TAXPAYER SAVINGS FROM NEW JERSEY

FROM NEW JERSEY NONPUBLIC SCHOOLS

2018-2019

How NJ nonpublic schools save NJ public school districts **\$2.7 billion per year**.

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Executive Summary



onpublic schools save the government considerable money each year by providing the same product as public schools – a quality secular education – at almost no cost to the taxpayer. But how much money do the nonpublic schools save the government?

This paper provides a conservative answer to this question using the most stringent of economic models for estimating variable costs for public schools. By looking only at "variable costs" we exclude fixed costs such as administration, food service, and building maintenance expenses which – one could argue – the public schools had to spend anyway.

Applying this model to publicly available state and federal spending and enrollment data, we found that:

- The state's public schools spent at least \$16,177 in variable expenditures per pupil.
- Nonpublic schools enrolled 151,216 K-12 students, about 10% of the statewide total.
- In the 2018-2019 alone, nonpublic schools save their local school districts at least \$2.7 billion in variable costs.
 - o That is \$3.5 million per nonpublic school, or \$10.7 million per school district.
- In the long run, if nonpublic schools were to shut down *en masse*, the cost to school districts will be significantly higher than this estimate suggests. Districts would inevitably invest more in fixed building, management, and administration costs to accommodate a larger permanent student body.



Introduction

n the state of New Jersey, roughly 10% of the state's 1.5 million elementary and secondary school students attend nonpublic schools. However, in Fiscal Year 2019 only \$102 million of state education funding and negligible local government education funding went to support nonpublic schools – compared \$32.542 billion total non-capital spending by New Jersey school districts in the 2018-2019 school year.

This is despite the fact that nonpublic schools generate significant savings for the state and local school districts. Notionally, if enrollment in New Jersey public schools increased by 11%, then public education spending would also need to increase by 11% to meet the increased demand for public education services. According to the Council for American Private Education, by simply multiplying the annual per-pupil expenditure on public school students in 2012 by the total enrollment in nonpublic schools, we can conclude that nonpublic schools saved taxpayers nationwide a total of \$49.9 billion.

Critics of such analyses argue that nonpublic schools can only take credit for a fraction of said savings. They point out that since much of the infrastructure for public education already exists, only a fraction of public education spending are "variable costs" which change with fluctuations in enrollment. While in the long run (5, 10, or 20 years out) all costs are variable, as stated by economist N. Gregory Mankiw:

"Over a period of only a few months, Ford cannot adjust the number or size of its car factories. The only way it can produce additional cars is to hire more workers at the factories it already has. The cost of these factories is, therefore, a fixed cost in the short run. By contrast, over a period of several years, Ford can expand the size of its factories, build new factories, or close old ones. Thus, the cost of its factories is a variable cost in the long run."

In other words, if a school adds 50 more students then you might need a new teacher or two ("variable cost"), but you won't need to add another principal or secretary.

To date, there have been several attempts to quantify the variable costs of public school districts.

Economist Benjamin Scafidi demonstrated that nationwide about 64% of short-run costs are variable and 36% are fixed (in New Jersey, he found the ratio was 68.8% variable to 31.2% fixed).² In his analysis, he considered spending on Instruction, Student Support, Instructional Support, Enterprise Operations, and Food Service to be **variable** and spending on Capital Expenditures, Interest, General Administration, School Administration, Operations and Maintenance, Transportation, and Other Support to be **fixed**.

¹ N. Gregory Mankiw, Principles of Economics, 6th ed (Mason, OH: South-Western Cengage Learning, 2012), 271.

² Benjamin Scafidi, "The Fiscal Effects of School Choice Programs on Public School Districts. National Research," *Friedman Foundation for Educational Choice* (Friedman Foundation for Educational Choice, March 2012).



Introduction (cont.)

Researcher Martin Leuken used a more refined and conservative model to estimate the fixed costs of school districts.³ He separately considered the extra expenditures on special education students – who generally attend public schools at a higher rate than they attend nonpublic schools – and excluded expenditures on Enterprise Operations, and Food Service from the category of fixed costs. Thus, under Scafidi's more conservative model, only spending on Instruction, Student Support, and Instructional Support was considered "variable" while all other spending was considered "fixed."

To date, no one has applied these nuanced models for estimating variable cost savings to school districts to assess the savings by nonpublic schools to taxpayers. Moreover, no one has done so at the public school district level – even though the concentration of nonpublic school districts and local per pupil expenditures varies from district to district. Finally, no one has attempted to disentangle the different costs of elementary vs. secondary school expenditures, even though nonpublic schools enroll a higher proportion of elementary school students compared to public schools, and high school per pupil expenditures are higher than elementary school per pupil expenditures.

The goal of this study is to assess the short-term variable savings generated by nonpublic schools for New Jersey school districts following the most stringent definition of variable expenditures and taking into account variations in per pupil expenditures among school districts, elementary vs. secondary schools, and general vs. special education students.

This study will produce a high-confidence "minimum" whereby interested parties can safely conclude, "In this geographic area, if all the nonpublic schools shut down then the local school district would need to immediately spend *at least* \$X more annually to educate the students from those closed nonpublic schools."

³ Martin F. Lueken, "Fiscal Effects of School Vouchers" (EdChoice, September 2018).





2.1. Data

For this analysis, we used the following data:

- 1. **School system finances data** for Fiscal Year 2019 from the U.S. Census Bureau.⁴
- 2. Public school grade level enrollment data from the New Jersey Department of Education.⁵
- 3. **Nonpublic school grade level enrollment data** from the New Jersey Department of Education.⁶
- 4. Statewide and district-level public and nonpublic school special education enrollment data from the New Jersey Department of Education Office of Special Education Programs.⁷
- 5. **School and legislative districts for each nonpublic school** identified using Geocodio, an online geocoding service.

2.2. Key Assumptions

In developing our models for calculating both District-Level Per Pupil Variable Expenditures (see Section 2.3) and Nonpublic School-Level Savings to School Districts (see Section 2.4), we made the following explicit assumptions:

- 1. Public education costs vary from district to district.
- 2. Students with special needs are more costly to educate than students without special needs.
- 3. Secondary School (Grades 9-12) students are more costly to educate than Elementary School (Grades PreK-8) students.
- 4. Variable expenditures include three types of expenditures⁸ :
 - Total Instructional Spending This includes teacher salaries and benefits and instructional supplies and purchased services. Tuition payments to other school districts are excluded.
 - **Spending on Student Support** This includes student support services such as nurses, therapists, and guidance counselors.
 - Spending on Instructional Staff Support This includes expenditures for supervision of instruction service improvements, curriculum development, instructional staff training, and media, library, audiovisual, television, and computer-assisted instruction services.

^{4 &}quot;Annual Survey of School System Finances" downloaded from https://www.census.gov/data/tables/2019/econ/schoolfinances/secondary-education-finance.html on November 8, 2021.

^{5 &}quot;2018-2019 Enrollment District Reported Data" downloaded from https://www.nj.gov/education/data/enr/enr19/stat_doc. htm on November 8, 2021. The 2018-2019 school year's enrollment data was selected as the most closely representing the cohort of students upon whom the FY2018 funding was spent.

^{6 &}quot;2018-2019 Nonpublic School Enrollment" data provided directly by the New Jersey Department of Education to Teach Coalition via email.

^{7 &}quot;Children Receiving Free and Appropriate Education (Ages 6-21)" and "Children Receiving Free and Appropriate Education (Ages 6 to 21 - Public) Student By County By Race" downloaded from https://www.nj.gov/education/specialed/ data/2019.htm on July 20, 2021. By subtracting the total from the "Public" student only document from the former document which includes all students, we can arrive at the total nonpublic enrollment for special education student.

⁸ Lueken, "Fiscal Effects of School Vouchers", footnote 24.



Methodology (cont.)

2.3. Method for Calculating District-Level Total Variable Expenditures

The U.S. Census Bureau collects data on a wide range of different expenditure types for each school district. Following Lueken, ⁹ we selected the following three variables to collectively represent variable expenditures for each school district:

- Total current spending for instruction (TCURINST)
- Current operation expenditure Pupil support (E17)
- Current operation expenditure Instructional staff support (E07)

Together, these represent all expenditures for instruction (including teacher salaries) and expenditures on supporting students and teachers.

This definition excludes expenditures on buildings, operations, and non-instructional staff. By excluding costs for enterprise operations and food service, this model is even more stringent than earlier models for estimating variable costs for school districts,¹⁰ which ensures that near-term savings to school districts from nonpublic schools are not overstated.

2.4 Model for Calculating District-Level Per Pupil Variable Expenditures

Based on our assumptions in Section 2.2, our model for extrapolating School District Variable Expenditures per student is as follows:

$$T = (S_V * S_E) + (L_V * L_E) + (U_V * U_E)$$

Where:

- T is the Total Variable Expenditures in a given school district.
- S_v is the Extra Variable Expenditure Per Special Needs Student (in any grade).¹¹
- **S**_E is the Special Education Enrollment in a given school district.
- Ly is the Variable Expenditure per Elementary School (Pre-K through 8th Grade) Student.
- L_E is the Elementary School Enrollment in a given school district. ¹²
- U_v is the Variable Expenditure per Secondary School (9th Grade through 12th Grade) Student.¹³
- U_E is the Secondary School Enrollment in a given school district.

In keeping with Key Assumption #2 above, this model includes a premium spent on special needs students. Since a higher percentage of public school students (15.7%) are considered special needs compared to private school students (11.78%), this ensures the cost savings to districts from nonpublic schools is not overstated.

⁹ Martin F. Lueken, "The Tax-Credit Scholarship Audit: Do Publicly Funded Private School Choice Programs Save Money?" (EdChoice, October 2016).

¹⁰ Lueken, footnote 33.

¹¹ The process for deriving this estimate can be found in Appendix A.

¹² The process for deriving this estimate can be found in Appendix B.

¹³ Pre-K enrollment data was not available from the NJ Department of Education.



Likewise, in keeping with Key Assumption #3 above, this model separately considers expenditure rates on Elementary vs. Secondary school students. Since a higher percentage of public school students (70.1%) are in elementary school compared to private school students (67.1%), this ensures the cost savings to districts from nonpublic schools is not overstated.

2.5 Model for Calculating Nonpublic School-Level Savings to School Districts

For our model to calculate Nonpublic School-Level Savings to School Districts, we use the following formula:

$$T_{N} = (S_{V} * E_{N} * 0.1178) + (L_{V} * L_{N}) + (U_{V} * U_{N})$$

Where:

- T_N is the Total Expected Savings to a school district generated by a given nonpublic school.
- S_v is the Extra Variable Expenditure Per Special Needs Student of the school district where the nonpublic school was located.¹⁴
- E_N is the Total K-12 Enrollment in the nonpublic school.
- \cdot L_V is the Variable Expenditure per Elementary School Student of the school district where the nonpublic school was located.
- L_N is the Grades K-8 School Enrollment in a given nonpublic school.
- $\mathbf{U}_{\mathbf{V}}$ is the Variable Expenditure per Secondary School Student of the school district where the nonpublic school was located.
- U_N is the Grades 9-12 School Enrollment in a given nonpublic school.

School-level special education enrollment data was not available for nonpublic schools. As such, to estimate a given nonpublic school's special education enrollment, we multiplied total enrollment by the statewide average of 11.78% of nonpublic school students with special education needs. While this is unlikely to be accurate at the school level, when aggregated with other nonpublic schools within the district this should be a close approximation of savings to districts from special education enrollment in nonpublic schools.

Once we have estimated the savings from each nonpublic school, we can easily obtain the total estimated savings from all nonpublic schools in a given geographic area (e.g. a district, county, or state) by adding together the estimated savings from each nonpublic school in that geographic area.

¹⁴ This is arrived by dividing the 17,806 aged 5-21 special needs students enrolled in nonpublic schools by the 151,256 total K-12 nonpublic school students in the state. We arrived at 17,806 special needs students enrolled in nonpublic schools by subtracting the NJ DoE-reported 214,036 special needs students in public schools only from the 231,1842 special needs students in both public and nonpublic schools. Special needs enrollment data was drawn from Data Source 4 listed in Section 2.1.



3. Finding

3.1. NJ School Districts Spent \$21B on Variable Expenditures

In the 2018-2019 school year, New Jersey Department of Education reported a total of 1,308,228 students enrolled in public schools in 579 school districts across the state. An additional 56,563.5 students¹⁵ were enrolled in 91 charter schools (and one school for the deaf) across the state.

According to U.S. National Center for Education Statistics data, New Jersey school districts spent a total of \$32.542 billion on all non-capital expenditures. Of this, \$21.164 billion (or 65%) was spent on variable expenditures including student instruction, teacher support, and pupil support. This finding – which is consistent with Scafidi's earlier estimate of 68.8% using a less cautious definition of variable costs – amounts to **\$16,177 in variable expenditures per pupil**.¹⁶

3.2. Nonpublic Schools Saved New Jersey Public Schools \$2.7B in 2018-19

According to New Jersey Department of Education data, in the 2018-2019 school year 773 nonpublic schools enrolled a total of 151,216 students. These nonpublic schools saved New Jersey public schools a total of \$2.731 billion in the 2018-2019 school year.

The average nonpublic school saved its local school district \$3.5 million in variable expenditures alone.¹⁷ The average school district hosted 3 nonpublic schools and saved \$10.7 million variable expenditures.¹⁸

If all 151,216 nonpublic school students in the 773 nonpublic schools had attended local public schools in 2018-2019, then school districts would have needed to increase their combined \$32.542 billion budget by 8.4%, \$2.7 billion.

In practice, the budgetary impact of nonpublic school students attending public schools would not be evenly distributed. Districts with relatively small nonpublic school populations would be lightly impacted while those with relatively large nonpublic school populations would be very heavily impacted.

This represents only variable costs, including teacher salaries and spending on teacher and student support. In the long run, fixed costs would also increase reflecting the expense of building additional classrooms, hiring additional administrative, custodial, and cafeteria staff, and other such expenses.

18 See Appendix E for details on the savings generated in each school district.

¹⁵ Students enrolled less than full-time are represented as fractions of pupils.

¹⁶ See Appendix C for the enrollment and variable expenditure data for each public school district.

¹⁷ See Appendix D for details on the savings generated by each nonpublic school.





4.1. NCES vs. NJ DoE Enrollment Figures

These district-level enrollment figures reported by the NJ Department of Education differed somewhat from the total 1,345,089 enrollment reported by the U.S. National Center for Education Statistics.

This may be for several possible reasons, such as inclusion of charter school enrollment in the district totals and taking attendance at different times during the year.

This discrepancy should not significantly impact our findings, however, as this amounts to less than a 3% difference in enrollment overall. In no individual district's case did it exceed a 10% difference.

This analysis used New Jersey Department of Education enrollment data as it provided grade-level enrollment data necessary for breaking out elementary vs. secondary expenditure rates.

4.2. Lack of District of Residence Data for Nonpublic Schools

When estimating the savings from a nonpublic school's operations, we multiplied the per pupil variable expenditures in the school district where the nonpublic school is located by the enrollment in the nonpublic school. This method assumes that the vast majority of students attend nonpublic schools located in the same districts as their homes. However, in the event a nonpublic school closed and its students moved to public school, they would most likely attend public school near the students' residences – which is not necessarily where the nonpublic school had been located.

We anticipate that these differences will even out statewide; if one nonpublic school is located in a lower expenditure district compared to its parents' homes, that will be cancelled out by another nonpublic school located in a higher expenditure district.

However, to the extent that nonpublic schools tend to be located in lower- or higher-expenditure school districts relative to their parent bodies' districts of residence, our estimates of overall savings to school districts may be high or low.

This effect will be even more pronounced at the district level. Since nearly all nonpublic schools enroll students who live across school district lines, this means our estimates of savings to school districts could easily be off for any given school district.

Thus, the more granular the level of analysis using this data, the more uncertainty as to how a given district's actual budget would be impacted if a given nonpublic school closed.



5. Conclusion

pplying our cautious model for estimating savings from nonpublic schools to New Jersey school districts, we have found that in the 2018-2019 school year nonpublic schools saved New Jersey school districts an estimated \$2.731 billion. If all these nonpublic schools closed at the end of the current school year, then next year school districts would have needed to increase their combined budgets by 8.4% – a figure that would even higher in districts with large nonpublic school populations.

Since our model uses readily available federal data on public school district expenditures and state data on public and nonpublic school enrollment, this analysis could easily be replicated in any other state that reports nonpublic school-level grade enrollment data. Such states include New York, California, Florida, Pennsylvania, California, Maryland, and many others.

For interested researchers, it may even be feasible to replicate this study on a nationwide scale using data from the National Center for Education Statistics semi-annual Private School Universe Survey.

These should provide high-confidence estimates of the minimum savings nonpublic schools generated for their host school districts, and ultimately local, state, and federal taxpayers.



Appendix A: Calculating Extra Expenditures On Special Needs Students

n our Model for Calculating District-Leve Per Pupil Variable Expenditures described in Section 2.4, the variable SV "Extra Variable Expenditure Per Special Needs Student" represents the extra cost to a school district to educate an average special needs student, regardless of grade.¹⁹

According to the New Jersey Special Education Expenditure Project (SEEP), a New Jersey-level re-analysis of the U.S. DoE-funded Special Education Expenditure Project, "the total expenditure to educate the average special education student is an estimated 1.87 times that expended to educate the typical general education student with no special needs." ²⁰

Assuming this ratio holds for variable expenditures as well, then the per pupil special education "premium" can be expressed mathematically as:

$$S_V = 0.87 * G_V$$
 or $G_V = 1.15 * S_V$

Where:

- S_V is Extra Variable Expenditure per Special Needs student
- G_V is General Education Expenditure per Non-Special Needs student

Our model described in Section 2.2 above can be simplified into the following which doesn't account separately for elementary vs. secondary education costs:

$$(G_{\vee} \ast T_{E}) = (L_{\vee} \ast L_{E}) + (U_{\vee} \ast U_{E})$$

Plugging this into our model in Section 2.2, we arrive at: $T = (S_V * S_F) + (G_V * T_F)^{21}$

Substituting for G_V for 1.15 * S_V per the relationship above, we arrive at the following:

 $T = (S_V * S_V) + (1.15 * S_V * T_E)$

Simplifying, we arrive at the following to calculate S_V : $S_V = \frac{T}{S_F + (1.15 * T_F))}$

We used this formula, combined with Total Variable Expenditure from the U.S. Census Bureau and enrollment data from the New Jersey Department of Education, to calculate the extra cost per special needs student for each school district.

¹⁹ Since grade- or age-level special needs student data was not available, we could not separately estimate the cost of elementary vs. secondary school-aged special needs students.

 ²⁰ New Jersey Special Education Expenditure Project (SEEP), Page 17. The SEEP represents 1999-2000 school year data. Unfortunately, no more recent analysis exists of the relationship between special and general education spending.
21 T_e is total Pre-K-12 enrollment for the school district, drawn directly from the New Jersey Department of Education

[&]quot;2018-2019 Nonpublic School Enrollment" report.



Appendix B:

Calculating Expenditures On Elementary and Secondary School Students

ur master model described in Section 2.4 above assumes that variable expenditures are higher for secondary school students than for primary school students. This is based on a presumption that the skills required to teach higher levels of Math, Science, English, and other subjects are in higher demand, and therefore hiring teachers with these skill is more costly for school districts.

This is borne out by the expenditures data from the "Annual Survey of School System Finances" report for Fiscal Year 2019. In Fiscal Year 2018, average per pupil expenditures in the 274 NJ school districts serving only students in grades Pre-K through 8 had an average per pupil variable expenditure of \$15,650.94. This is compared to an average per pupil variable expenditure of \$16,379.50 in the 43 NJ school districts where the vast majority of students (>95%) were in grades 9-12.

Assuming this ratio holds across the board in NJ school districts, it is 4.66% more expensive to education secondary school students than elementary school students and this can be expressed mathematically as follows:

$$U_V = 1.0466 * L_V$$
 or $L_V = 0.955 * U_V$

Assuming $(G_V * T_E) = (L_V * L_E) + (U_V * U_E)$, and substituting $U_V = 1.0466 * L_V$, we can arrive at the following:

$$(G_V * T_F) = (L_V * L_F) + (1.0466 * L_V * U_F)$$

Simplifying, we arrive at the following formulas to calculate L_{V} :

$$L_V = \frac{(G_V * T_E)}{(L_E + (1.0466 * U_E))}$$

We used this formula, deriving G_{V} via the calculations described in Section 2.4 above and using enrollment data from the New Jersey Department of Education, to calculate the extra cost per special needs student for each school district.



Appendix C:

Enrollment and Variable Expenditure Calculations by Public School District

Enrollment and Variable Expenditure Calculations by Public School District.

District Data	Total Variable Expenditure Data					Enrollment Data				Per Pupil Expenditure Calculations				
School District Name	District Unique ID	Instructional Pupil Support In Spending Spending		nstructional Support Spending	Total Variable Expenditures	Special Needs Enrollment (Age 6-21)	Elementary Enrollment (PreK-8)	Secondary Enrollment (Grades 9-12)	Total Enroliment	Extra Variable Expenditure Per Special Needs Pupil	Expenditure Per Non-Special Needs Pupil	Variable Expenditure Per Elementary Pupil	Variable Expenditure Per Secondary Pupil	
Formula/Variable Notation		TCURINST	E17		E07	T = TCURINST + E17 + E07	S _E	L _E	U _E	T_E	$S_V = \frac{T}{S_E + (1.15 * T_E)}$	$G_V = 1.15 * S_V$	$L_V = \frac{(G_V * T_E)}{L_E + (\ 1.0466 * U_E)}$	$U_V = 1.0466 * L_V$
ABSECON SCHOOL DISTRICT	0010	\$ 10,507,000	\$ 1,158,0	00 \$	293,000	\$ 11,958,000	116	859	-	859	\$ 10,832.99	\$ 12,457.94	\$ 12,457.94	\$ 13,038.48
ALEXANDRIA TWP SCH DIST	0020	\$ 6,689,000	\$ 1,186,0	00 \$	875,000	\$ 8,750,000	82	482	-	482	\$ 13,751.38	\$ 15,814.08	\$ 15,814.08	\$ 16,551.02
ALLAMUCHY TWP SCH DIST	0030	\$ 4,282,000	\$ 844,	000 \$	159,000	\$ 5,285,000	60	432	-	432	\$ 9,491.74	\$ 10,915.50	\$ 10,915.50	\$ 11,424.16
ALLENDALE BORO SCH DIST	0040	\$ 10,534,000	\$ 1,933,0	00 \$	668,000	\$ 13,135,000	82	874	-	874	\$ 12,082.61	\$ 13,895.00	\$ 13,895.00	\$ 14,542.50
ALLOWAY TWP SCH DIST	0060	\$ 4,052,000	\$ 587,	000 \$	123,000	\$ 4,762,000	39	361	-	361	\$ 10,485.52	\$ 12,058.35	\$ 12,058.35	\$ 12,620.27
ALPHA BORO SCH DIST	0070	\$ 2,646,000	\$ 313,	000 \$	196,000	\$ 3,155,000	19	205	-	205	\$ 12,384.69	\$ 14,242.39	\$ 14,242.39	\$ 14,906.09
											No Special Needs			
ALPINE PUBLIC SCH DIST	0080	\$ 3,372,000	\$ 584,	000 \$	490,000	\$ 4,446,000		135	-	135	Students	\$ 32,933.33	\$ 32,933.33	\$ 34,468.03
ANDOVER REG SCH DIST	0090	\$ 6,421,000	\$ 1,275,0	00 \$	390,000	\$ 8,086,000	72	445	-	445	\$ 13,851.82	\$ 15,929.59	\$ 15,929.59	\$ 16,671.91
ASBURY PARK SCHOOL DISTRICT	0100	\$ 45,588,000	\$ 8,981,0	00 \$	5,182,000	\$ 59,751,000	328	1,522	374	1,895	\$ 23,831.29	\$ 27,405.98	\$ 27,156.56	\$ 28,422.05
ATLANTIC CITY SCH DISTRICT	0110	\$ 106,108,000	\$ 8,838,0	00 \$	7,010,000	\$ 121,956,000	970	5,087	1,768	6,855	\$ 13,775.28	\$ 15,841.57	\$ 15,653.44	\$ 16,382.89
ATLANTIC COUNTY VOCATIONAL														
SCHOOL	0120	\$ 16,518,000	\$ 2,106,0	00 \$	1,239,000	\$ 19,863,000	167	157	1,490	1,647	\$ 9,637.32	\$ 11,082.92	\$ 10,634.59	\$ 11,130.16
ATLANTIC HIGHLANDS SCHOOL DIST	0130	\$ 4,190,000	\$ 526,	000 \$	188,000	\$ 4,904,000	47	311	-	311	\$ 12,119.12	\$ 13,936.98	\$ 13,936.98	\$ 14,586.45
AUDUBON BORO SCH DIST	0150	\$ 17,528,000	\$ 2,865,0	00 \$	984,000	\$ 21,377,000	322	891	608	1,499	\$ 10,448.96	\$ 12,016.30	\$ 11,793.39	\$ 12,342.96
											No Special Needs			
AVALON STONE HARBOR SCH DIST	0170	\$ 1,916,000	\$ 339,	000 \$	192,000	\$ 2,447,000		61	-	61	Students	\$ 40,114.75	\$ 40,114.75	\$ 41,984.10
AVON BORO SCH DIST	0180	\$ 2,197,000	\$ 413,	000 \$	142,000	\$ 2,752,000	15	139	-	139	\$ 15,739.21	\$ 18,100.09	\$ 18,100.09	\$ 18,943.55
BARNEGAT TWP SCH DIST	0185	\$ 36,818,000	\$ 6,465,0	00 \$	1,719,000	\$ 45,002,000	560	2,217	881	3,097	\$ 10,918.71	\$ 12,556.51	\$ 12,392.33	\$ 12,969.81
BARRINGTON BORO SCH DIST	0190	\$ 7,342,000	\$ 1,375,0	00 \$	118,000	\$ 8,835,000	66	588		588	\$ 11,903.80	\$ 13,689.37	\$ 13,689.37	\$ 14,327.29
BASS RIVER TWP SCH DIST	0200	\$ 1,737,000	\$ 227,	000 \$	78,000	\$ 2,042,000	18	106	-	106	\$ 14,596.14	\$ 16,785.56	\$ 16,785.56	\$ 17,567.77
											No Special Needs			
BAY HEAD BORO SCH DIST	0210	\$ 2,057,000	\$ 196,	000 \$	153,000	\$ 2,406,000	· ·	122	-	122	Students	\$ 19,721.31	\$ 19,721.31	\$ 20,640.32
BAYONNE SCHOOL DISTRICT	0220	\$ 102,238,000	\$ 12,121,0	00 \$	3,200,000	\$ 117,559,000	1,467	7,301	2,303	9,604	\$ 9,396.00	\$ 10,805.40	\$ 10,685.99	\$ 11,183.96
											No Special Needs			
BEACH HAVEN SCH DIST	0230	\$ 1,254,000	\$ 160,	000 \$	212,000	\$ 1,626,000	-	52	-	52	Students	\$ 31,269.23	\$ 31,269.23	\$ 32,726.38
BEDMINSTER TWP SCH DIST	0240	\$ 8,090,000	\$ 1,544,0	00 \$	498,000	\$ 10,132,000	74	514	-	514	\$ 15,233.80	\$ 17,518.87	\$ 17,518.87	\$ 18,335.25
BELLEVILLE SCH DIST	0250	\$ 50,572,000	\$ 7,582,0	00 \$	760,000	\$ 58,914,000	714	3,129	1,348	4,477	\$ 10,049.21	\$ 11,556.59	\$ 11,396.69	\$ 11,927.77
BELLMAWR BORO SCH DIST	0260	\$ 12,722,000	\$ 1,966,0	00 \$	796,000	\$ 15,484,000	152	1,213	-	1,213	\$ 10,009.37	\$ 11,510.78	\$ 11,510.78	\$ 12,047.18
BELMAR ELEM SCH DIST	0270	\$ 7,159,000	\$ 991,	000 \$	343,000	\$ 8,493,000	80	466		466	\$ 13,789.58	\$ 15,858.01	\$ 15,858.01	\$ 16,597.00
BELVIDERE SCH DIST	0280	\$ 8,202,000	\$ 1,480,0	00 \$	239,000	\$ 9,921,000	80	259	415	674	\$ 11,602.15	\$ 13,342.47	\$ 12,970.32	\$ 13,574.74
BERGEN COUNTY VOCATIONAL														
SCHOOL	0290	\$ 43,229,000	\$ 5,215,0	00 \$	3,053,000	\$ 51,497,000	364	3	2,345	2,348	\$ 16,806.02	\$ 19,326.92	\$ 18,467.44	\$ 19,328.02
BERGENFIELD BORO SCH DIST	0300	\$ 47,298,000	\$ 6,280,0	00 \$	1,301,000	\$ 54,879,000	525	2,405	1,133	3,538	\$ 11,946.58	\$ 13,738.57	\$ 13,536.56	\$ 14,167.36
BERKELEY HEIGHTS SCH DIST	0310	\$ 34,834,000	\$ 5,147,0	00 \$	1,937,000	\$ 41,918,000	370	1,621	948	2,568	\$ 12,613.75	\$ 14,505.81	\$ 14,260.61	\$ 14,925.16
BERKELEY TWP SCH DIST	0320	\$ 23,266,000	\$ 4,233,0	00 \$	941,000	\$ 28,440,000	441	2,309	-	2,309	\$ 9,185.01	\$ 10,562.76	\$ 10,562.76	\$ 11,054.98
BERLIN BOROUGH BOARD OF														
EDUCATN	0330	\$ 8,586,000	\$ 1.235.0	00 Ś	553.000	\$ 10.374.000	123	813	-	813	\$ 9,805,76	\$ 11.276.62	\$ 11.276.62	\$ 11.802.11
BERLIN TWP SCH DIST	0340	\$ 9,333,000	\$ 1.562.0	00 \$	426.000	\$ 11.321.000	104	632	-	632	\$ 13.626.62	\$ 15,670,62	\$ 15.670.62	\$ 16,400,87
BERNARDS TWP SCH DIST	0350	\$ 67.135.000	\$ 10.858.0	00 \$	4.697.000	\$ 82,690,000	701	3,486	1.815	5.301	\$ 12,165,39	\$ 13,990,20	\$ 13,770,49	\$ 14,412,19
BETHLEHEM TWP SCH DIST	0370	\$ 5,490,000	\$ 1.195.0	00 \$	545.000	\$ 7,230,000	76	354	-	354	\$ 14,965,85	\$ 17,210,72	\$ 17,210,72	\$ 18.012.74
BEVERLY CITY SCHOOL DISTRICT	0380	\$ 3,798,000	\$ 705,	000 \$	365,000	\$ 4,868,000	61	304	-	304	\$ 11,855.82	\$ 13,634.19	\$ 13,634.19	\$ 14,269.55

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Appendix D:

Enrollment and Variable Expenditure Calculations by Nonpublic School

Non	Enrollment Data			Distrie	ct Expenditure D	ata	Nonpublic School Savings Calculations					
Nonpublic School Name	Host Public School District	Host District Unique ID	Elementary Enrollment (K-8)	Secondary Enrollment (Grades 9-12)	Total Enrollment	Extra Variable Expenditure Per Special Needs Pupil	Variable Expenditure Per Elementary Pupil	Variable Expenditure Per Secondary Pupil	Estimated Savings from Elementary Pupils	Estimated Savings from Secondary Pupils	Estimated Savings from Special Needs Pupils	Total Estimated Savings
Formula/Variable Notation			L_N	U_N	\overline{E}_N	S_V	L_V	U_V	$(L_V * L_N)$	+ $(U_V * U_N)$ +	$(S_V \ast E_N \ast 0.1178)$	$= T_N$
Holy Spirit High School	ABSECON SCHOOL DISTRICT	0010	-	364	364	\$ 10,832.99	\$ 12,457.94	\$ 13,038.48	\$ -	\$ 4,746,008	\$ 464,510	\$ 5,210,518
Highland Academy	ABSECON SCHOOL DISTRICT	0010	41	-	41	\$ 10,832.99	\$ 12,457.94	\$ 13,038.48	\$ 510,776	\$-	\$ 52,321	\$ 563,097
Our Lady Of Mount Carmel	ASBURY PARK SCHOOL DISTRICT	0100	201	-	201	\$ 23,831.29	\$ 27,156.56	\$ 28,422.05	\$ 5,458,468	\$-	\$ 564,273	\$ 6,022,740
Sisters Academy Of New Jersey	ASBURY PARK SCHOOL DISTRICT	0100	51	-	51	\$ 23,831.29	\$ 27,156.56	\$ 28,422.05	\$ 1,384,984	\$-	\$ 143,174	\$ 1,528,158
Our Lady Star Of The Sea	ATLANTIC CITY SCH DISTRICT	0110	118	-	118	\$ 13,775.28	\$ 15,653.44	\$ 16,382.89	\$ 1,847,106	\$-	\$ 191,482	\$ 2,038,587
Castle Academy	BARRINGTON BORO SCH DIST	0190	171	10	181	\$ 11,903.80	\$ 13,689.37	\$ 14,327.29	\$ 2,340,882	\$ 143,273	\$ 253,810	\$ 2,737,966
All Saints Catholic Academy	BAYONNE SCHOOL DISTRICT	0220	349	-	349	\$ 9,396.00	\$ 10,685.99	\$ 11,183.96	\$ 3,729,411	\$-	\$ 386,290	\$ 4,115,701
Marist High School	BAYONNE SCHOOL DISTRICT	0220	-	256	256	\$ 9,396.00	\$ 10,685.99	\$ 11,183.96	\$-	\$ 2,863,093	\$ 283,353	\$ 3,146,446
Beacon Christian Academy	BAYONNE SCHOOL DISTRICT	0220	90	-	90	\$ 9,396.00	\$ 10,685.99	\$ 11,183.96	\$ 961,739	\$-	\$ 99,616	\$ 1,061,356
Yeshiva Gedolah Of Bayonne	BAYONNE SCHOOL DISTRICT	0220	-	-	-	\$ 9,396.00	\$ 10,685.99	\$ 11,183.96	\$ -	\$ -	\$ -	\$ -
Willow School, The	BEDMINSTER TWP SCH DIST	0240	81	-	81	\$ 15,233.80	\$ 17,518.87	\$ 18,335.25	\$ 1,419,028	\$-	\$ 145,358	\$ 1,564,386
Purnell School, The	BEDMINSTER TWP SCH DIST	0240	-	52	52	\$ 15,233.80	\$ 17,518.87	\$ 18,335.25	\$ -	\$ 953,433	\$ 93,316	\$ 1,046,749
Saint Peter School	BELLEVILLE SCH DIST	0250	121	-	121	\$ 10,049.21	\$ 11,396.69	\$ 11,927.77	\$ 1,378,999	\$ -	\$ 143,239	\$ 1,522,238
Sandy Lane Nursery School	BELLEVILLE SCH DIST	0250	7	-	7	\$ 10,049.21	\$ 11,396.69	\$ 11,927.77	\$ 79,777	\$ -	\$ 8,287	\$ 88,063
St. Rose High School	BELMAR ELEM SCH DIST	0270	-	442	442	\$ 13,789.58	\$ 15,858.01	\$ 16,597.00	\$-	\$ 7,335,872	\$ 717,990	\$ 8,053,862
Saint Rose Grammar School	BELMAR ELEM SCH DIST	0270	271	-	271	\$ 13,789.58	\$ 15,858.01	\$ 16,597.00	\$ 4,297,521	\$ -	\$ 440,216	\$ 4,737,737
Transfiguration Academy	BERGENFIELD BORO SCH DIST	0300	140	-	140	\$ 11,946.58	\$ 13,536.56	\$ 14,167.36	\$ 1,895,118	\$ -	\$ 197,023	\$ 2,092,141
Love and Truth Christian Academy	BERGENFIELD BORO SCH DIST	0300	-	-	-	\$ 11,946.58	\$ 13,536.56	\$ 14,167.36	\$-	\$-	\$-	\$-
Flexschool	BERKELEY HEIGHTS SCH DIST	0310	18	20	38	\$ 12,613.75	\$ 14,260.61	\$ 14,925.16	\$ 256,691	\$ 298,503	\$ 56,464	\$ 611,658
Diamond Hill Montessori School	BERKELEY HEIGHTS SCH DIST	0310	11	-	11	\$ 12,613.75	\$ 14,260.61	\$ 14,925.16	\$ 156,867	\$-	\$ 16,345	\$ 173,212
Our Lady Of Mt Carmel	BERLIN BOROUGH BOARD OF EDUCATN	0330	159	-	159	\$ 9,805.76	\$ 11,276.62	\$ 11,802.11	\$ 1,792,983	\$-	\$ 183,664	\$ 1,976,646
Providence Pediatric Medical Daycare, Inc.	BERLIN TWP SCH DIST	0340	-	-	-	\$ 13,626.62	\$ 15,670.62	\$ 16,400.87	\$-	\$-	\$ -	\$ -
Pingry School, The	BERNARDS TWP SCH DIST	0350	559	569	1,128	\$ 12,165.39	\$ 13,770.49	\$ 14,412.19	\$ 7,697,704	\$ 8,200,539	\$ 1,616,518	\$ 17,514,760
Saint James School	BERNARDS TWP SCH DIST	0350	180	-	180	\$ 12,165.39	\$ 13,770.49	\$ 14,412.19	\$ 2,478,688	\$-	\$ 257,955	\$ 2,736,643
Mendham Country Day School	BERNARDS TWP SCH DIST	0350	92	-	92	\$ 12,165.39	\$ 13,770.49	\$ 14,412.19	\$ 1,266,885	\$-	\$ 131,844	\$ 1,398,729
Albrook School, The	BERNARDS TWP SCH DIST	0350	72	-	72	\$ 12,165.39	\$ 13,770.49	\$ 14,412.19	\$ 991,475	\$ -	\$ 103,182	\$ 1,094,657
Somerset Hills Montessori Sch	BERNARDS TWP SCH DIST	0350	-	-	-	\$ 12,165.39	\$ 13,770.49	\$ 14,412.19	\$-	\$-	\$-	\$-
S.T.E.A.M. Academy	BEVERLY CITY SCHOOL DISTRICT	0380	-	-		\$ 11,855.82	\$ 13,634.19	\$ 14,269.55	\$ -	\$-	\$-	\$-
Blair Academy	BLAIRSTOWN TWP SCH DIST	0400	-	468	468	\$ 12,734.90	\$ 14,645.13	\$ 15,327.59	\$ -	\$ 7,173,314	\$ 702,080	\$ 7,875,394
Saint Thomas Apostle	BLOOMFIELD TOWN SCH DIST	0410	153	-	153	\$ 9,922.60	\$ 11,256.04	\$ 11,780.57	\$ 1,722.173	\$ -	\$ 178.839	\$ 1,901.012
Maarif School	BLOOMFIELD TOWN SCH DIST	0410	105	28	133	\$ 9,922.60	\$ 11,256.04	\$ 11,780.57	\$ 1,181,884	\$ 329,856	\$ 155,461	\$ 1,667,201

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Appendix E:

Savings Generated by Nonpublic Schools by Public School District

School District Name	District Unique ID	# of Nonpublics	Total Savin	gs from Nonpublics
ABSECON SCHOOL DISTRICT	0010		2	\$5,773,615
ASBURY PARK SCHOOL DISTRICT	0100		2	\$7,550,898
ATLANTIC CITY SCH DISTRICT	0110		1	\$2,038,587
BARRINGTON BORO SCH DIST	0190		1	\$2,737,966
BAYONNE SCHOOL DISTRICT	0220		3	\$8,323,503
BEDMINSTER TWP SCH DIST	0240		2	\$2,611,135
BELLEVILLE SCH DIST	0250		2	\$1,610,302
BELMAR ELEM SCH DIST	0270		2	\$12,791,600
BERGENFIELD BORO SCH DIST	0300		1	\$2,092,141
BERKELEY HEIGHTS SCH DIST	0310		2	\$784,870
BERLIN BOROUGH BOARD OF EDUCATN	0330		1	\$1,976,646
BERNARDS TWP SCH DIST	0350		4	\$22,744,789
BLAIRSTOWN TWP SCH DIST	0400		1	\$7,875,394
BLOOMFIELD TOWN SCH DIST	0410		4	\$3,853,987
BOGOTA SCH DIST	0440		1	\$2,765,058
BOONTON TOWN SCH DIST	0450		4	\$3,078,904
BRANCHBURG TWP SCH DIST	0510		2	\$349,699
BRICK TWP SCHOOL DISTRICT	0530		1	\$5,753,803
BRIDGETON CITY SCH DIST	0540		1	\$432,302
BRIDGEWATER-RARITAN REG SCH DT	0555		10	\$3,848,844
BUENA REGIONAL SCH DIST	0590		2	\$14,237,086
BURLINGTON CITY SCHOOL DISTRICT	0600		3	\$6,121,995
BURLINGTON TWP SCH DIST	0620		1	\$2,079,605
CALDWELL-W CALDWELL SCH DIST	0660		2	\$5,735,805
CAMDEN CITY SCH DIST	0680		7	\$27,062,698
CARTERET BORO SCH DIST	0750		2	\$2,093,559
CEDAR GROVE TWP SCH DIST	0760		1	\$2,714,599
CHATHAMS SCHOOL DISTRICT	0785		4	\$4,425,543
CHERRY HILL TOWNSHIP SCHOOL DIST	0800		12	\$23,426,597
CHESTER TWP SCH DIST	0820		2	\$9,953,766
CHESTERFIELD TWP SCH DIST	0830		1	\$604,203
CINNAMINSON TWP SCH DIST	0840		2	\$3,779,010
CLARK TWP SCHOOL DIST	0850		3	\$6,966,669

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