

# Educating Students with Disabilities

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Demographic changes, costs, and state support  
*A NYSASBO Analysis*



New York State  
Association of School  
Business Officials

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# Introduction

## The Issue

Since the early 1900s, New York has partnered with local school districts to educate the state's children, including students with disabilities. State Aid to school districts is meant to ensure that stark differences in local resources and student need are not barriers to providing a sound basic education for all children. 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, focused on students with disabilities, is the second in a series examining need specifically targeted in the state's Foundation Aid formula: economic disadvantage, students with disabilities, and English language learners.

Part one of this paper analyzes demographic trends of students with disabilities. The second section focuses on student achievement and outcomes. The final section discusses current funding approaches and concludes with policy recommendations.

NYSED has estimated that 80 percent of students with disabilities can be successfully educated with appropriate supports, but currently New York falls far short of that goal. This report shows that academic performance for students with disabilities is too low across the board and is highly stratified by levels of student poverty and local fiscal capacity.

## Background

Two federal court cases in the early 1970s, *Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania* (1971) and *Mills v. Board of Education of District of Columbia* (1972), affirmed state responsibility for educating students with disabilities, regardless of the level of disability or a family's economic means. In 1975, Congress passed the Education for All Handicapped Children Act (EHA), which codified principles that still guide special education, including:

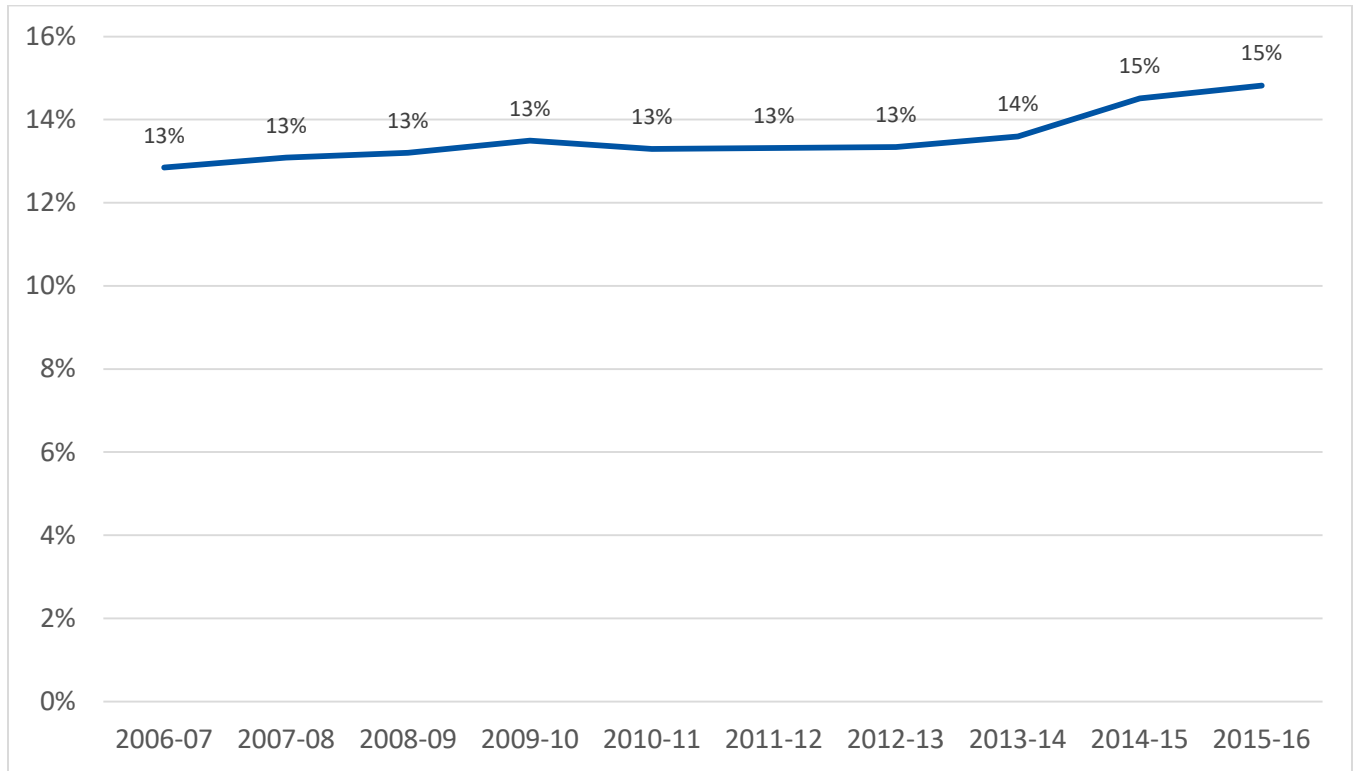
- A free appropriate public education (FAPE)
- Least restrictive environment (LRE)
- Individualized education program (IEP)
- Due process for parents and guardians
- Multiple unbiased assessments
- Parental involvement

This new law provided much needed focus on the needs of students with disabilities but only provided about 40 percent of the resources to do so, leaving the burden of funding for states and localities. In 1990, EHA was amended and became the Individuals with Disabilities Education Act (IDEA). The 2004 version of IDEA didn't provide additional resources to states but dovetailed with the recently passed No Child Left Behind Act to promote "accountability" in education policy. Specifically, IDEA now emphasizes student assessments and graduation rates, as well as requiring more rigorous qualifications for special education teachers. The Every Student Succeeds Act (ESSA), the 2015 follow up to No Child Left Behind, requires schools adopt challenging academic standards for most students with disabilities, with the exception of the most severe cases of cognitive disabilities. Federal and state policy currently align in including students with disabilities in general classrooms to the greatest extent possible. The following section explores changing demographics of students with disabilities in New York schools, before turning to student achievement.

## Part One: Demographic Trends

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 for school districts was 13 percent. Figure 1 shows how the SWD rate has been slowly increasing over time. For school districts with enrollments of at least 2,000, the share of students with disabilities ranged from 4 to 21 percent.

**Figure 1. Overall Students with Disabilities Rate**



**Figure 2. Students with Disabilities Rate by Need/Resource-Capacity Category, 2015-16**

While students with disabilities are present in nearly all schools, regardless of geographic or social characteristics of the local community, they are not equally distributed among school districts. Figure 2 presents students with disabilities rates by need/resource-capacity category of school districts; these rates are correlated with levels of student need and local fiscal capacity, and rates are approximately 40 percent higher in the Big Five city school districts than in the more affluent low-need school districts.

Region/NRC	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 3. Students with Disabilities Classification Distribution**

Classification	Percent of SWDs 2005-06	Percent of SWDs 2015-16
Autism	3%	7%
Emotional Disturbance	10%	5%
Learning Disability	43%	36%
Multiple Disabilities	6%	3%
Other Health Impairment	12%	16%
Speech or Language Impairment	21%	27%
All Other Classifications	5%	4%

Figure 3 shows the classification distribution for SWDs in 2005-06 and 2015-16. In both years, learning disabilities and speech or language impairments were by far the two most frequent diagnoses. Over the course of the decade, the number of students diagnosed with autism more than doubled.

Analyzing classifications of students with disabilities across need/resource-capacity categories provides more detail on disparities in diagnoses and rates.

Figure 4 shows the distribution of the two

diagnoses with the most variation among NRCs, learning disabilities and speech or language impairments.<sup>1</sup> Differences in diagnoses for speech or language impairment stem from differences between New York City and school districts in the rest of the state, while diagnoses for learning disabilities appear to be linked with whether a district is high, average, or low-need.

The differences in these two classifications are associated with differences in student need and district fiscal capacity, which become clearer when examining these variations in greater detail by looking at need/resource index (NRI) deciles.<sup>2</sup> The Need/Resource Index is a measure that combines student need and local fiscal capacity. When looking at students with disabilities by NRI decile, the link between need and classification becomes even more pronounced. Figure 5 shows overall students with disabilities rates and learning disability rates by NRI decile. Students with disabilities account for more than 19 percent of enrollment in the highest need decile; for the lowest need decile, the SWD rate is 13 percent. Learning disabilities account for more than one-third of all disability classifications. In addition to being the most frequent classification, learning disability rates are also the most closely correlated with overall SWD rates by NRI decile. In the highest need decile, seven percent of all students are classified as having a learning disability, while in the lowest need decile the rate is only four percent.

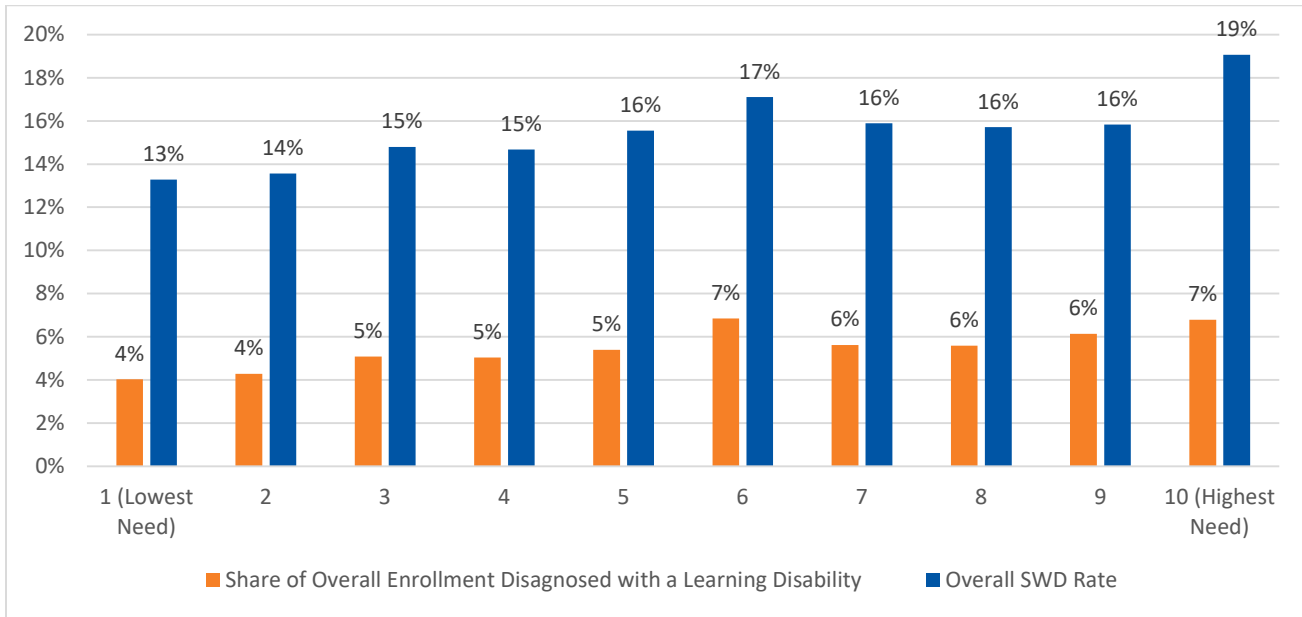
**Figure 4. Share of Overall Enrollment Diagnosed with a Learning Disability or Speech or Language Impairment by NRC, 2015-16**

Region	Share of Overall Enrollment Diagnosed with a Learning Disability	Share of Overall Enrollment Diagnosed with a Speech or Language Impairment
Statewide	5%	3%
NYC	9%	8%
Big Four	7%	5%
Urban/Suburban High-Need	6%	4%
Rural High-Need	7%	3%
Average-Need	5%	3%
Low-Need	4%	3%

<sup>1</sup> These are the only two diagnoses with a standard deviation between NRCs greater than one percentage point.

<sup>2</sup> All NRI decile analyses in this paper excludes New York City.

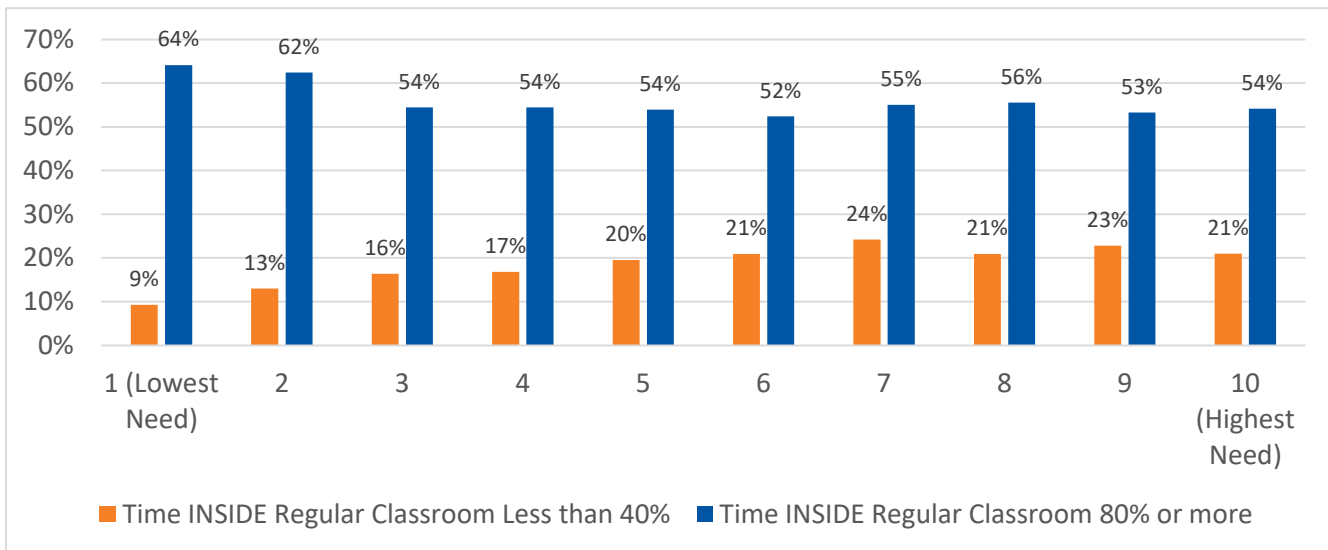
**Figure 5. Overall Students with Disabilities and Learning Disability Rates by NRI Decile, 2015-16**



There are many possible causes of the sharp disparities in learning disability rates. Potential explanations include lead exposure, which is heavily stratified by economics and race and ethnicity, and the use of classification as a punitive measure for student behavior.

Current education policy emphasizes maximizing time in general education classrooms for students with disabilities. Breaking down time in regular classrooms again shows variation by levels of need. Figure 6 shows the percentage of student with disabilities who spend more than 80 percent or less than 40 percent of their time in regular classrooms. While the highest need and average need deciles have generally similar rates for each category, the two lowest need deciles clearly diverge from the others. These disparities may explain some of the achievement gaps covered in the next section of this paper.

**Figure 6. SWD Time Inside Regular Classroom by NRI Decile, 2014-15**





## 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 have taken annual English language arts (ELA) and math exams. Figure 7 shows students with disabilities have low levels of proficiency, particularly in ELA, where only nine percent of students with disabilities are proficient. Because proficiency rates for students with disabilities are so low, they exert a significant pull on the overall statewide proficiency rates, which are six to seven percentage points higher for non-SWDs.

**Figure 7. Students with Disabilities' ELA and Math Proficiency, 2017**

Proficiency Rate						
	SWD ELA	SWD Math	Overall ELA	Overall Math	Non-SWD ELA	Non-SWD Math
<b>Statewide</b>	9%	11%	39%	40%	46%	46%
<b>NYC</b>	11%	12%	41%	38%	49%	45%
<b>Big Four</b>	3%	5%	18%	17%	21%	20%
<b>Urban/Suburban High-Need</b>	3%	4%	23%	22%	27%	26%
<b>Rural High-Need</b>	3%	5%	28%	31%	33%	37%
<b>Average-Need</b>	6%	9%	40%	44%	45%	49%
<b>Low-Need</b>	15%	21%	60%	65%	65%	69%

The demographic section of this paper showed students with disabilities in the lowest need/resource-index deciles are more likely to follow current best practices of maximizing general classroom inclusion than students with disabilities in other NRI deciles. Figure 8 shows ELA and math proficiency rates as well as the rates of SWDs spending less than 40 percent or more than 80 percent of their time in general education classrooms.

**Figure 8. ELA and Math Proficiency Rates (2017) and Time Inside Regular Classroom (2014-15), by NRI Decile**

NRI Decile	SWD ELA Proficiency Rate	SWD Math Proficiency Rate	Time Inside Regular Classroom Less than 40%	Time Inside Regular Classroom 80% or more
1 (Lowest Need)	19%	25%	9%	64%
2	13%	19%	13%	62%
3	8%	13%	16%	54%
4	6%	9%	17%	54%
5	4%	7%	20%	54%
6	5%	6%	21%	52%
7	5%	6%	24%	55%
8	4%	5%	21%	56%
9	4%	5%	23%	53%
10 (Highest Need)	3%	4%	21%	54%

## 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 as shown in Figure 9. For the four-year class of 2016, 80 percent of students graduated, a six percentage point increase over five years earlier. The graduation rate for students with disabilities saw an even larger increase, but the current graduation rate of 53 percent is still far too low. Low-need districts have the highest graduation rates for all students and students with disabilities, while Big Four districts have the lowest. The success of students with disabilities in low and average-need school districts compared with high-need districts emphasizes the large impact of student poverty and district fiscal capacity on the successful achievement of students with disabilities. Figure 10 includes rates for NRI deciles, showing the pattern already discussed, where as many as eight of ten students with disabilities are proficient in the lowest need school districts.

**Figure 9. Four-Year Graduation Rates by Need/Resource Capacity Category and Student Group (2016 except where noted)**

	All Students	Students with Disabilities
<b>Statewide 2016</b>	80%	53%
<b>Statewide 2011</b>	74%	45%
<b>NYC</b>	70%	42%
<b>Big Four</b>	62%	39%
<b>Urban/Suburban High-Need</b>	71%	46%
<b>Rural High-Need</b>	83%	51%
<b>Average-Need</b>	88%	62%
<b>Low-Need</b>	95%	78%

**Figure 10. Four-Year Graduation Rates by NRI Deciles, 2016**

NRI Decile	SWD Graduation Rate	Overall Graduation Rate
<b>1 (Lowest Need)</b>	81%	96%
<b>2</b>	74%	94%
<b>3</b>	68%	90%
<b>4</b>	64%	88%
<b>5</b>	59%	86%
<b>6</b>	60%	83%
<b>7</b>	52%	80%
<b>8</b>	49%	78%
<b>9</b>	52%	80%
<b>10 (Highest Need)</b>	40%	67%

## Part Three: Special Education Spending and Policy Recommendations

Currently special education accounts for 30 percent of spending in New York schools, while students with disabilities make up 15 percent of overall enrollment. Analyzing spending by need/resource-capacity categories and NRI deciles, as presented in in Figures 11 and 12, shows a close relationship between per pupil spending, student need, and local resources. Low-need school districts spend \$39,975 per pupil on special education, which is 127% of statewide per pupil special education spending. In the lowest need NRI decile, per pupil special education spending is \$43,635, which is 139% of the statewide average

**Figure 11. Per Pupil General and Special Education Spending by NRC, 2015-16**

Region/NRC	General Education Spending Per Pupil	General Education Spending Compared with Statewide General Education Spending	Special Education Spending per Special Education Pupil	Special Education Spending Compared with Statewide Special Education Spending
<b>Statewide</b>	\$12,615	-	\$31,423	-
<b>NYC</b>	\$13,500	107%	\$30,635	97%
<b>Big Four</b>	\$11,589	92%	\$24,592	78%
<b>Urban/Suburban High-Need</b>	\$11,431	91%	\$30,757	98%
<b>Rural High-Need</b>	\$10,712	85%	\$27,286	87%
<b>Average-Need</b>	\$11,230	89%	\$31,577	100%
<b>Low-Need</b>	\$14,657	116%	\$39,775	127%

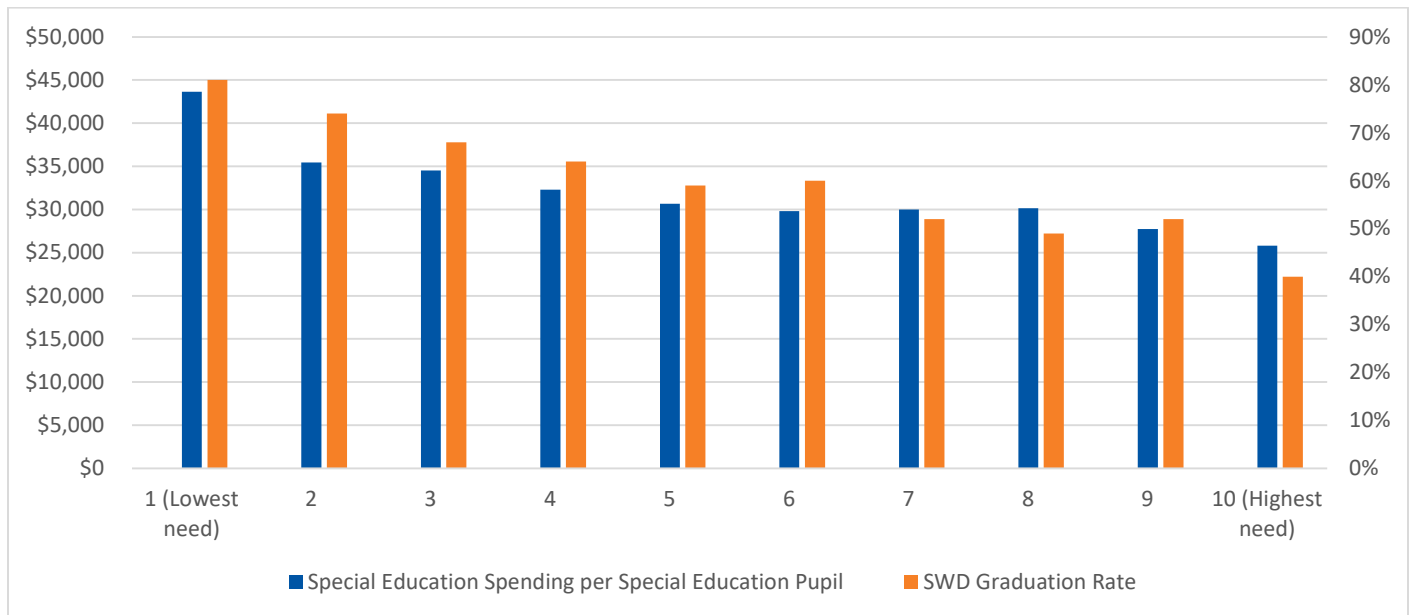
**Figure 12. Per Pupil General and Special Education Spending by NRI Decile, 2015-16**

NRI Decile	General Education Spending Per Pupil	General Education Spending Compared with Statewide General Education Spending	Special Education Spending per Special Education Pupil	Special Education Spending Compared with Statewide Special Education Spending
<b>1 (Lowest Need)</b>	\$15,753	125%	\$43,635	139%
<b>2</b>	\$12,693	101%	\$35,439	113%
<b>3</b>	\$12,374	98%	\$34,540	110%
<b>4</b>	\$11,656	92%	\$32,299	103%
<b>5</b>	\$10,788	86%	\$30,667	98%
<b>6</b>	\$11,502	91%	\$29,796	95%
<b>7</b>	\$11,296	90%	\$29,989	95%
<b>8</b>	\$11,205	89%	\$30,132	96%
<b>9</b>	\$10,575	84%	\$27,731	88%
<b>10 (Highest Need)</b>	\$10,913	87%	\$25,823	82%



Student achievement and per pupil spending are closely linked. The chart in figure 13 shows both per pupil spending and graduation rates for students with disabilities. The large gaps in per pupil spending match up with similarly large gaps in four-year graduation rates.

**Figure 13. Per Pupil Spending and Graduation Rate for Students with Disabilities by NRI Decile, 2015-16**



NYSASBO’s current State Aid proposal offers a number of proposals that would help school districts strengthen education for students with disabilities. While the analysis in this paper has shown clear links between per pupil spending and student achievement, current state funding formulas use pupil weightings for students with disabilities that are not disconnected from proficiency goals. Updating cost-studies of schools that have successfully educated students with disabilities would better align State Aid with student need. At NYSASBO’s recent School Business Management Workshop, Syracuse University Professor John Yinger presented research showing funding for students with severe disabilities should be 6.7 percent higher to achieve proficiency. In addition, NYSASBO’s [Foundation Aid Task Force](#) has recommended improving measures of poverty and updating the cost study to determine the Foundation Amount in successful school districts. These actions would continue to drive state funding to areas where student needs are greatest and local capacity is weakest.

As student need continues to rise, it becomes even more important that the state commit to fully funding its Foundation Aid formula, which is currently \$4.2 billion short. Ensuring all students, regardless of need or local resources, receive an adequate education is a vital part of New York’s future.

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## 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*

*November 15, 2017 New York State Current Law School Aid Database*

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