Pittsburgh's Best Friend

The data sets visualized here are Allegheny County Dog License data from 2008-2022, hosted by WPRDC at https://data.wprdc.org/dataset/allegheny-county-dog-licenses . I chose to filter the data down to the most popular dog name in each zip code. Each of Pittsburgh's neighborhoods have a unique character, and I hope this data story adds another layer of distinctiveness between neighborhoods. I hope to also show how Pittsburgh is a dynamic city and popular dog names shift over time with the everchanging population of the city. I include some outside context as to why certain trends in popular dog names may have appeared, however these are not definitive but my own personal hypothesis based on research of events and Pittsburgh history that may influence dog name popularity. I had originally hoped to analyze the most popular dog breeds as well, but I found that analyzing the most popular dog names by neighborhood over time yielded a considerable amount of interesting data visualizations and stories.

For each year's raw data set of dog license data, I transformed the data set by iterating through each zip code, and making a data frame of all the dog licenses issued in that zip code. I then iterated through that subset of dog licenses and made a hash table of dog names. Each dog name that appeared was inserted into the hash table as a key, and the number of times it appeared was set as the value. After going through each entry in a given zip code, I then added the zip code as a key and the most popular dog name in that zip code as a value into a final hash table. After doing this with every zip code, I processed the final hash table into a CSV file containing two fields, "ZipCode" and "DogName" , with DogName holding the most popular dog name in that zip code.

To make these into geographic maps, I used the Allegheny County Zip Code Boundaries Map from WPRDC https://wprdc-maps.carto.com/u/wprdc/tables/allegheny_county_zip_code_boundaries/public . I joined this map with the data set containing zip codes and dog names. I was then able to use the geopandas library to map the data set. I made a joined data set for each year of dog license data.

Note: The maps produced when the jupyter notebook is run are higher resolution and capacity to zoom in is greater than the maps on this document

Most Popular Dog Names in Allegheny County, 2008

Most Popular Dog Names in Allegheny County, 2009

Most Popular Dog Names in Allegheny County, 2010

Most Popular Dog Names in Allegheny County, 2011
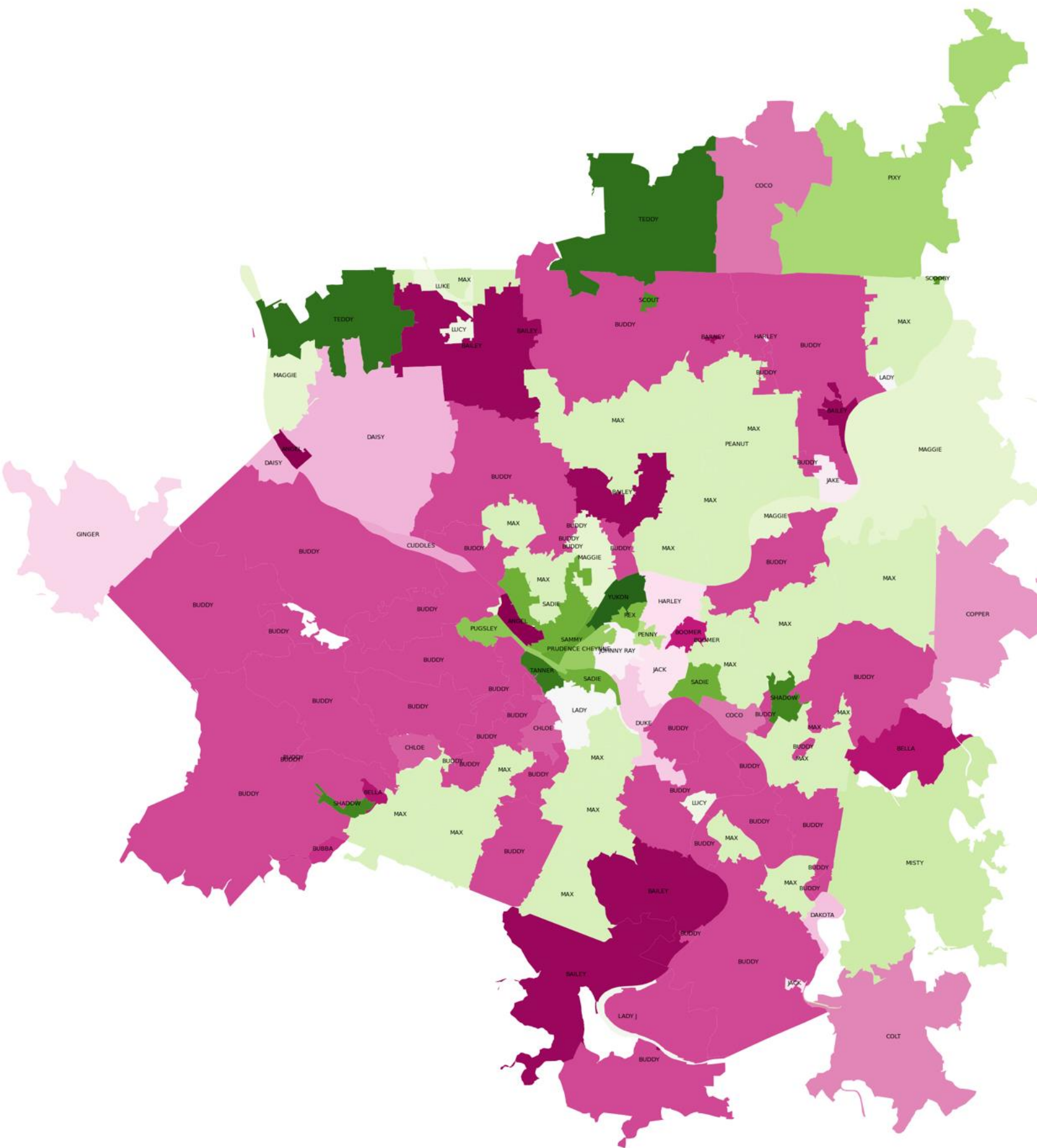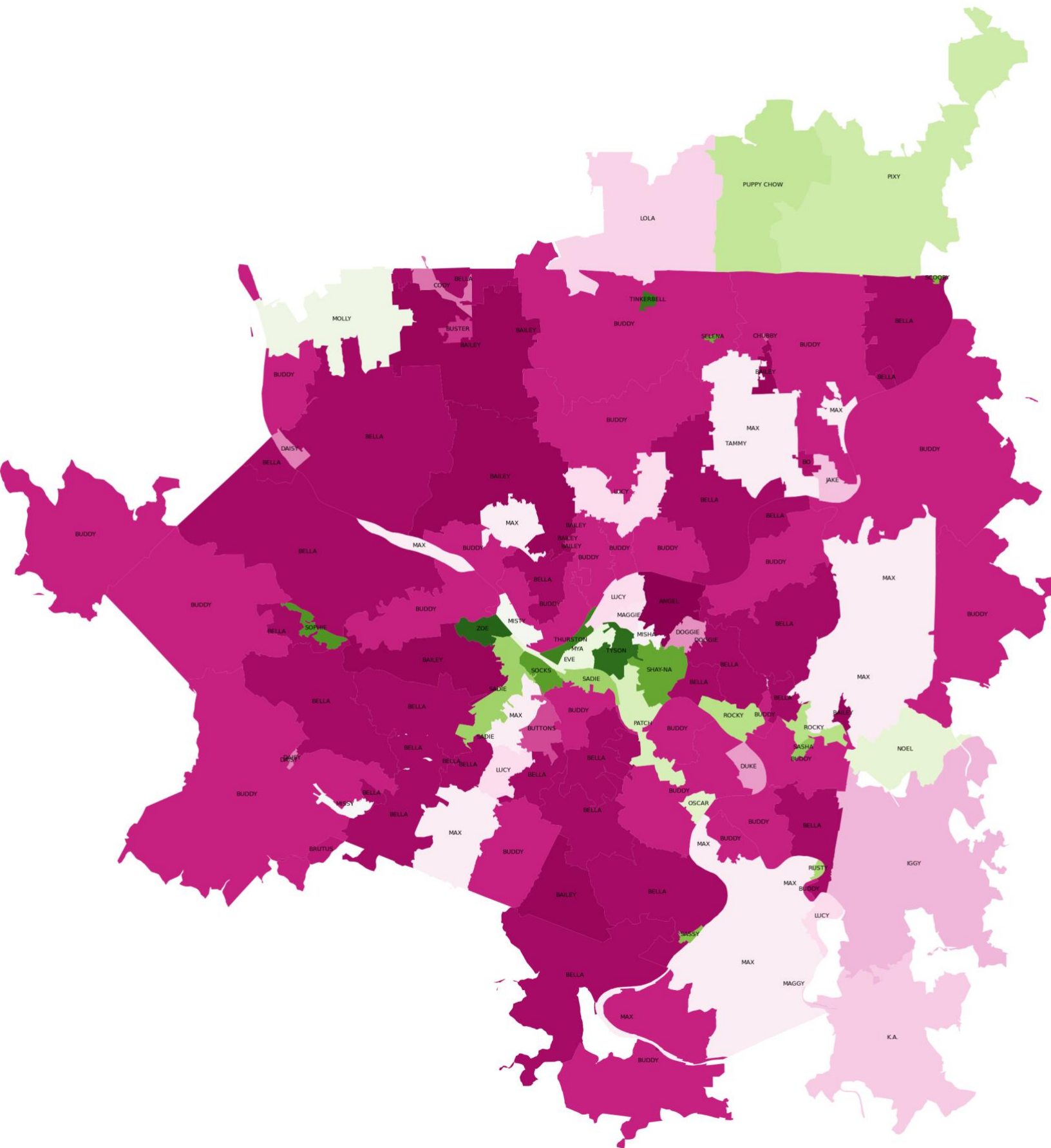
Most Popular Dog Names in Allegheny County, 2012
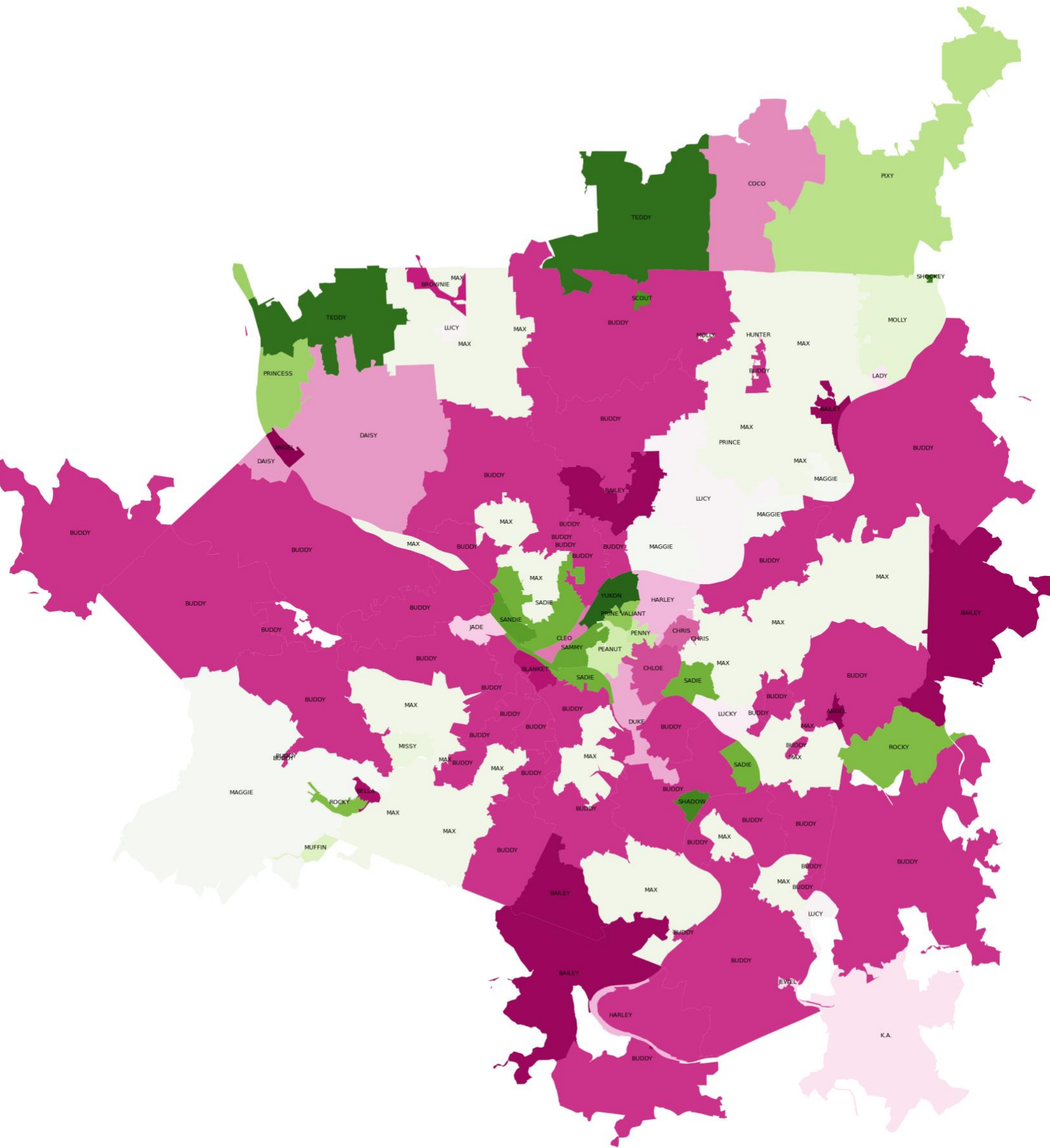
A significant number of neighborhoods had their most popular dog name change to "Bella" in 2012. According to PR News1, Bella became a popular dog name with the release of the Twilight series movies and books, where Bella is the name of the main character. Even though the first movie was released in 2008, the series Finale "Breaking Dawn -- Part 2" was released in 2012 and may have contributed to the increase in dogs named Bella.

1. https://www.prnewswire.com/news-releases/bella-is-the-top-dog-name-of-the-decade-300969001.html

Most Popular Dog Names in Allegheny County, 2013

Although the name Thurston is most popular in the Strip District, it may correlate to the Winchester Thurston el
ementary school in Shadyside

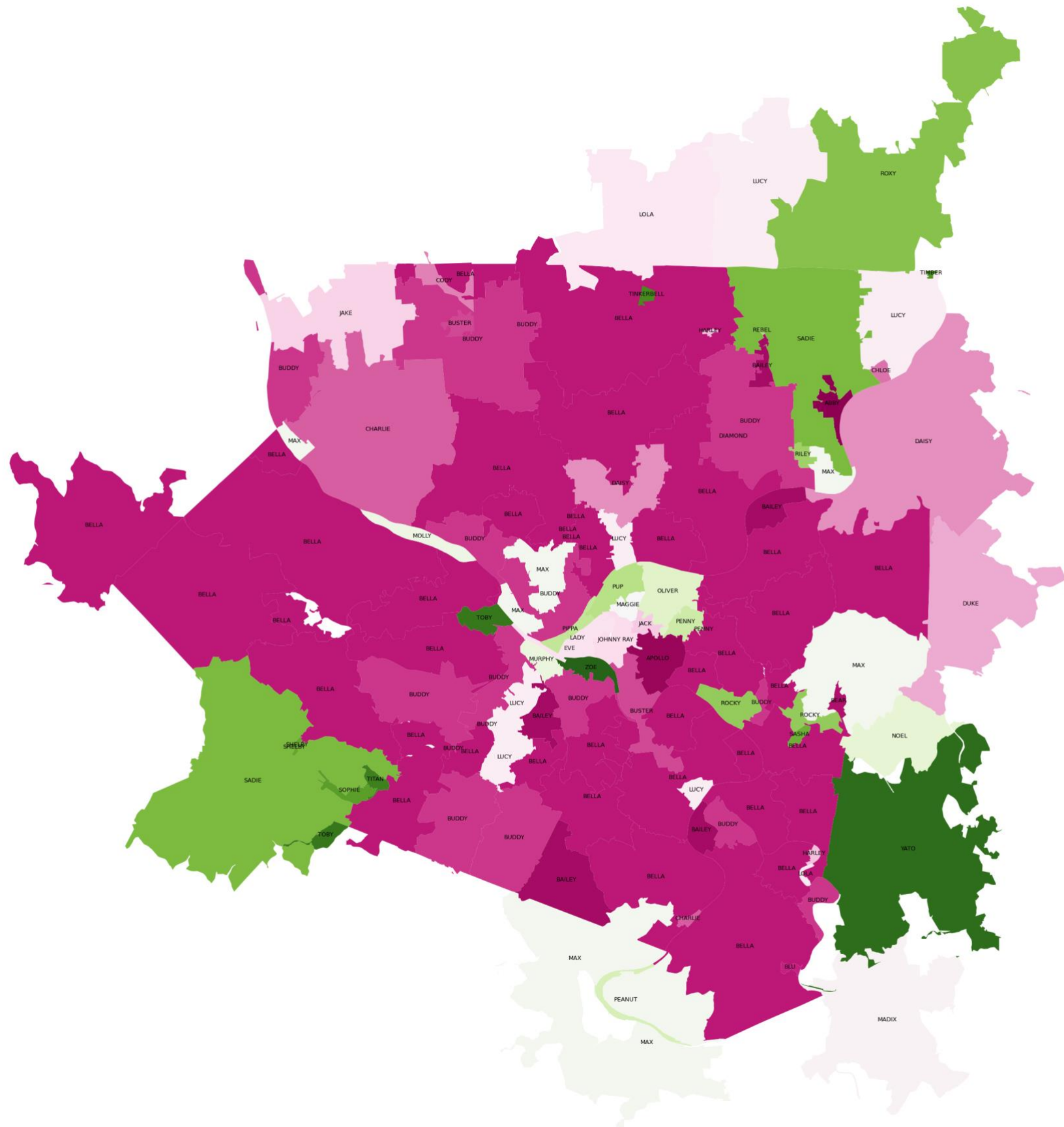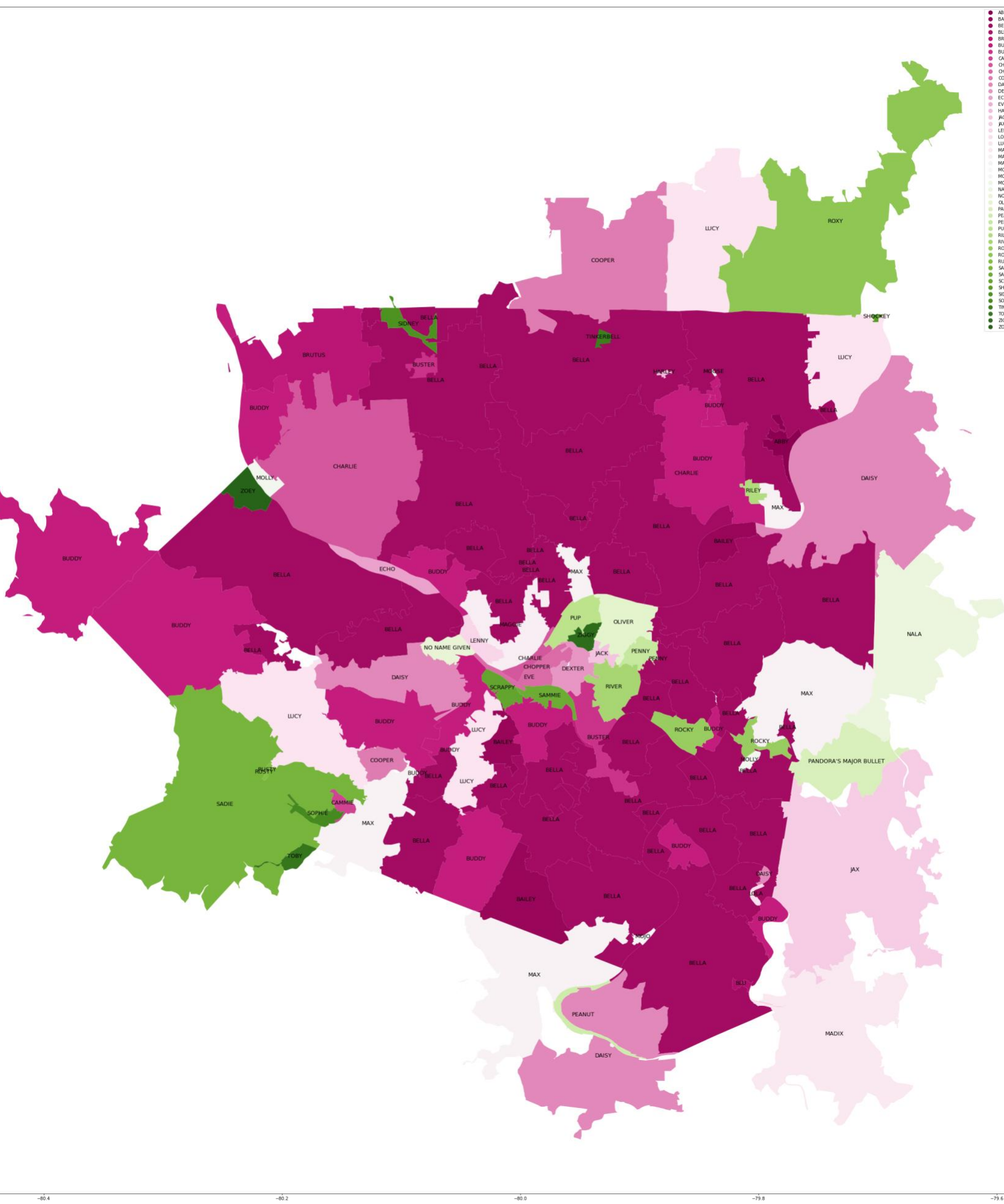# Most Popular Dog Names in Allegheny County, 2014

Most Popular Dog Names in Allegheny County, 2015
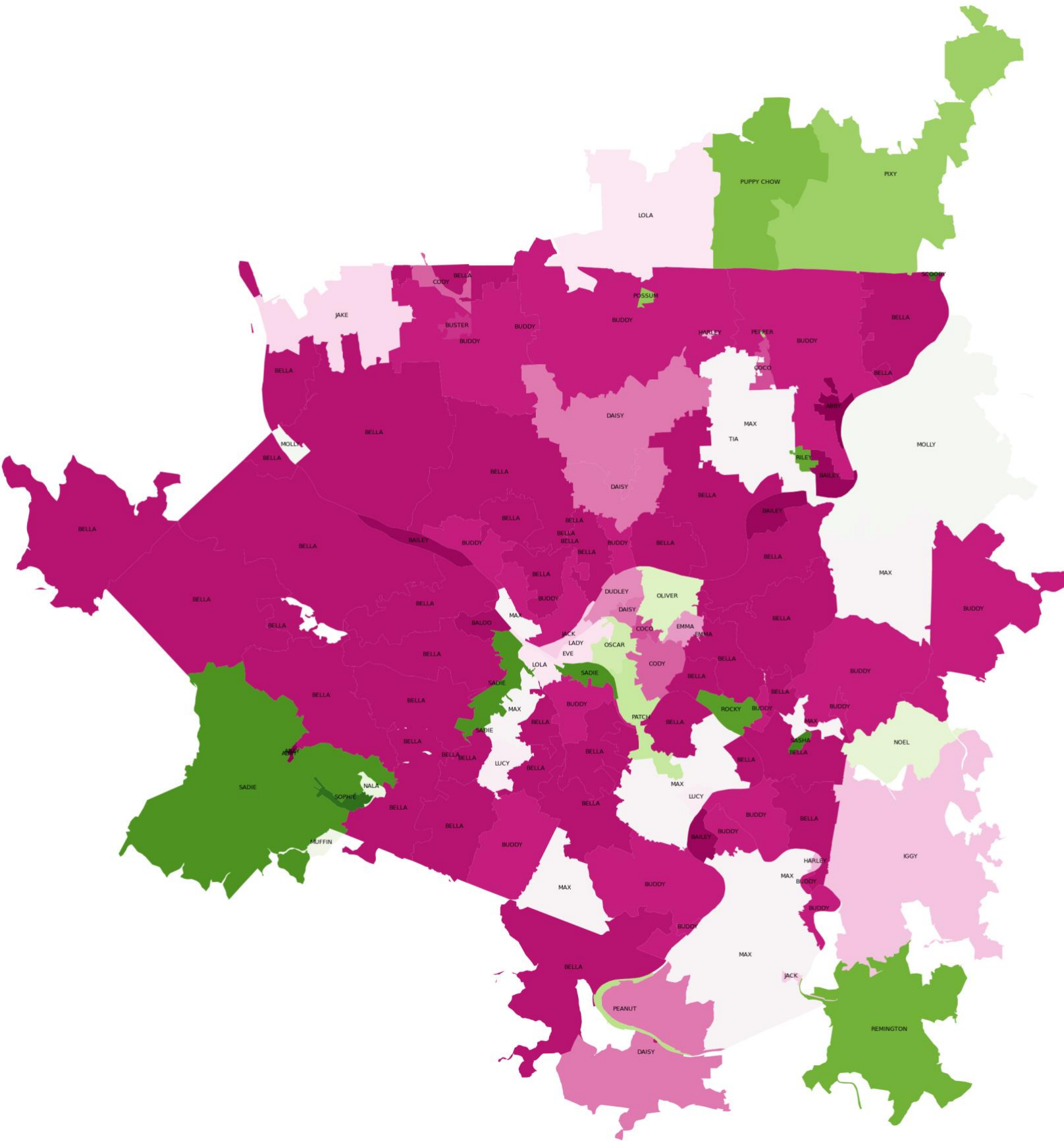
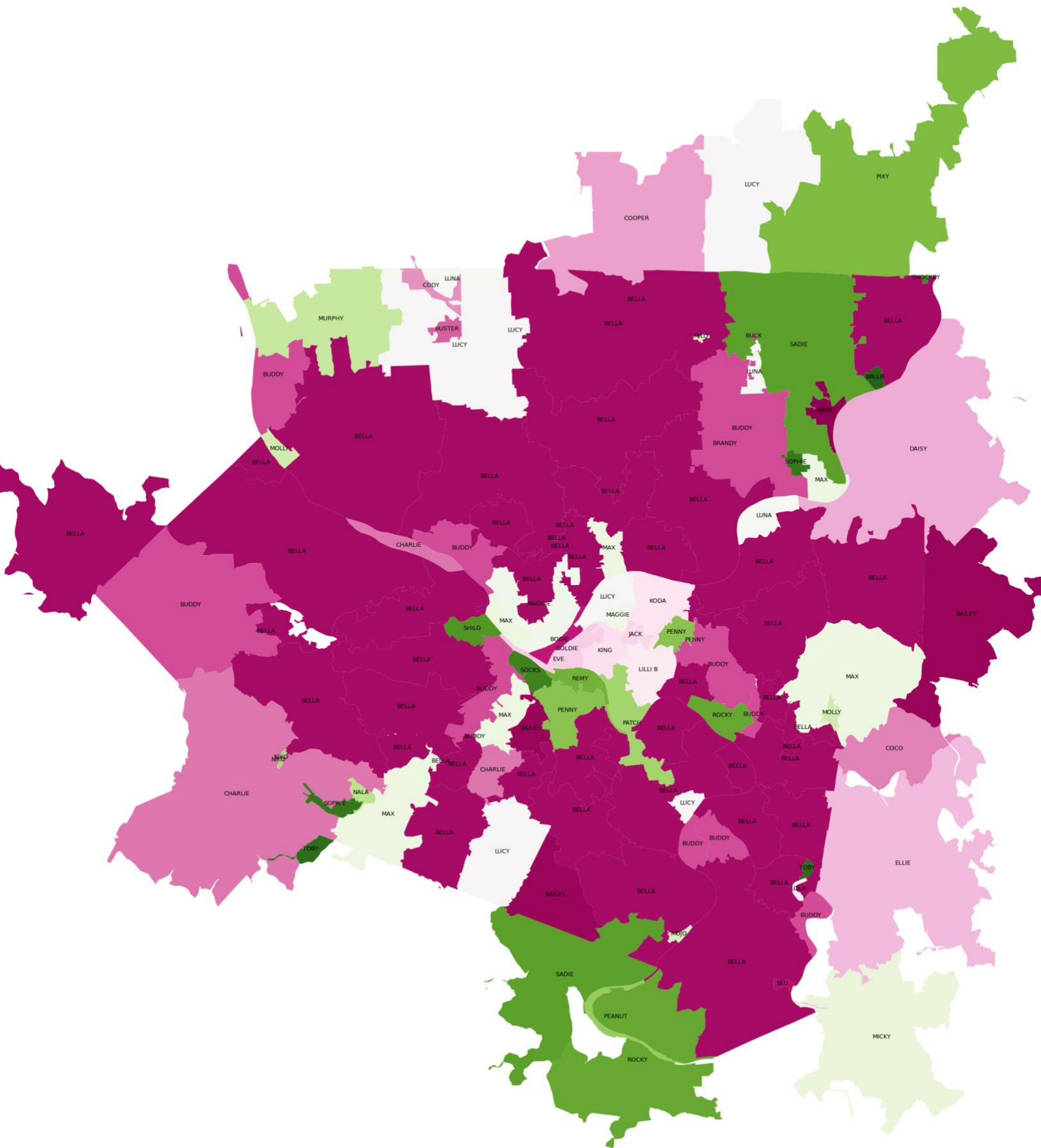# Most Popular Dog Names in Allegheny County, 2016
Johnny Ray appears as a most popular dog name this year. Johnny Ray was a Pittsburgh Pirates second basema
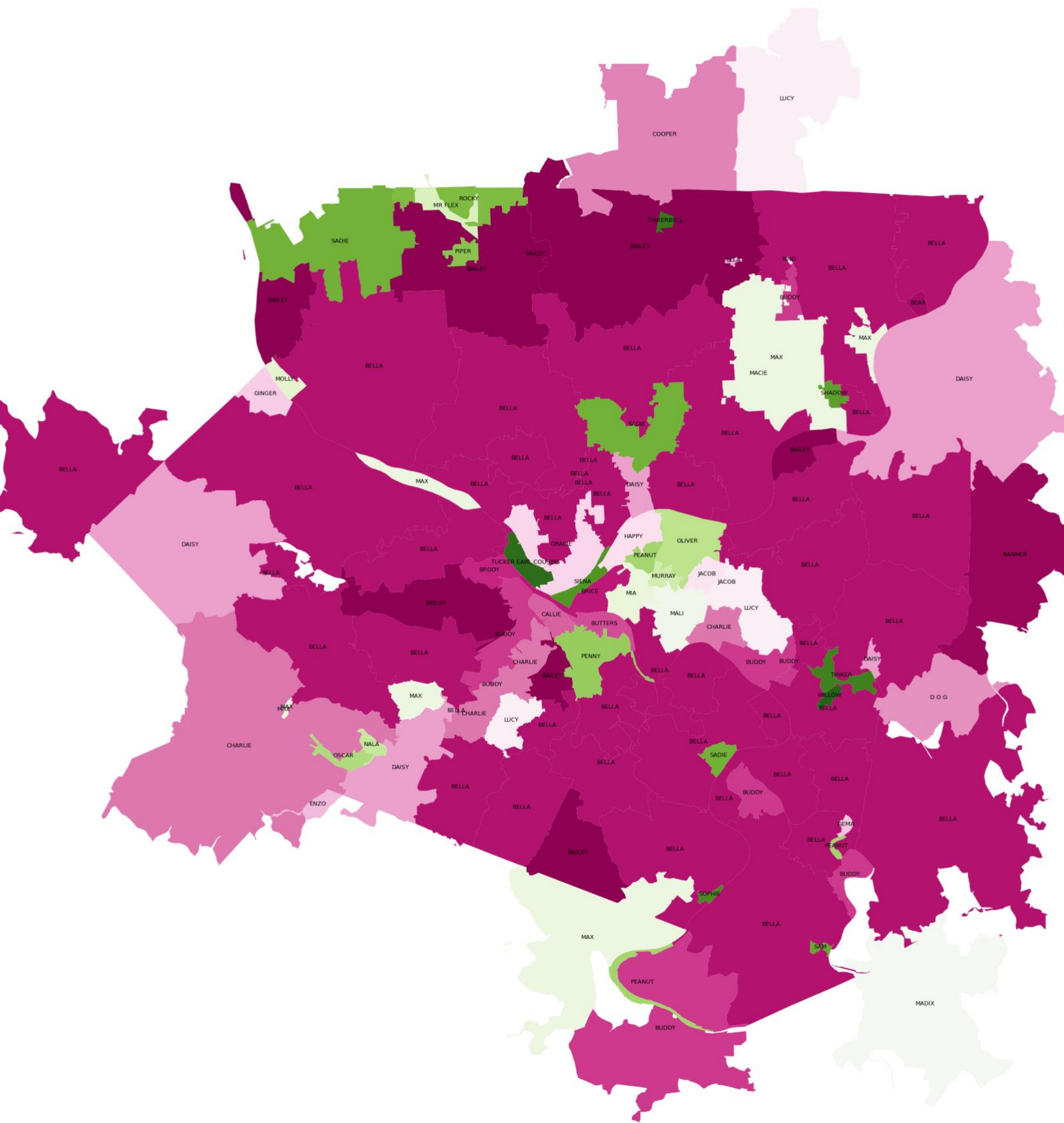n in the 1980s and 1990s.

Most Popular Dog Names in Allegheny County, 2017

Most Popular Dog Names in Allegheny County, 2018

Most Popular Dog Names in Allegheny County, 2019

Most Popular Dog Names in Allegheny County, 2020

Most Popular Dog Names in Allegheny County, 2021

Most Popular Dog Names in Allegheny County, 2022

I thought this approach could provide viewers with fun and interesting information on Pittsburgh neighborhoods and their change over time. In class, aside from my classmates helping me with technical difficulties in making geographic maps, the overall response seemed to be that people enjoyed learning about dog license data, since most people enjoy having dogs as pets.

If I were to continue working on this data story, I would definitely analyze most popular dog breeds in the same way I analyzed dog names. I would also love to compare dog ownership trends in Pittsburgh to the rest of the nation. It could also be interesting to analyze dog license trends compared to other types of pet ownership in Pittsburgh.

Something this data set is missing is City of Pittsburgh issued dog license data, and it only includes Allegheny County issued dog licenses. This omits some data on popular dog names. This data story only focuses on dog ownership in Pittsburgh, and wouldn't appeal to those who are not fans of dogs. It also omits discussion of any other indicators of change in Pittsburgh and doesn't take into account the patterns of people who don't have dogs as pets. The point of this data story was not to summarize an entire decade of Pittsburgh history using dog license data, but rather just one more layer of information about the history of Pittsburgh.