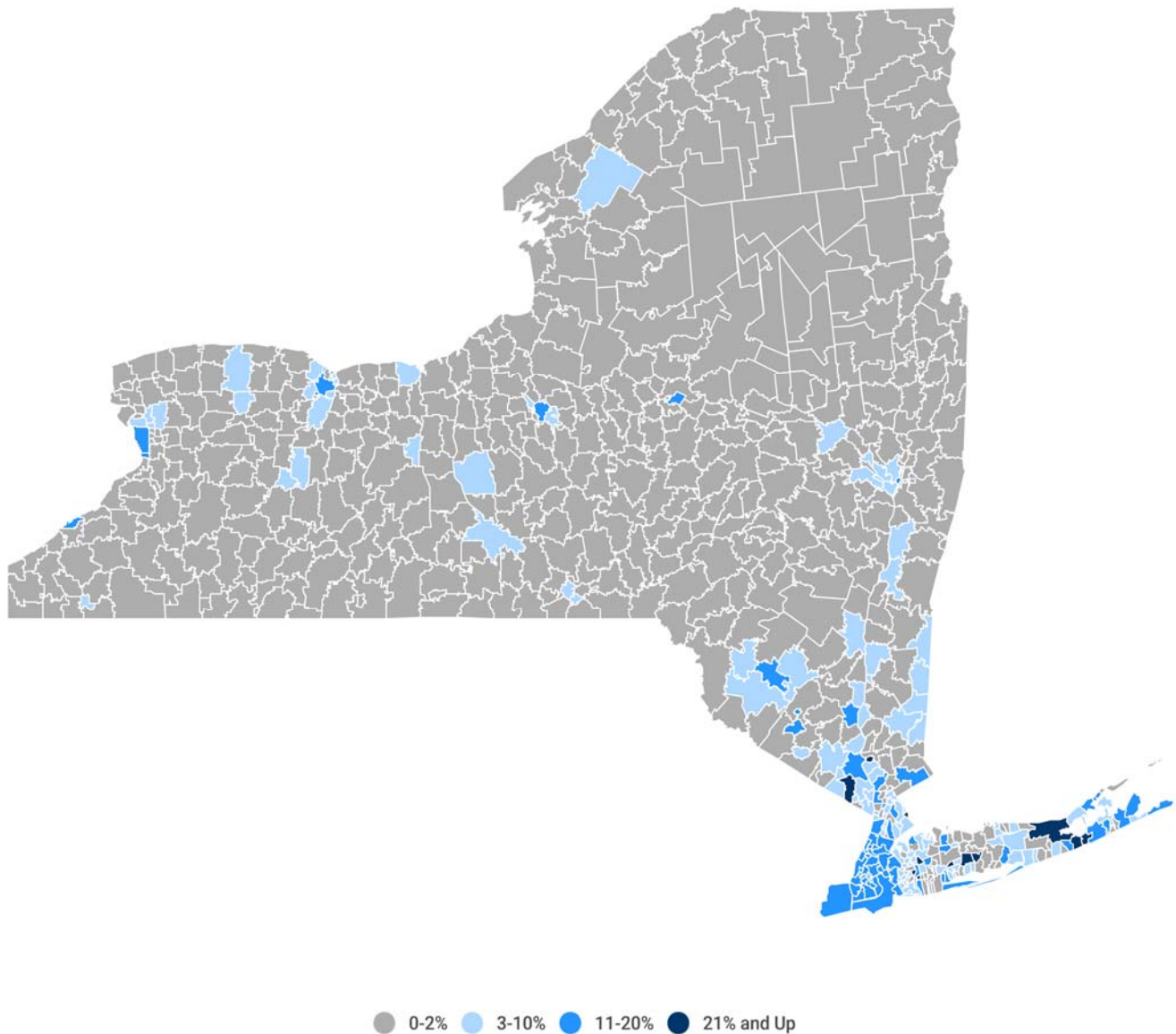
The table in Figure 9 shows ELL and FRPL rates in the districts where ELLs account for more than 20 percent of enrollment. Of these districts, 14 out of 17 districts have at least 60 percent of students eligible for free- or reduced-price lunches; 7 out of 17 districts have at least 20 percent of their students in poverty. In other words, ELLs are highly concentrated in a small number of school districts and these school districts also have high levels of student poverty and economic disadvantage. This phenomenon illustrates a strong overlap between ELL students and other forms of need. In 2015-16, 83 percent of English learners were also economically disadvantaged and 25 percent of ELLs were students with disabilities, almost twice the statewide rate. The map in figure 10 shows that ELLs are most heavily concentrated in the New York City and Long Island areas; other city school districts across the state also have significant numbers of ELLs.

Figure 9 . ELL Share and FRPL Rate in School Districts with Highest Levels of ELLs

School District	Enrollment (2016-17)	Students Eligible for Free- and Reduced-Price Lunch	ELL Enrollment (2016-17)
Kiryas Joel	164	87%	88%
Central Islip	7,222	80%	32%
East Ramapo	8,589	79%	31%
Westbury	5,093	88%	30%
Brentwood	19,051	83%	30%
Uniondale	6,901	73%	30%
Hempstead	7,748	76%	30%
Port Chester	4,658	69%	30%
Wyandanch	2,516	87%	27%
Tuckahoe Common	317	52%	27%
Riverhead	5,418	50%	26%
Hampton Bays	2,069	49%	25%
Roosevelt	3,260	63%	23%
Peekskill	3,306	82%	23%
Amityville	2,932	75%	22%
Bridgehampton	191	61%	21%
Freeport	6,820	71%	21%



Figure 10. English Language Learners in New York State School Districts



Summary of Demographic Trends

There are clear student demographic changes in New York State. Overall, enrollment is declining, while poverty, economic hardship, and the incidence of students with disabilities and English language learners have all been increasing. Students with disabilities and, to a lesser extent, poverty and economic hardship are distributed across the state, while ELLs are highly concentrated in a small number of districts. Figure 11 summarizes statewide rates, median rates, and change over time for the demographic categories analyzed in this paper. The next section of this paper will examine student achievement statewide and among key subgroups, including those covered in this section.

Figure 11. Summary of Demographic Trends in New York State Schools

	Statewide Rate	Median Rate by School District	Statewide Change (timespan)
Five-Year Enrollment Decline, 2011-12 to 2016-17	-0.6% (average annual change)	-7%	-3%
Ten-Year Enrollment Decline, 2006-07 to 2016-17	-0.7% (average annual change)	-15%	-7%
Poverty (SAIPE), 2015	21%	15%	2%
Economic Hardship (FRPL), 2016-17	53%	43%	3% (2010-11 to 2016-17)
Students with Disabilities, 2015-16	15%	13%	2% (2010-11 to 2015-16)
English Language Learners, 2016-17	9%	0.7%	2% (2010-11 to 2016-17)

Part Two: Student Achievement

English Language Arts and Math Proficiency

Beginning with the 2005-06 school year, New York public school students in grades 3-8 take English language arts (ELA) and math exams. Figure 12 shows a map of proficiency rates by school district for the 2017 ELA and math tests (darker shading means higher proficiency rates). District-level proficiency rates range from 8 percent to 83 percent, with an average proficiency rate of 40 percent and a median proficiency rate of 38 percent.

Figure 12. ELA and Math Proficiency by School District

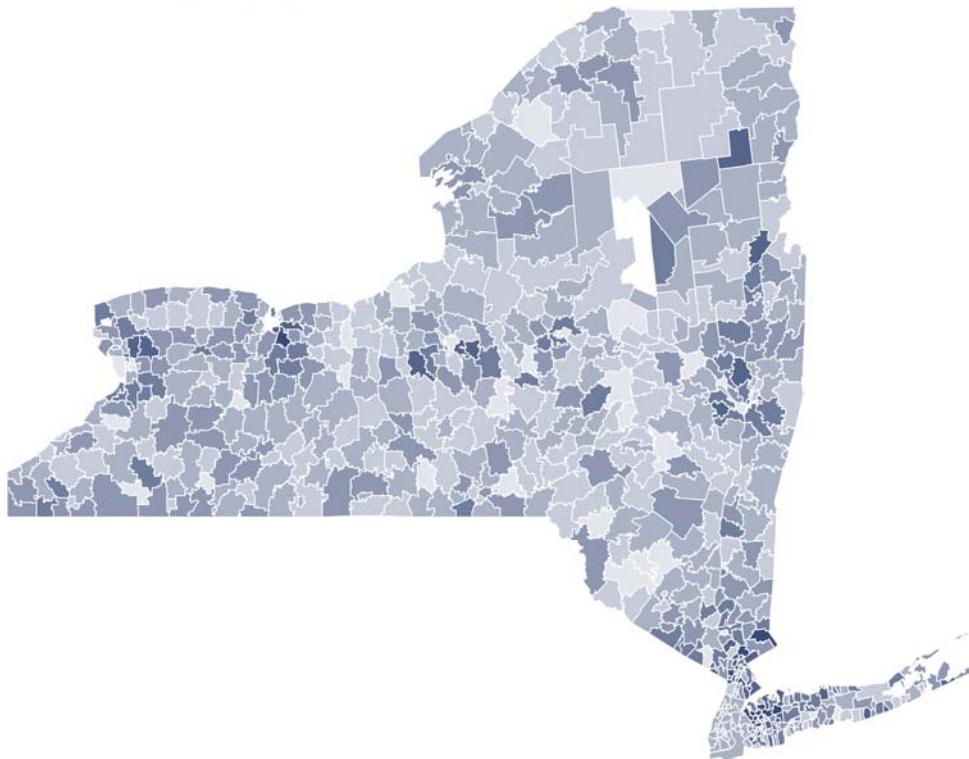


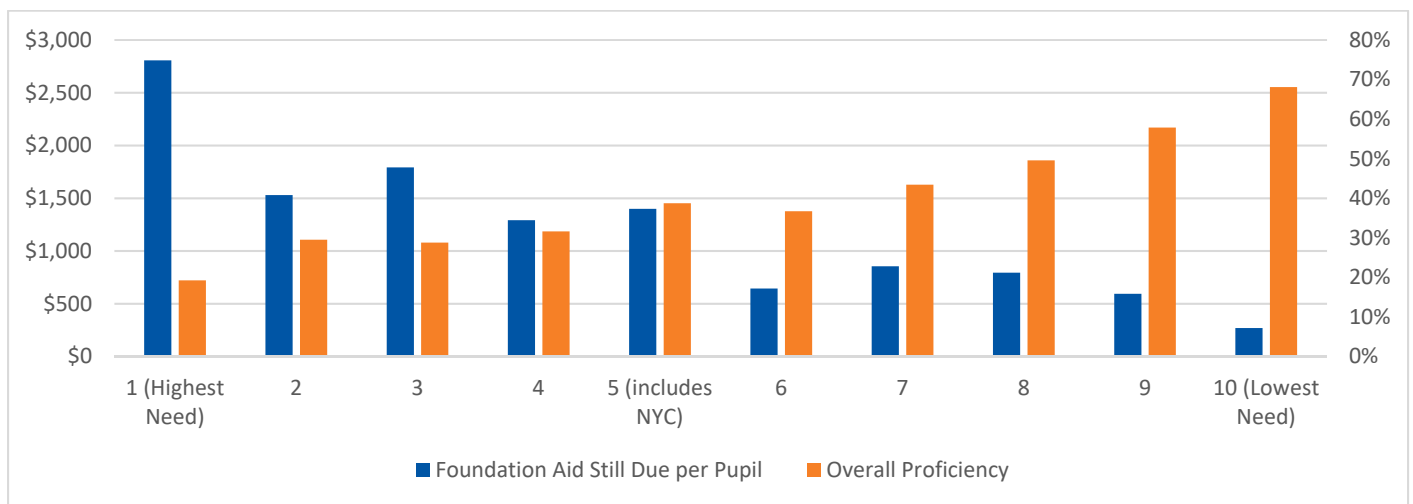
Figure 13 shows ELA and math proficiency rates statewide as well as by need/resource-capacity category. The results highlight the strong influence student need and local resources have on student achievement. As NYSASBO's February 2017 report, "Achievement and Resource Gap Widens: More Students Left Behind," shows, this link is exacerbated by strong inequities in Foundation Aid still due for full implementation of the formula enacted in 2007.

Figure 13. ELA and Math Proficiency by Need/Resource-Capacity Category

	ELA Proficiency Rate	Math Proficiency Rate
Statewide	40%	40%
NYC	41%	38%
Big Four	18%	17%
Urban/Suburban High-Need	23%	22%
Rural High-Need	28%	31%
Average-Need	40%	44%
Low-Need	60%	65%

Figure 14 shows overall proficiency rates (combined ELA and math results) and Foundation Aid still due per pupil by need/resource index deciles. The need/resource-capacity index allows us to examine relationships in greater detail than the five broader need/resource-capacity categories. This comparison shows that while need/resource-capacity categories are an important way of looking at school districts, they also fail to capture the extremes at either end of the need/resource spectrum. Figure 14 shows that when districts are arrayed by need and resource capacity, the neediest districts have the lowest achievement and the most Foundation Aid Still Due and the lowest need districts have the highest achievement and the least Foundation Aid Still Due. This is because the Foundation formula is targeted to need as measured by student poverty and fiscal capacity, but has yet to be fully funded.

Figure 14. Overall Proficiency Rate and Foundation Aid Still Due Per Pupil by Need/Resource-Capacity Index Decile



Economically disadvantaged students have much lower proficiency rates in ELA and math than the general population. Figure 15 shows ELA and math proficiency by need/resource-capacity category for economically disadvantaged students. Statewide, fewer than 30 percent of economically disadvantaged students are proficient on either the ELA or math tests. The relative proficiency rate measure compares the proficiency of economically disadvantaged students to the overall proficiency rates for a given group. For the state as a whole, economically disadvantaged students' 29 percent proficiency rates in ELA and math are a little less than 75 percent of the overall statewide rate. While student need and local

resources are closely linked to student achievement, economically disadvantaged students perform worst in low-need districts when compared to overall low-need student performance.

Figure 15. Economically Disadvantaged Students ELA and Math Proficiency

	ELA Proficiency Rate	Math Proficiency Rate	ELA Relative to Overall Proficiency Rate	Math Relative to Overall Proficiency Rate
Statewide	29%	29%	74%	73%
NYC	34%	31%	83%	82%
Big Four	14%	13%	77%	78%
Urban/Suburban High-Need	19%	19%	82%	83%
Rural High-Need	20%	23%	70%	75%
Average-Need	24%	29%	61%	65%
Low-Need	34%	37%	57%	58%



Figure 16. FRPL Eligibility Rate (Left) and Overall ELA and Math Proficiency Rate (Right) by School District



The two maps shown in figure 16 show the FRPL and overall ELA and math proficiency rates by school district. The darker shading indicates higher levels of economic need/higher levels or proficiency. Comparing the two maps shows an inverse pattern: higher shading in one map generally means lighter shade in the other. The contrast between the two maps indicates that higher levels of economic need reduce student achievement within a district.

Figure 17 shows students with disabilities have low levels of proficiency, particularly in ELA, where only five percent of students with disabilities are proficient. This rate is 13 percent of the overall statewide ELA proficiency rate for all students. Relative to overall need/resource-capacity category proficiency levels, students with disabilities have the most success in Big Five and low-need districts.

Figure 17. Students with Disabilities' ELA and Math Proficiency

	ELA Proficiency Rate	Math Proficiency Rate	ELA Relative to Overall Proficiency Rate	Math Relative to Overall Proficiency Rate
Statewide	9%	11%	23%	28%
NYC	11%	12%	26%	31%
Big Four	3%	5%	19%	28%
Urban/Suburban High-Need	3%	4%	13%	18%
Rural High-Need	3%	5%	12%	16%
Average-Need	6%	9%	14%	20%
Low-Need	15%	21%	25%	33%

It is not surprising that English language learners have significantly lower proficiency rates in ELA than they do in math. Figure 18 shows ELL proficiency rates as well as how they compare with total performance in school districts grouped by need/resource-capacity category. Statewide, only 5 percent of ELLs are proficient in ELA, while 13 percent of ELLs are proficient in math, well short of the statewide proficiency rates of 40 percent in ELA and math. Even with the relatively low proficiency rates in ELA and math, there are still clear differences based on student need and local resources. Being an English learner with economic hardship in a school district with limited ability to raise resources locally is an added educational challenge to overcome.

Figure 18. English Language Learners' ELA and Math Proficiency

	ELA Proficiency Rate	Math Proficiency Rate	ELA Relative to Overall Proficiency Rate	Math Relative to Overall Proficiency Rate
Statewide	5%	13%	13%	33%
NYC	6%	15%	14%	39%
Big Four	2%	4%	12%	24%
Urban/Suburban High-Need	3%	7%	15%	32%
Rural High-Need	3%	6%	10%	20%
Average-Need	4%	11%	9%	25%
Low-Need	8%	27%	14%	42%

Graduation Rates

While English language arts and math proficiency rates discussed above analyze student performance on annual statewide examinations, graduating from high school represents the culmination of K-12 schooling. High school graduation rates have been increasing statewide. For the four-year class of 2016, 80 percent of students graduated, a 6 percent increase over the rate five years earlier. The only group that did not see its graduation rate increase from five years prior are English language learners, whose graduation rate fell from 38 percent to 27 percent. ELL rates will likely remain relatively volatile, since ELL classification changes once a student has attained a certain level of English ability.



Figure 19. Four-Year Graduation Rates by Need/Resource-Capacity Category and Student Group (2016 except where noted)

	All Students	Economically Disadvantaged Students	Students with Disabilities	English Language Learners
Statewide 2016	80%	72%	53%	27%
Statewide 2011	74%	64%	45%	38%
NYC	70%	70%	42%	27%
Big Four	62%	60%	39%	24%
Urban/Suburban High-Need	71%	69%	46%	23%
Rural High-Need	83%	76%	51%	26%
Average-Need	88%	79%	62%	29%
Low-Need	95%	87%	78%	32%

Summary of Student Achievement

While English language arts and math proficiency and high school graduation rates are on generally upward trajectories, their growth is far too slow. Too many students do not graduate and certain sub-groups of students are lagging far behind. Education plays a key role in civic, social, and economic achievement. The state has a responsibility to ensure all students have access to an adequate education. The next section will examine the role of State Aid in fulfilling this promise.

Education holds the promise of a fulfilling and productive life for our students. But the vast majority of schools cannot do this alone. State funding holds the promise of providing a level playing field for students that maximizes student learning and success.

Part Three: State Aid, Demographics, and Student Need

Foundation Aid

The first two sections of this paper showed that students across New York state vary tremendously in their levels of need and that there are clear links between student need and achievement. This section considers the state’s role in ensuring all students have access to an adequate education, regardless of need or local resources. While the above demographic and achievement analysis focused on student need, variations in local resources also significantly affect education. As

shown in figure 20, most public school spending in New York, 55 percent in 2015-16, comes from local revenue. The share of overall spending coming from local sources has been gradually increasing over time.

Figure 20. New York State Education Funding Sources, 2005-06 to 2015-16

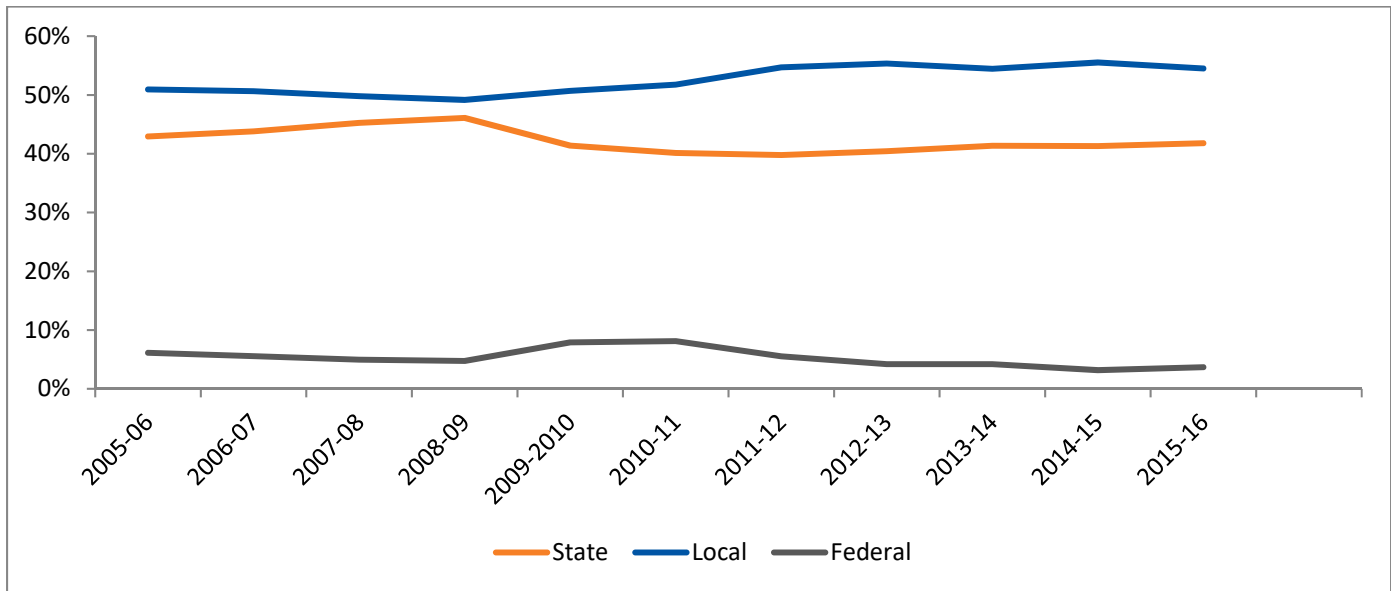


Figure 21 shows the breakdown by need/resource-capacity category of revenue sources as well as spending. Local variation in wealth means that high wealth districts can generate greater resources with lower tax rates, far outpacing the state’s current ability to compensate for this inequality. For example, high-need districts receive 88 percent more in State Aid per pupil than low-need districts, but spend 22 percent less per pupil. Strikingly, low-need districts spend 45 percent more on per pupil teacher salaries than high-need districts do.

Figure 21. Fiscal Snapshot by Need/Resource-Capacity Category, 2015-16

	Spending Per Pupil	Share of Revenue from Local Sources	Share of Revenue from State Sources	Share of Revenue from Federal Sources	Per Pupil Spending on Teacher Salaries
Statewide	\$23,361	55%	42%	4%	\$7,500
NYC	\$24,036	56%	40%	5%	\$7,908
Big Four	\$21,287	19%	72%	9%	\$5,840
Urban/Suburban High-Need	\$21,255	39%	57%	5%	\$6,553
Rural High-Need	\$22,671	28%	67%	5%	\$5,838
Average-Need	\$21,775	55%	43%	2%	\$6,898
Low-Need	\$27,109	78%	21%	1%	\$9,444

Using State Aid to Address Student Need

The first attempts in the United States to use State Aid to address student need focused on poverty. The US Department of Education's 1966 report, "Equality of Educational Opportunity," also known as the Coleman report, clearly demonstrated that students living in poverty cost more to educate than their more affluent peers. However, pinning down the exact difference in cost has vexed education scholars for decades.

Initial funding approaches to economic inequality focused on overcoming stark differences in local resources by emphasizing the notion of equity or fairness, which was operationalized to mean the same amount of resources (or inputs) for all students. This then evolved into the notion of vertical equity which acknowledged that some groups of students needed more time and help to be educated and thus cost more and the state should share in these costs as part of an effort to provide a level playing field or equal educational opportunity for all. But the question remained: How much is enough?

Research developed the concept of educational adequacy: providing resources to allow school districts to meet a given level of achievement for the students under their care. This pairing of resources to desired outcomes was responsive to education clauses of constitutions in states like New York that required an education system that educates all children. Scholars argued that providing such funds would benefit all of society by resulting in more children educated, and fewer individuals reliant on public assistance or in the criminal justice system.

In 2007, the focus on equalizing local fiscal capacity and providing vertical equity to New York State school districts was upgraded to a system that provided educational adequacy. The Campaign for Fiscal Equity lawsuit, involving the New York City school district, had just been decided in favor of the plaintiffs, forcing the Legislature and Governor to address state funding for education. A Foundation Aid formula was enacted that provided state support in relation to a standard of student achievement considered to represent successful school district performance. The state's Foundation Aid formula multiplies a pre-determined per pupil cost of providing an adequate education with a school district's enrollment and then adjusts it based on region, student need, and local resources, with the aim of ensuring a sound, basic education for all students.

The calculation of a district's Foundation Aid can be described as follows:

- $(\text{Foundation Amount} \times \text{Pupil Need Index} \times \text{Regional Cost Index}) - \text{Expected Local Contribution} = \text{Foundation Aid per Pupil}$
- Pupils include the average daily membership of pupils educated by the district, summer school students, students with disabilities weighted at an additional 1.41, and students declassified from special education.
- A district's state foundation aid = Foundation Aid per Pupil x Number of Pupils

The formula was planned to be phased in over four years, but after two years, a prolonged economic recession resulted in freezing the formula and then reducing state aid to school districts. This period of drought lasted from 2010 through 2016 when the cuts placed on school districts were discontinued. A variety of methods have been used to phase in the formula strategically, but the districts with the highest levels of need are the same districts that are the furthest away from a full phase-in. Ten years after the formula was enacted, there remains \$3.6 billion for full implementation of the formula. This section provides an overview of how school aid formulas have addressed the three student groups covered by this paper: economically disadvantaged students, students with disabilities, and English language learners.

Economically Disadvantaged Students

In analyzing the demographics of economic need, we distinguished between poverty and economic hardship. When creating a funding formula to address economic need, policy makers need to choose how narrowly or broadly they want to define it. SAIPE data, which estimate school age childhood poverty rates, are based on the poverty line; in 2017-18, for a family of four, poverty is gross household income at or below \$45,110. Eligibility for free- and reduced- price lunch (FRPL) for students K-6 covers for the same family of four gross household incomes up to \$81,198.

The Foundation Aid formula includes economic need through the calculation of the Pupil Need Index (PNI), which attempts to blend poverty and the broader hardship measure. PNI is then used to determine the adjusted Foundation Aid amount. Part of the PNI is a district's poverty count, in which a district's FRPL rate and its poverty rate are equally weighted. The Poverty count formula is:

- Poverty Count = $(0.65 \times \text{FRPL rate for previous three years}) + (0.65 \times \text{school age poverty rate in 2000 Census})$

However, a failure to use up-to-date data makes the measure much less responsive to current student needs. The FRPL measure is an average of FRPL eligibility for K-6 students over the previous three years. However, the poverty measure does not use the most recent year (or an average of multiple recent years). It is instead based on a school district's school age poverty rate in the 2000 census. It is hard enough to know how to weight economic need, let alone measures of need that are so far out of date that the children they measured are now all adults between 22 and 34 years old.

New York State recognized this problem and asked the State Education Department to study the use of free and reduced-price lunch data and other measures to assess economic disadvantage and make recommendations (see Chapter 54 of the laws of 2016). The Department issued the report and offered a variety of recommendations including replacing the use of Census data with more current Small Area Income and Poverty Estimates and using Direct Certification data instead of Free- and Reduced-Price Lunch eligibility. Lawmakers responded by beginning to use three years of federal SAIPE data instead of the previously used 2000 Census poverty data. In addition, the law gave school districts with a concentration of students in nonpublic schools a choice of the better of three years of federal SAIPE rates or 2000 Census data.

Students with Disabilities

A recent NYSASBO report found that spending on special education grew 43 percent over the eight years for which information was available, far outpacing general education spending, which grew 22 percent. School districts spent about two and a half times more per pupil on special education than they did on general education and the classification rate of students with disabilities was 15 percent. Recognizing that students with disabilities generally cost more to educate, Foundation Aid provides additional aid to school districts by adding a weighted calculation of students with disabilities to the enrollment number multiplied by the calculated per pupil amount. Students with disabilities are included in the average daily membership measure of enrollment, which is supplemented by 1.41 times the number of students with disabilities.

English Language Learners

Foundation Aid covers English language learners in two ways. First, through an addition to the Pupil Need Index (PNI) mentioned above in the section on economic need. The specific formula is as follows:

- Extraordinary Need Count = Poverty Count + (English Language Learner Count x 0.5) + Sparsity Factor

Second, there are additional tiers of aid that supplement the Foundation Aid formula that have been used as part of phasing in to the full funding formula. For 2017-18 aid, Tier A provides additional aid to districts with low levels of resources where ELLs either accounted for at least 2 percent of enrollment in 2016-17 or the number of ELLs increased at least 0.1 percent over the previous school year. ²

The use of tiers illustrates the problem we are describing. The Foundation Formula includes students with disabilities, English learners, and economically disadvantaged students in its calculation, but the way the formula has been implemented does not recognize the full cost of educating these students or changes in student populations. To get around this problem, a special tier was created to recognize increases in English learners. But what about districts whose poverty is increasing? And districts where the number of students with disabilities is growing? The formula is not recognizing these changes and the Tier A aid in 2017-18 is less than what the formula is intended to provide.

Conclusion

New York State embraced the goal of educational adequacy with its enactment of the 2007 Foundation Aid formula but its implementation was stalled by an economic recession. In the intervening years, student need has continued to grow and the state has not fully shared in the costs of this growth. As the economy recovers, New York should renew its commitment to partner with school districts for the education of all students. This will require both attention to the accuracy and quality of measuring student need as well the sufficiency of resources needed to achieve a meaningful education. Only then can education truly unlock the door to a democratic, participatory society in which all have the opportunity to contribute.

This will involve actions in the following areas as recommended by NYSASBO and its members, in a state aid proposal for school year 2017-18.

1. Improve the measurement of student poverty.
2. Equalize aid fully for ability to pay.
3. Keep Foundation Aid unrestricted.
4. Provide categorical aid for the education of English Language Learners until Foundation Aid is fully phased in.
5. Examine the cost of success with at risk students to determine the appropriate weighting for pupil need.
6. Update and improve the cost study to estimate the cost of providing a sound basic education.
7. Dollars for education should result in increased numbers of students that are college and career ready.

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² See the 2017-18 [State Aid Handbook](#) for more details.

Data Sources

NYSASBO calculations and analysis based on the following sources:

New York State Education Department *2017 English Language Arts and Math Test Results*

New York State Education Department *2011-2016 Graduation Rate Database*

New York State Education Department *2016 Report Card Database*

New York State Education Department *2007-2016 Special Education Data Collection, Analysis, and Reporting (SEDCAR) School-Age Student Reports*

New York State Education Department *2015-16 Annual Financial Report (ST-3)*

New York State *2010-2017 enacted budget files*

United State Census *Small Area Income & Poverty Estimates (SAIPE) for School Districts, Counties, and States*

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