An Examination of Resource Allocation, Demographics and Capacity Utilization in Montgomery County Public Schools

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Executive Summary

Using 2018 data on individual schools published by Montgomery County Public Schools (MCPS), this study makes the following four findings.

Finding 1: MCPS Distributes Staff Resources to Fight the Achievement Gap

MCPS does not distribute staff at equal levels across its schools. Rather, it concentrates staff in schools with high percentages of African American and Latino students as well as students enrolled in English for Speakers of Other Languages (ESOL) and free and reduced price meals (FARMs) programs. Personnel cost per student is significantly higher in such schools and student/instructional staff ratio is significantly lower. Such staff allocation is consistent with MCPS's stated goal of fighting the achievement gaps in student performance.

Finding 2: The Fiscal 2017 Property Tax Hike Did Not Bring Substantially More Resources to the Classroom

In Fiscal Year 2017, the county levied a property tax hike of nearly 9%, promising that the extra revenue would be used to reduce class size and fight the achievement gap. But there is little evidence that the extra money made an impact in classrooms. Most schools saw an increase in student/instructional staff ratio and modest gains in personnel cost per student consistent with the rate of inflation.

Finding 3: There Are Gigantic Demographic Gaps Between Students and Professional Staff

MCPS's student body is 28% white but its school-based professional staff is 73% white. In the huge majority of schools, the percentage of students who are African American, Asian and Latino is much lower than the percentage of professional staff in those corresponding demographic groups. MCPS has a teacher diversity initiative but it has a lot of progress to make.

Finding 4: Boundary Shifts Can Play a Role in Solving Capacity Issues

In about half of MCPS's schools, enrollment exceeds capacity. Overall, the system is at full capacity utilization but that masks huge variations between schools. Most local areas in the county have a mix of over capacity and under capacity schools. MCPS's capital needs require substantial resources, but in some cases, boundary shifts may be able to play a role in reducing school crowding.

Methodology

This study relies on MCPS's Schools at a Glance series to gather data on individual schools. The data gathered for 2018, the most recent year available, includes school name and address, school type (high, middle and elementary), percentages of students and professional staff who are African American, Asian, Latino/Hispanic and white, percentages of students enrolled in English for Speakers of Other Languages (ESOL) and free and reduced price meals (FARMs) programs, current enrollment and projected enrollment in 2023-24, current capacity and future capacity due to programmed additions, student/instructional staff ratios and personnel cost per student. Some of this data was also collected for 2016 to enable analysis of the effects of the Fiscal Year 2017 tax hike.

We added the congressional district, state legislative district and county council district of each school, and the average household income of the school's zip code from 2013 through 2017. Local area definitions conform to zip codes except for these designations:

- Silver Spring/Takoma Park Inside Beltway includes schools in these two towns that are located inside the Washington Beltway.

- Wheaton includes zip code 20902.

- Glenmont/Norbeck includes zip code 20906.

- Silver Spring East County includes other areas of Silver Spring located outside the Beltway.

We included high schools, middle schools and elementary schools in our analysis but not MCPS's seven special schools. The special schools serve distinct populations of students including those with behavioral issues, learning disabilities, severe physical disabilities, autism and former home school students. Some of these schools do not have their own facilities but operate out of other MCPS schools. As a group, they have very high personnel cost per student and very low student/instructional staff ratio. Including these schools in our analysis would have skewed results in unpredictable ways, especially in small analysis units like geography.

Schools at a Glance reports some data on class size but it had many problems rendering it unsuitable for analysis. They include:

- Average class size is not reported for each school. Rather, in elementary schools, average class size is reported separately for kindergarten, grades 1-3 and grades 4-5 and in middle and high schools, it is reported separately for English classes and non-English classes.

- Average class size is defined as enrollment divided by number of attendance sections in elementary schools and is defined as enrollment divided by number of classes in middle and high schools. The difference in definition means that this measure cannot be compared between elementary and secondary schools.

- There were large, unexplained differences in class size between 2016 and 2018 in some schools. For example, Rocky Hill Middle School in Clarksburg reported average class sizes of 25.4 in English classes and 28.7 in non-English classes in 2016. In 2018, Rocky Hill reported average

class sizes of 7.7 in English classes and 9.8 in non-English classes. Many other middle and high schools reported similar shifts nearly as large. Differences in calculation methods rather than actual resources cannot be dismissed as a source for these huge variations.

Accordingly, we used student/instructional staff ratio instead of class size. The definition is simple: enrollment divided by instructional staff. It is reported for every school. And it does not demonstrate the erratic behavior that MCPS's class size does.

When aggregating school data across sub-groups, such as local areas, weighted averages based on enrollment were used.

Finding 1: MCPS Distributes Staff Resources to Fight the Achievement Gap

The achievement gap is a widespread educational phenomenon in which members of specific demographic groups persistently and systematically underperform members of other groups on academic measures. The achievement gap is sometimes represented in economic terms with students from low income families underperforming students from higher income families. It can also be represented in racial terms, with African American and Latino students underperforming white and Asian students.

In a May 2019 Washington Post op-ed, MCPS Superintendent Jack R. Smith wrote:

For 50 years, the achievement gap in Montgomery County has grown in the shadows while many of our county's schools and students garnered well-deserved praise and earned awards. Despite efforts by county leaders, the gap continued to grow, overshadowed by aggregated data, which allowed the struggles of some students to be masked behind the outcomes of their peers in one of the nation's largest school districts.

This disparity in academic outcomes is a crisis in our community that must be addressed. If we are committed to ensuring that all students, regardless of background, meet their full potential, we must first shine a bright light into those shadows and disaggregate student outcomes across multiple measures.

MCPS tracks both racial and economic achievement gaps and releases data on them by individual school. But it does more than that. The school system systematically allocates more staff resources to schools with higher percentages of African American and Latino students, students receiving free and reduced price meals (FARMs) and students in English for Speakers of Other Languages (ESOL) programs. Schools with higher percentages of white and Asian students and lower percentages of FARMs and ESOL students get relatively fewer staff resources. On some measures, the former schools can get 30%+ more staff resources per student than the latter schools. Despite MCPS's substantial investment reallocations, the achievement gap persists.

To quantify MCPS's financial efforts to fight the achievement gap, we examined two measures: personnel cost per student and student/instructional staff ratio.

Personnel Cost per Student

MCPS's Schools at a Glance series releases total personnel cost per school. We divided that by total enrollment to get personnel cost per student, a relative measure of staff investment by school.

In 2018, MCPS spent $10,284 in school-based personnel cost per student. That amount was higher in middle schools and lower in high schools.

Personnel Cost per Student, 2018		
		PCost per
School Type	Number	Student, 2018
Elementary	133	10,250
Middle	40	10,360
High	25	9,779
Total	205	10,284
Total (excludes special schools)	198	10,132

In terms of local areas, those that are higher income and have higher percentages of white students (the two measures correlate) receive less personnel cost per student than those with higher percentages of FARMs, ESOL, African American and Hispanic students. High income, majority white Bethesda received 30% less in personnel cost per student than lower income, majority-minority Wheaton.

Personnel Cost per Student by Local Area, 2018		
Local		PCost per
Area	Number	Student, 2018
Bethesda	16	8,784
Chevy Chase	4	9,219
Clarksburg	6	9,803
Damascus	5	11,264
Gaithersburg	27	10,801
Germantown	19	10,092
Glenmont/Norbeck	10	10,072
Kensington	6	10,142
Montgomery Village	4	11,248
Olney	5	9,757
Potomac	8	9,361
Rockville	26	9,924
SS/TP Inside Beltway	16	10,351
SS East County	21	10,239
Wheaton	10	11,391

Differential economic investments can be seen when looking at average household incomes by zip code. In zip codes with mean household incomes in 2013-17 below $100,000, schools received $10,740 in personnel cost per student. In zip codes with mean household incomes over $200,000, schools received $9,072 per student.

Personnel Cost per Student by Household Income, 2018		
Zip Code		PCost per
Household Income	Number	Student, 2018
Below $100,000	32	10,740
$100,000-149,999	106	10,257
$150,000-199,999	34	9,927
$200,000 or More	26	9,072

Personnel cost per student rose substantially as ESOL and FARMs rates increased.

Personnel Cost per Student by ESOL and FARMs, 2018		
		PCost per
Percentage ESOL	Number	Student, 2018
Below 10%	58	9,565
10-24.9%	86	10,099
25-49.9%	40	11,124
50% or More	14	11,178
		PCost per
Percentage FARMs	Number	Student, 2018
Below 10%	38	8,970
10-24.9%	45	9,588
25-49.9%	56	10,660
50% or More	59	10,873

Overall, personnel cost per student had significant positive correlations with percentages of FARMs, Latino and ESOL students and significant negative correlations with percentages of Asian and white students and average household income. This reflects MCPS's resource allocation decisions to fight the achievement gap.

Personnel Cost/Student Correlations	
FARMs Student %	0.42
Hispanic Student %	0.41
ESOL Student %	0.33
Black Student %	0.18
Asian Student %	-0.32
White Student %	-0.32
Avg. Household Income	-0.35

Student/Instructional Staff Ratio

Student/instructional staff (SI) ratio is total enrollment divided by instructional staff. This measure tends to track with both class size and personnel cost per student. As with the latter measure, S/I ratio varies substantially depending on school demographics.

In 2018, MCPS schools had an average of 11.3 students per instructional staffer. This was slightly lower in elementary schools, slightly higher in middle schools and higher in high schools.

Student/Instructional Staff Ratio, 2018		
		S/I Ratio,
School Type	Number	2018
Elementary	133	11.0
Middle	40	11.5
High	25	12.2
Total	205	11.3
Total (excludes	198	11.8
special schools)		

In terms of local areas, those that are higher income and have higher percentages of white and Asian students have higher S/I ratios than those with higher percentages of FARMs, ESOL, African American and Hispanic students. High income, majority white Bethesda's S/I ratio was 40% higher than the S/I ratio in majority-minority Montgomery Village.

Student/Instructional Staff Ratio by Local Area, 2018		
Local		S/I Ratio,
Area	Number	2018
Bethesda	16	13.7
Chevy Chase	4	13.2
Clarksburg	6	13.1
Damascus	5	11.4
Gaithersburg	27	10.6
Germantown	19	12.0
Glenmont/Norbeck	10	11.0
Kensington	6	11.9
Montgomery Village	4	9.8
Olney	5	13.4
Potomac	8	13.0
Rockville	26	12.2
SS/TP Inside Beltway	16	11.1
SS East County	21	11.4
Wheaton	10	9.9

As with personnel cost per student, S/I ratio varies with average household income. In zip codes with mean household incomes in 2013-17 below $100,000, schools had an average S/I ratio of 10.4. In zip codes with mean household incomes over $200,000, schools had an average S/I ratio of 13.4, 29% higher.

S/I Ratio by Household Income, 2018		
Zip Code		S/I Ratio,
Household Income	Number	2018
Below $100,000	32	10.4
$100,000-149,999	106	11.8
$150,000-199,999	34	12.3
$200,000 or More	26	13.4

S/I ratio fell substantially as ESOL and FARMs rates increased.

S/I Ratio by ESOL and FARMs, 2018		
		S/I Ratio,
Percentage ESOL	Number	2018
Below 10%	58	13.1
10-24.9%	86	11.8
25-49.9%	40	9.9
50% or More	14	9.6
		S/I Ratio,
Percentage FARMs	Number	2018
Below 10%	38	13.7
10-24.9%	45	13.0
25-49.9%	56	11.2
50% or More	59	10.2

S/I ratio correlations are the inverse of personnel cost per student correlations. S/I ratio is positively associated with white and Asian student% as well as average household income. It is negatively associated with African American, Hispanic, ESOL and FARMs percentage. However, the S/I ratio correlations tend to be stronger than the personnel cost per student correlations. That suggests that above and beyond mere cost, MCPS is investing additional instructional staff in schools with large student bodies susceptible to the achievement gap.

S/I Ratio Correlations	
White Student %	0.51
Avg. Household Income	0.46
Asian Student %	0.43
Black Student %	-0.30
ESOL Student %	-0.53
Hispanic Student %	-0.60
FARMs Student %	-0.63

Conclusion

Taken together, data on personnel cost per student and student/instructional staff ratio demonstrate that MCPS is pouring more staff resources into schools with higher percentages of African American, Hispanic, ESOL and FARMs students than schools in high income areas with higher percentages of white and Asian students. The per-student resource variations approach 30% or more in some cases. Despite this disproportionate resource investment in schools with student populations vulnerable to the achievement gap, the gap persists. That suggests that more strategies other than spending money – and perhaps strategies going beyond the school system itself – are needed to remedy Montgomery County's achievement gap.

Finding 2: The Fiscal 2017 Property Tax Hike Did Not Bring Substantially More Resources to the Classroom

In Fiscal Year 2017, the County Council raised property taxes by nearly 9%. The council called its budget an "education first budget" and said the proceeds of the tax hike would go towards cutting class size and reducing the achievement gap.

The table below shows changes in the county's budget between FY16 (the year before the tax hike) and FY17 (the first year in which the tax hike took effect). The county's total revenue increase between those two years was $272 million, of which $37 million came from increased intergovernmental aid. (Most of this is state aid for MCPS.) Property tax revenues increased by $137 million, about half of the total revenue increase received by the county.

MoCo FY16 vs FY17 Budget				
Actual totals for both years.				
	FY16	FY17	Change	%
Total Revenue	5,120,321,434	5,392,007,384	271,685,950	5.3%
Intergovernmental Aid	1,038,668,643	1,075,477,817	36,809,174	3.5%
Local Revenue	4,081,652,791	4,316,529,567	234,876,776	5.8%
Property Taxes	1,595,330,274	1,732,445,462	137,115,188	8.6%
Total Expenditures	5,065,969,510	5,250,528,229	184,558,719	3.6%
MCPS	2,321,487,679	2,456,109,682	134,622,003	5.8%
Local Dollars Only	1,540,794,230	1,650,794,230	110,000,000	7.1%
Instructional Salaries	902,563,774	958,117,867	55,554,093	6.2%
Other Spending	1,418,923,905	1,497,991,815	79,067,910	5.6%
Other Agencies/Uses	2,744,481,831	2,794,418,547	49,936,716	1.8%

MCPS's budget increased by $135 million, about half the total revenue increase, and $110 million of that came from local dollars. However, instructional salaries only increased by $56 million. That means that roughly a fifth of the county's revenue increase was used to pay for increased instructional salaries.

To calculate the impact of the revenue increase on individual schools, we compared MCPS Schools at a Glance data from 2016 (the year before the tax hike) to 2018 (the most recent year available). We looked at two measures: student/instructional staff ratio and personnel cost per student. If the tax hike had really gone towards classrooms, we would expect to see a decrease in student/instructional staff ratio and a large increase in personnel cost per student.

We did not find either result.

Personnel Cost per Student

MCPS's Schools at a Glance series releases total personnel cost per school. We divided that by total enrollment to get personnel cost per student, a relative measure of staff investment by school.

The table below shows the change in personnel cost per student by school type. For all schools, personnel cost per student rose by 3.4% over the two year period. As a basis of comparison, the Washington-Baltimore consumer price index increased by 1.4% in 2017 and an average of 2.0% per year in the 2007-2017 period. That means that personnel cost per student did not increase much faster than the rate of the inflation despite the county's large property tax hike. In middle schools, personnel cost per student actually went down.

Personnel Cost per Student, 2016-2018

School Type	Number	PCost per Student, 2016	PCost per Student, 2018	Change	%
Elementary	133	9,841	10,250	409	4.2%
Middle	40	10,492	10,360	-132	-1.3%
High	25	9,181	9,779	598	6.5%
Total	205	9,948	10,284	336	3.4%
Total (excludes special schools)	198	9,789	10,132	343	3.5%

No local areas received double-digit increases in personnel cost per student. In fact, the measure dropped in Glenmont/Norbeck and Olney and probably did not keep up with inflation in Potomac, Silver Spring/Takoma Park inside the Beltway and Wheaton. Chevy Chase and Clarksburg received the biggest increases.

Personnel Cost per Student by Local Area, 2016-2018					
Local Area	Number	PCost per Student, 2016	PCost per Student, 2018	Change	%
Bethesda	16	8,438	8,784	346	4.1%
Chevy Chase	4	8,536	9,219	683	8.0%
Clarksburg	6	8,976	9,803	828	9.2%
Damascus	5	10,779	11,264	485	4.5%
Gaithersburg	27	10,479	10,801	322	3.1%
Germantown	19	9,768	10,092	324	3.3%
Glenmont/Norbeck	10	10,138	10,072	-66	-0.7%
Kensington	6	9,756	10,142	386	4.0%
Montgomery Village	4	10,744	11,248	504	4.7%
Olney	5	9,853	9,757	-96	-1.0%
Potomac	8	9,172	9,361	189	2.1%
Rockville	26	9,526	9,924	398	4.2%
SS/TP Inside Beltway	16	10,138	10,351	213	2.1%
SS East County	21	9,770	10,239	468	4.8%
Wheaton	10	11,183	11,391	208	1.9%

ESOL and FARMs are correlated with the achievement gap. One of the rationales used for the tax hike was that it was supposed to be used to reduce the achievement gap. However, personnel cost per student was not allocated disproportionately to high ESOL and FARMs schools. In fact, high ESOL and FARMs schools received smaller percentage increases in personnel cost per student than did low ESOL and FARMs schools.

Personnel Cost per Student by ESOL and FARMs, 2016-2018					
		PCost per	PCost per		
Percentage ESOL	Number	Student, 2016	Student, 2018	Change	%
Below 10%	58	9,204	9,565	361	3.9%
10-24.9%	86	9,783	10,099	316	3.2%
25-49.9%	40	10,741	11,124	383	3.6%
50% or More	14	10,795	11,178	383	3.5%
		PCost per	PCost per		
Percentage FARMs	Number	Student, 2016	Student, 2018	Change	%
Below 10%	38	8,656	8,970	314	3.6%
10-24.9%	45	9,238	9,588	350	3.8%
25-49.9%	56	10,175	10,660	484	4.8%
50% or More	59	10,684	10,873	189	1.8%

Student/Instructional Staff Ratio

Student/instructional staff (SI) ratio is total enrollment divided by instructional staff. This measure tends to track with both class size and personnel cost per student.

The table below shows the change in S/I ratio by school type. For all schools, S/I ratio rose from 10.9 in 2016 to 11.3 in 2018, an increase of 3.7%. S/I ratio rose by 10.6% in middle schools and fell by 2.4% in high schools. The overall gain in S/I ratio happened despite promises that the property tax hike would reduce class size.

Student/Instructional Staff Ratio, 2016-2018					
		S/I Ratio,	S/I Ratio,		
School Type	Number	2016	2018	Change	%
Elementary	133	10.7	11.0	0.3	2.8%
Middle	40	10.4	11.5	1.1	10.6%
High	25	12.5	12.2	-0.3	-2.4%
Total	205	10.9	11.3	0.4	3.7%
Total (excludes special schools)	198	11.5	11.8	0.4	3.2%

Montgomery Village was the only major area in the county to see a drop in S/I ratio following the tax hike. The five schools in Olney saw a whopping 14.4% increase. The ten schools in Glenmont/Norbeck, which have a majority Latino student body, saw an 8.8% increase.

Student/Instructional Staff Ratio by Local Area, 2016-2018					
Local		S/I Ratio,	S/I Ratio,		
Area	Number	2016	2018	Change	%
Bethesda	16	13.5	13.7	0.3	1.9%
Chevy Chase	4	12.6	13.2	0.7	5.5%
Clarksburg	6	13.0	13.1	0	0.3%
Damascus	5	11.2	11.4	0.1	1.0%
Gaithersburg	27	10.3	10.6	0.3	3.2%
Germantown	19	11.3	12.0	0.7	6.1%
Glenmont/Norbeck	10	10.1	11.0	0.9	8.8%
Kensington	6	11.5	11.9	0.3	3.0%
Montgomery Village	4	9.8	9.8	-0.1	-0.5%
Olney	5	11.7	13.4	1.7	14.4%
Potomac	8	12.2	13.0	0.7	5.9%
Rockville	26	12.1	12.2	0.1	0.6%
SS/TP Inside Beltway	16	10.5	11.1	0.5	5.2%
SS East County	21	11.3	11.4	0.1	0.9%
Wheaton	10	9.3	9.9	0.6	6.5%

High ESOL and FARMs schools saw larger percentage increases in S/I ratio than low ESOL and FARMs schools, a direct contradiction of the promise to reduce the achievement gap.

Student/Instructional Staff Ratio by ESOL and FARMs, 2016-2018					
		S/I Ratio,	S/I Ratio,		
Percentage ESOL	Number	2016	2018	Change	%
Below 10%	58	12.7	13.1	0.4	3.3%
10-24.9%	86	11.4	11.8	0.4	3.1%
25-49.9%	40	9.7	9.9	0.3	2.6%
50% or More	14	9.3	9.6	0.4	3.8%
		S/I Ratio,	S/I Ratio,		
Percentage FARMs	Number	2016	2018	Change	%
Below 10%	38	13.3	13.7	0.4	3.1%
10-24.9%	45	12.6	13.0	0.4	3.1%
25-49.9%	56	11.0	11.2	0.2	1.7%
50% or More	59	9.7	10.2	0.5	5.3%

This is not to say that there were zero schools that benefited from more resources. The table below shows the number of schools that had increased S/I ratios between 2016 and 2018 and the number that had lower ratios. Roughly twice as many schools had increased ratios as had lower ratios. The exception is high schools, of whom 7 had higher ratios and 15 had lower ones.

Increase or Decrease, Student/Instructional Staff Ratio, 2016-2018			
	Schools w/	Schools w/	No
School Type	Higher S/I	Lower S/I	Change
Elementary	79	49	5
Middle	35	2	1
High	7	15	3
Total	126	67	10
Total (excludes special schools)	121	66	9

Conclusion

If the Fiscal Year 2017 property tax hike had really been targeted to reducing class size and closing the achievement gap, we should have seen lower student/instructional staff ratios, significant increases in personnel cost per student and increases in the already disproportionate investments that MCPS makes in high ESOL and FARMs schools. In fact, we saw the opposite. The sole exception might be high schools, which saw the largest personnel cost per student gains and lower student/instructional staff ratios, but that progress may have come at the expense of middle schools, which were at the other end of those extremes. In summary, there is little evidence that the tax hike made a major positive impact in MCPS classrooms.

Finding 3: There Are Gigantic Demographic Gaps Between Students and Professional Staff

Montgomery County is one of the most diverse jurisdictions in the country and no single racial/ethnic group has a majority of its population. In 2018, MCPS's student population reflected that, as its enrollment was 31% Hispanic, 28% white, 21% African American and 14% Asian with the remainder in other groups. A substantial body of research demonstrates the importance of students having teachers who resemble them demographically. Consider some of the most recent research on the subject.

A 2018 study by professors from American University and Johns Hopkins University finds that, "College completion rates are systematically higher for students whose teachers had higher expectations for them. More troublingly, we also find that white teachers, who comprise the vast majority of American educators, have far lower expectations for black students than they do for similarly situated white students. This evidence suggests that to raise student attainment, particularly among students of color, elevating teacher expectations, eliminating racial bias, and hiring a more diverse teaching force are worthy goals."

A 2017 American University study finds that "assigning a black male to a black teacher in the third, fourth, or fifth grades significantly reduces the probability that he drops out of high school, particularly among the most economically disadvantaged black males."

A 2017 literature review by professors from American University and Stanford University summarizes dozens of studies on how unconscious bias affects classrooms.

A 2016 Vanderbilt University study finds that "Even after conditioning on test scores and other factors, Black students indeed are referred to gifted programs, particularly in reading, at significantly lower rates when taught by non-Black teachers, a concerning result given the relatively low incidence of assignment to own-race teachers among Black students."

MCPS understands the importance of teacher diversity and has embarked on a recruitment initiative for teachers of color. But MCPS has a long ways to go as its professional staff is overwhelmingly white. The table below summarizes the demographics of students and professional staff across the system.

Student vs Professional Staff Demographics, 2018

Includes all MCPS schools.

Demographic	% of Students	% of Professional Staff	Gap
Asian	14.4%	5.7%	-8.7%
Black	21.4%	12.9%	-8.5%
Hispanic	30.8%	6.6%	-24.2%
White	28.3%	73.0%	44.7%

Compared to student demographics, Asian and black professional staff are under-represented. The biggest gaps are found for Hispanics and whites. Hispanics account for 31% of students but just 7% of professional staff. Whites account for 28% of students and 73% of professional staff.

In 2018, MCPS had 198 high, middle and elementary schools. Of those, 33 had majority white student bodies and 193 had a majority white professional staff.

The following tables illustrate the percentage of students and professional staff by school for four demographic groups: Asians, blacks, Hispanics and whites. In the cases of each of the three non-white groups, the gaps between students and professional staff are largest in schools with large populations of those groups. For example, in schools with 50% or more Hispanic student bodies, 61% of the students are Hispanic but just 10% of the professional staff is Hispanic. The gaps are smallest in areas with small percentages of non-white groups. For example, in the 16 schools in Bethesda, 7% of the student body is black and 6% of the professional staff is black.

Asian Percentage of Students and Professional Staff, 2018				
		Asian % of	Asian % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	14.1%	5.7%	-8.4%
Middle	40	14.8%	6.2%	-8.6%
High	25	14.7%	5.5%	-9.2%
Total	205	14.4%	5.7%	-8.7%
Total (excludes special schools)	198	14.3%	5.7%	-8.5%
Local		Asian % of	Asian % of	
Area	Number	Students	Prof. Staff	Gap
Bethesda	16	11.6%	5.4%	-6.1%
Chevy Chase	4	6.7%	3.6%	-3.0%
Clarksburg	6	28.5%	3.8%	-24.8%
Damascus	5	8.6%	2.4%	-6.3%
Gaithersburg	27	11.7%	6.2%	-5.4%
Germantown	19	18.7%	4.7%	-14.0%
Glenmont/Norbeck	10	8.0%	7.4%	-0.6%
Kensington	6	9.9%	4.6%	-5.3%
Montgomery Village	4	6.6%	4.8%	-1.8%
Olney	5	11.8%	3.9%	-7.9%
Potomac	8	32.8%	8.5%	-24.3%
Rockville	26	20.8%	7.7%	-13.1%
SS/TP Inside Beltway	16	5.9%	4.7%	-1.3%
SS East County	21	10.5%	5.4%	-5.1%
Wheaton	10	7.2%	5.1%	-2.1%
		Asian % of	Asian % of	
Percentage Asian	Number	Students	Prof. Staff	Gap
Below 10%	91	6.6%	5.1%	-1.4%
10-24.9%	79	14.8%	5.9%	-8.9%
25-49.9%	27	34.2%	7.1%	-27.1%
50% or More	1	50.9%	13.5%	-37.4%

Black Percentage of Students and Professional Staff, 2018				
		Black % of	Black % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	21.4%	10.3%	-11.1%
Middle	40	21.4%	16.5%	-4.9%
High	25	21.4%	14.5%	-6.9%
Total	205	21.4%	12.9%	-8.5%
Total (excludes special schools)	198	21.3%	13.0%	-8.4%
Local		Black % of	Black % of	
Area	Number	Students	Prof. Staff	Gap
Bethesda	16	7.3%	5.5%	-1.8%
Chevy Chase	4	13.8%	7.6%	-6.1%
Clarksburg	6	22.8%	6.6%	-16.2%
Damascus	5	13.1%	2.2%	-10.9%
Gaithersburg	27	20.3%	10.7%	-9.6%
Germantown	19	29.7%	10.7%	-18.9%
Glenmont/Norbeck	10	20.8%	18.0%	-2.9%
Kensington	6	14.9%	15.0%	0.1%
Montgomery Village	4	30.0%	19.7%	-10.2%
Olney	5	16.9%	7.3%	-9.6%
Potomac	8	8.4%	4.8%	-3.6%
Rockville	26	14.3%	8.7%	-5.6%
SS/TP Inside Beltway	16	25.7%	20.3%	-5.3%
SS East County	21	38.0%	23.5%	-14.5%
Wheaton	10	21.9%	18.0%	-3.9%
		Black % of	Black % of	
Percentage Black	Number	Students	Prof. Staff	Gap
Below 10%	42	6.6%	5.3%	-1.3%
10-24.9%	90	17.5%	11.9%	-5.5%
25-49.9%	55	31.8%	16.6%	-15.2%
50% or More	11	58.5%	27.8%	-30.6%

Hispanic Percentage of Students and Professional Staff, 2018				
		Hispanic % of	Hispanic % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	32.3%	6.2%	-26.1%
Middle	40	29.2%	6.6%	-22.6%
High	25	29.5%	7.2%	-22.3%
Total	205	30.8%	6.6%	-24.2%
Total (excludes special schools)	198	30.8%	6.6%	-24.1%
Local		Hispanic % of	Hispanic % of	
Area	Number	Students	Prof. Staff	Gap
Bethesda	16	12.9%	4.4%	-8.5%
Chevy Chase	4	20.5%	9.8%	-10.7%
Clarksburg	6	19.2%	5.6%	-13.6%
Damascus	5	22.3%	5.3%	-16.9%
Gaithersburg	27	40.4%	7.8%	-32.5%
Germantown	19	28.1%	7.1%	-21.0%
Glenmont/Norbeck	10	60.6%	9.0%	-51.6%
Kensington	6	36.1%	7.7%	-28.4%
Montgomery Village	4	51.8%	7.7%	-44.0%
Olney	5	14.2%	4.2%	-9.9%
Potomac	8	7.9%	3.1%	-4.8%
Rockville	26	27.6%	5.6%	-22.0%
SS/TP Inside Beltway	16	38.5%	7.4%	-31.1%
SS East County	21	34.1%	7.3%	-26.8%
Wheaton	10	54.5%	8.8%	-45.7%
		Hispanic % of	Hispanic % of	
Percentage Hispanic	Number	Students	Prof. Staff	Gap
Below 10%	22	7.9%	3.3%	-4.6%
10-24.9%	74	17.2%	5.4%	-11.9%
25-49.9%	69	37.6%	6.9%	-30.7%
50% or More	33	60.5%	9.9%	-50.6%

White Percentage of Students and Professional Staff, 2018				
		White % of	White % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	26.6%	76.0%	49.4%
Middle	40	29.8%	68.7%	38.9%
High	25	30.0%	70.9%	40.9%
Total	205	28.3%	73.0%	44.7%
Total (excludes special schools)	198	28.2%	72.8%	44.6%
Local		White % of	White % of	
Area	Number	Students	Prof. Staff	Gap
Bethesda	16	60.5%	83.5%	23.0%
Chevy Chase	4	52.0%	77.8%	25.8%
Clarksburg	6	22.4%	82.5%	60.1%
Damascus	5	50.3%	87.4%	37.1%
Gaithersburg	27	22.9%	73.8%	50.9%
Germantown	19	18.2%	75.8%	57.6%
Glenmont/Norbeck	10	7.7%	63.6%	55.9%
Kensington	6	33.1%	69.9%	36.9%
Montgomery Village	4	6.1%	66.3%	60.2%
Olney	5	51.5%	84.6%	33.1%
Potomac	8	44.9%	81.9%	37.0%
Rockville	26	31.7%	76.4%	44.7%
SS/TP Inside Beltway	16	24.9%	64.9%	40.0%
SS East County	21	13.0%	61.3%	48.4%
Wheaton	10	12.1%	66.1%	54.0%
		White % of	White % of	
Percentage White	Number	Students	Prof. Staff	Gap
Below 10%	48	5.2%	63.3%	58.2%
10-24.9%	51	17.4%	71.4%	53.9%
25-49.9%	64	36.7%	77.2%	40.5%
50% or More	35	59.0%	82.6%	23.7%

Conclusion

Substantial research has shown the importance of teacher diversity to students. MCPS's schools, which have an extremely diverse student enrollment but a large majority of white professional staff, have a long way to go to match teacher and student diversity.

Finding 4: Boundary Shifts Can Play a Role in Solving Capacity Issues

Funding adequate physical school capacity for students is a major challenge for MCPS. In recent years, MCPS enrollment has increased faster than the rest of the state combined. State aid for school construction has risen modestly and the county is struggling to cover rising construction costs. MCPS now spends nearly $300 million a year on school construction, up roughly 20% from a decade ago, and the Superintendent is recommending a capital budget for schools of $1.8 billion over the next six years. School construction is becoming such a massive need that, in times of limited capital money, it is squeezing out other kinds of projects, especially road projects. But individual school data suggests that school boundary shifts can play a role in solving part of the capacity challenges facing MCPS.

The table below shows two measures of capacity utilization by school. The first is current capacity utilization, which is total enrollment divided by current capacity. The second is capacity utilization in school year 2023-24, which is future capacity (including programmed additions) divided by projected enrollment in 2023-24. Systemwide, the data shows that MCPS is near full capacity both now and five years in the future.

Capacity Utilization, 2018 vs 2023-24

School Type	Number	Current Cap. Util.	Future Cap. Util. 23-24
Elementary	133	104.7%	99.4%
Middle	40	93.9%	92.2%
High	25	100.5%	107.6%
Total	205	100.9%	100.0%
Total (excludes special schools)	198	100.8%	100.1%

Most local areas range from under capacity to slightly over capacity. The exception is schools in Clarksburg, the county's most rapidly growing area, which is projected to be at 130% capacity in 2023-24.

Capacity Utilization by Local Area, 2018 vs 2023-24			
Local		Current	Future Cap.
Area	Number	Cap. Util.	Util. 23-24
Bethesda	16	109.2%	99.9%
Chevy Chase	4	99.9%	102.6%
Clarksburg	6	103.8%	129.7%
Damascus	5	94.6%	93.9%
Gaithersburg	27	99.3%	104.8%
Germantown	19	104.9%	96.8%
Glenmont/Norbeck	10	103.6%	96.5%
Kensington	6	96.2%	107.9%
Montgomery Village	4	96.6%	96.0%
Olney	5	89.6%	83.7%
Potomac	8	94.1%	86.0%
Rockville	26	102.4%	99.1%
SS/TP Inside Beltway	16	105.8%	96.5%
SS East County	21	102.9%	109.5%
Wheaton	10	92.9%	97.2%

Capacity utilization does not vary much with race, ESOL or FARMs rates. There is a slight correlation with zip code average household income in one respect: in 2023-24, the 26 schools in zip codes with average household incomes of $200,000 or more are expected to be at 91% capacity, a lower number than in other zip codes.

Capacity Utilization by Household Income, 2018 vs 2023-24			
Zip Code		Current	Future Cap.
Household Income	Number	Cap. Util.	Util. 23-24
Below $100,000	32	99.8%	100.7%
$100,000-149,999	106	102.1%	102.2%
$150,000-199,999	34	96.7%	99.9%
$200,000 or More	26	102.4%	90.6%

Analyzing average capacity rates is insufficient because averages mask variations between individual schools, and those variations are what drive school crowding. The table below shows the number of schools over capacity and those at 120% capacity or more for both 2018 and the 2023-24 school year.

Over Capacity Schools, 2018 vs 2023-24					
School Type	Total Number	Over Capacity, 2018	120%+ Capacity, 2018	Over Capacity, 2023-24	120%+ Capacity, 2023-24
Elementary	133	76	26	62	18
Middle	40	13	1	12	0
High	25	13	1	17	5
Total	205	104	28	91	23
Total (excludes special schools)	198	102	28	91	23

Of MCPS's 205 schools, 104 were over capacity in 2018 and 91 are projected to be over capacity in 2023-24. The number of schools at 120% capacity are more were 102 in 28 in 2018 (all but two were elementary schools) and are projected to be 23 in 2023-24. The 120% capacity measure is relevant given that it is one of the triggers for housing moratoriums in Montgomery County.

Every major local area in the county had at least one over capacity school in 2018 or in the projected 2023-24 school year. Over capacity schools tend to be most prevalent in Clarksburg, followed by Germantown, Gaithersburg, Silver Spring East County and Rockville. Olney had the lowest incidence of over capacity schools.

Over Capacity Schools by Local Area, 2018 vs 2023-24					
Local Area	Total Number	Over Capacity, 2018	120%+ Capacity, 2018	Over Capacity, 2023-24	120%+ Capacity, 2023-24
Bethesda	16	9	5	6	3
Chevy Chase	4	2	0	2	1
Clarksburg	6	4	2	3	3
Damascus	5	2	0	3	0
Gaithersburg	27	14	5	17	5
Germantown	19	12	3	11	2
Glenmont/Norbeck	10	5	0	4	0
Kensington	6	3	1	3	1
Montgomery Village	4	2	0	2	0
Olney	5	1	0	1	0
Potomac	8	2	0	1	0
Rockville	26	16	5	10	1
SS/TP Inside Beltway	16	8	3	7	2
SS East County	21	13	3	12	5
Wheaton	10	5	0	5	0

The facts that there are almost as many under capacity schools as over capacity schools, and that each major local area in the county contains both under and over capacity schools, suggests that shifting school boundary lines may help in dealing with *part* of MCPS's capacity issues. Here are five examples of schools that are significantly over capacity that are adjacent to other schools that are under capacity.

Burnt Mills Elementary School, Silver Spring

Burnt Mills ES had the 4th-highest capacity utilization of elementary schools in 2018 at a 151% rate. It is projected to have 147% capacity utilization in 2023-24. Of the five schools Burnt Mills borders, three are projected to have less than 90% capacity utilization in 2023-24: Cresthaven ES, Montgomery Knolls ES and Pine Crest ES.

	Enrollment/ Capacity, 2018	Enrollment/ Capacity, 2023-24
Burnt Mills ES (Silver Spring)	151%	147%
Adjacent Schools		
Cresthaven ES	120%	83%
Forest Knolls ES	134%	140%
Jackson Road ES	98%	100%
Montgomery Knolls ES	92%	78%
Pine Crest ES	116%	80%

Rachel Carson Elementary School, Gaithersburg

Rachel Carson ES had the 5th-highest capacity utilization of elementary schools in 2018 at a 148% rate. It is projected to have 146% capacity utilization in 2023-24. Of the seven schools Rachel Carson borders, two have capacity utilization under 80% in both 2018 and 2023-24: Brown Station ES and DuFief ES.

	Enrollment/ Capacity, 2018	Enrollment/ Capacity, 2023-24
Rachel Carson ES (Gaithersburg)	148%	146%
Adjacent Schools		
Brown Station ES	76%	73%
Diamond ES	110%	107%
DuFief ES	76%	69%
Fields Road ES	102%	105%
Jones Lane ES	101%	99%
Summit Hall ES	153%	150%
Thurgood Marshall ES	123%	119%

Cedar Grove Elementary School, Germantown

Cedar Grove ES had the 7th-highest capacity utilization of elementary schools in 2018 at a 146% rate. It is projected to have 149% capacity utilization in 2023-24. Of the seven schools Cedar Grove borders, three have capacity utilization under 90% in both 2018 and 2023-24: Laytonsville ES, Lois P. Rockwell ES and Woodfield ES.

	Enrollment/ Capacity, 2018	Enrollment/ Capacity, 2023-24
Cedar Grove ES (Germantown)	146%	149%
Adjacent Schools		
Damascus ES	94%	109%
Laytonsville ES	84%	71%
Little Bennett ES	101%	98%
Lois P. Rockwell ES	88%	87%
William B. Gibbs ES	97%	103%
Wilson Wims ES	161%	186%
Woodfield ES	83%	71%

Oak View Elementary School, Silver Spring

Oak View ES had the 9th-highest capacity utilization of elementary schools in 2018 at a 141% rate. It is projected to have 123% capacity utilization in 2023-24. Of the five schools Oak View ES borders, two are projected to have capacity utilization in 2023-24 of 80% or less: Montgomery Knolls ES and Pine Crest ES.

	Enrollment/ Capacity, 2018	Enrollment/ Capacity, 2023-24
Oak View ES (Silver Spring)	141%	123%
Adjacent Schools		
Highland View ES	138%	142%
Montgomery Knolls ES	92%	78%
Pine Crest ES	116%	80%
Rolling Terrace ES	119%	114%
Sligo Creek ES	101%	104%

Stonegate Elementary School, Silver Spring

Stonegate ES is projected to have the 10th-highest capacity utilization of elementary schools in 2023-24 at rate of 141%. This is up from its 2018 capacity utilization rate of 137%. Of the seven schools Stonegate borders, two have projected capacity utilization of less than 90% in 2023-24: Bel Pre ES and Sherwood ES.

	Enrollment/ Capacity, 2018	Enrollment/ Capacity, 2023-24
Stonegate ES (Silver Spring)	137%	141%
Adjacent Schools		
Bel Pre ES	92%	89%
Cloverly ES	113%	114%
Dr. Charles R. Drew ES	105%	108%
Flower Valley ES	114%	111%
Sherwood ES	90%	79%
Strathmore ES	99%	108%
Westover ES	98%	98%

Conclusion

MCPS's capacity challenges are real and will take additional resources to deal with. However, because there are almost as many under capacity schools as over capacity schools and capacity issues are not disproportionately concentrated by geography (with the exception of Clarksburg), boundary shifts may be able to play a role in ameliorating part of the school system's capacity problems.

Appendix I: Student/Instructional Staff Ratios, 2016 vs 2018

Student/Instructional Staff Ratio, 2016-2018					
		S/I Ratio,	S/I Ratio,		
School Type	Number	2016	2018	Change	%
Elementary	133	10.7	11.0	0.3	2.8%
Middle	40	10.4	11.5	1.1	10.6%
High	25	12.5	12.2	-0.3	-2.4%
Total	205	10.9	11.3	0.4	3.7%
Total (excludes special schools)	198	11.5	11.8	0.4	3.2%
Legislative		S/I Ratio,	S/I Ratio,		
District	Number	2016	2018	Change	%
14	29	11.4	11.6	0.3	2.3%
15	30	12.3	12.7	0.4	3.3%
16	20	13.0	13.5	0.5	3.7%
17	22	11.8	12.0	0.2	1.3%
18	21	11.2	11.7	0.5	4.7%
19	29	10.3	10.7	0.4	4.2%
20	23	11.2	11.5	0.3	2.9%
39	24	10.6	11.0	0.4	3.7%
Council		S/I Ratio,	S/I Ratio,		
District	Number	2016	2018	Change	%
1	37	13.0	13.5	0.5	3.6%
2	44	11.4	11.8	0.3	3.1%
3	37	11.5	11.6	0.2	1.4%
4	42	10.6	11.1	0.5	4.9%
5	38	10.9	11.2	0.3	3.0%

Student/Instructional Staff Ratio by Local Area, 2016-2018					
Local Area	Number	S/I Ratio, 2016	S/I Ratio, 2018	Change	%
Bethesda	16	13.5	13.7	0.3	1.9%
Chevy Chase	4	12.6	13.2	0.7	5.5%
Clarksburg	6	13.0	13.1	0	0.3%
Damascus	5	11.2	11.4	0.1	1.0%
Gaithersburg	27	10.3	10.6	0.3	3.2%
Germantown	19	11.3	12.0	0.7	6.1%
Glenmont/Norbeck	10	10.1	11.0	0.9	8.8%
Kensington	6	11.5	11.9	0.3	3.0%
Montgomery Village	4	9.8	9.8	-0.1	-0.5%
Olney	5	11.7	13.4	1.7	14.4%
Potomac	8	12.2	13.0	0.7	5.9%
Rockville	26	12.1	12.2	0.1	0.6%
SS/TP Inside Beltway	16	10.5	11.1	0.5	5.2%
SS East County	21	11.3	11.4	0.1	0.9%
Wheaton	10	9.3	9.9	0.6	6.5%

Student/Instructional Staff Ratio by Demographic, 2016-2018					
		S/I Ratio,	S/I Ratio,		
Percentage Asian	Number	2016	2018	Change	%
Below 10%	91	10.4	10.9	0.4	4.1%
10-24.9%	79	12.0	12.2	0.2	1.9%
25-49.9%	27	12.8	13.5	0.6	4.8%
50% or More	1	12.3	12.3	0	0.0%
		S/I Ratio,	S/I Ratio,		
Percentage Black	Number	2016	2018	Change	%
Below 10%	42	12.9	13.2	0.4	2.9%
10-24.9%	90	11.4	11.8	0.4	3.6%
25-49.9%	55	10.7	11.1	0.4	3.3%
50% or More	11	10.9	11.1	0.2	1.5%
		S/I Ratio,	S/I Ratio,		
Percentage Hispanic	Number	2016	2018	Change	%
Below 10%	22	13.2	13.4	0.2	1.4%
10-24.9%	74	12.5	13.0	0.4	3.6%
25-49.9%	69	10.6	10.9	0.3	2.9%
50% or More	33	9.7	10.2	0.5	4.9%
		S/I Ratio,	S/I Ratio,		
Percentage White	Number	2016	2018	Change	%
Below 10%	48	10.1	10.5	0.3	3.1%
10-24.9%	51	10.8	11.3	0.5	4.5%
25-49.9%	64	12.1	12.4	0.3	2.6%
50% or More	35	13.0	13.4	0.4	2.9%

Student/Instructional Staff Ratio by ESOL and FARMs, 2016-2018					
		S/I Ratio,	S/I Ratio,		
Percentage ESOL	Number	2016	2018	Change	%
Below 10%	58	12.7	13.1	0.4	3.3%
10-24.9%	86	11.4	11.8	0.4	3.1%
25-49.9%	40	9.7	9.9	0.3	2.6%
50% or More	14	9.3	9.6	0.4	3.8%
		S/I Ratio,	S/I Ratio,		
Percentage FARMs	Number	2016	2018	Change	%
Below 10%	38	13.3	13.7	0.4	3.1%
10-24.9%	45	12.6	13.0	0.4	3.1%
25-49.9%	56	11.0	11.2	0.2	1.7%
50% or More	59	9.7	10.2	0.5	5.3%
Student/Instructional Staff Ratio by Household Income, 2016-2018					
Zip Code		S/I Ratio,	S/I Ratio,		
Household Income	Number	2016	2018	Change	%
Below $100,000	32	9.9	10.4	0.5	4.7%
$100,000-149,999	106	11.4	11.8	0.3	2.9%
$150,000-199,999	34	11.9	12.3	0.4	3.1%
$200,000 or More	26	12.9	13.4	0.4	3.4%

Appendix II: Increase and Decrease in Student/Instructional Staff Ratio by School, 2016 vs 2018

Increase or Decrease, Student/Instructional Staff Ratio, 2016-2018			
	Schools w/	Schools w/	No
School Type	Higher S/I	Lower S/I	Change
Elementary	79	49	5
Middle	35	2	1
High	7	15	3
Total	126	67	10
Total (excludes special schools)	121	66	9
Legislative	Schools w/	Schools w/	No
District	Higher S/I	Lower S/I	Change
14	16	12	1
15	18	10	2
16	13	7	0
17	13	9	0
18	14	4	2
19	20	7	2
20	16	6	1
39	11	11	1
Council	Schools w/	Schools w/	No
District	Higher S/I	Lower S/I	Change
1	23	13	0
2	22	19	2
3	21	14	2
4	29	10	3
5	26	10	2

Increase or Decrease, S/I Ratio by Local Area, 2016-2018			
Local Area	Schools w/ Higher S/I	Schools w/ Lower S/I	No Change
Bethesda	8	8	0
Chevy Chase	3	1	0
Clarksburg	3	2	0
Damascus	2	3	0
Gaithersburg	18	9	0
Germantown	11	6	2
Glenmont/Norbeck	9	1	0
Kensington	3	1	1
Montgomery Village	1	3	0
Olney	5	0	0
Potomac	6	2	0
Rockville	12	13	1
SS/TP Inside Beltway	13	2	1
SS East County	10	10	1
Wheaton	8	1	1

Increase or Decrease, S/I Ratio by Demographic, 2016-2018			
	Schools w/	Schools w/	No
Percentage Asian	Higher S/I	Lower S/I	Change
Below 10%	62	24	4
10-24.9%	41	34	4
25-49.9%	18	8	0
50% or More	0	0	1
	Schools w/	Schools w/	No
Percentage Black	Higher S/I	Lower S/I	Change
Below 10%	26	16	0
10-24.9%	58	25	5
25-49.9%	30	21	4
50% or More	7	4	0
	Schools w/	Schools w/	No
Percentage Hispanic	Higher S/I	Lower S/I	Change
Below 10%	11	10	1
10-24.9%	45	25	2
25-49.9%	41	22	6
50% or More	24	9	0
	Schools w/	Schools w/	No
Percentage White	Higher S/I	Lower S/I	Change
Below 10%	31	16	1
10-24.9%	33	13	4
25-49.9%	34	25	4
50% or More	23	12	0

Increase or Decrease, S/I Ratio by ESOL and FARMs, 2016-2018			
	Schools w/	Schools w/	No
Percentage ESOL	Higher S/I	Lower S/I	Change
Below 10%	35	19	2
10-24.9%	50	31	5
25-49.9%	25	13	2
50% or More	11	3	0
	Schools w/	Schools w/	No
Percentage FARMs	Higher S/I	Lower S/I	Change
Below 10%	24	14	0
10-24.9%	24	16	3
25-49.9%	33	19	4
50% or More	40	17	2
Increase or Decrease, S/I Ratio by Household Income, 2016-2018			
Zip Code	Schools w/	Schools w/	No
Household Income	Higher S/I	Lower S/I	Change
Below $100,000	24	8	0
$100,000-149,999	61	37	7
$150,000-199,999	21	10	2
$200,000 or More	15	11	0

Appendix III: Personnel Cost per Student, 2018 vs 2018

Personnel Cost per Student, 2016-2018					
		PCost per	PCost per		
School Type	Number	Student, 2016	Student, 2018	Change	%
Elementary	133	9,841	10,250	409	4.2%
Middle	40	10,492	10,360	-132	-1.3%
High	25	9,181	9,779	598	6.5%
Total	205	9,948	10,284	336	3.4%
Total (excludes special schools)	198	9,789	10,132	343	3.5%
Legislative		PCost per	PCost per		
District	Number	Student, 2016	Student, 2018	Change	%
14	29	10,084	10,487	403	4.0%
15	30	9,351	9,681	330	3.5%
16	20	8,715	8,934	219	2.5%
17	22	9,594	9,972	379	3.9%
18	21	9,810	10,131	321	3.3%
19	29	10,548	10,828	280	2.7%
20	23	9,922	10,191	269	2.7%
39	24	10,202	10,740	538	5.3%
Council		PCost per	PCost per		
District	Number	Student, 2016	Student, 2018	Change	%
1	37	8,790	9,044	254	2.9%
2	44	9,898	10,325	427	4.3%
3	37	9,865	10,292	427	4.3%
4	42	10,366	10,595	230	2.2%
5	38	9,978	10,347	370	3.7%

Personnel Cost per Student by Local Area, 2016-2018					
Local Area	Number	PCost per Student, 2016	PCost per Student, 2018	Change	%
Bethesda	16	8,438	8,784	346	4.1%
Chevy Chase	4	8,536	9,219	683	8.0%
Clarksburg	6	8,976	9,803	828	9.2%
Damascus	5	10,779	11,264	485	4.5%
Gaithersburg	27	10,479	10,801	322	3.1%
Germantown	19	9,768	10,092	324	3.3%
Glenmont/Norbeck	10	10,138	10,072	-66	-0.7%
Kensington	6	9,756	10,142	386	4.0%
Montgomery Village	4	10,744	11,248	504	4.7%
Olney	5	9,853	9,757	-96	-1.0%
Potomac	8	9,172	9,361	189	2.1%
Rockville	26	9,526	9,924	398	4.2%
SS/TP Inside Beltway	16	10,138	10,351	213	2.1%
SS East County	21	9,770	10,239	468	4.8%
Wheaton	10	11,183	11,391	208	1.9%

Personnel Cost per Student by Demographic, 2016-2018					
		PCost per	PCost per		
Percentage Asian	Number	Student, 2016	Student, 2018	Change	%
Below 10%	91	10,308	10,619	311	3.0%
10-24.9%	79	9,574	9,945	371	3.9%
25-49.9%	27	8,964	9,317	353	3.9%
50% or More	1	9,332	9,915	582	6.2%
		PCost per	PCost per		
Percentage Black	Number	Student, 2016	Student, 2018	Change	%
Below 10%	42	8,958	9,300	342	3.8%
10-24.9%	90	9,899	10,212	313	3.2%
25-49.9%	55	10,213	10,571	358	3.5%
50% or More	11	9,884	10,341	457	4.6%
		PCost per	PCost per		
Percentage Hispanic	Number	Student, 2016	Student, 2018	Change	%
Below 10%	22	8,878	9,338	460	5.2%
10-24.9%	74	9,093	9,427	334	3.7%
25-49.9%	69	10,414	10,772	357	3.4%
50% or More	33	10,658	10,894	236	2.2%
		PCost per	PCost per		
Percentage White	Number	Student, 2016	Student, 2018	Change	%
Below 10%	48	10,468	10,791	323	3.1%
10-24.9%	51	10,204	10,534	331	3.2%
25-49.9%	64	9,410	9,764	354	3.8%
50% or More	35	8,990	9,337	348	3.9%

Personnel Cost per Student by ESOL and FARMs, 2016-2018					
		PCost per	PCost per		
Percentage ESOL	Number	Student, 2016	Student, 2018	Change	%
Below 10%	58	9,204	9,565	361	3.9%
10-24.9%	86	9,783	10,099	316	3.2%
25-49.9%	40	10,741	11,124	383	3.6%
50% or More	14	10,795	11,178	383	3.5%
		PCost per	PCost per		
Percentage FARMs	Number	Student, 2016	Student, 2018	Change	%
Below 10%	38	8,656	8,970	314	3.6%
10-24.9%	45	9,238	9,588	350	3.8%
25-49.9%	56	10,175	10,660	484	4.8%
50% or More	59	10,684	10,873	189	1.8%
Personnel Cost per Student by Household Income, 2016-2018					
Zip Code		PCost per	PCost per		
Household Income	Number	Student, 2016	Student, 2018	Change	%
Below $100,000	32	10,513	10,740	227	2.2%
$100,000-149,999	106	9,862	10,257	396	4.0%
$150,000-199,999	34	9,693	9,927	234	2.4%
$200,000 or More	26	8,713	9,072	359	4.1%

Appendix IV: Asian Percentage of Students and Professional Staff, 2018

Asian Percentage of Students and Professional Staff, 2018				
		Asian % of	Asian % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	14.1%	5.7%	-8.4%
Middle	40	14.8%	6.2%	-8.6%
High	25	14.7%	5.5%	-9.2%
Total	205	14.4%	5.7%	-8.7%
Total (excludes special schools)	198	14.3%	5.7%	-8.5%
Legislative		Asian % of	Asian % of	
District	Number	Students	Prof. Staff	Gap
14	29	11.8%	4.4%	-7.4%
15	30	24.5%	5.5%	-19.0%
16	20	14.9%	6.1%	-8.8%
17	22	19.5%	8.0%	-11.5%
18	21	7.9%	4.7%	-3.2%
19	29	8.9%	6.2%	-2.7%
20	23	8.6%	5.6%	-3.0%
39	24	14.7%	4.9%	-9.8%
Council		Asian % of	Asian % of	
District	Number	Students	Prof. Staff	Gap
1	37	16.9%	5.8%	-11.1%
2	44	17.0%	4.6%	-12.4%
3	37	18.9%	7.7%	-11.2%
4	42	9.5%	5.7%	-3.8%
5	38	8.8%	5.0%	-3.8%

Asian Percentage of Students and Professional Staff by Local Area, 2018				
Local Area	Number	Asian % of Students	Asian % of Prof. Staff	Gap
Bethesda	16	11.6%	5.4%	-6.1%
Chevy Chase	4	6.7%	3.6%	-3.0%
Clarksburg	6	28.5%	3.8%	-24.8%
Damascus	5	8.6%	2.4%	-6.3%
Gaithersburg	27	11.7%	6.2%	-5.4%
Germantown	19	18.7%	4.7%	-14.0%
Glenmont/Norbeck	10	8.0%	7.4%	-0.6%
Kensington	6	9.9%	4.6%	-5.3%
Montgomery Village	4	6.6%	4.8%	-1.8%
Olney	5	11.8%	3.9%	-7.9%
Potomac	8	32.8%	8.5%	-24.3%
Rockville	26	20.8%	7.7%	-13.1%
SS/TP Inside Beltway	16	5.9%	4.7%	-1.3%
SS East County	21	10.5%	5.4%	-5.1%
Wheaton	10	7.2%	5.1%	-2.1%
Asian Percentage of Students and Professional Staff by Asian % in School, 2018				
		Asian % of	Asian % of	
Percentage Asian	Number	Students	Prof. Staff	Gap
Below 10%	91	6.6%	5.1%	-1.4%
10-24.9%	79	14.8%	5.9%	-8.9%
25-49.9%	27	34.2%	7.1%	-27.1%
50% or More	1	50.9%	13.5%	-37.4%

Appendix V: Black Percentage of Students and Professional Staff, 2018

Black Percentage of Students and Professional Staff, 2018				
		Black % of	Black % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	21.4%	10.3%	-11.1%
Middle	40	21.4%	16.5%	-4.9%
High	25	21.4%	14.5%	-6.9%
Total	205	21.4%	12.9%	-8.5%
Total (excludes special schools)	198	21.3%	13.0%	-8.4%
Legislative		Black % of	Black % of	
District	Number	Students	Prof. Staff	Gap
14	29	32.6%	15.3%	-17.3%
15	30	17.5%	5.9%	-11.5%
16	20	6.7%	5.4%	-1.3%
17	22	15.9%	10.1%	-5.8%
18	21	16.5%	13.1%	-3.4%
19	29	22.5%	15.9%	-6.6%
20	23	30.3%	23.0%	-7.3%
39	24	28.4%	13.8%	-14.6%
Council		Black % of	Black % of	
District	Number	Students	Prof. Staff	Gap
1	37	8.4%	5.4%	-3.0%
2	44	24.7%	10.1%	-14.7%
3	37	16.0%	9.3%	-6.7%
4	42	22.4%	16.5%	-5.9%
5	38	35.0%	22.4%	-12.5%

Black Percentage of Students and Professional Staff by Local Area, 2018				
Local Area	Number	Black % of Students	Black % of Prof. Staff	Gap
Bethesda	16	7.3%	5.5%	-1.8%
Chevy Chase	4	13.8%	7.6%	-6.1%
Clarksburg	6	22.8%	6.6%	-16.2%
Damascus	5	13.1%	2.2%	-10.9%
Gaithersburg	27	20.3%	10.7%	-9.6%
Germantown	19	29.7%	10.7%	-18.9%
Glenmont/Norbeck	10	20.8%	18.0%	-2.9%
Kensington	6	14.9%	15.0%	0.1%
Montgomery Village	4	30.0%	19.7%	-10.2%
Olney	5	16.9%	7.3%	-9.6%
Potomac	8	8.4%	4.8%	-3.6%
Rockville	26	14.3%	8.7%	-5.6%
SS/TP Inside Beltway	16	25.7%	20.3%	-5.3%
SS East County	21	38.0%	23.5%	-14.5%
Wheaton	10	21.9%	18.0%	-3.9%
Black Percentage of Students and Professional Staff by Black % in School, 2018				
		Black % of	Black % of	
Percentage Black	Number	Students	Prof. Staff	Gap
Below 10%	42	6.6%	5.3%	-1.3%
10-24.9%	90	17.5%	11.9%	-5.5%
25-49.9%	55	31.8%	16.6%	-15.2%
50% or More	11	58.5%	27.8%	-30.6%

Appendix VI: Hispanic Percentage of Students and Professional Staff, 2018

Hispanic Percentage of Students and Professional Staff, 2018				
		Hispanic % of	Hispanic % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	32.3%	6.2%	-26.1%
Middle	40	29.2%	6.6%	-22.6%
High	25	29.5%	7.2%	-22.3%
Total	205	30.8%	6.6%	-24.2%
Total (excludes special schools)	198	30.8%	6.6%	-24.1%
Legislative		Hispanic % of	Hispanic % of	
District	Number	Students	Prof. Staff	Gap
14	29	20.2%	4.9%	-15.3%
15	30	18.2%	5.2%	-13.0%
16	20	12.5%	3.6%	-8.9%
17	22	31.1%	7.6%	-23.5%
18	21	39.7%	8.0%	-31.6%
19	29	47.1%	7.7%	-39.4%
20	23	39.5%	7.8%	-31.7%
39	24	37.8%	7.4%	-30.4%
Council		Hispanic % of	Hispanic % of	
District	Number	Students	Prof. Staff	Gap
1	37	12.6%	4.6%	-8.0%
2	44	29.8%	6.5%	-23.3%
3	37	32.3%	7.1%	-25.2%
4	42	43.9%	7.4%	-36.5%
5	38	34.4%	7.2%	-27.2%

Hispanic Percentage of Students and Professional Staff by Local Area, 2018				
Local Area	Number	Hispanic % of Students	Hispanic % of Prof. Staff	Gap
Bethesda	16	12.9%	4.4%	-8.5%
Chevy Chase	4	20.5%	9.8%	-10.7%
Clarksburg	6	19.2%	5.6%	-13.6%
Damascus	5	22.3%	5.3%	-16.9%
Gaithersburg	27	40.4%	7.8%	-32.5%
Germantown	19	28.1%	7.1%	-21.0%
Glenmont/Norbeck	10	60.6%	9.0%	-51.6%
Kensington	6	36.1%	7.7%	-28.4%
Montgomery Village	4	51.8%	7.7%	-44.0%
Olney	5	14.2%	4.2%	-9.9%
Potomac	8	7.9%	3.1%	-4.8%
Rockville	26	27.6%	5.6%	-22.0%
SS/TP Inside Beltway	16	38.5%	7.4%	-31.1%
SS East County	21	34.1%	7.3%	-26.8%
Wheaton	10	54.5%	8.8%	-45.7%
Hispanic % of Students and Professional Staff by Hispanic % in School, 2018				
		Hispanic % of	Hispanic % of	
Percentage Hispanic	Number	Students	Prof. Staff	Gap
Below 10%	22	7.9%	3.3%	-4.6%
10-24.9%	74	17.2%	5.4%	-11.9%
25-49.9%	69	37.6%	6.9%	-30.7%
50% or More	33	60.5%	9.9%	-50.6%

Appendix VII: White Percentage of Students and Professional Staff, 2018

White Percentage of Students and Professional Staff, 2018				
		White % of	White % of	
School Type	Number	Students	Prof. Staff	Gap
Elementary	133	26.6%	76.0%	49.4%
Middle	40	29.8%	68.7%	38.9%
High	25	30.0%	70.9%	40.9%
Total	205	28.3%	73.0%	44.7%
Total (excludes special schools)	198	28.2%	72.8%	44.6%
Legislative		White % of	White % of	
District	Number	Students	Prof. Staff	Gap
14	29	30.0%	73.0%	43.0%
15	30	33.8%	81.9%	48.1%
16	20	58.6%	83.9%	25.3%
17	22	28.3%	73.3%	45.0%
18	21	30.4%	71.7%	41.3%
19	29	17.0%	68.2%	51.2%
20	23	17.3%	61.1%	43.8%
39	24	14.1%	72.1%	58.0%
Council		White % of	White % of	
District	Number	Students	Prof. Staff	Gap
1	37	55.1%	82.8%	27.8%
2	44	22.9%	77.0%	54.0%
3	37	27.4%	74.6%	47.2%
4	42	19.7%	68.4%	48.7%
5	38	17.2%	62.8%	45.5%

White Percentage of Students and Professional Staff by Local Area, 2018				
Local Area	Number	White % of Students	White % of Prof. Staff	Gap
Bethesda	16	60.5%	83.5%	23.0%
Chevy Chase	4	52.0%	77.8%	25.8%
Clarksburg	6	22.4%	82.5%	60.1%
Damascus	5	50.3%	87.4%	37.1%
Gaithersburg	27	22.9%	73.8%	50.9%
Germantown	19	18.2%	75.8%	57.6%
Glenmont/Norbeck	10	7.7%	63.6%	55.9%
Kensington	6	33.1%	69.9%	36.9%
Montgomery Village	4	6.1%	66.3%	60.2%
Olney	5	51.5%	84.6%	33.1%
Potomac	8	44.9%	81.9%	37.0%
Rockville	26	31.7%	76.4%	44.7%
SS/TP Inside Beltway	16	24.9%	64.9%	40.0%
SS East County	21	13.0%	61.3%	48.4%
Wheaton	10	12.1%	66.1%	54.0%
White Percentage of Students and Professional Staff by White % in School, 2018				
		White % of	White % of	
Percentage White	Number	Students	Prof. Staff	Gap
Below 10%	48	5.2%	63.3%	58.2%
10-24.9%	51	17.4%	71.4%	53.9%
25-49.9%	64	36.7%	77.2%	40.5%
50% or More	35	59.0%	82.6%	23.7%

Appendix VIII: Capacity Utilization, 2018 and 2023-24 (Projected)

Capacity Utilization, 2018 vs 2023-24			
		Current	Future Cap.
School Type	Number	Cap. Util.	Util. 23-24
Elementary	133	104.7%	99.4%
Middle	40	93.9%	92.2%
High	25	100.5%	107.6%
Total	205	100.9%	100.0%
Total (excludes special schools)	198	100.8%	100.1%
Legislative		Current	Future Cap.
District	Number	Cap. Util.	Util. 23-24
14	29	98.7%	97.6%
15	30	100.5%	101.4%
16	20	107.6%	99.4%
17	22	103.4%	104.9%
18	21	101.2%	99.9%
19	29	96.3%	98.8%
20	23	102.5%	100.7%
39	24	98.4%	97.9%
Council		Current	Future Cap.
District	Number	Cap. Util.	Util. 23-24
1	37	102.5%	95.7%
2	44	101.2%	103.4%
3	37	102.2%	101.6%
4	42	94.3%	96.1%
5	38	105.2%	104.4%

Capacity Utilization by Local Area, 2018 vs 2023-24			
Local		Current	Future Cap.
Area	Number	Cap. Util.	Util. 23-24
Bethesda	16	109.2%	99.9%
Chevy Chase	4	99.9%	102.6%
Clarksburg	6	103.8%	129.7%
Damascus	5	94.6%	93.9%
Gaithersburg	27	99.3%	104.8%
Germantown	19	104.9%	96.8%
Glenmont/Norbeck	10	103.6%	96.5%
Kensington	6	96.2%	107.9%
Montgomery Village	4	96.6%	96.0%
Olney	5	89.6%	83.7%
Potomac	8	94.1%	86.0%
Rockville	26	102.4%	99.1%
SS/TP Inside Beltway	16	105.8%	96.5%
SS East County	21	102.9%	109.5%
Wheaton	10	92.9%	97.2%

Capacity Utilization by Demographic, 2018 vs 2023-24			
		Current	Future Cap.
Percentage Asian	Number	Cap. Util.	Util. 23-24
Below 10%	91	98.8%	99.4%
10-24.9%	79	102.9%	101.2%
25-49.9%	27	100.8%	99.3%
50% or More	1	88.8%	89.1%
		Current	Future Cap.
Percentage Black	Number	Cap. Util.	Util. 23-24
Below 10%	42	101.3%	94.7%
10-24.9%	90	101.4%	102.4%
25-49.9%	55	98.7%	99.6%
50% or More	11	104.3%	103.3%
		Current	Future Cap.
Percentage Hispanic	Number	Cap. Util.	Util. 23-24
Below 10%	22	96.5%	89.5%
10-24.9%	74	103.1%	100.5%
25-49.9%	69	99.9%	102.3%
50% or More	33	100.6%	102.2%
		Current	Future Cap.
Percentage White	Number	Cap. Util.	Util. 23-24
Below 10%	48	99.8%	100.4%
10-24.9%	51	101.1%	105.5%
25-49.9%	64	101.5%	98.8%
50% or More	35	100.5%	94.5%

Capacity Utilization by ESOL and FARMs, 2018 vs 2023-24			
		Current	Future Cap.
Percentage ESOL	Number	Cap. Util.	Util. 23-24
Below 10%	58	97.0%	95.6%
10-24.9%	86	103.4%	105.0%
25-49.9%	40	99.8%	96.0%
50% or More	14	108.5%	103.1%
		Current	Future Cap.
Percentage FARMs	Number	Cap. Util.	Util. 23-24
Below 10%	38	102.7%	97.4%
10-24.9%	45	101.3%	99.3%
25-49.9%	56	98.9%	101.4%
50% or More	59	101.4%	101.3%
Capacity Utilization by Household Income, 2018 vs 2023-24			
Zip Code		Current	Future Cap.
Household Income	Number	Cap. Util.	Util. 23-24
Below $100,000	32	99.8%	100.7%
$100,000-149,999	106	102.1%	102.2%
$150,000-199,999	34	96.7%	99.9%
$200,000 or More	26	102.4%	90.6%

Appendix IX: Number of Over Capacity Schools, 2018 and 2023-24 (Projected)

Over Capacity Schools, 2018 vs 2023-24					
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
School Type	Number	2018	2018	2023-24	2023-24
Elementary	133	76	26	62	18
Middle	40	13	1	12	0
High	25	13	1	17	5
Total	205	104	28	91	23
Total (excludes special schools)	198	102	28	91	23
		Over	120%+	Over	120%+
Legislative	Total	Capacity,	Capacity,	Capacity,	Capacity,
District	Number	2018	2018	2023-24	2023-24
14	29	14	2	15	2
15	30	13	5	10	5
16	20	12	5	7	4
17	22	13	4	11	3
18	21	11	3	9	1
19	29	14	3	14	2
20	23	12	3	10	4
39	24	13	3	15	2
		Over	120%+	Over	120%+
Council	Total	Capacity,	Capacity,	Capacity,	Capacity,
District	Number	2018	2018	2023-24	2023-24
1	37	18	7	13	4
2	44	24	6	24	6
3	37	21	7	18	4
4	42	16	3	16	3
5	38	23	5	20	6

Over Capacity Schools by Local Area, 2018 vs 2023-24					
		Over	120%+	Over	120%+
Local	Total	Capacity,	Capacity,	Capacity,	Capacity,
Area	Number	2018	2018	2023-24	2023-24
Bethesda	16	9	5	6	3
Chevy Chase	4	2	0	2	1
Clarksburg	6	4	2	3	3
Damascus	5	2	0	3	0
Gaithersburg	27	14	5	17	5
Germantown	19	12	3	11	2
Glenmont/Norbeck	10	5	0	4	0
Kensington	6	3	1	3	1
Montgomery Village	4	2	0	2	0
Olney	5	1	0	1	0
Potomac	8	2	0	1	0
Rockville	26	16	5	10	1
SS/TP Inside Beltway	16	8	3	7	2
SS East County	21	13	3	12	5
Wheaton	10	5	0	5	0

Over Capacity Schools by Demographic, 2018 vs 2023-24					
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage Asian	Number	2018	2018	2023-24	2023-24
Below 10%	91	44	9	40	10
10-24.9%	79	46	15	39	10
25-49.9%	27	12	4	12	3
50% or More	1	0	0	0	0
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage Black	Number	2018	2018	2023-24	2023-24
Below 10%	42	18	5	14	4
10-24.9%	90	49	16	43	11
25-49.9%	55	29	6	28	7
50% or More	11	6	1	6	1
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage Hispanic	Number	2018	2018	2023-24	2023-24
Below 10%	22	7	2	5	0
10-24.9%	74	38	15	31	9
25-49.9%	69	39	9	38	10
50% or More	33	18	2	17	4
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage White	Number	2018	2018	2023-24	2023-24
Below 10%	48	27	2	25	3
10-24.9%	51	27	9	27	12
25-49.9%	64	34	12	28	5
50% or More	35	14	5	11	3

Over Capacity Schools by ESOL and FARMs, 2018 vs 2023-24					
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage ESOL	Number	2018	2018	2023-24	2023-24
Below 10%	58	17	4	16	2
10-24.9%	86	53	17	49	14
25-49.9%	40	23	6	17	6
50% or More	14	9	1	9	1
		Over	120%+	Over	120%+
	Total	Capacity,	Capacity,	Capacity,	Capacity,
Percentage FARMs	Number	2018	2018	2023-24	2023-24
Below 10%	38	18	6	13	5
10-24.9%	45	22	10	19	4
25-49.9%	56	30	7	29	6
50% or More	59	32	5	30	8
Over Capacity Schools by Household Income, 2018 vs 2023-24					
		Over	120%+	Over	120%+
Zip Code	Total	Capacity,	Capacity,	Capacity,	Capacity,
Household Income	Number	2018	2018	2023-24	2023-24
Below $100,000	32	15	1	14	2
$100,000-149,999	106	61	17	56	15
$150,000-199,999	34	15	5	15	4
$200,000 or More	26	11	5	6	2

Appendix X: Correlations Between Variables, 2018

Asian Student %	Correlation
Asian Student %	1.00
Black Student %	-0.29
Hispanic Student %	-0.53
White Student %	0.15
ESOL Student %	-0.40
FARMs Student %	-0.53
S/I Ratio	0.43
Personnel Cost/Student	-0.32
Avg. Household Income	0.32
Current Capacity Util.	0.03
Future Capacity Util.	0.04
Black Student %	Correlation
Asian Student %	-0.29
Black Student %	1.00
Hispanic Student %	0.20
White Student %	-0.67
ESOL Student %	0.20
FARMs Student %	0.52
S/I Ratio	-0.30
Personnel Cost/Student	0.18
Avg. Household Income	-0.52
Current Capacity Util.	0.06
Future Capacity Util.	0.14
Hispanic Student	Correlation
Asian Student %	-0.53
Black Student %	0.20
Hispanic Student %	1.00
White Student %	-0.74
ESOL Student %	0.81
FARMs Student %	0.91
S/I Ratio	-0.60
Personnel Cost/Student	0.41
Avg. Household Income	-0.59
Current Capacity Util.	0.06
Future Capacity Util.	0.14

White Student %	Correlation
Asian Student %	0.15
Black Student %	-0.67
Hispanic Student %	-0.74
White Student %	1.00
ESOL Student %	-0.64
FARMs Student %	-0.86
S/I Ratio	0.51
Personnel Cost/Student	-0.32
Avg. Household Income	0.69
Current Capacity Util.	-0.12
Future Capacity Util.	-0.24
ESOL Student %	Correlation
Asian Student %	-0.40
Black Student %	0.20
Hispanic Student %	0.81
White Student %	-0.64
ESOL Student %	1.00
FARMs Student %	0.83
S/I Ratio	-0.53
Personnel Cost/Student	0.33
Avg. Household Income	-0.50
Current Capacity Util.	0.16
Future Capacity Util.	0.14
FARMs Student %	Correlation
Asian Student %	-0.53
Black Student %	0.52
Hispanic Student %	0.91
White Student %	-0.86
ESOL Student %	0.83
FARMs Student %	1.00
S/I Ratio	-0.63
Personnel Cost/Student	0.42
Avg. Household Income	-0.67
Current Capacity Util.	0.06
Future Capacity Util.	0.12

S/I Ratio	Correlation
Asian Student %	0.43
Black Student %	-0.30
Hispanic Student %	-0.60
White Student %	0.51
ESOL Student %	-0.53
FARMs Student %	-0.63
S/I Ratio	1.00
Personnel Cost/Student	-0.87
Avg. Household Income	0.46
Current Capacity Util.	0.20
Future Capacity Util.	0.08
Personnel Cost/Student	Correlation
Asian Student %	-0.32
Black Student %	0.18
Hispanic Student %	0.41
White Student %	-0.32
ESOL Student %	0.33
FARMs Student %	0.42
S/I Ratio	-0.87
Personnel Cost/Student	1.00
Avg. Household Income	-0.35
Current Capacity Util.	-0.35
Future Capacity Util.	-0.20
Avg. Household Income	Correlation
Asian Student %	0.32
Black Student %	-0.52
Hispanic Student %	-0.59
White Student %	0.69
ESOL Student %	-0.50
FARMs Student %	-0.67
S/I Ratio	0.46
Personnel Cost/Student	-0.35
Avg. Household Income	1.00
Current Capacity Util.	-0.07
Future Capacity Util.	-0.19

Current Capacity Utilization	Correlation
Asian Student %	0.03
Black Student %	0.06
Hispanic Student %	0.06
White Student %	-0.12
ESOL Student %	0.16
FARMs Student %	0.06
S/I Ratio	0.20
Personnel Cost/Student	-0.35
Avg. Household Income	-0.07
Current Capacity Util.	1.00
Future Capacity Util.	0.68
Future Capacity Utilization	Correlation
Asian Student %	0.04
Black Student %	0.14
Hispanic Student %	0.14
White Student %	-0.24
ESOL Student %	0.14
FARMs Student %	0.12
S/I Ratio	0.08
Personnel Cost/Student	-0.20
Avg. Household Income	-0.19
Current Capacity Util.	0.68
Future Capacity Util.	1.00