# PyCity Schools Analysis

- The goal of this analysis is to understand trends in school performance given a set of the city's district-wide standardized test scores with accompanying student information pertinent to the location of the student in the district. Overall, the data shows that being a student in a Charter school as opposed to a District school is the single biggest determiner of passing the standardized test (receiving a 70% or greater).

- The initial analysis of the data took summary statistics for the district scores as a whole. The overall passing rate in the district is a 65.2% of students with 75.0% and 85.9% of students passing math and reading respectively. In order to be overall passing, test scores in both math and science needed to exceed a 70%. Thus, the overall percentage being lower than the individual category percentages leads us to believe the discrepancy lies in the significantly lesser percentage of students passing math. As a district, it would be in our best interest to focus on improving math scores district wide.

- When comparing school-to-school, we learn more information about the types of schools in the district and their significance. From the data, we can see charter schools are all smaller in student population, have smaller school budgets, and score higher on this standardized test than district schools. Therefore, on the contrary, district schools have much higher student populations, higher school budgets, yet perform poorer on this standardized test than charter school students on average. It is reasonable from these data to suggest further investigation into how funds are allocated in charter schools in order to glean insight on how to improve the spread of district schools' budgets.

- Another suggestion from these data on how to improve test scores across the district would be the opening of another district school. We can see clearly that student population directly affects overall passing rate. If there were another district school available to students, we could reduce class size in our district schools and thereby increase test scores.