## School Data Analysis Summary and Conclusions

In the school district analysis, we have a sample of 15 schools that combine for 39,170 students and have a combined budget of over 24 million dollars. In this district, all students average a score of about 79 for math and about 82 for reading with about 75% of students passing math and about 86% passing reading. The district has about 65% of students passing both subjects.

The top 5 schools in the district by scores are all charter schools while the bottom 5 are all district schools. Charter schools have about a 94% passing rate for math and about 97% passing rate for reading while district schools have about a 67% passing rate for math and an 81% passing rate for reading.

For this analysis, the school district has been broken up into 4 ranges of spending: Under \$585 per student with 93% of students passing math and about 97% passing reading, between \$585 and \$630 per student with about 87% of students passing math and about 93% passing reading, between \$630 and \$645 per student with about 73% of students passing math and about 84% passing reading, and between \$645 and \$680 per student with about 66% of students passing math and about 81% passing reading.

This analysis has divided the schools in this district into 3 sizes: Schools with less than 1000 students that have about 94% of students passing math and about 96% passing reading, schools with between 1000 and 2000 students that have about 94% of students passing math and about 98% passing reading, and schools with between 2000 and 5000 students that have about 70% of students passing math and about 83% passing reading. Notably, all of the district schools fall under the largest population of students (between 2000 and 5000) while only one charter school falls under this category.

What stands out to me about this analysis is that all of the top 5 schools by passing rate are charter schools while the bottom 5 are district schools. When looking closer at the data, all of the district schools have an overall passing rate of under 55% while the lowest overall passing rate for a charter school is about 89%. Additionally, 4 of the 8 charter schools are spending less than \$585 per student, the lowest range of the spending bracket and another 3 are in the \$585 to \$630 range while the 6 of the 7 district schools fall into the upper 2 spending ranges (between \$630 and \$645 and between \$645 and \$680). This might indicate that charter schools likely have better methods for educating students than the district schools but, this could also be an issue of the number of students per school. All 7 district schools have between 2000 and 5000 students (the largest of the population brackets), while there is only one charter school of this size, Wilson High School with 2283 students. Notably, the smallest district school has 2739 students. In summary, the discrepancy in scores between charter and district schools could be caused by different teaching methods between the two or the difference in the number of students at each type of school.