

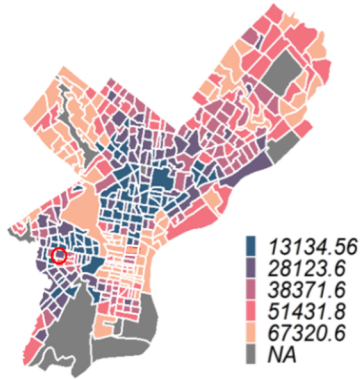


Hasa Reddy

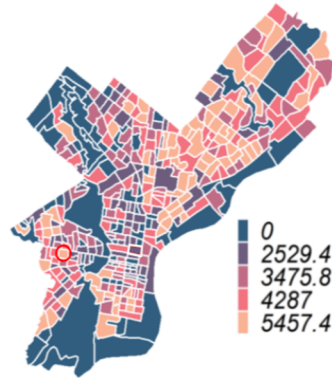
## Site location

### Income, population and poverty map

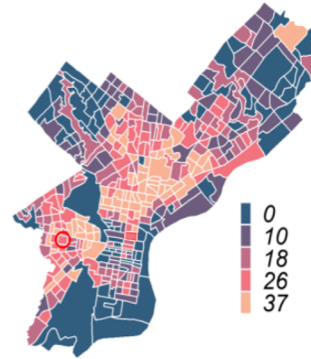
Detailed information of test bed site.



Map of median household income



Map of total population



Map of percentage of poverty

#### Income

**\$17,039**

Per capita income

about three-fifths of the amount in Philadelphia: \$27,924

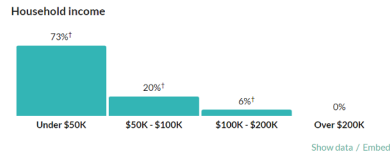
about three-fifths of the amount in Philadelphia County: \$27,924

**\$33,429**

Median household income

about three-quarters of the amount in Philadelphia: \$45,927

about three-quarters of the amount in Philadelphia County: \$45,927



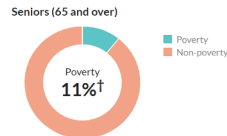
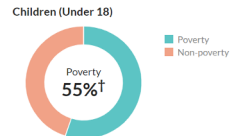
#### Poverty

**35.6%**

Persons below poverty line

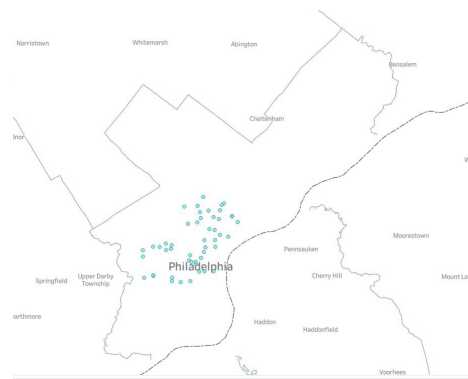
about 1.5 times the rate in Philadelphia: 24.3%

about 1.5 times the rate in Philadelphia County: 24.3%

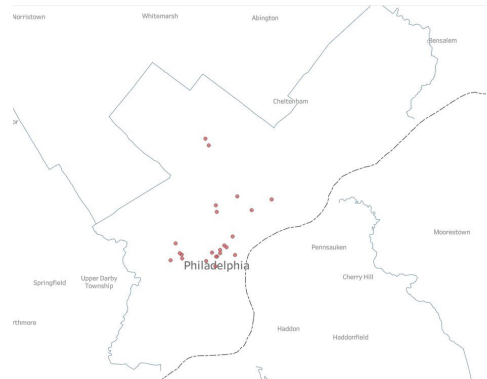


Testbed: **Census tract 85**, bounded by Market Street, South 50th Street, Pine Street and South 55th Street.

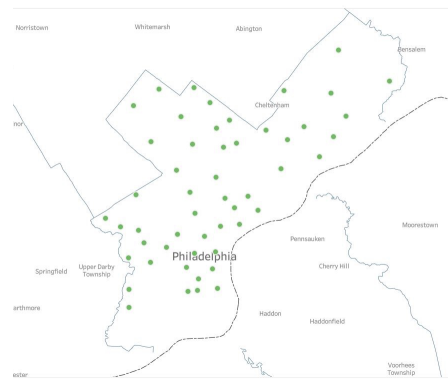
Data Presentation



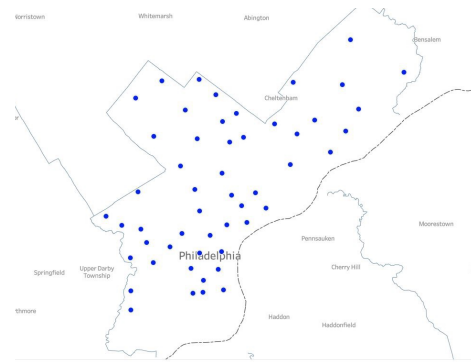
PhilAbundance Locations



General Meal Locations

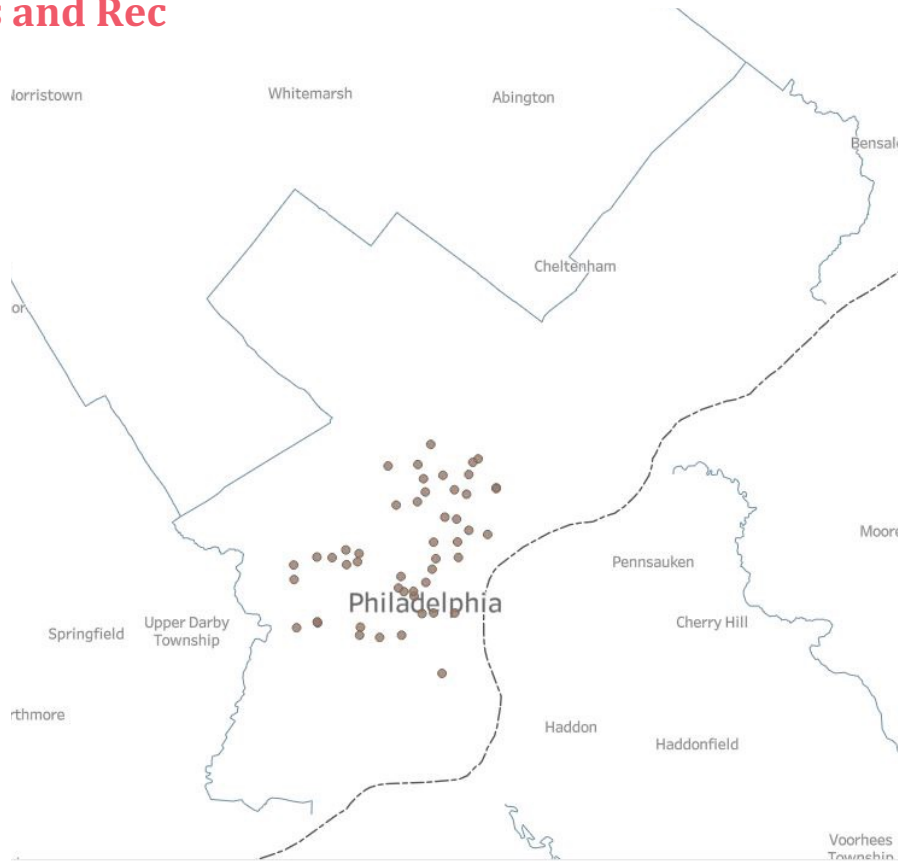


WiFi Locations

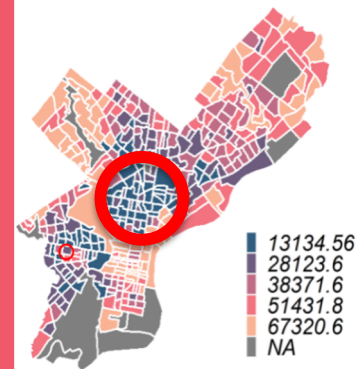


Parking Locations

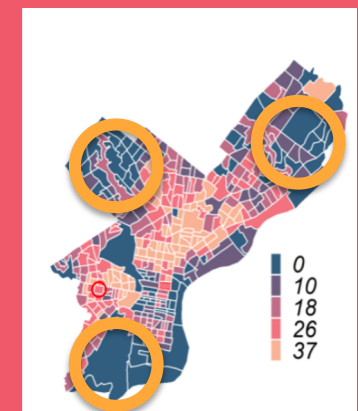
# Parks and Rec



```
for i in range(len(df_parknrec)):
    par_lat, par_lon = df_parknrec.iloc[i, -4:-2].values
    for j in range(len(df_lib_loc)):
        lib_lat, lib_lon = df_lib_loc.iloc[j, -2:].values
        dis = haversine((par_lat, par_lon), (lib_lat, lib_lon), unit=Unit.METERS)
        if dis <= 100:
            df_parknrec.iloc[i, -2] += 1
            df_parknrec.iloc[i, -1] += (df_lib_loc.iloc[j, 0] + '_')
```



Map of median household income



Map of percentage of poverty

## Next steps and hurdles?

1. How to overlay the census data with flex network data set?
2. Trying to figure out how to locate the optimal locations in tracts that need these locations?