

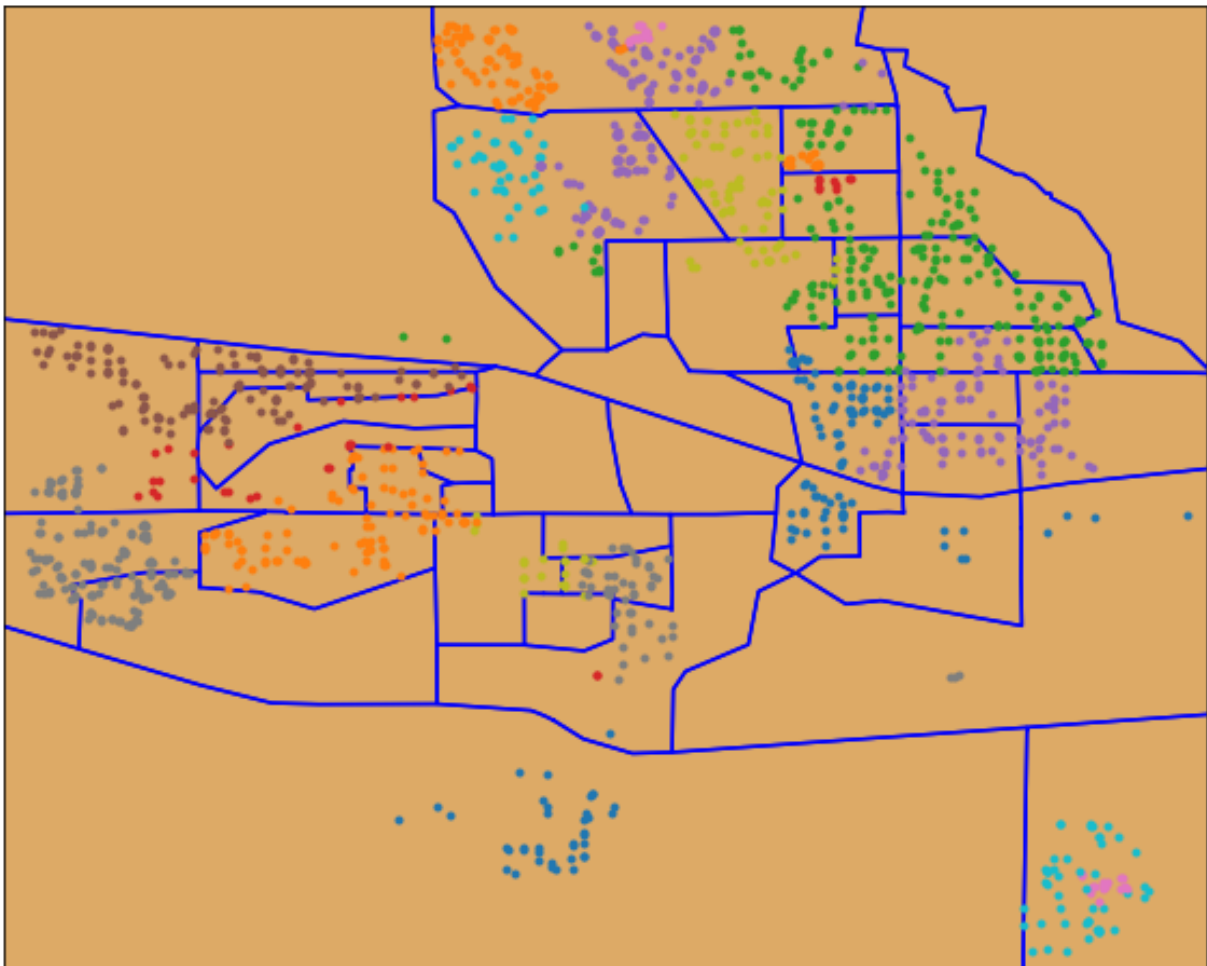
Adding Census Data to Housing Data

The original dataset has a Parcel ID (PID) to identify individual household. [1]

Individual homes within the data set can be referenced directly from the Ames City Assessor webpage via the Parcel ID (PID) found in the data set. Note these are nominal values (non-numeric) so preceding 0's must be included in the data entry field on the website. Access to the database can be gained from the Ames site [2] by clicking on "property search" or by accessing the Beacon website [3] and inputting Iowa and Ames in the appropriate fields. A city map showing the location of all the neighborhoods is also available on the Ames site and can be accessed by clicking on "Maps" and then "Residential Assessment Neighborhoods (City of Ames Only)".

The housing data from the Beacon website is the origin of this dataset. On this website are individual addresses which can be matched to (lat, lon) which can then be joined with census block shape files. Getting these addresses will require scrapping the website since there are too many to search manually.

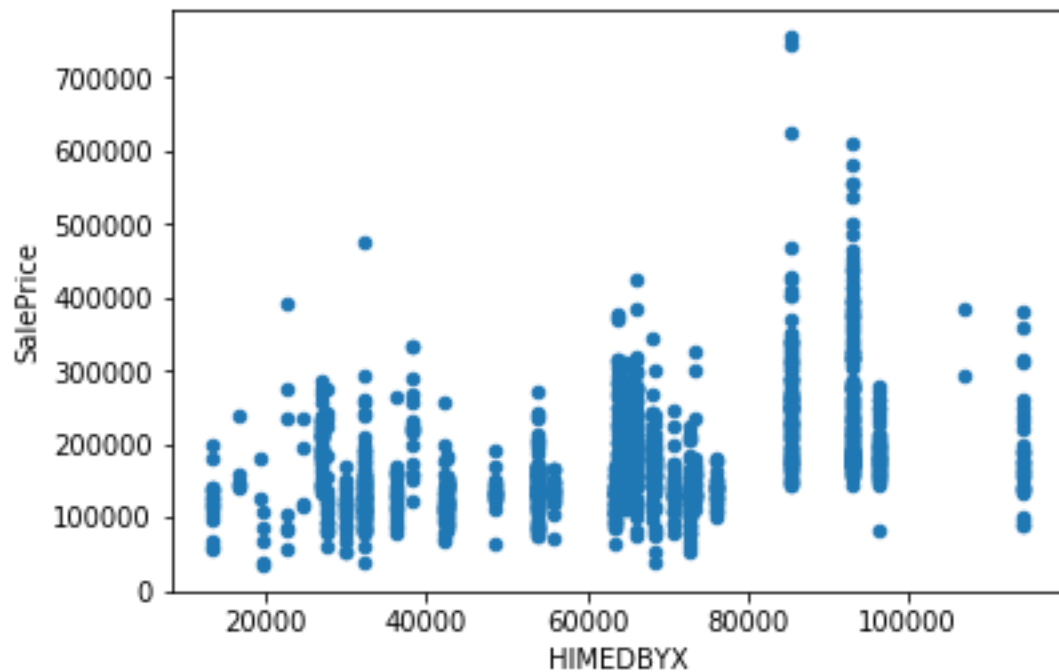
Mapping Census Blocks to Neighborhoods



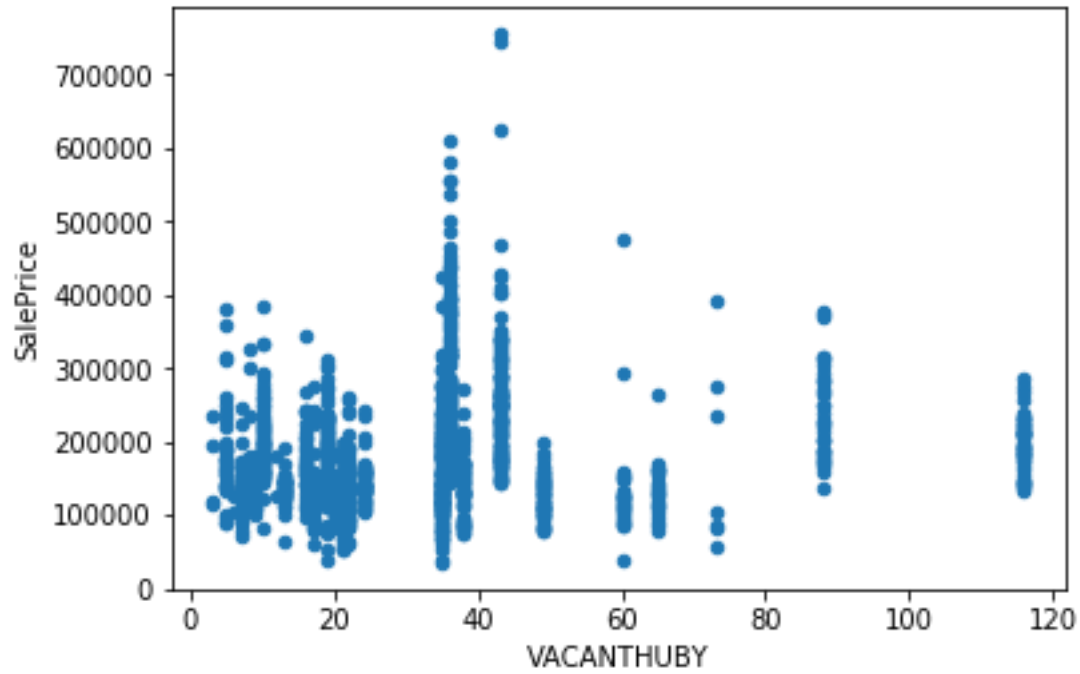
Each point represents a house in the dataset while each color represents a different neighborhood. The blue borders are the 2010 census blocks. There are clearly overlaps of a neighborhood spanning more than one census block as well as a census block with more than one neighborhood. We still believe this dataset will be useful for improving accuracy, but the features may not be as powerful as we were hoping.

Geo Demographics

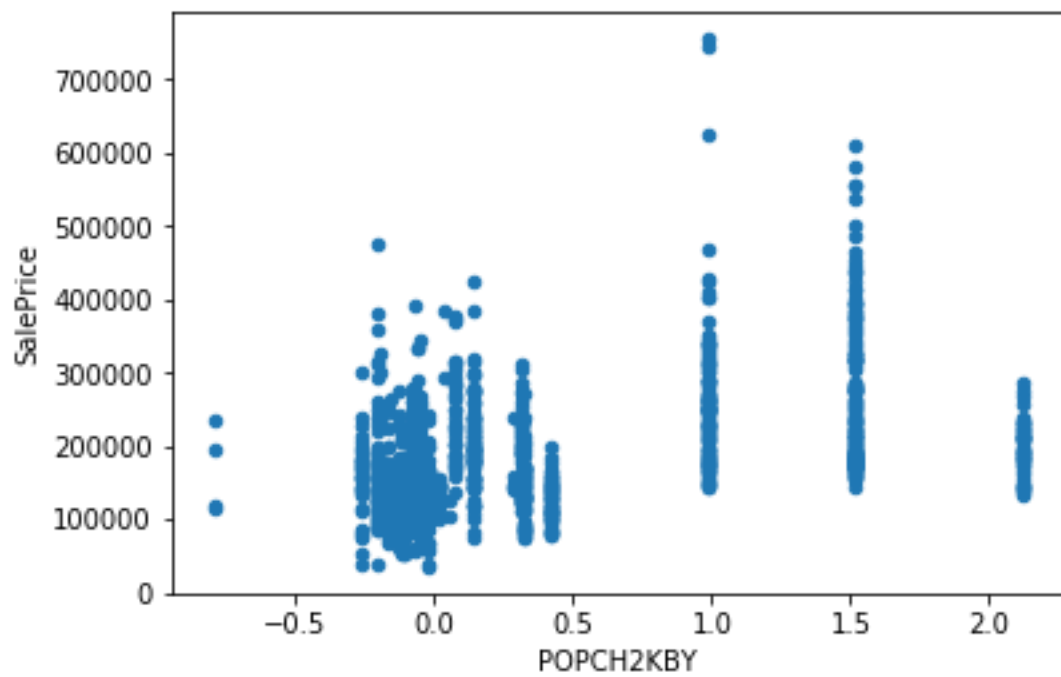
We have variables pertaining to income, housing, population, education, and age.



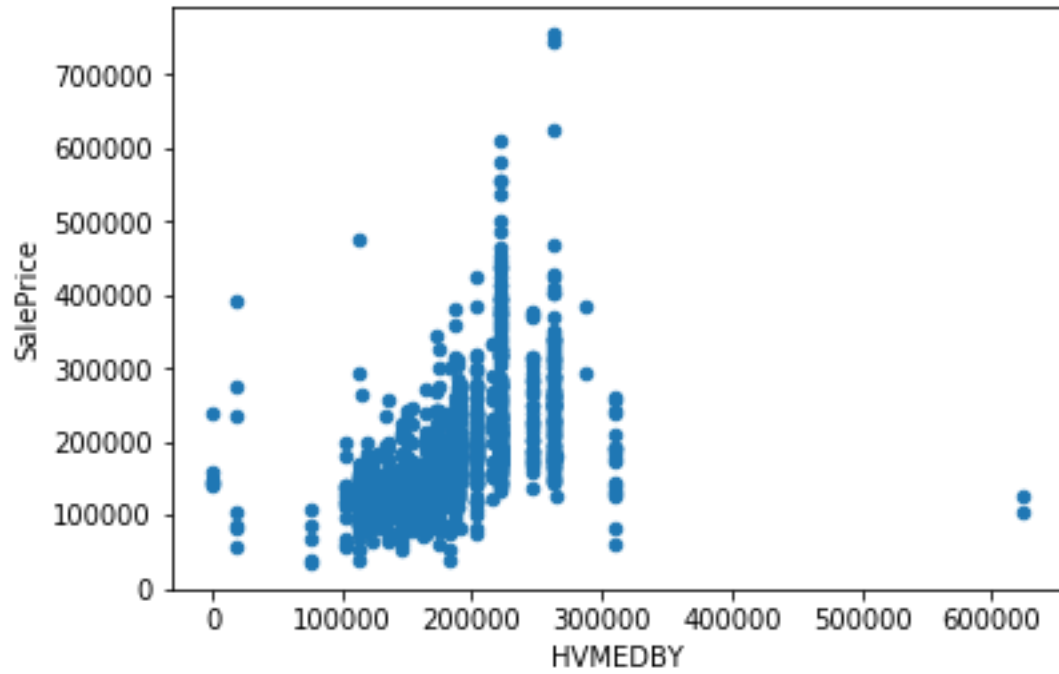
2010 Household income: Median



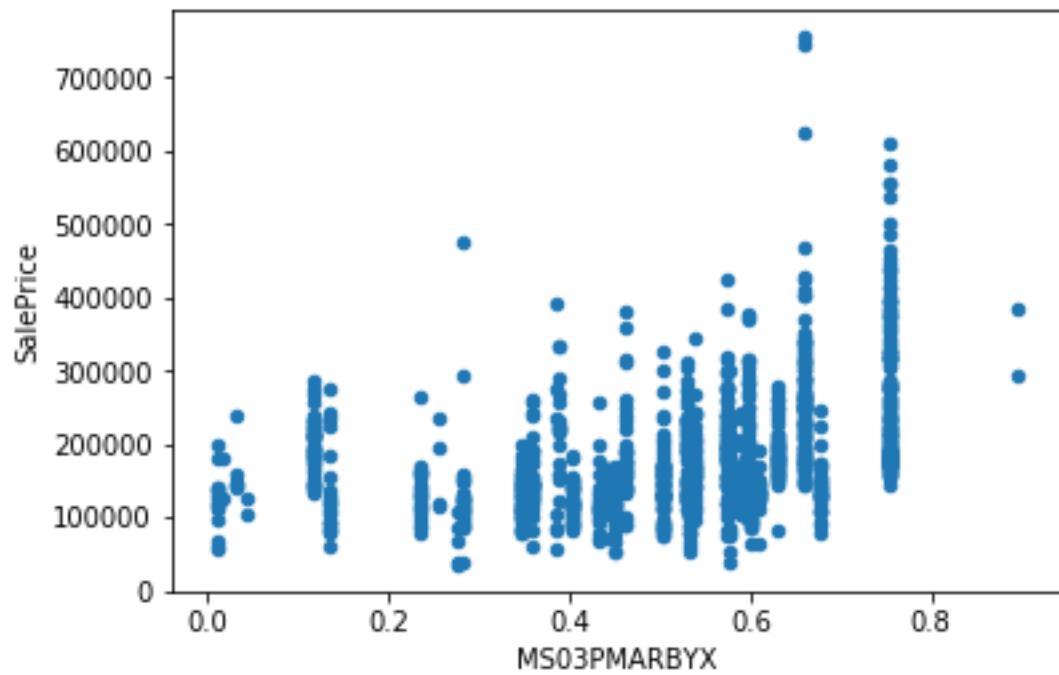
2010 Vacant housing units



% Population Change 2000 to 2010



2010 Home value: Median



% 2010 Marital Status: Population 15 years and over - Now married

Footnotes

[1]: <https://ww2.amstat.org/publications/jse/v19n3/decock/datadocumentation.txt>

[2]: <http://www.cityofames.org/assessor/>

[3]: <http://beacon.schneidercorp.com/Default.aspx>