City Transportation Analysis

By Emile and Warren

We were interested in designing a project/presentation around transportation services in New York City. It's not hard to see that transit service in Brooklyn and Queens is much worse when compared to Manhattan. The outer boroughs are much larger in size and aren't as densely packed with trains and buses. This is an ethics issue clear as day. Brooklyn and Queens residents have less access to transit, which means that they will have less opportunities in terms of employment if they live in an area that doesn't have a reasonable commute to a job. It's one of the explanations for the increase in bikes and scooters in the city as well, since citizens are forced to find other means to travel. We found that there was good reason to look further into this issue and do a little analysis/programming in an effort to find solutions, or at least to make the issue clearer and provide a visual representation of it.

With this in mind, we wanted to create a tool to illustrate this inequity, and analyze the transit situations in order to help transit workers/executives make decisions to add in new methods of transportation, or perhaps change routes to better accommodate more areas. We developed a tool that could take a coordinate point and check the nearby methods of public transportation in a requested vicinity, and then used some programming with publicly available datasets to find different coordinates to test with. These data sets allowed us to pinpoint parts of the city that may benefit greatly from better transit. We also tested the neighborhoods that would be in the proposed Interborough Express Line through Brooklyn and Queens, in order to showcase how beneficial the IBX proposal would be to these neighborhoods.