

Let's start with the following comparison:

Take two low-wealth districts in the state, the Mount Vernon and the Port-Chester Rye School Districts in Westchester County. The average per pupil spending in Mount Vernon is \$27,642, yet more than half of the district's schools are in the bottom 20 percent academically of all schools in the state. The average per pupil spending in Port-Chester Rye is \$19,941 — less than the New York State average — and yet the district does not have one school that is in the bottom 20 percent academically.

The examples above beg a simple question: are schools within districts getting the resources they need?

The link between education funding levels and student outcomes is a matter of continuing debate, including in New York State. State education aid in New York follows a progressive formula that targets more aid to lower-income, higher-need school districts, yet these districts continue to dominate lists of the state's lowest performing schools.

The Center for Education Pipeline Systems Change at the Rockefeller Institute of Government examines various aspects of the education system to pinpoint problems and to identify and grow programs that are improving student outcomes and success.¹ In this brief, education spending and academic performance in New York are examined.

The state's more than 4,000 public schools are ranked by academic performance, and measures of those schools' fiscal capacity and wealth and poverty measures are presented. District per pupil spending is highlighted.

While district-level data effectively highlight funding disparities among districts across the state, such a presentation unfortunately does not allow for a complete picture, particularly in large districts that have a number of schools. For instance, the New York City Department of Education has more than 1,600 public schools in its district and the city of Buffalo Public Schools has more than fifty public schools. District-level spending data — the only per pupil spending data currently made available by the New York State Education Department (NYSED) — does not allow an effective analysis of how such districts, especially the state's larger urban districts,

allocate resources among their individual schools. Fortunately, the recently adopted federal Every Student

State education aid in New York follows a progressive formula that targets more aid to lower-income, higher-need school districts, yet these districts continue to dominate lists of the state's lowest performing schools.

In this brief, we:

- Examine education spending and academic performance in New York.
- Rank the state's more than 4,000 public schools by academic performance.
- Present measures of those schools' fiscal capacity and wealth and poverty measures.
- Highlight district per pupil spending.

¹ The Center is currently undertaking a multistate analysis of teacher demand and supply, identifying local staffing needs. See, for example, Thomas Gais, Jim Malatras, Alan Wagner, and Young Joo Park, "Phase One Analysis of the Teacher Workforce in South Dakota," By the Numbers Brief, The Nelson A. Rockefeller Institute of Government, November 2017, http://www.rockinst.org/pdf/education/2017-11-14-Teacher_Workforce_SD.PDF.

Succeeds Act (ESSA) now requires that, in addition to district-level data, school-level per pupil spending must be reported.² Per pupil spending data by school is critical in an analysis of links to academic performance, and the Rockefeller Institute's Center for Education Pipeline Systems Change is prepared to undertake such an analysis when these data become available.

Still, the broader district-level spending data present interesting initial findings that are worth exploring. Those findings are below.

Overview of Spending on K-12 Education in New York State

In 2017-18, there are 733 school districts in New York, and within those 733 districts are 4,447 individual traditional public schools.³ New York makes a considerable investment in K-12 education, spending more than \$26 billion annually on its public schools, serving more than 2.6 million students and employing more than 210,000 teachers. New York spends more per pupil than any other state in the nation, at more than \$21,000 per student — 86 percent higher than the national average of \$11,392.⁴ Nationwide, per pupil spending for K-12 education increased 7.5 percent from 2010-15, while in New York the average per pupil

FIGURE 1. K-12 Education Funding by Government



² See Every Student Succeeds Act State and Local Report Cards Non-Regulatory Guidance, Appendix B: Per-Pupil Expenditures Example — All Expenditures Reported at the School Level (Washington, DC: U.S. Department of Education, January 2017), https://www2.ed.gov/policy/elsec/leg/essa/essastatereportcard.pdf.

TABLE 1A. Per Pupil Spending by State

ABLE 1A. Per Pupil Spendi	ng by State
STATE	2015 TOTAL
New York	\$21,205.58
Alaska	\$20,172.49
District of Columbia	\$19,395.65
Connecticut	\$18,377.29
New Jersey	\$18,235.43
Vermont	\$18,039.10
Wyoming	\$16,054.69
Massachusetts	\$15,592.10
Rhode Island	\$15,179.15
Pennsylvania	\$14,716.69
New Hampshire	\$14,696.76
Maryland	\$14,191.96
Delaware	\$14,120.43
Illinois	\$13,755.33
North Dakota	\$13,320.08
Maine	\$13,257.18
Hawaii	\$12,854.72
Minnesota	\$11,948.66
Nebraska	\$11,945.58
Ohio	\$11,636.80
Michigan	\$11,482.37
United States	\$11,391.83
Wisconsin	\$11,374.58
West Virginia	\$11,358.56
Virginia	\$11,236.84
Montana	\$11,028.29
Louisiana	\$11,009.53
lowa	\$10,943.96
Washington	\$10,734.75
California	\$10,466.53
Oregon	\$10,442.09
Missouri	\$10,146.56
Kansas	\$10,039.87
South Carolina	\$9,953.13
New Mexico	\$9,751.65
Arkansas	\$9,693.80
Indiana	\$9,686.79
Kentucky	\$9,630.42
Georgia	\$9,427.28
Colorado	\$9,245.03
Alabama	\$9,127.93
South Dakota	\$8,937.02
Florida	\$8,881.14
Texas	\$8,861.31
Tennessee	\$8,726.40
North Carolina	\$8,687.22
Nevada	\$8,614.77
Mississippi	\$8,455.67
Oklahoma	\$8,082.21
Arizona	\$7,489.50
Idaho	\$6,923.09
Utah	\$6,574.55
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SOURCE: United States Census Bureau

³ See NYSED school district data at "New York State Education at a Glance," n.d., https://data.nysed.gov/. This does not include the 315 public charter schools in the state.

⁴ The Empire Center for Public Policy has a good primer on why New York has the highest spending. See *NY's stratospheric school spending* (Albany: Empire Center for Public Policy, July 2017), https://www.empirecenter.org/publications/nys-stratospheric-school-spending/.

TABLE 1B. Per Pupil Spending by Percentage Changes

STATE	2010 TOTAL	2015 TOTAL	% CHANGE
Alaska	\$15,782.50	\$20,172.49	27.8%
Connecticut	\$14,906.37	\$18,377.29	23.3%
North Dakota	\$10,991.34	\$13,320.08	21.2%
New Hampshire	\$12,383.36	\$14,696.76	18.7%
Illinois	\$11,634.15	\$13,755.33	18.2%
Vermont	\$15,273.53	\$18,039.10	18.1%
Massachusetts	\$13,589.86	\$15,592.10	14.7%
Delaware	\$12,382.70	\$14,120.43	14.0%
New York	\$18,618.24	\$21,205.58	13.9%
Washington	\$9,452.03	\$10,734.75	13.6%
Pennsylvania	\$12,994.93	\$14,716.69	13.3%
lowa	\$9,763.31	\$10,943.96	12.1%
Minnesota	\$10,684.58	\$11,948.66	11.9%
California	\$9,374.71	\$10,466.53	11.6%
Nebraska	\$10,733.91	\$11,945.58	11.3%
Rhode Island	\$13,698.62	\$15,179.15	10.8%
Hawaii	\$11,753.94	\$12,854.72	9.4%
South Carolina	\$9,142.70	\$9,953.13	8.9%
Oregon	\$9,623.63	\$10,442.09	8.5%
Utah	\$6,063.66	\$6,574.55	8.4%
New Jersey	\$16,841.15	\$18,235.43	8.3%
Tennessee	\$8,064.69	\$8,726.40	8.2%
Maine	\$12,258.62	\$13,257.18	8.1%
Michigan	\$10,643.58	\$11,482.37	7.9%
Kentucky	\$8,947.95	\$9,630.42	7.6%
United States	\$10,600.06	\$11,391.83	7.5%
Virginia	\$10,596.64	\$11,236.84	6.0%
Arkansas	\$9,143.21	\$9,693.80	6.0%
Wyoming	\$15,169.17	\$16,054.69	5.8%
Ohio	\$11,030.33	\$11,636.80	5.5%
Missouri	\$9,633.84	\$10,146.56	5.3%
Montana	\$10,497.24	\$11,028.29	5.1%
Colorado	\$8,852.78	\$9,245.03	4.4%
Mississippi	\$8,119.03	\$8,455.67	4.1%
New Mexico	\$9,383.61	\$9,751.65	3.9%
D.C.	\$18,666.85	\$19,395.65	3.9%
Louisiana	\$10,638.27	\$11,009.53	3.5%
Kansas	\$9,714.61	\$10,039.87	3.3%
North Carolina	\$8,408.76	\$8,687.22	3.3%
Maryland	\$13,738.32	\$14,191.96 \$0.127.02	3.3%
Alabama Oklahoma	\$8,880.74 \$7,895.72	\$9,127.93 \$8,082.21	2.8% 2.4%
Florida	\$8,741.32	\$8,881.14	1.6%
Nevada	\$8,483.06	\$8,614.77	1.6%
Texas	\$8,745.66	\$8,861.31	1.3%
South Dakota	\$8,858.24	\$8,937.02	0.9%
Indiana	\$9,611.18	\$9,686.79	0.8%
Georgia	\$9,394.03	\$9,427.28	0.4%
Wisconsin	\$11,364.40	\$11,374.58	0.1%
West Virginia	\$11,527.25	\$11,358.56	-1.5%
Idaho	\$7,105.81	\$6,923.09	-2.6%
Arizona	\$7,848.08	\$7,489.50	-4.6%
i I	,	,	

spending increased nearly 14 percent over this same time period. New York per student spending growth in this recent span ranked ninth of all states nationwide — only Alaska, Connecticut, North Dakota, New Hampshire, Illinois, Vermont, Massachusetts, and Delaware grew per pupil school spending at a faster rate.

How the State Education Funding Pie Is Divided

According to the latest comprehensive dataset available from the NYSED,⁵ more than \$65 billion is spent on New York's public schools annually, of which nearly 42 percent comes from the state.⁶ The remainder comes primarily from the local property tax and federal aid.⁷

Per Pupil Spending Variation among New York State School Districts

While the average per pupil spending in New York State is more than \$21,000, the variation in spending levels among school districts is significant. Overall, compared against the census data, 279 districts spend more per pupil than the state's average.

⁵ We used the NYSED's "Fiscal Profile Reporting System Annual Financial Report (Form ST-3)" Masterfile for 2015-16, http://www.oms.nysed.gov/faru/Profiles/profiles_cover.html.

⁶ The State's STAR program — direct property tax relief to homeowners — is counted as state spending on education given that a significant portion of local property taxes paid go towards funding public education.

⁷ We will be exploring local property taxes and the effect of the state tax cap in future policy reports.

State Spending and District Wealth

The State Education Department groups the 733 school districts into Need Resource Capacity (NRC) categories, designed measure to the overall wealth of each district and thus its ability to support school spending with local fiscal resources. There are six categories: High Need New York City; High Need Large City Districts (i.e., Buffalo, Rochester, Syracuse, and Yonkers); High Need Urban-

TABLE 2. Highest and Lowest Per Pupil Spending by District

TOP SPENDING DISTRICTS	AMOUNT	1	LOWEST SPENDING DISTRICT	S AMOUNT
Fire Island	\$99,224	(General Brown	\$13,599
Kiryas Joel	\$79,439		Glens Falls Common	\$14,281
Bridgehampton	\$61,539	\	Victor	\$14,499
Newcomb	\$57,403	į f	-rontier	\$14,955
Indian Lake	\$53,066		_ancaster	\$15,467
Long Lake	\$51,138	\	Watertown	\$15,668
Quogue	\$49,340	; N	Mechanicville	\$15,886
Tuxedo	\$47,867	; (Jtica	\$16,058
Shelter Island	\$47,691	į F	Portville	\$16,219
Pocantico Hill	\$47,363	F	Royalton Hartl	\$16,303

SOURCE: New York State Education Department

TABLE 3. 2017-18 Enacted Budget Spending Increase on K-12 Education

CH	ANGE FROM 2016-17 (\$ in millions)	% OF TOTAL 2017-18 SPENDING INCREASE	
High Need	+ \$717.5	72.09%	
Average Need	+ \$224.4	22.54%	
Low Need	+ \$53.5	5.37%	
State Total	+ \$995.4	100.00%	

SOURCE: State Education Department Computer Runs of April 10, 2017

Suburban Districts; High Need Rural Districts; Average Need Districts; and Low Need Districts.⁸ (At times in this report during a general discussion of findings, we will combine the High Need Districts categories into one.)

In 2017-18, the state added nearly \$1 billion in education spending. More than 70 percent of this education funding increase was targeted to the highest needs school districts: more than \$717 million of the total formula-based school aid increase of \$995 million, or more than 72 percent of the total, went to the lowest wealth schools in the state.⁹

Defining Low-Performing Schools within Districts

In order to attempt to measure potential funding disparity issues within districts we created a definition of low-performing schools as a way to compare to available spending and poverty indicators. Using the latest academic performance data available from NYSED (2015-16 school year), we separate schools into two categories: (1) for elementary schools, those with a combined 3-8 ELA and math proficiency in the lowest 20 percent of all district schools statewide and for high schools, those with graduation rates in the bottom 20 percent of schools across the state; and (2) all other

⁸ See New York State Education Department, "Need/Resource Capacity Categories," n.d., http://www.p12.nysed.gov/irs/accountability/2011-12/NeedResourceCapacityIndex.pdf.

⁹ The Citizens Budget Commission has a good primer on how to address some potential equity issues within the current state funding formula. See "A Better Foundation Aid Formula: Funding Sound Basic Education with Only Modest Added Cost," December 12, 2016, https://cbcny.org/research/better-foundation-aid-formula.

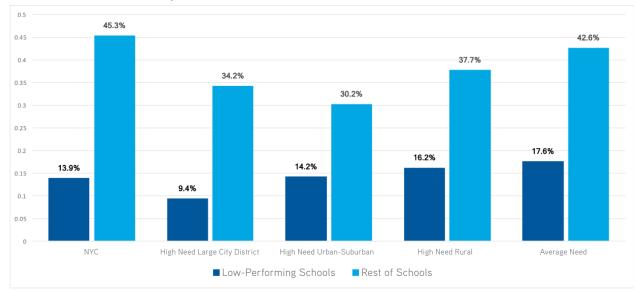


FIGURE 2. ELA and Math Comparison between Low-Performing Schools and Rest of Schools

The Every Student Succeeds Act is promising because it will provide apples-to-apples school spending data across the country. But, this provision will not be implemented for several years. The recent proposal in the state executive budget requires real-time data before the district makes decisions. Together, both have the promise of providing better data that will help inform the decision-making process for lawmakers.

district schools.¹⁰ We refer to the bottom 20 percent as low-performing throughout the report.

Under our definition of low-performing, Figure 2 serves as a backdrop to illustrate the overall academic performance of these schools against all other schools. Within specific need resource capacity categories, the gap between low-performing schools

¹⁰ NYSED has defined poor performing schools in a number of ways including: Focus Schools, Failing Schools, and Priority Schools. Each has different metrics used to define poor performing. In our analysis here, we have excluded special act schools, certain transfer high schools, schools for students with severe disabilities, public charter schools, schools with fewer than five grades 3-8 test takers, and high schools with less than twenty-five test takers. In the 2015-16 school year, there were 4,469 schools within districts statewide — 1,627 in New York City and 2,842 in the rest of the state. After the noted exclusions, this analysis includes 4,127 schools — 1,458 in New York City and 2,669 in the rest of the state — approximately 92 percent of all schools statewide.

TABLE 4. Districts with Low-Performing Schools in New York State

COLINEY	SCHOOL	NEEDS RESOURCE	2015-16 FISCAL	NUMBER	NO. OF	% OF
COUNTY	DISTRICT	CAPACITY CATEGORY	PROFILE EXPENDITURE/PUPIL	OF SCHOOLS	SCHOOLS IN BOTTOM 20%	SCHOOLS IN BOTTOM 20%
	• • •					
Albany	Albany	High Need Urban Suburban	\$19,984	16	12	75%
	Green Island	Average Need	\$22,719	1	1	100%
	Watervliet	High Need Urban Suburban	\$19,287	2	1	50%
Allegany	Friendship	High Need Rural	\$25,213	1	1	100%
Broome	Binghamton	High Need Urban Suburban	\$19,785	10	8	80%
Cattaraugus	Salamanca	High Need Rural	\$22,186	3	1	33%
Cayuga	Auburn	Average Need	\$17,644	7	2	29%
Chautauqua	Brocton	High Need Rural	\$27,677	2	2	100%
	Cassadaga Valley	High Need Rural	\$22,424	2	1	50%
	Dunkirk	High Need Urban Suburban	\$19,717	6	1	17%
	Jamestown	High Need Urban Suburban	\$16,802	9	4	44%
Chemung	Elmira	High Need Urban Suburban	\$19,814	7	5	71%
Chenango	Afton	High Need Rural	\$28,171	2	1	50%
<u> </u>	Georgetown-South Otselic	High Need Rural	\$28,629	1	1	100%
	Unadilla Valley	High Need Rural	\$27,459	2	1	50%
Clinton	Chazy	Average Need	\$20,880	2	1	50%
Columbia	Hudson	High Need Rural	\$27,054	2	1	50%
Cortland	Cincinnatus	High Need Rural	\$23,592	3	2	67%
Corttanu	Cortland	High Need Urban Suburban	\$19,038	6	1	17%
		High Need Rural		2	1	
Dutahaaa	Mcgraw Dorle		\$21,278		1	50%
Dutchess	Hyde Park	Average Need	\$23,791	6	<u>'</u>	17%
	Northeast	Average Need	\$25,315	3	1	33%
	Poughkeepsie	High Need Urban Suburban	\$21,848	6	6	100%
	Wappingers	Average Need	\$19,101	15	1	7%
Erie	Buffalo	High Need Large Cities	\$20,914	56	41	73%
	Cheektowaga	Average Need	\$18,765	4	2	50%
	Evans-Brant (Lake Shore)	Average Need	\$21,320	5	1	20%
	Lackawanna	High Need Urban Suburban	\$18,960	3	2	67%
-ranklin	Brushton-Moira	High Need Rural	\$22,792	2	1	50%
	Salmon River	High Need Rural	\$25,226	4	3	75%
	Tupper Lake	Average Need	\$21,884	2	1	50%
ulton	Gloversville	High Need Rural	\$22,185	6	3	50%
Greene	Cairo-Durham	Average Need	\$21,868	3	1	33%
	Catskill	High Need Rural	\$25,841	3	1	33%
	Hunter-Tannersville	Average Need	\$35,400	2	1	50%
Herkimer	Bridgewater-West Winfield	High Need Rural	\$21,770	3	1	33%
	Dolgeville	High Need Rural	\$18,738	3	1	33%
	Little Falls	High Need Rural	\$19,688	3	1	33%
Jefferson	Alexandria	Average Need	\$21,080	2	1	50%
2011013011	Watertown	High Need Urban Suburban	\$15,668	8	1	
owic			\$21,703	2	<u> </u>	13%
Lewis	Harrisville	Average Need			<u> </u>	50%
Livingston	Mt Morris	High Need Rural	\$25,775	2	2	100%
Monroe	Rochester	High Need Large Cities	\$22,820	50	48	96%
Montgomery	Amsterdam	High Need Rural	\$17,766	6	3	50%
	Oppenheim-Ephratah- St. Johnsville		\$20,253	2	1	50%
Nassau	Freeport	High Need Urban Suburban	\$22,314	7	1	14%
	Hempstead	High Need Urban Suburban	\$22,498	8	5	63%
	Oceanside	Low Need	\$24,853	9	1	11%
	Roosevelt	High Need Urban Suburban	\$26,329	5	4	80%
	Westbury	High Need Urban Suburban	\$23,188	5	1	20%
					<u> </u>	
New York City	New York City	High Need New York City	\$24 036	1458	518	36%
New York City Niagara	New York City Niagara Falls	High Need New York City High Need Urban Suburban	\$24,036 \$18,585	1,458 11	518 5	36% 45%

COUNTY	SCHOOL	NEEDS RESOURCE	2015-16 FISCAL	NUMBER	NO. OF	% OF
COUNTY	DISTRICT	CAPACITY CATEGORY	PROFILE EXPENDITURE/PUPIL	OF SCHOOLS	SCHOOLS IN BOTTOM 20%	SCHOOLS IN BOTTOM 20
Oneida	Utica	High Need Urban Suburban	\$16,058	13	7	54%
Onondaga	North Syracuse	Average Need	\$17,252	10	2	20%
	Syracuse	High Need Large Cities	\$19,883	30	27	90%
Ontario	Geneva	High Need Urban Suburban	\$24,942	3	1	33%
Orange	Middletown	High Need Urban Suburban	\$21,415	6	1	17%
	Newburgh	High Need Urban Suburban	\$21,982	12	4	33%
Orleans	Holley	Average Need	\$21,947	2	1	50%
	Medina	High Need Rural	\$22,014	3	1	33%
Oswego	Altmar-Parish- Williamstown	High Need Rural	\$24,670	2	1	50%
	Hannibal	High Need Rural	\$22,370	3	1	33%
Rensselaer	Berlin	Average Need	\$24,616	3	1	33%
renoceaci	Rensselaer	High Need Urban Suburban	\$19,859	2	1	50%
	Troy	High Need Urban Suburban	\$20,277	7	3	43%
Rockland	East Ramapo (Spring Valley)	High Need Urban Suburban	\$26,533	13	10	77%
Saratoga	Edinburg Comn	Average Need	\$23,042	1	1	100%
Schenectady	Schenectady	High Need Urban Suburban	\$18,382	15	12	80%
Schoharie	Gilboa-Conesville	Average Need	\$30,541	1	1	100%
	Jefferson	High Need Rural	\$24,973	1	1	100%
Schuyler	Odessa-Montour	High Need Rural	\$21,726	2	1	50%
Seneca	South Seneca	High Need Rural	\$31,561	2	1	50%
St. Lawrence	Edwards-Knox	High Need Rural	\$21,251	2	1	50%
	Gouverneur	High Need Rural	\$20,101	3	1	33%
	Massena	High Need Rural	\$18,242	5		20%
Steuben	Corning	Average Need	\$24,319	9		11%
Oteuben	Hornell	High Need Rural	\$19,872	4	2	50%
	Jasper-Troupsburg	High Need Rural	\$19,666 \$19,666	2	<u> </u>	50%
Suffolk	Amityville	High Need Urban Suburban	\$30,216	4	2	50%
Juliotk	Brentwood	High Need Urban Suburban				50%
	Central Islip	High Need Urban Suburban	\$19,074	7	7	29%
	Copiague	High Need Urban Suburban	\$26,740	•	2	
	Patchogue-		\$21,557	6		17%
	Medford	Average Need	\$22,357	11	4	36%
	Riverhead	Average Need	\$23,140	7	2	29%
	South Country	Average Need	\$26,702	6	1	17%
	Wyandanch	High Need Urban Suburban	\$25,068	3	2	67%
Sullivan	Fallsburg	High Need Rural	\$29,064	2	1	50%
	Liberty	High Need Rural	\$28,767	2	1	50%
	Monticello	High Need Rural	\$28,534	5	3	60%
	Tri-Valley	Average Need	\$29,146	2	1	50%
Tioga	Candor	Average Need	\$21,372	2	2	100%
	Newark Valley	Average Need	\$20,403	3	1	33%
Tompkins	Ithaca	Average Need	\$21,817	12	1	8%
	Newfield	High Need Rural	\$22,933	3	1	33%
Ulster	Ellenville	High Need Rural	\$26,403	3	2	67%
	Kingston	High Need Urban Suburban	\$24,952	10	2	20%
Warren	Glens Falls Common	High Need Urban Suburban	\$14,281	1	1	100%
	Hadley-Luzerne	Average Need	\$22,928	2	1	50%
Washington	Argyle	Average Need	\$21,985	2	1	50%
	Hudson Falls	High Need Rural	\$19,525	4	1	25%
	Whitehall	Average Need	\$18,884	2	1	50%
Westchester	Mt Vernon	High Need Urban Suburban	\$27,642	16	9	56%
	Peekskill	High Need Urban Suburban	\$24,769	4	2	50%
	Yonkers	High Need Large Cities	\$21,103	39	18	46%
Yates	Dundee	High Need Rural	\$23,652	2		50%

and the rest of the schools is pronounced. In other words, these schools lag significantly behind other schools in the state academically.

While we know the overall socioeconomic make-up of the schools within the districts, performance on standardized assessments, and where the schools fall in academic performance overall, we do not really know how much federal, state, and local funding flow to each individual school in any comprehensive way — that information does not exist in a comprehensive form and thus the desired accuracy of measuring the impact of funding on individual schools is currently unavailable. As a proxy, however, wealth measures such as the participation in the federal free and reduced priced

lunch program can be used to examine the state's more than 4,000 public schools within its 700-plus districts through this lens.

FIGURE 3. Distribution of Low-Performing Schools, by Need Category

Distribution of the Low-Performing Schools in New York

There are 866 schools that are low-performing as defined — falling into the bottom 20 percent statewide in combined math and ELA proficiency. These low-performing schools can be found in every borough in New York City and across forty-nine other counties.

Of the 866 low-performing schools, an overwhelming 95.6 percent (828) are in High Need districts; 4.3 percent (37) are in Average Need districts; and just one is in a Low Need district.¹¹ Of the 828 low-performing schools in High Need districts, New York City has 518, or 62.6 percent of the total.

New York City is home to nearly two-thirds of all low-performing, High Needs schools in the state included in this analysis. More than a third of all the public schools in New York City are low-performing under our definition.

And as Figure 4 shows, there are a number of low-performing schools in every borough in the City.

However, a closer look reveals that there

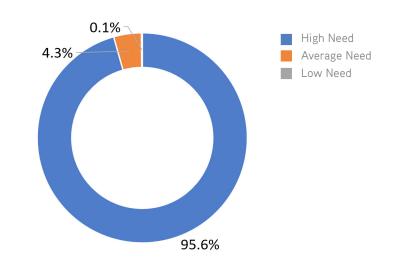


FIGURE 4. Distribution of Low-Performing Schools in New York City

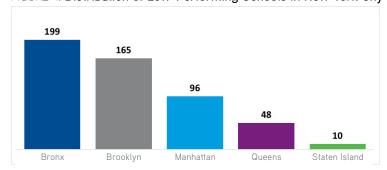
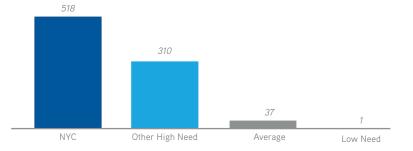


FIGURE 5. Distribution of Low-Performing Schools by District Need Resource Category



¹¹ Note, however, some of these schools had high opt-out rates which could skew the results.

are significant issues in New York's upstate cities as well. In Rochester, forty-eight of the city school district's fifty total schools are low-performing — or percent of the entire city school district. In Syracuse, twentyseven of thirty schools are lowperforming — or 90 percent of the entire district. Twelve out of the fifteen schools in the Schenectady City School District are lowperforming — or 80 percent of the entire district. Twelve out of the sixteen schools - 75 percent are low-performing in the City School District of Albany. Fortyone of Buffalo's fifty-six schools — 73 percent — are low-performing.

In seven one-school districts, that single school falls in the bottom 20 percent of proficiency statewide: Glens Falls Common, Jefferson, Friendship, Georgetown-South Otselic, Green Island, Edinburg, and Gilboa-Conesville. In four other districts that have between two and six schools, all schools are low-performing: Mount Morris, Brocton, Candor, and Poughkeepsie (the largest of these).

The thirty-seven low-performing schools in Average Needs districts are spread out among twenty-nine districts, with the most (four) found in the Patchogue-Medford School District in Suffolk County — 36 percent of the district. The one low-performing school in a Low Need district is

Oceanside in Nassau - 11 percent of the district.

Average Per Student Spending in the Low-Performing Schools

The availability of only district-level per pupil spending data, rather than school-specific spending data, allows only a rough snapshot of the relationship between spending and academic performance.

FIGURE 6. Average Spending Per Pupil in Districts with Low-Performing Schools

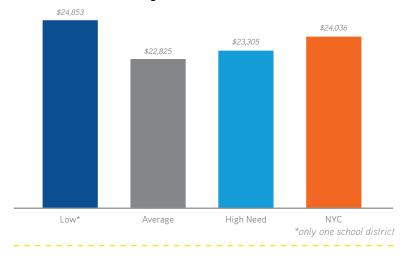
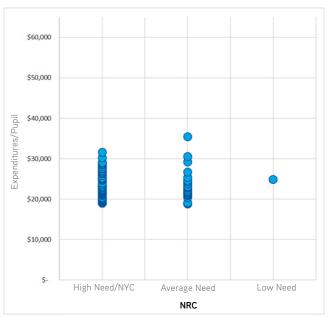


FIGURE 7. Range of District Average Per Pupil Spending for Bottom 20 Percent Schools by Need Resource Category



There is little variation in the average per pupil spending of districts by resource need category that have low-performing schools. The Low Need district average was highest at \$24,853 per pupil; Average Need districts spent \$22,825, while High Need districts (rural, urban, suburban, city combined) spent \$23,305, and New York City spent \$24,036.

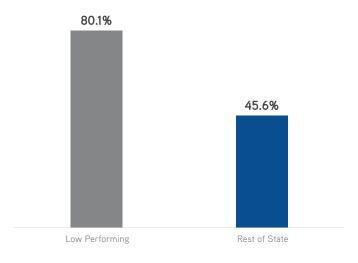
When looking at the average per pupil spending in the districts with low-performing schools, every district is still above the national average of \$11,392. As Figure 7 shows, within each category there is a wide range of the average per pupil spending by district, though in each category they are clustered similarly.

When districts are grouped by their percentage of low-performing schools, there is a general trend that the greater the percentage of low-performing schools the higher average per pupil spending in that district.

While this picture seems to suggest that per pupil spending does not clearly correspond to academic performance, the unit of analysis we are forced to use certainly may be masking real issues. For example, what is the distribution of funding in an average need district, like



FIGURE 8. Student Participation in Free and Reduced-Priced Lunch Program



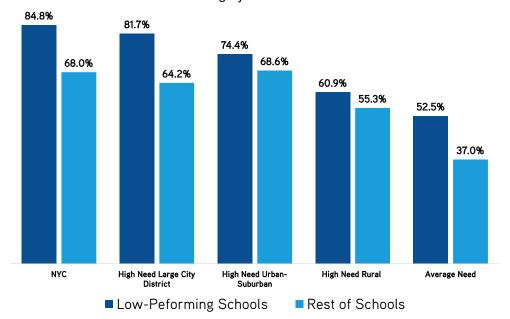
Patchogue-Medford on Long Island, where 36 percent (four of eleven) schools are low-performing, or Newburgh, a low-wealth district where 33 percent (four of twelve) school are low-performing?

That we currently have access only to district-level data means it remains unknown how per pupil spending is allocated among each school within districts. Significant differences in spending between low-performing schools and other schools within an individual district may be revealed when such data are made available.

Free and Reduced-Price Lunch Participation in Low-Performing Schools

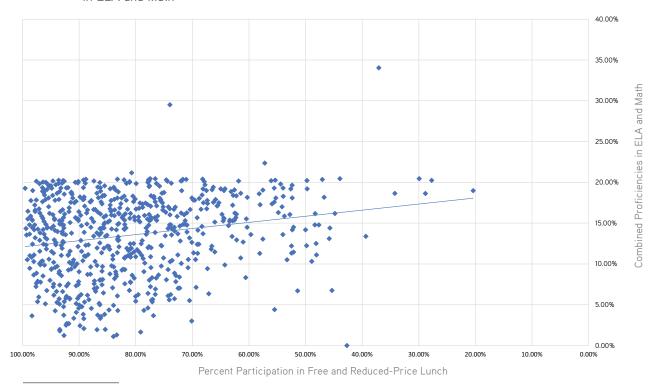
The federal school breakfast and lunch programs provide free and reduced-priced

FIGURE 9. Student Participation in Free and Reduced-Price Lunch, Low Performing Versus Rest of Schools in Need Category



meals (FRPL) to low-income students. Students whose family's income is up to \$31,590 (for a family of four) are eligible for free lunch and students whose family's income is up to \$44,955 (for a family of four) are eligible for reduced-price meals.¹²

FIGURE 10. Low-Performing Schools Percentage of Participation in FRPL Compared to Combined Proficiencies in ELA and Math



¹² See Office of Temporary and Disability Assistance, "School Breakfast and Lunch Programs," n.d., https://otda.ny.gov/workingfamilies/schoollunch.asp.

On average, low-performing schools all had higher rates of participation — nearly double — in the FRPL program compared to other schools in the state.

Examining FRPL participation by Need Category and academic performance, it is clear that low-performing schools had higher FRPL participations rates in all Need Categories (see Figure 9).

As Figure 10 illustrates, however, when individual low-performing schools are mapped according to FRPL participation and overall combined proficiency in ELA and math, there appears to be some relationship of FRPL to academic performance. With better data, we will explore this in greater detail in the future.

Conclusion

School-level per pupil spending data are needed to more accurately determine a relationship between district education spending and academic performance, but this report shows that in many cases there are disparities within districts. While this report finds that low-performing schools have a significantly greater percentage of students participating in the free and reduced-price lunch program, suggesting poverty plays a role in performance, average per pupil spending data suggest that per pupil spending does not clearly correspond to academic performance, for the district unit of analysis may be masking real issues of spending within the district — i.e. there may be funding disparities with school districts.

The new requirement under the federal Every Student Succeeds Act, and recent legislative proposals in New York for districts to provide school-level per pupil spending data will allow a more robust analysis of potential funding disparities between low-performing district schools and other district schools and the state should do more to ensure that we truly understand how public dollars flow to the schools in need.

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