Project Proposal

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**1.** **Research Problem.**

The project is about to visualize the data about students and teachers of public school in Massachusetts. Here are the research question:

Which school and which city has the most enrolment and most number of public school in MA?

Which city and which school have the highest teachers’ salary?

**2. About the dataset.**

The data is retrieved from Kaggle by the link <https://www.kaggle.com/ndalziel/massachusetts-public-schools-data#MA_Public_Schools_2017.csv>

There are 302 columns with 1861 records describing the data about public and charter school. The dataset includes the data on the enrollment (by grade, selected population, race, gender); class size (by gender and selected populations); teacher salary; per pupil expenditure; graduation rate; Graduates Attending Higher Ed; Advanced Placement Participation; Advanced Placement Performance; SAT Performance; MCAS Achievement Results; Accountability Report.

In this project, I am using some specific columns comprising “Number of Students”, “Address 1”, “Town”, “State”, “Zip”, “District”, “Average Salary”.

**3. GIS methods and tools.**

The map of MA will be created based on the Google Map of HCMGIS in assignment week 5. The location of school will be shown in the map, so it can be seen that which city has more public schools. This can be shown using QGIS.

The summary of teacher salary and student enrolment can be shown using Selection Statistics in week 4 assignment.

The number of student can be shown in color by the amount