

Weekly Project SCRUM Report

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Project Name: State Surplus Land Assessment - Affordable Housing

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Scope of the Project:

Since 2019, Representative Nika Elugardo has continuously worked to address the critical shortage of affordable housing for low income or minorities in Massachusetts. Her filed legislation in 2019 has enabled public housing authorities to borrow against real estate equity of municipal-owned properties to raise funds for maintenance and building of additional affordable housing units. Additionally, the bill enables the state to sell its unused lands and make them more readily available to developers to either create affordable land or to generate capital for building or renovating affordable housing elsewhere.

In previous semesters, the students had identified the number of the state-owned lands which were designated for public housing and validated their distance to public transportation. Furthermore, they identified which lands are most appropriate for low income housing development and which lands are most appropriate for sale to market-rate development for the purposes of raising money to fund the development of affordable housing. However, the project was mainly focused on the lands owned by the Commonwealth, not by cities and towns. Therefore, in this semester, Representative Elugardo is interested in determining both the value of lands owned by state and lands owned by municipal housing authorities.

Our team of four members was designated to tackle her questions of interest, and our undertaking for this project is to assess the volume and attributes of lands owned by municipal housing authorities (cities and towns) and the market value of lands owned by the State Department of Housing and the State Department of Transportation. The goal for this project is to provide recommendations of which lands to sell and which to develop for affordable housing. These recommendations will be based on the list of lands that has most attractive features such as transit friendly (i.e. have the multiple public transportation options), the assessed value of the land (based on the state assessment as well as the market assessment of nearby lands), building viability (i.e. access to water/electricity based on presence of existing buildings), and other amenities. By the end of this project, our team

would like to provide the client with a clear description of how many surplus lands that were owned by the state and how many that were owned by the municipal housing authorities which are readily available for the development of affordable housing.

Activities Completed this week:

- Reviewed the project description and gained an understanding of what was done in the previous semester
- Kickoff meetings with clients and the project manager to redefine the scope of the project. Nika Elugardo was not able to meet due to recent injury. Clients explained what they are looking for and clarified some previous questions we had. Project Manager, Rishab, introduced himself and outlined what is needed and ways that he can help.
- Reviewed client's questions of interest and determined what are the most important questions that the team can accomplish or address this semester
- Explored the dataset and tools required for doing data extraction and analysis

Obstacles and Solutions:

- Still not clear about what all of the variables in the dataset mean and how to use them to answer questions of interest. The team will need to work with clients and project manager to determine what variables needed to extract and use for data analysis
- There are several Real Estate API websites that the team need to utilize in order to get valuable information to answer one of the client's questions (such as the assessed value of land based on the state assessment and market assessment of nearby land). Our team is not very familiar with how-to extract data from the APIs. We will need to explore the APIs more thoroughly and determine what information we need to extract from it.

Plans for Next Week:

- Continue revising scope and submit by EOD sunday
- Delegate tasks to each team member to tackle different layers of the project.
- Explore ways to extract data from APIs and use them for data analysis later on.
- Weekly meeting with project manager and discuss any questions or confusion we have
- Familiarize with the tools and software that the previous team used to do the data analysis last semester, and come up with new estimation or improvement on the code if needed

- Work out features that are needed to serve as the input of APIs(May need to consult the project manager). Before using those APIs, work need to be done to group several datasets.

Meet with Project Manager Next Week: Yes