**Research**

**Metrics for finding best neighborhood:**

* **Crime rate**
* **Health**
  + dataset for blood lead level rates <https://data.wprdc.org/dataset/allegheny-county-elevated-blood-lead-level-rates>

# Dataset for Allegheny County Median Age at Death

* + https://data.wprdc.org/dataset/median-age-death

**Final Report**

* It is best to think about your final project as a data-driven report. You will need to put everything into a Jupyter notebook with the following structure:
* Also, include the powerpoint link in the jupyter notebook: <https://docs.google.com/presentation/d/1DjAwKNw7pVHByRlAmucrgoYugPP5ZjUCtRlCXINn55U/edit?usp=sharing>
* **Introduction: Introduce the project, your approach, talk about the process of how you came up with the metric and some alternatives you may have explored.** This project has us working together to try and find a measurable standard that we can use to judge Pittsburgh’s neighborhoods and determine which one is the “best.” We thought that “best” entailed the physical, mental, and emotional well-being of the residents, rather than how easy it was to catch a bus route, how many good stores are nearby, or whatever other conveniences were available. Other metrics we seriously considered were crime rate and how much environmental pollution there was. Ultimately, we decided to broaden the latter and just look at health in general.
* **The Metric: Describe your metric, what features are you measuring. What datasets are you using?** We are using health as our metric, and are looking to measure features such as median age of death, obesity rate, and the number of health hazard incidents that occur for each neighborhood.
* **The Best Neighborhood: Apply the metric from the previous section to determine the best neighborhood in Pittsburgh. Beyond just executing code, provide narrative about why you think this is the best neighborhood. Incorporate a data visualization, perhaps to rank all of the neighborhoods or show a neighborhood’s best-ness over time. The key is to make a data driven argument.** We judged Squirrel Hill to be the best neighborhood in Pittsburgh. Looking at data for both Squirrel Hill North and Squirrel Hill South, we decided that both had extremely promising results and lumped them together as one entity. The first thing we noticed was that Squirrel Hill South had the highest median age of death, which could imply its residents have better stress regulation, exercise/diets, and/or air quality. The second dataset we looked at supported this data, as Squirrel Hill North had the second lowest obesity rate out of all the neighborhoods. Finally, we looked at 311 call data, specifically calls related to “Health Hazards.” Out of 10,000 calls, 509 were related to Health Hazards. A mere 4.5% of those 509 calls were from Squirrel Hill, both North and South, despite it being the largest neighborhood by area in Pittsburgh. The second largest neighborhood, Brookline, only had a marginally lower number of calls, 22, despite being smaller than Squirrel Hill by 0.5
* Conclusion: Reflect on how the data driven determination of “best neighborhood” is the same or different from your personal favorite neighborhood. **Each member of the group** should write their own response to this.
* Alex: I don’t have a favorite neighborhood in Pittsburgh, but if I had to choose one, it would be Allentown neighborhood, which shares the same name as the city I came from. From what I’ve read in this article (<https://www.post-gazette.com/local/city/2017/08/28/Allentown-Pittsburgh-neighborhood-economic-renewal-Hilltop-Alliance-development/stories/201708270139>), it comes as no surprise that Squirrel Hill beats out Allentown as the best. From census data, Allentown’s population dropped from 8,200 to 2,500. In 2010, the Allentown poverty rate was greater than the city average. Although the neighborhood has made significant progress since then, if we were to also analyze Squirrel Hill crime data from 2010, we likely would’ve found significantly better results.
* Jiani：My favorite neighborhood in Pittsburgh is squirrel hill, and I plan to rent an apartment in squirrel hill next year, because squirrel hill has convenient transportation, many buses and convenient for me to go to and from school every day, many delicious restaurants and Chinese supermarkets, as well as many houses to choose from and convenient access to the waterfront. And squirrel hill is also a very safe community according to the survey, so squirrel hill is a good choice for me.
* Junyao Jiang: For me, the best neighborhood in Pittsburgh is Squirrel Hill, if we look at the data, Squirrel Hill has the highest median age at death in Pittsburgh. This data can reflect many things, such as the crime rate, murders can lower the median death rate, also, this median age of death rate means there are less people who die in accidents.