

Growing Student Poverty:

Challenges for Achievement and State Funding



New York State
Association of School
Business Officials

Advancing the Business of Education

November 2017

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 is the first in a series focused on need specifically targeted in the state's Foundation Aid formula; this paper examines economic disadvantage, while subsequent papers will analyze students with disabilities and English language learners.

The following questions inspired this project:

- 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, each paper will have three primary sections focused on the student group that is being studied:

- An analysis of state enrollment trends
- An examination of student achievement
- A discussion of state public policy to help school districts meet student needs and the primary state aid mechanisms for funding school districts



Background

Economic disadvantage is the term educators use for children living in or near poverty. Since the [Coleman report](#) in 1966 educators have understood that economic disadvantage is a barrier to success in public schools. Despite much being known¹² about how to remedy the effects of economic disadvantage on student success, educators continue to cite this as one of the biggest problems facing public education.³ Recent research⁴ has shown, for example, that having an effective teacher for three years in a row can eliminate the achievement gap associated with economic disadvantage and that these benefits have positive impacts in adulthood.

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:

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.

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 address student economic need and school age poverty along with 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 as well as economic need changing over time? What do we know about the costs of educating economically disadvantaged students? How can State Aid formulas address economic need 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?



¹ See for example the work of the Center for School Improvement at the University at Albany's School of Education (CASDA) and Cynthia Johnson, *Leading Learning for Children from Poverty*.

² See for example the statement of need in NYSASBO's Foundation Aid Task Force Report (<https://www.nysasbo.org/page/supporting-our-schools-a-study-of-new-york-state-foundation-aid-625.html>)

³ Hanushek and Rivkin, *The Distribution of Teacher Quality and Implications for Policy*.

(<http://hanushek.stanford.edu/sites/default/files/publications/Hanushek+Rivkin%202012%20AnnRevEcon%204.pdf>) and Chetty, Friedman and Rokoff, 2012 (<http://www.nber.org/papers/w17699>)

Part One: Demographic Trends

Overall Enrollment

Statewide enrollment has been declining slightly for years, though small annual declines results in significant cumulative changes. Figures 1 and 2 show this steady decline. The first graph presents overall enrollment, while the second graph shows the cumulative percentage change from 2003-04 enrollment.

Figure 1. Public School Enrollment in the 674 Major School Districts, 2001-02 to 2016-17

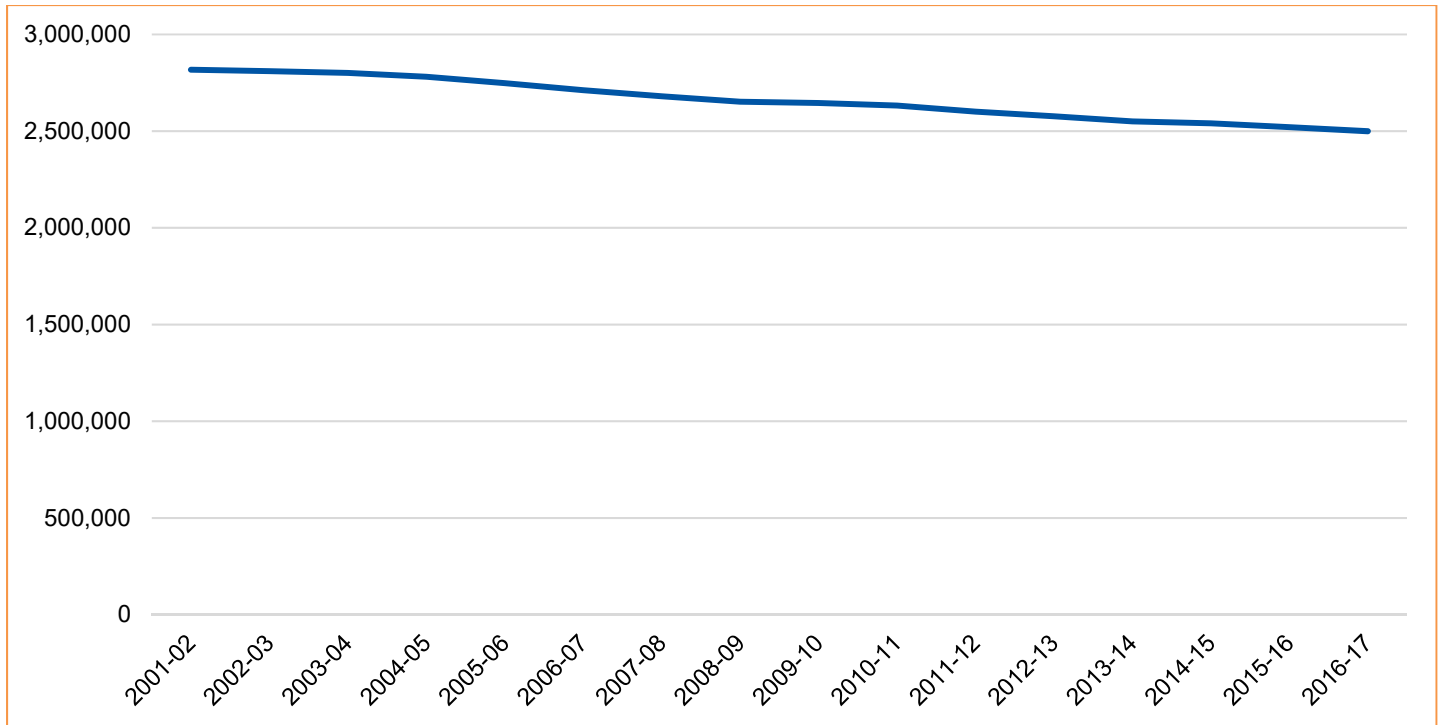
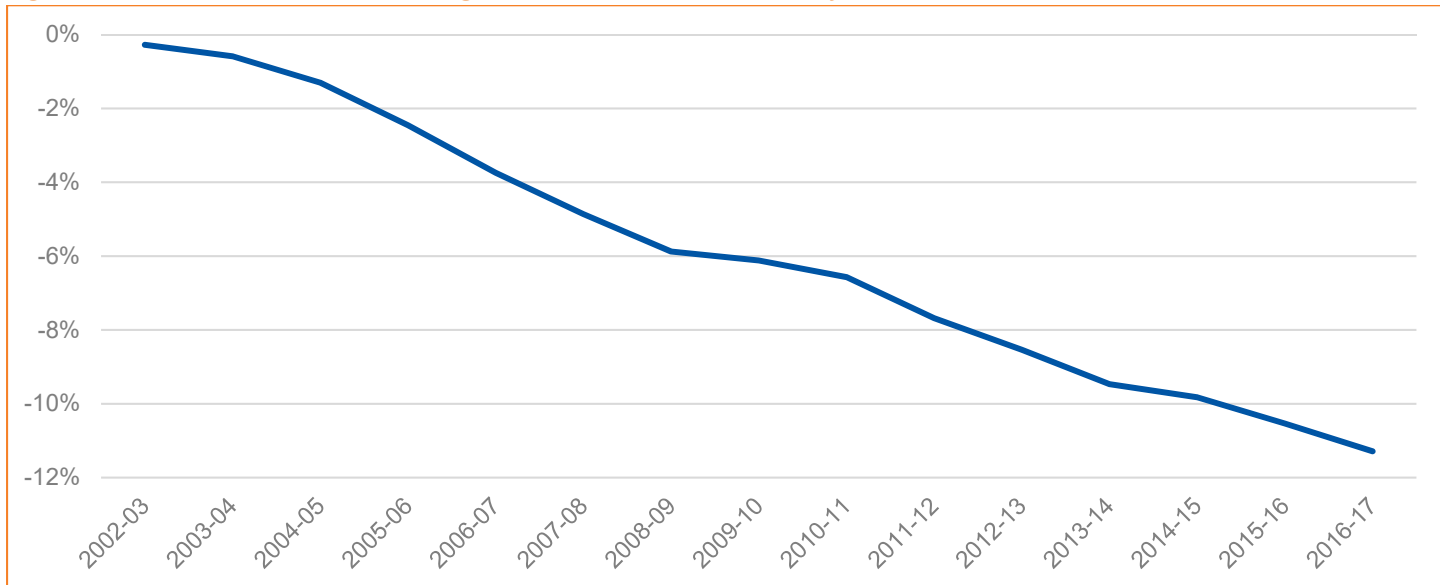


Figure 2. Cumulative Enrollment Change Since 2001-02 in the 674 Major School Districts



However, not all districts have experienced these declines or the same magnitude of loss. As Figure 3 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 3. 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%	68%
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 4, 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

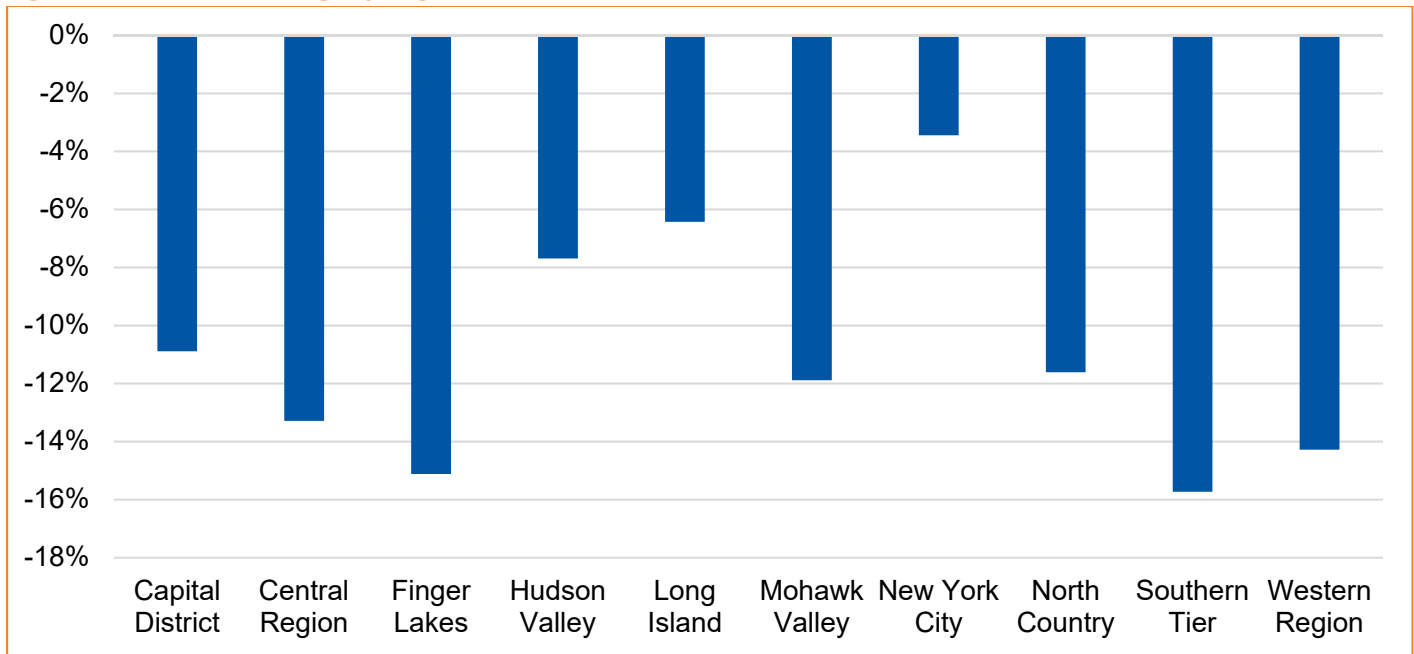
declines greater than 10 percent. Many other school district groups lost enrollment as well. For example, enrollment in average-need school districts, which represent almost 50 percent of school districts in New York State, fell almost 13 percent over a ten-year period. Only high-need urban and suburban school districts gained enrollment, increasing three percent over the past five years and one percent over the last ten years.

Figure 4. 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	-2%	-3%
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%

All regions of the state have experienced significant enrollment declines, though the extent of the change is quite varied. In the regional breakdown shown in figure 5, the largest enrollment decline was in the Southern Tier, which lost 16 percent of enrollment in 10 years; the smallest decline was in New York City, which only had a 3 percent decline.

Figure 5. Enrollment Change by Region, 2006-07 to 2016-17



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 6 shows poverty estimates statewide and by need/resource-capacity category. Poverty rates slightly declined in 2014 and 2015, but are still two 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 6. 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 rate⁵ can be used as a broader measure of economic hardship, which is shown in Figure 7. 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 eight percent.

Figure 7. Economically Disadvantaged Students: Percent of K-6 Students Eligible for Reduced-Price Meals

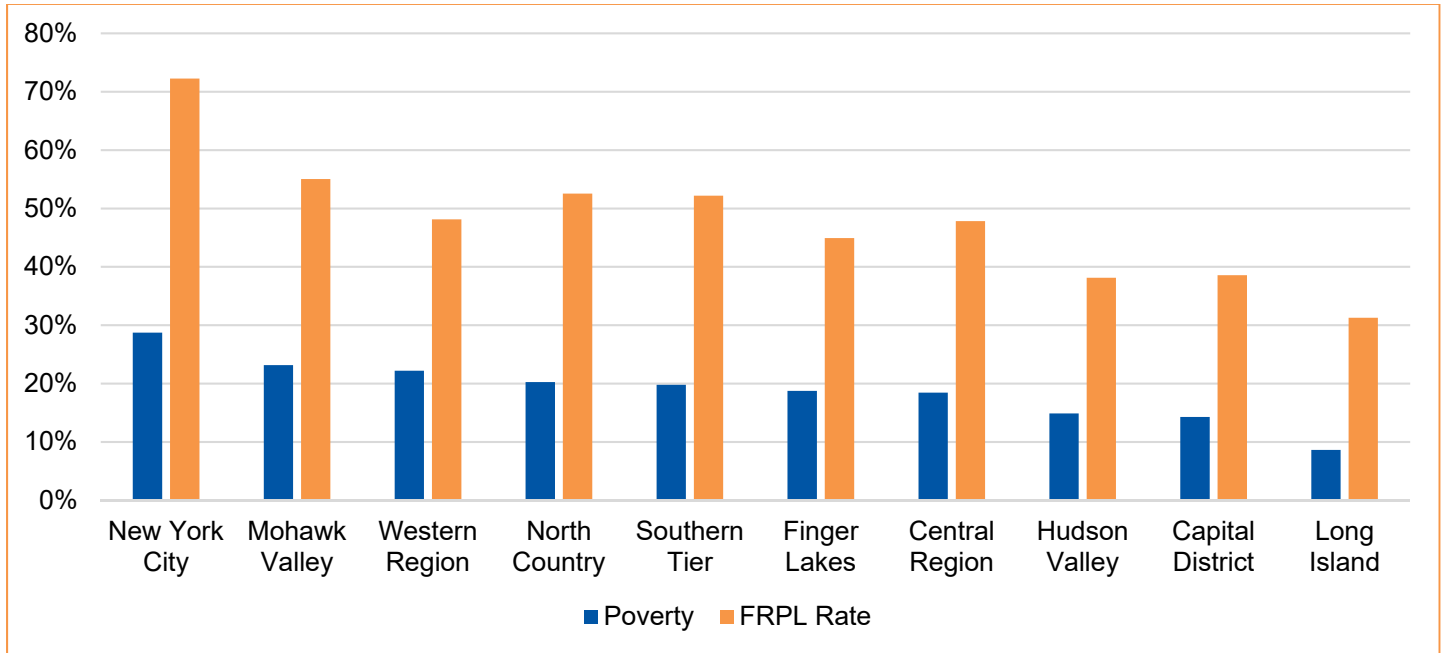
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	CHANGE (2010-11 to 2016-17)
Statewide	50%	50%	51%	52%	52%	52%	53%	3%
NYC	78%	78%	78%	76%	75%	73%	72%	-6%
Big Four	81%	81%	81%	81%	81%	81%	80%	-1%
Urban/Suburban High-Need	65%	66%	68%	71%	72%	73%	73%	8%
Rural High-Need	52%	53%	55%	56%	57%	58%	59%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

Looking at the regional distribution of school age poverty and economic hardship shows significant variation between different state regions. Childhood poverty ranges from 9 percent in Long Island to 29 percent in New York City. Expanding beyond poverty to broader measures of hardship, Long Island again has the lowest percent of its students eligible for free and reduced-price lunches, while New York City has the highest rate, with almost three-fourths of students eligible.



⁵ 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 8. Student Economic Need by Region



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 9 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 9. ELA and Math Proficiency by School District

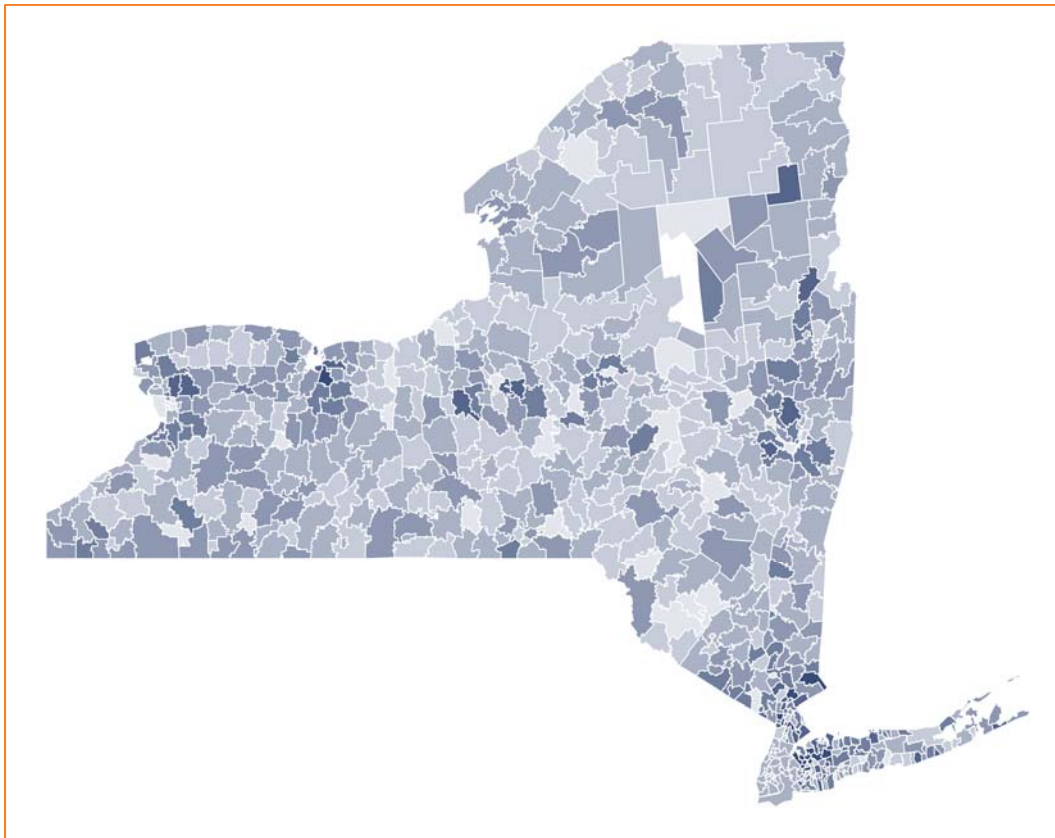


Figure 10 shows ELA and math proficiency rates statewide as well as by need/resource-capacity category of school districts. The results highlight the strong influence student need and local resources have on student achievement. As NYSASBO’s February 2017 report, “Achievement and Resource Gap Widens: 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.

Figures 11 shows overall proficiency rates (combined ELA and math results) and Foundation Aid still due per pupil by need/resource index deciles; while figure 12 compares poverty rates with proficiency rates. The need/resource-capacity index allows us to examine relationships in greater detail than the five broader need/resource-

Figure 10. ELA and Math Proficiency by Need/Resource-Capacity Category

	PROFICIENCY RATE	
	ELA	Math
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%

capacity categories. This comparison shows that while the five 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 11 shows that when districts are arrayed by ten groups of need and resource capacity, the neediest districts have the lowest achievement and the most Foundation Aid Still Due and the least 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 11. Overall Proficiency Rate and Foundation Aid Still Due Per Pupil by Need/Resource-Capacity Index Decile

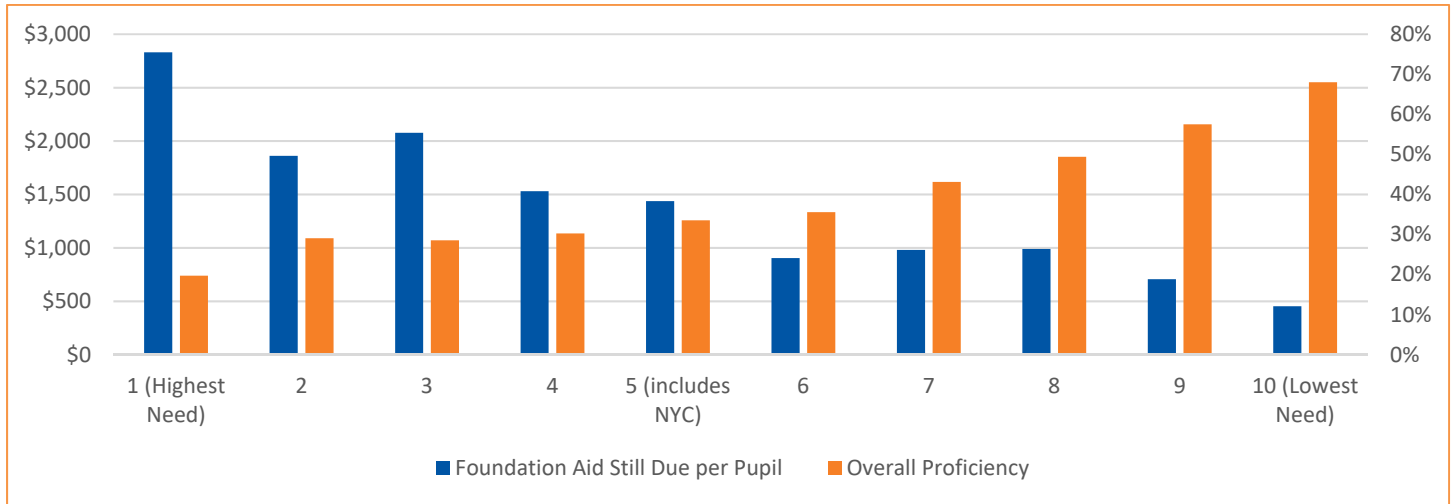
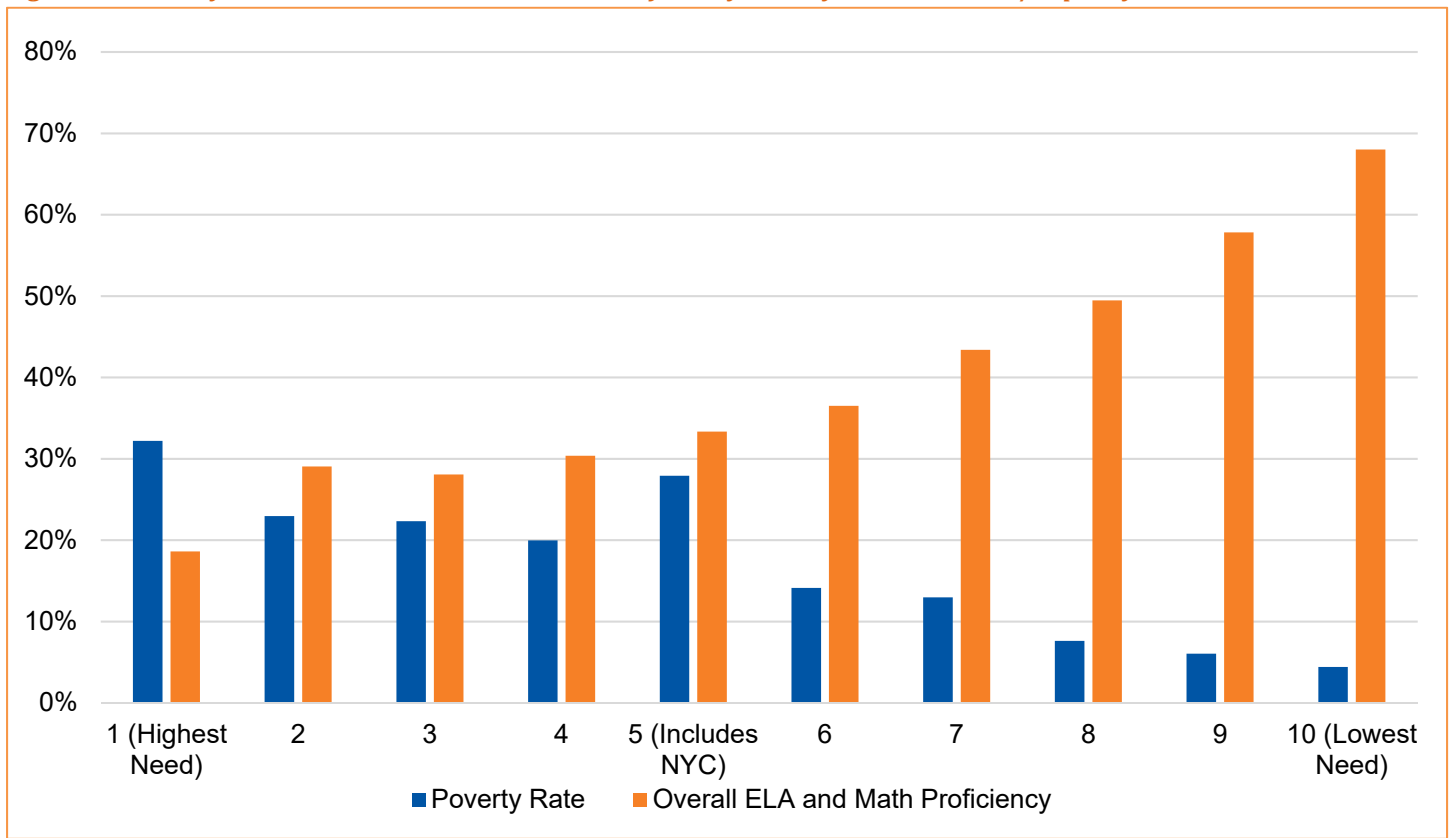


Figure 12. Poverty Rate and Overall Math and ELA Proficiency Rate by Need-Resource/Capacity Index Decile

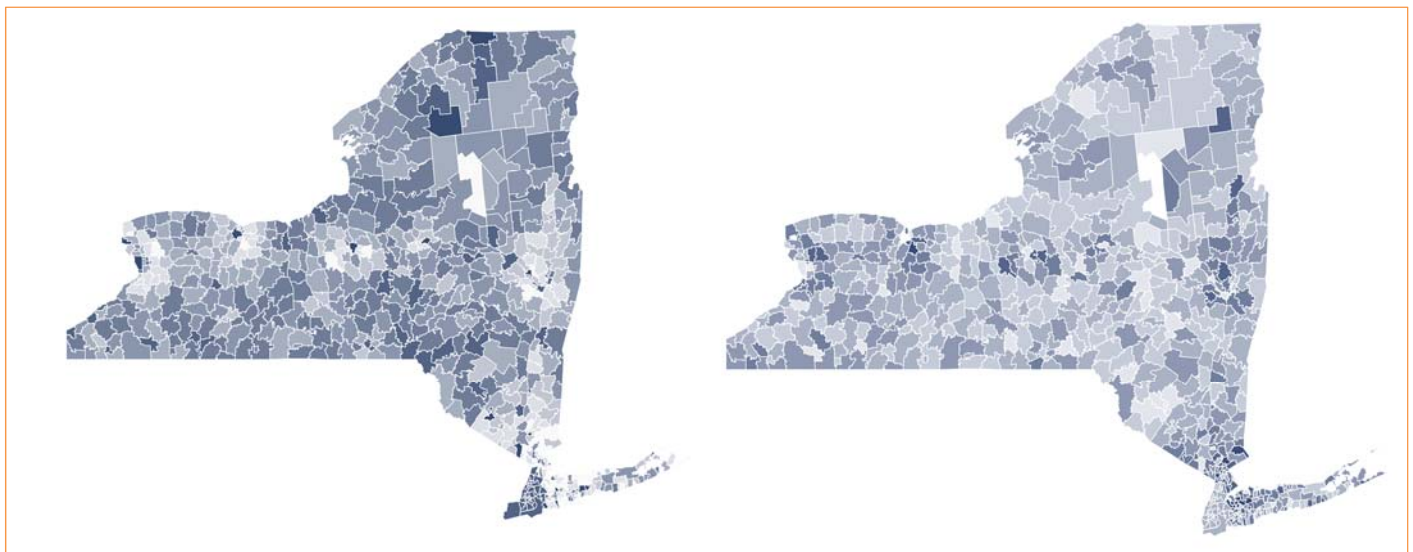


Economically disadvantaged students have much lower proficiency rates in ELA and math than the general population. Figure 13 shows ELA and math proficiency by need/resource-capacity category for economically disadvantaged students. Statewide, fewer than 30 percent of economically disadvantaged students 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. Economically disadvantaged students have their highest absolute levels of proficiency in low-need districts, but when compared with overall student performance in those school districts, they have the lowest relative rate of proficiency.

Figure 13. Economically Disadvantaged Students ELA and Math Proficiency

	PROFICIENCY RATE		RELATIVE TO OVERALL PROFICIENCY RATE	
	ELA	Math	ELA	Math
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%

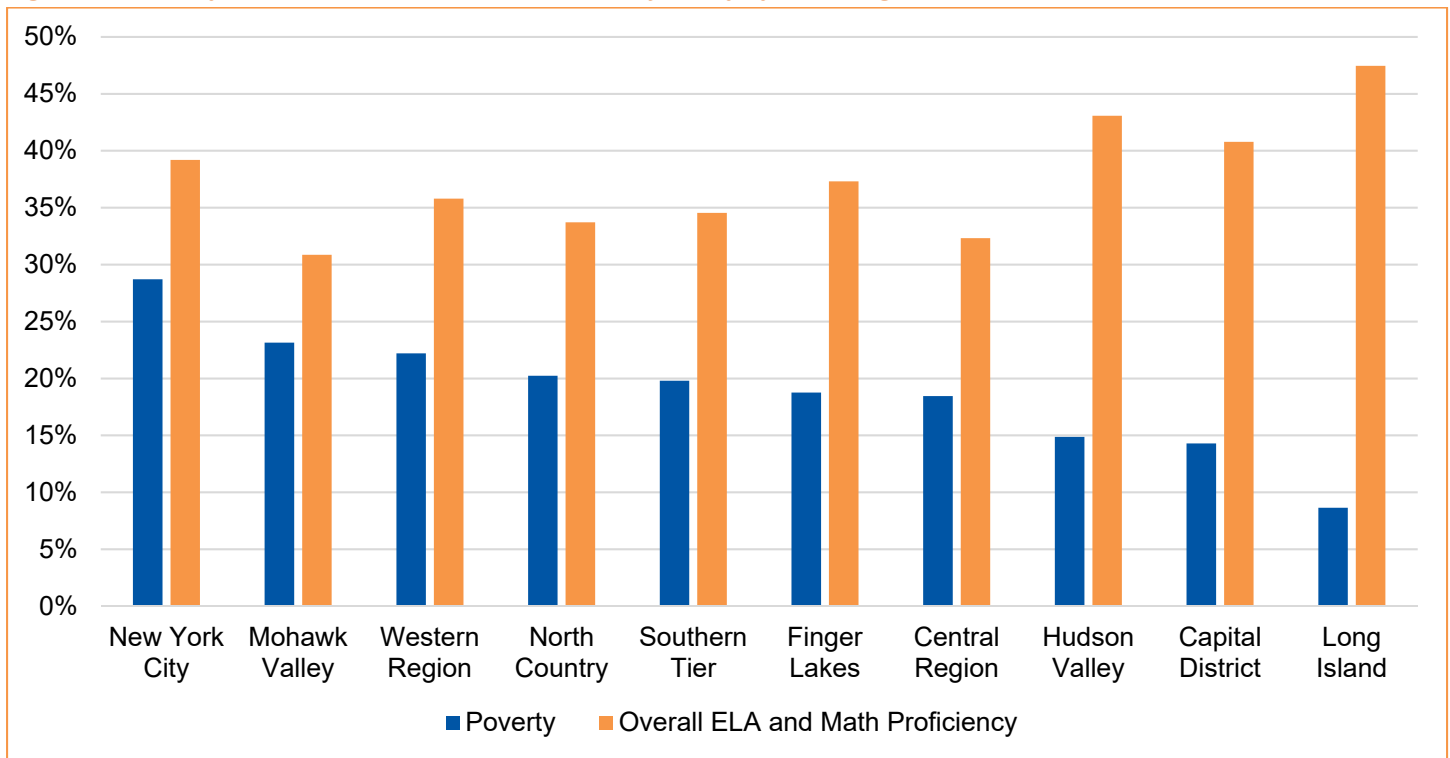
Figure 14. FRPL Eligibility Rate (Left) and Overall ELA and Math Proficiency Rate (Right) by School District



The two maps shown in figure 14 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.

The connection between need/resources and achievement can also be seen at the regional level. Figure 15 shows there is a clear, inverse relationship between school age poverty and combined ELA and math proficiency rates across the state. The lower a region's poverty rate, the higher its proficiency rate. The reverse is also true as the areas with the highest poverty rates have the lowest levels of proficiency, though New York City is somewhat of an outlier with student performance that is better than expected given its high level of poverty.

Figure 15. Poverty Rate and Overall ELA and Math Proficiency by State Region



There are 393 school districts in New York that have yet to have their Foundation Aid fully phased-in. Figures 16 and 17 show the regional breakdown of the \$3.6 billion in Foundation Aid still due to school districts. New York City has the largest amount of Foundation Aid still due in both absolute and per pupil amounts, while the North Country has the lowest.

Figure 16. Foundation Aid Still Due per Pupil by Region

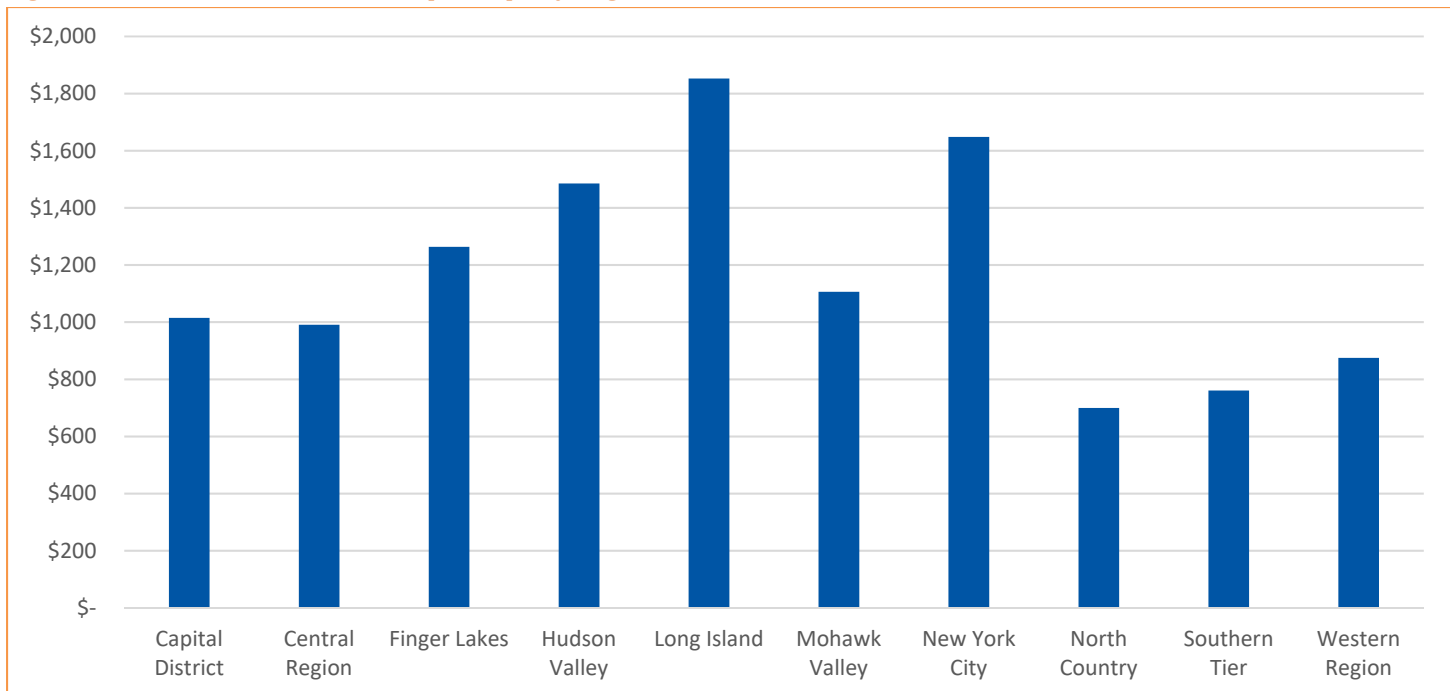


Figure 17. Total Foundation Aid Still Due by Region

Region	Foundation Aid Still Due
Capital District	\$141,553,787
Central Region	\$109,101,015
Finger Lakes	\$202,028,432
Hudson Valley	\$484,076,431
Long Island	\$806,449,987
Mohawk Valley	\$74,597,925
New York City	\$1,557,949,509
North Country	\$40,045,343
Southern Tier	\$62,696,524
Western Region	\$127,064,826

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 5 years earlier. Figure 18 includes graduation rates by NRC categories for all students and students with economic need.

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 economic hardship poses significant challenges for students and school districts. 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.

Figure 18. Four-Year Graduation Rates by Need/Resource-Capacity Category and Student Group (2016 except where noted)

	ALL STUDENTS	ECONOMICALLY DISADVANTAGED STUDENTS
Statewide 2016	80%	72%
Statewide 2011	74%	64%
NYC	70%	70%
Big Four	62%	60%
Urban/Suburban High-Need	71%	69%
Rural High-Need	83%	76%
Average-Need	88%	79%
Low-Need	95%	87%

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

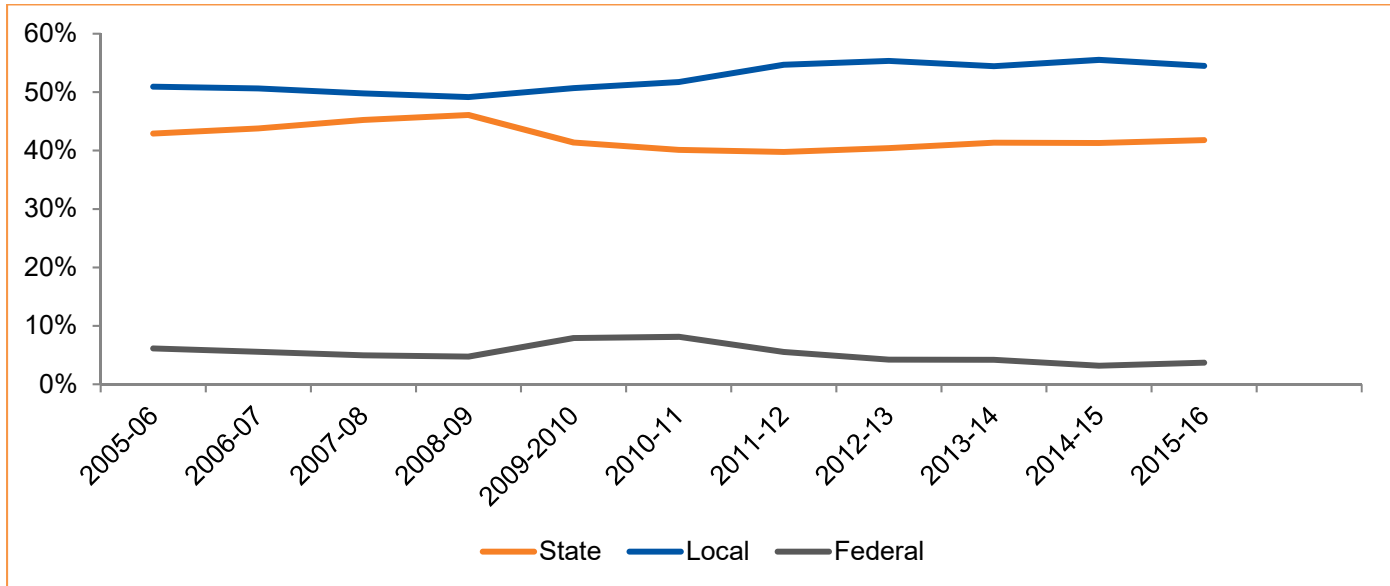


Figure 20 shows the breakdown by need/resource-capacity category of revenue sources as well as spending. Local variation in wealth means that high wealth districts can generate greater resources with lower tax rates, far outpacing the state’s current ability to compensate for this inequality. For example, 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 20. 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 economically disadvantaged students.

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 x FRPL rate for previous three years) + (0.65 x 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.

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.

Acknowledgments

This paper was written by Dr. Andrew Van Alstyne and Dr. Deborah Cunningham with assistance from Tom Tatun under the general direction of Michael Borges. The authors recognize the contributions from colleagues Kate Skahen, Comptroller, and Jackie Leroy, Director of ENL, World Languages and Bilingual Education, both of the Syracuse City School district. The authors are grateful for feedback provided by Dr. John Yinger, Trustee Professor of Economic and Public Administration and International Affairs, Syracuse University.

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*



A publication of the New York State Association of School Business Officials.

© 2017 NYSASBO. All Rights Reserved.

For use of NYSASBO data or analyses, please use the following source citation:

SOURCE: New York State Association of School Business Officials, Albany, NY 12205, November 2017, www.nysasbo.org

Contact: Michael J. Borges, Executive Director
New York State Association of School Business Officials (NYSASBO)
453 New Kanner Road, Albany, NY 12205 | 518-434-2281 | www.nysasbo.org