

OPTIMAL LOCATIONS FOR GOVERNMENT DEVELOPMENT IN BOSTON

INTRODUCTION

People’s choice of which neighborhood to live in is usually largely based on how “developed” the neighborhood is across different utilities. We’ve decided to look into the correlation and try to determine places that are optimal for government development. Our goal is to score each zipcode by the ratio of government developed structures to cost of living. If there is a higher score, that indicates there is too few developed structures as compared to the cost of a home in the area, pointing to a greater need for government development.



DATASETS

- Property Assessments of 2016 from City of Boston data portal
- Cambridge schools from City of Cambridge data portal
- Boston Streetlights from Analyze Boston data portal
- Hospital Locations from Analyze Boston data portal
- Boston Public Schools from City of Boston data portal
- Boston Police Stations from Analyze Boston data portal



PLAN

In order to do this we are going to need to determine a development score. The development score will be taken by the average cost of home divided by government development(police stations, hospitals, schools, and streetlights) in a zip code. If the value is low then the average cost of home is small or there is a relatively significant amount of government development. Because if the value of cost divided by development is high then there is an optimal opportunity for government development. However, if the value is low due to there being more development in comparison to property value, then there is less need for government development.

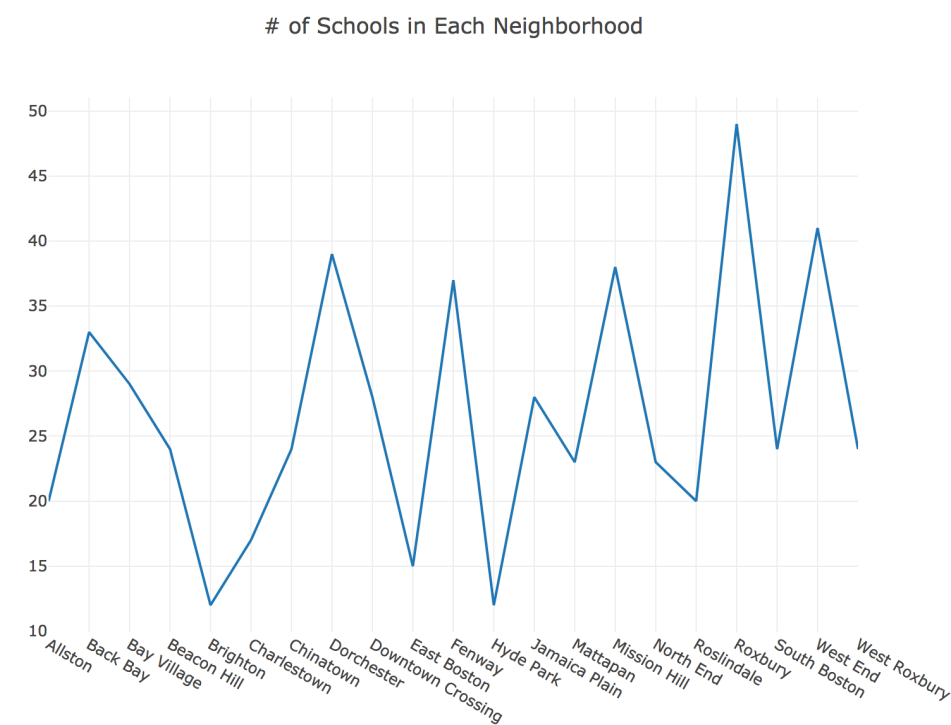
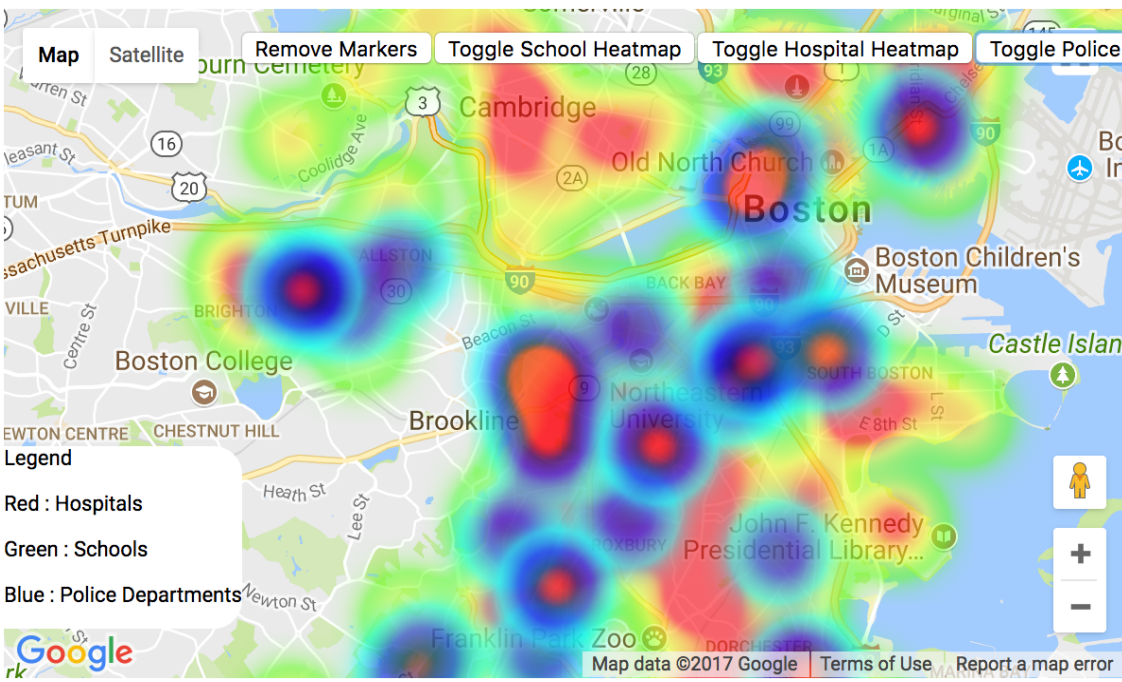


WEIGHTING

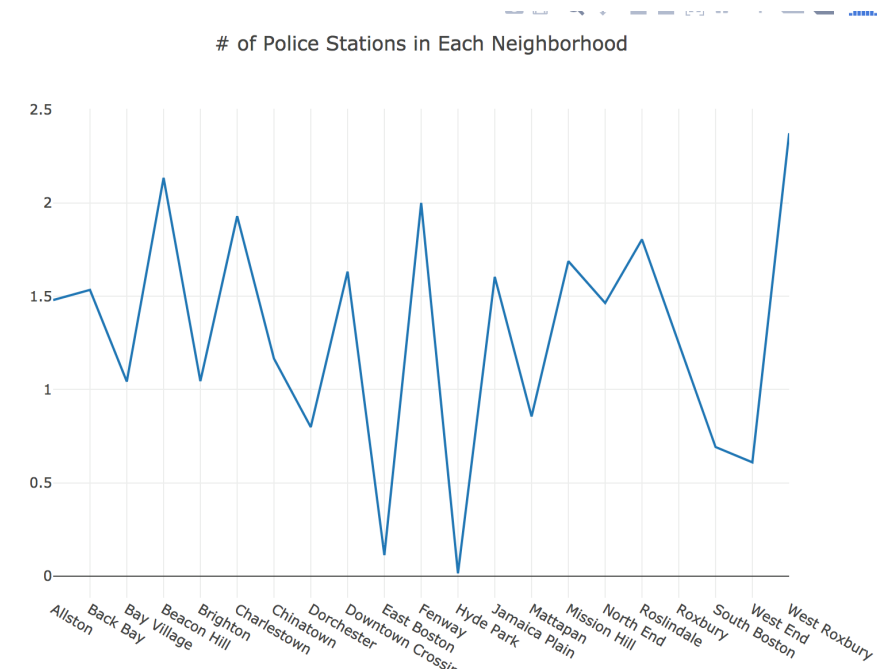
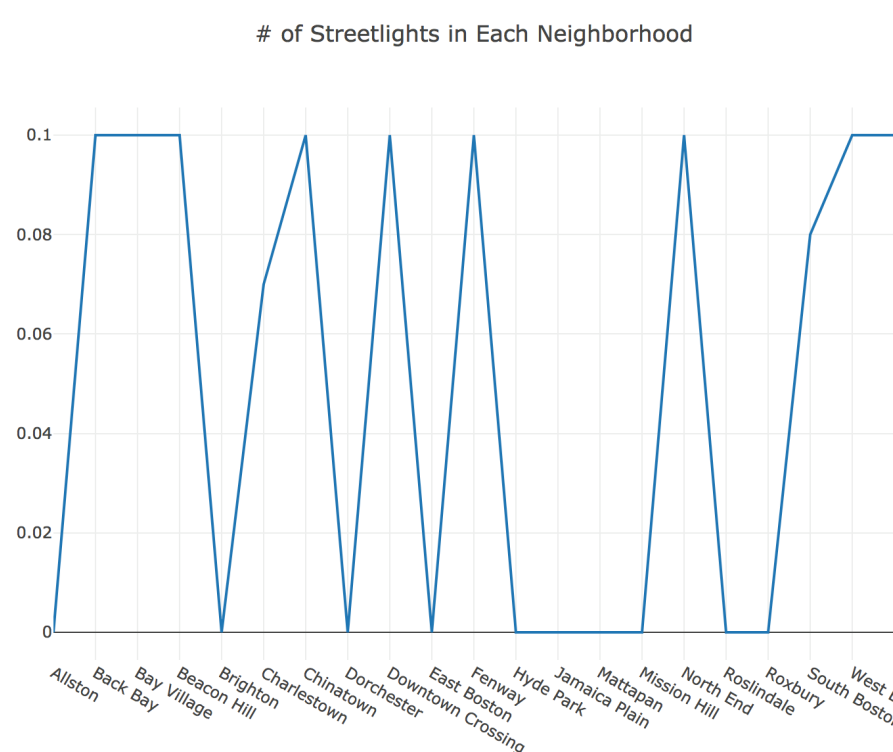
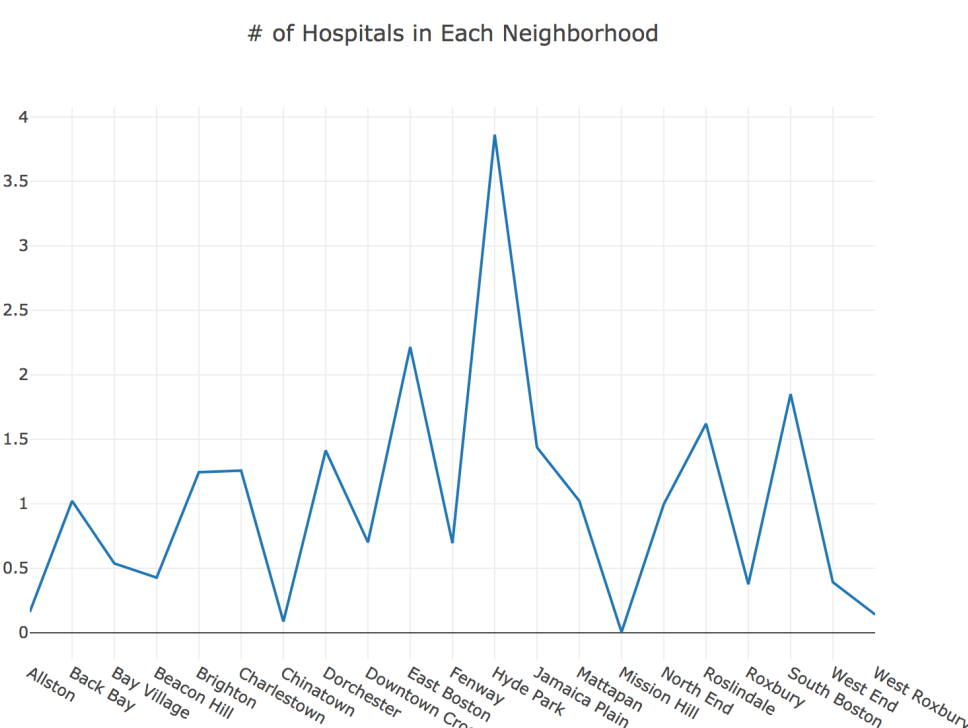
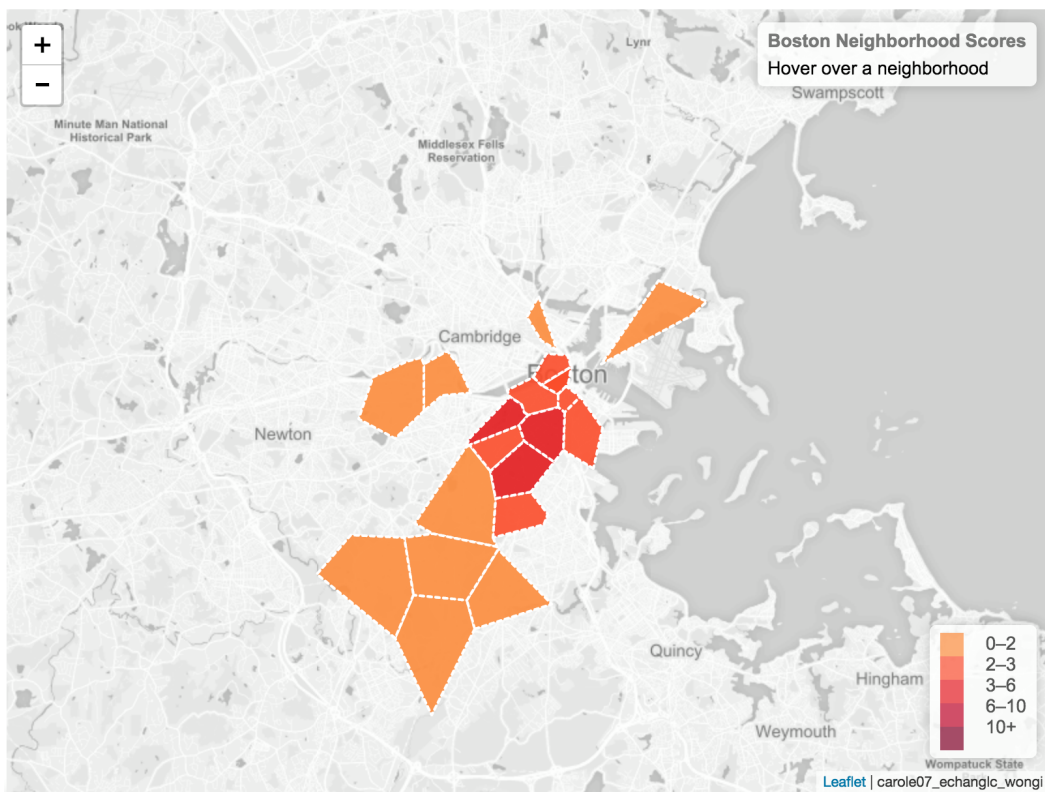
Government Development Type	Scale
Streetlights	0.25
Hospitals	1.5
Police Stations	1.0
Boston Schools	1.0
Cambridge Schools	1.0

We will create an arbitrary weighted scale for the Government development buildings. We scaled it based on what we felt was a fair assessment on the amount of development each type was worth according to the average cost to operate each facility. Giving us another perspective, where it's not just looking at how developed each neighborhood is, but rather the developmental opportunities.

RESULTS



These are some diagrams depicting the occurrence of development within each Boston neighborhood. These do not yet have our weighted scale applied to them.



FUTURE WORK

In the future we hope to not only figure out the most optimal places for governments to develop, but also what kind of developments are best. For instance, we could apply a less arbitrary weight and determine which developments could help the Development Score become more normal.

