

Dear Mr. Mayor:

After looking into Philly 311 data, I strongly recommend the City of Philadelphia to incorporate Philly 311 data into the decision making to identify the insufficient city services and promote the development of Philadelphia. There are two main reasons that Philly 311 data will be an indispensable complementary to the City. First, Philly 311 reflect the real-time residents' complaints on city services which would help the City figure out the priority problems; What's more, the progress the City has made would be documented in the changes of number of request services in Philly 311 as well. Second, the number of Philly 311 calls has significantly positive relationship with the crime rate (*Figure 1*); In other words, the higher number of service requests leads to the higher crime rates in this area; Therefore, one efficient method to reduce the crime rate is to improve city services and 311 helps the city gather information on lacked city services from the public.

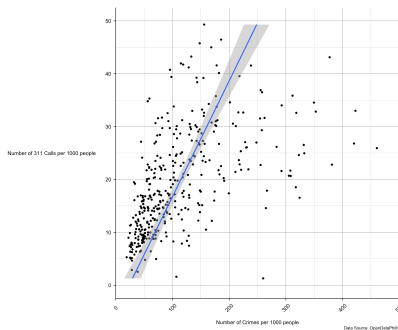


Figure 1 Relationship between crime and 311

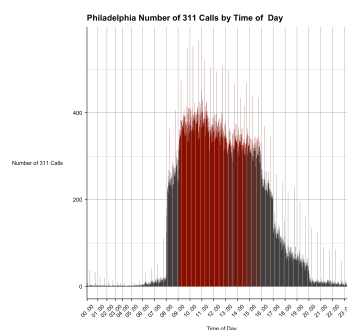


Figure 2 Number of 311 Calls by Time of Day

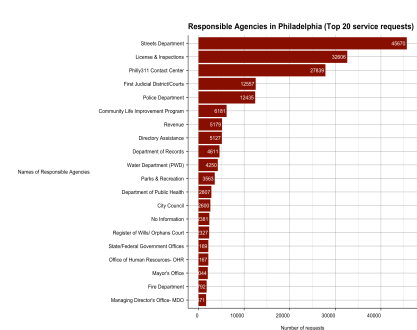


Figure 3 Top 20 Responsible Agencies in Philly 311

Based on my analysis of Philly 311 data, I would like to propose the following detailed policy recommendations:

First, Philly 311 system should allocate more workforce from 9 am to 3 pm during the weekdays to cope with the high volume of service requests (*Figure 2*); Besides, the system need to train the agents with more knowledge related to Streets Department, such as the schedule of trash and recycling collection so as to avoid transferring to the Street Department which has imbalanced responsibilities to solve the service requests from 311.

Second, Planning Commission should incorporate Philly 311 dataset to citywide planning and transportation planning to help identify the priority areas and infrastructures to be improved. For example, University City neighborhood is a focus area across the city, where University of Pennsylvania and Drexel are located, and thousands of students and staffs are working and living here. The safety is the main concern for the students and residents. The analysis of Philly 311 data indicates transportation infrastructures are the main concern within the University City, such as traffic signal emergency and street light outage. With the information of request coordinate from Philly 311, we could identify Chestnut Street improvement should be prioritized where street light outage is a severe problem for students who walk from or to the school at night (*Figure 4*).

Philly 311 system would be a great start for the City's data-driven decisions on city services and incorporating it into decision making would be a win-win strategy for both the residents and the government. The residents in Philadelphia would welcome to see their opinions are counted into the final

decision, while the government would obtain large amount of data efficiently compared to on-site visits.

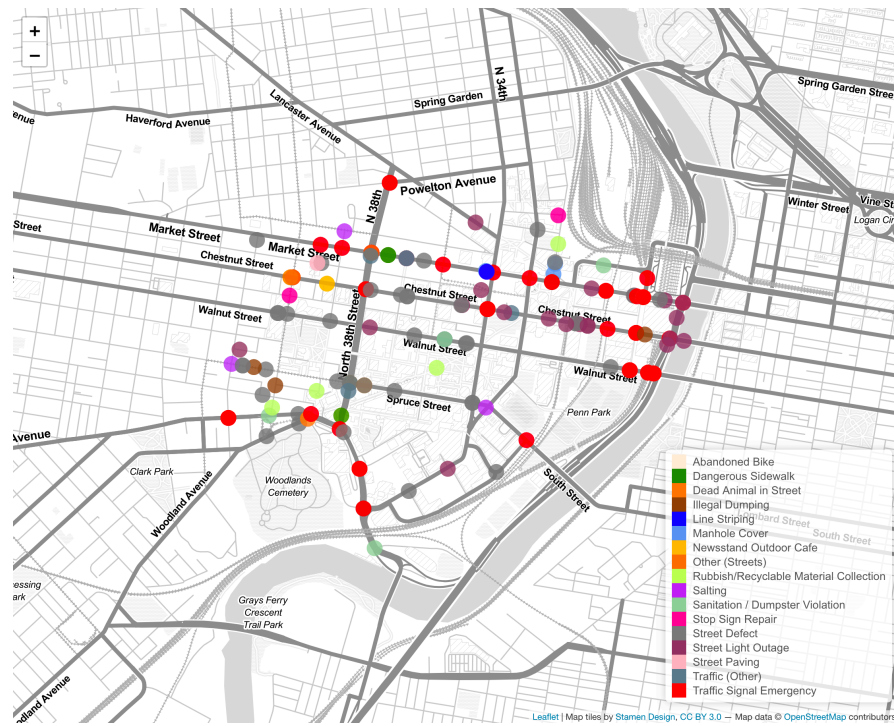


Figure 4 Service Requests Related to Street Departments in the University City