

Finds from dash boards

Since I have not attended high school in the U.S., I am interested about where the high school graduation will go, specifically in SUNY (State University of New York). Therefore, I searched “high school to SUNY” at DATA.GOV (<https://www.data.gov>) and I found a datasets called “State University of New York (SUNY) - NYS High School Attended by First Time Undergraduate Students: Beginning Fall 2010” (<https://catalog.data.gov/dataset/state-university-of-new-york-suny-nys-high-school-attended-by-first-time-undergraduate-stu>).

This dataset concludes all the high schools in the New York State and gives the data about high school graduations attending rate at SUNY school. In the dataset, all high schools’ names, school codes, cities, counties, and zip codes are provided. Besides, it details the total numbers of students that attended SUNY institutions, the numbers of students attended doctoral institutions, comprehensive colleges, technology colleges, and community colleges at SUNY.

Since there are almost 13 thousand of rows of data in the set, which is too much for me, I randomly selected 500 rows data from the original sheet.

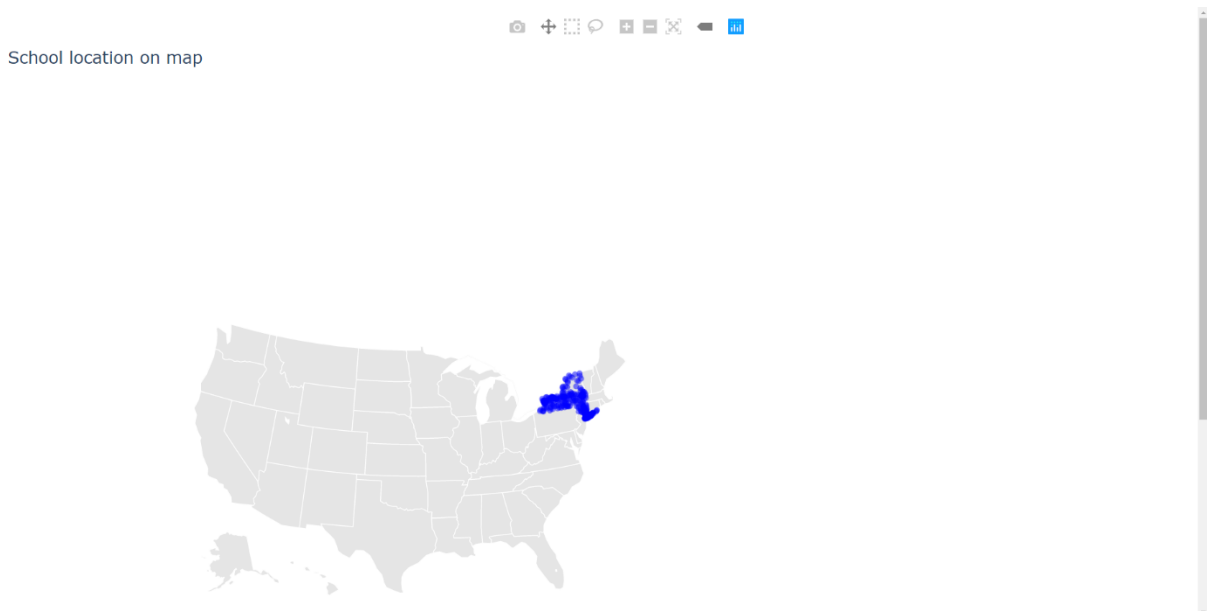


Figure 1 School Locations

School location on map

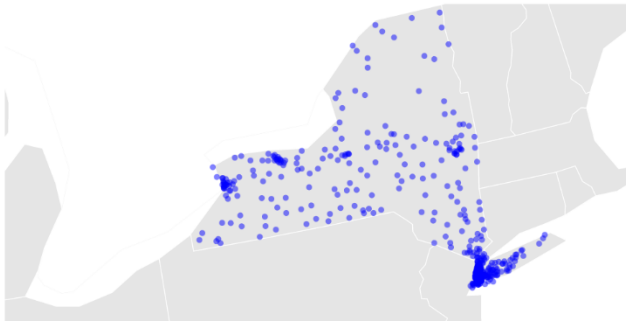


Figure 2 School Locations Zoomed

For figure 1 and figure 2, all the sample schools' location. We can see that the density of schools is extremely high around the New York City. It means that the population density is relatively high on this area.

School location on map

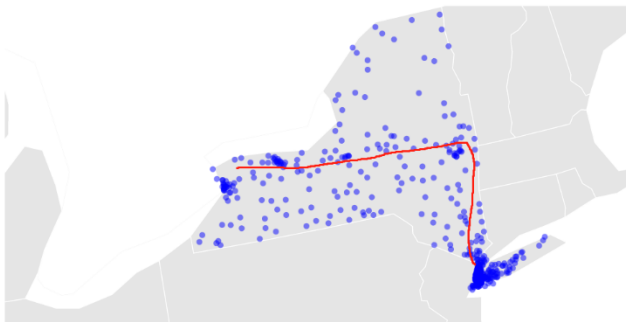


Figure 3 School Locations on Freeway

Besides, I draw a red line the map, which is the freeway that goes from NYC to Albany and Buffalo. Obviously, there are more schools around this line, and it means the population is higher than other areas.

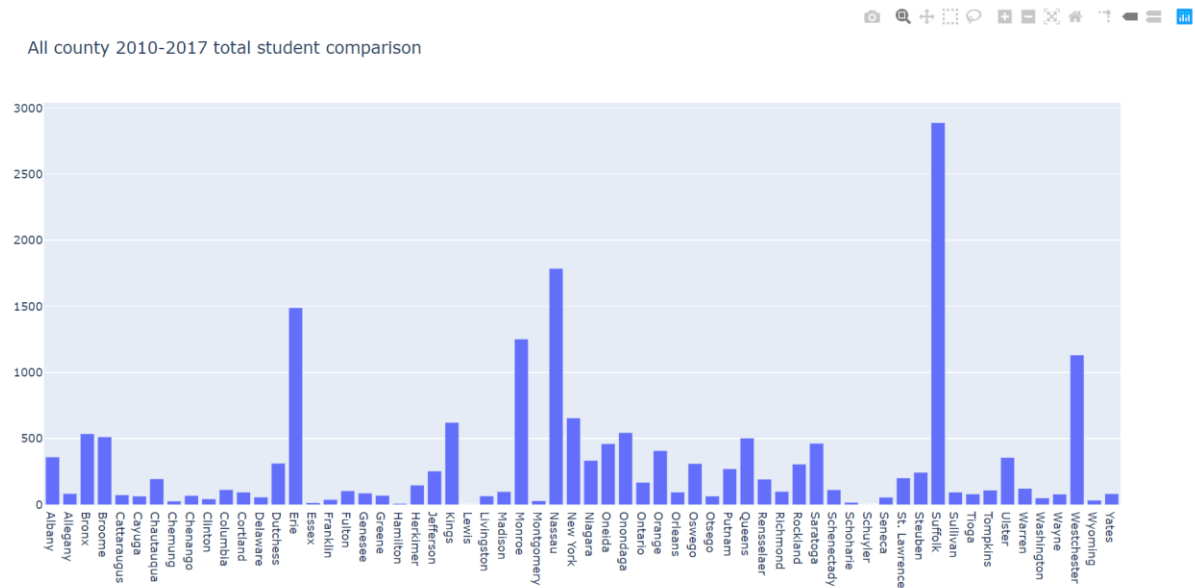


Figure 4 Total Students in Sample

On figure 4, the total students who graduated from high school from 2010-2017 for all counties are showing on the dashboard. Let us compare this with figure 2, we can see that, even though the number of schools in 5 boroughs of NYC is very high, the students who goes to SUNY is not that much in NYC. However, there are a lot of students go to SUNY in Nassau and Suffolk Counties. We can conclude that, firstly there is less SUNY school in NYC (in fact there is no SUNY school in NYC). Secondly, there are more SUNY school in Nassau and Suffolk Counties. Thirdly, the population in Suffolk and Nassau Counties are higher than most of other counties.

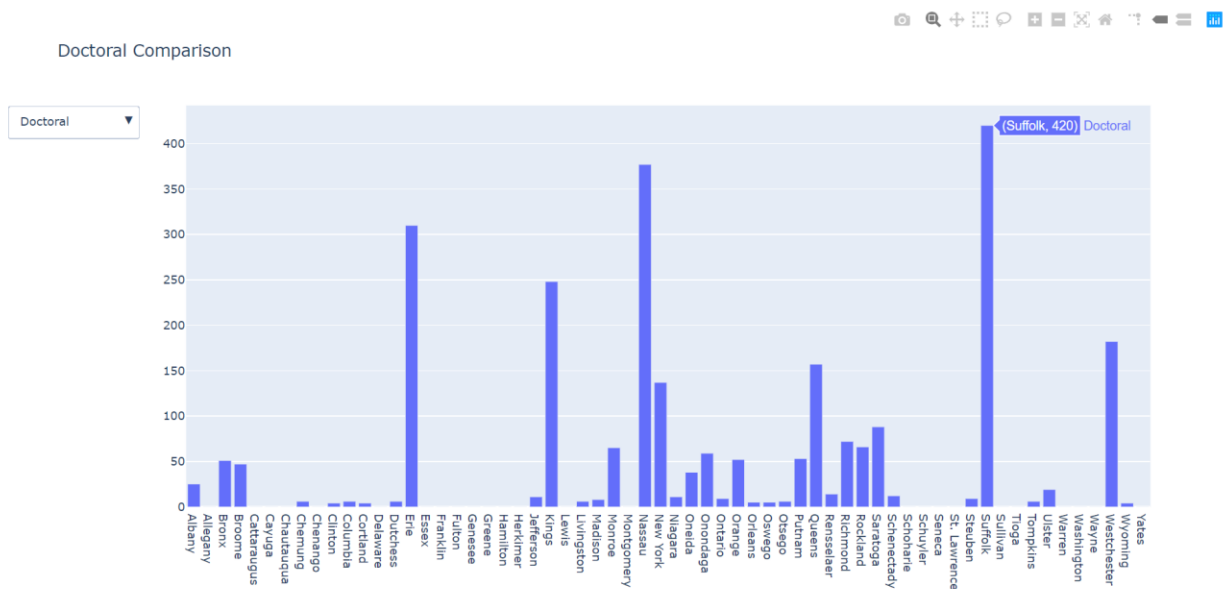


Figure 4 Students to Doctoral School

In addition to the number of total students, we can see from figure 4 that there are a lot of students from Suffolk and Nassau Counties that go to doctoral school from 2011-2017. It means that the doctoral school of SUNY such as our school, Stony Brook University attracts many medical students from its neighborhood.

For further information, I loaded the full data, which is not required for this assignment, for the school locations, all year chart, and all counties total student dashboard.

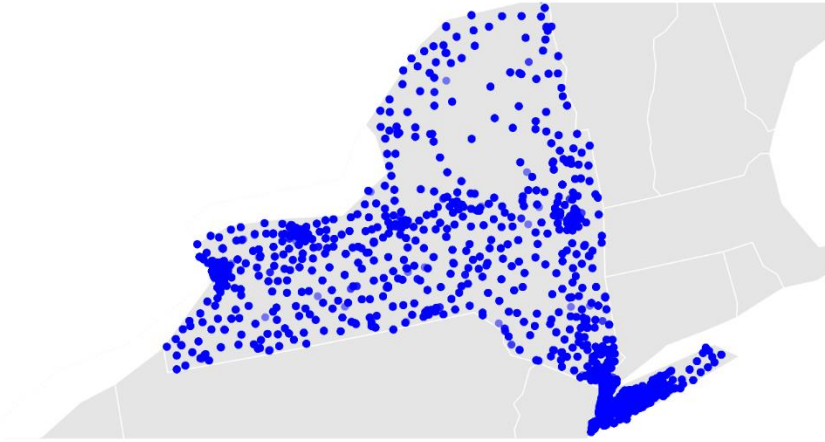


Figure 5 All 12944 High Schools Locations

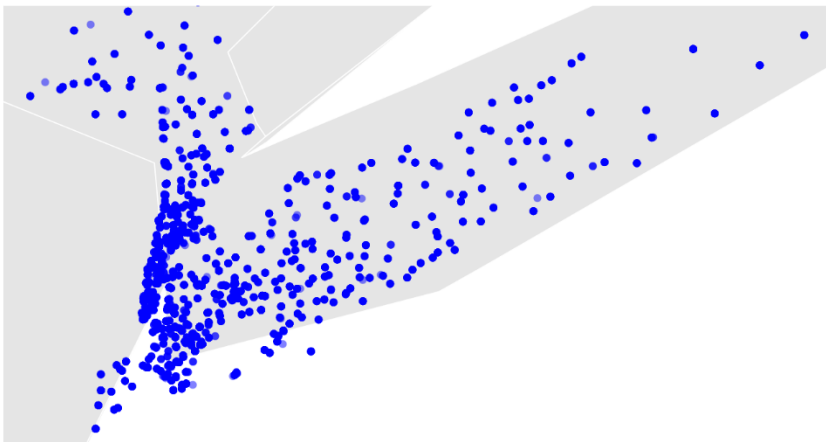


Figure 6 School Locations for NYC and Long Island Area

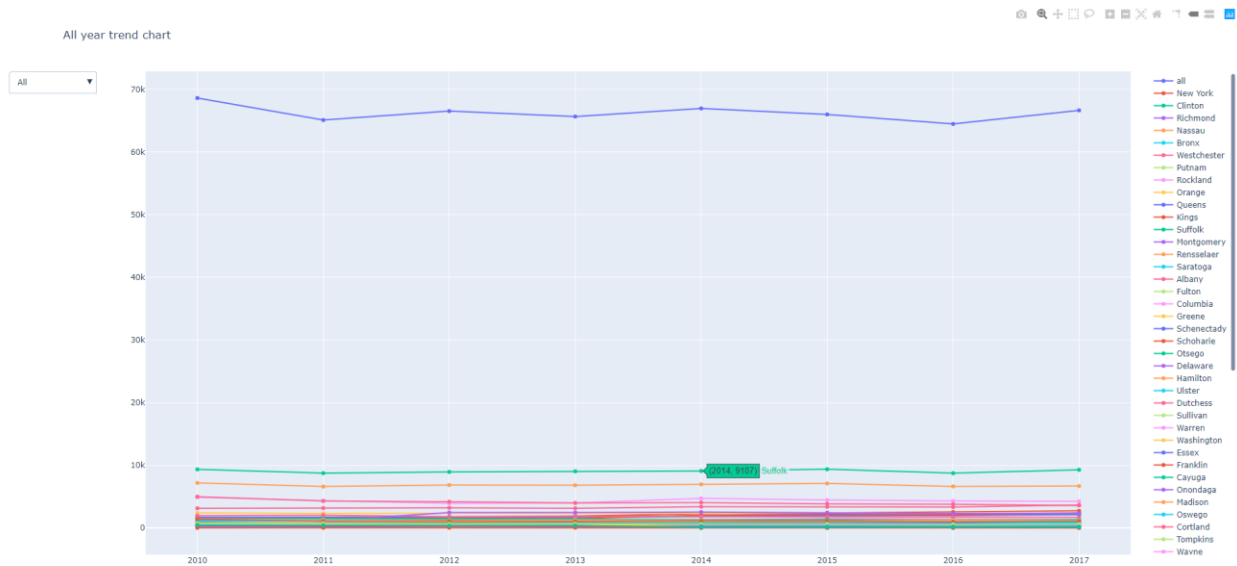


Figure 7 All Counties Trend Chart