**Written Report**

The data I used came from the reading and math district wide standardized test results I was then tasked with making this date easier to digest for the school board and mayor. First off was the district summary where I created a high-level snapshot of the standardized tests at a district level.

I first found the total number of schools within the district which was 15. At the district level there are 39170 different students in the district. The complete budget the district had this year was $24.649.428. Next came the average scores first was math at 78.98537145774827 and reading was at 81.87784018381414. I then calculated the percentage of students who passed math, reading, and both. The data showed that a higher percentage of students passed reading 85% over the 74% of students who passed math. But the overall passing percentage of students who passed both math and reading were 65% of students. This was the districts metrics all separate in their own cells but the final district\_summary was a new data frame that showed this in an easy-to-read table format.

The next section was a School summary found that the different school types were District and Charter. Next up was finding the total number of students attending each school, and Bailey High School had the highest number of students at 4976. Went deeper finding the total budget and per capita spending per school. Baily High School had the highest budget at 3,124,928 yet Huang High School had the highest per capita spending. The scores for each school were analyzed next where Baily had the highest overall number of students passing math and reading. These new metrics were used to create a new data frame Per\_School\_Summary making it easier for the school board and mayor to read.

Next, I went into greater detail listing the top 5 and bottom 5 schools of the district. The top 5 schools all had an overall passing percentage of 90% they were Cabera, Thomas, Griffin, Wilson, and Pena. The bottom 5 all had an overall passing percentage of 50 % they were Rodriguez, Figueroa, Huang, Hernadez, and Johnson.

Another layer of analyzation I decided to do was looking at the Math and reading Scores for each school organized by Grade Level (9th, 10th, 11th, 12th). The averages for math scores from all grades ranged from 75 - 85 meaning each grade has a passing average for math. The averages for reading scores from all grades ranged from 80 – 85; all class grades have a passing average for reading. Next all scores were organized by school spending ranging from <585, 585-630, 630-645, 645-680 into new data frame called spending\_summary. One trend that was surprising was spending range < 585 had the highest % passing math, % passing reading, and % overall passing all over 90%. Then I separated the data by school size ranging from <1000, 1000-2000, 2000-5000 in other words small, medium, large. What I found from this was that the schools with a large school size did not do so well with an average overall passing percentage of 58%. The scores were then separated by school type which was between charter vs districts. Charters had the higher overall passing percentage at 90%, but Districts had a bad overall passing percentage at 53%.