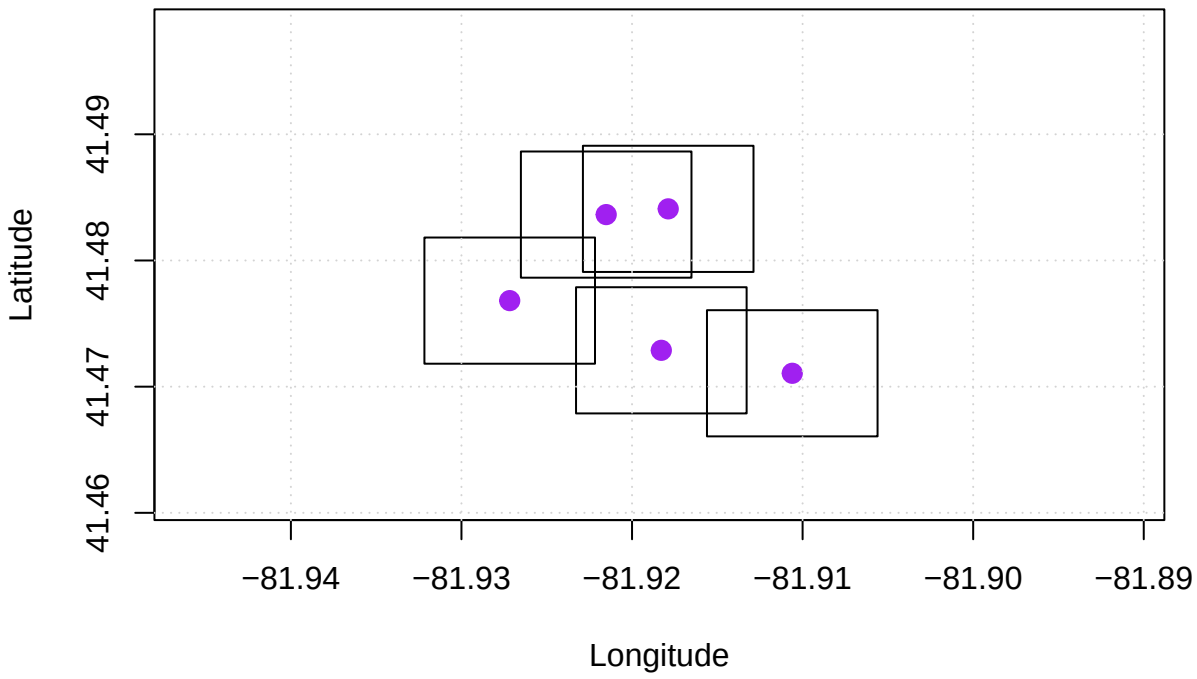
Pet Parties

2022-09-27

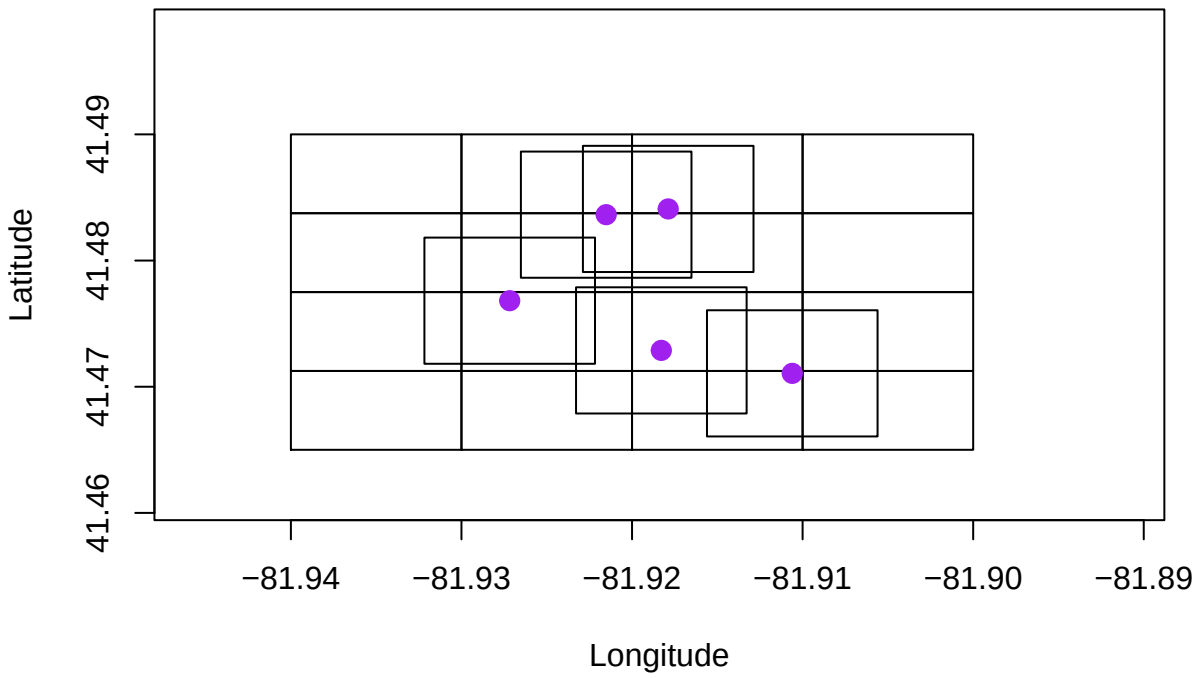
This document serves as a minimum working example of the technology I'll be using for my thesis project; I will be focusing on a $10km^2$ area in northeastern Ohio and applying dasymetric mapping techniques to it with mock demographic data.

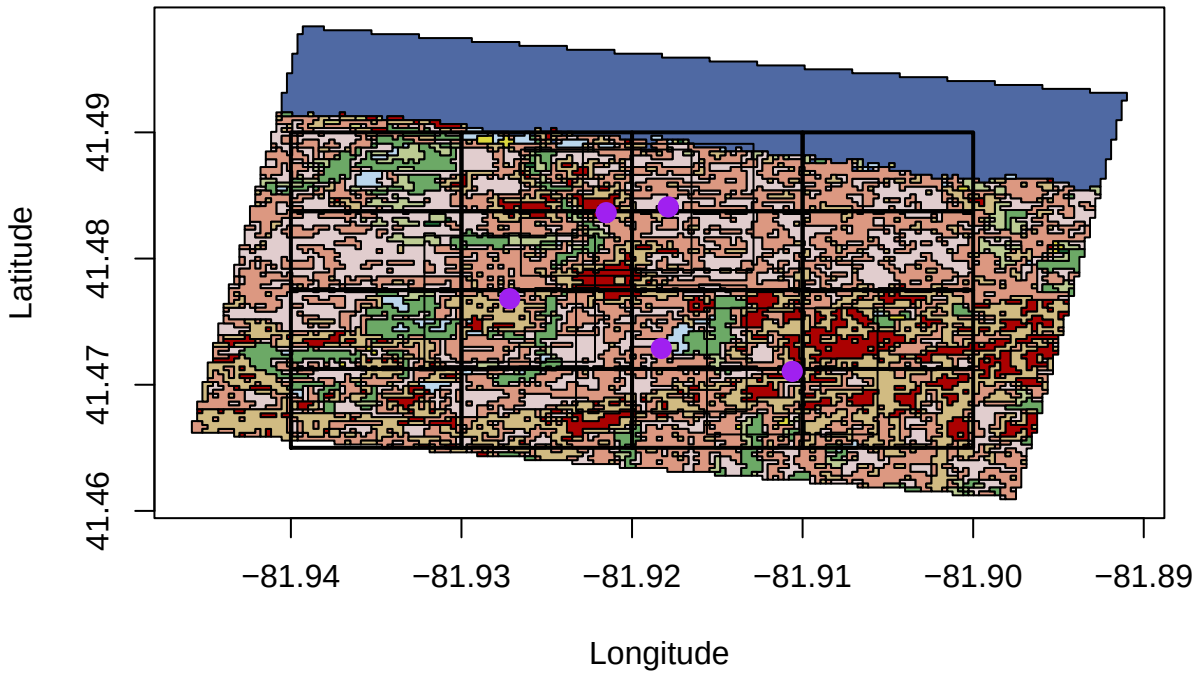
Initial Problem

We have an issue. The city is having a pet party at each government building, shown below. However, due to their storied rivalry, no party can accommodate both cats and dogs, so each building must either host a cat party or a dog party.



In order to maximize turnout, the city wants to make sure that the buildings are hosting a party that is reflective of the population densities of the pets in the surrounding area, represented by the boxes above. However, the city only has pet census data for the blocks shown below:


Latitude
41.49
41.48
41.47
41.46
−81.94
−81.93
−81.92
−81.91
−81.90
−81.89
Longitude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41.49
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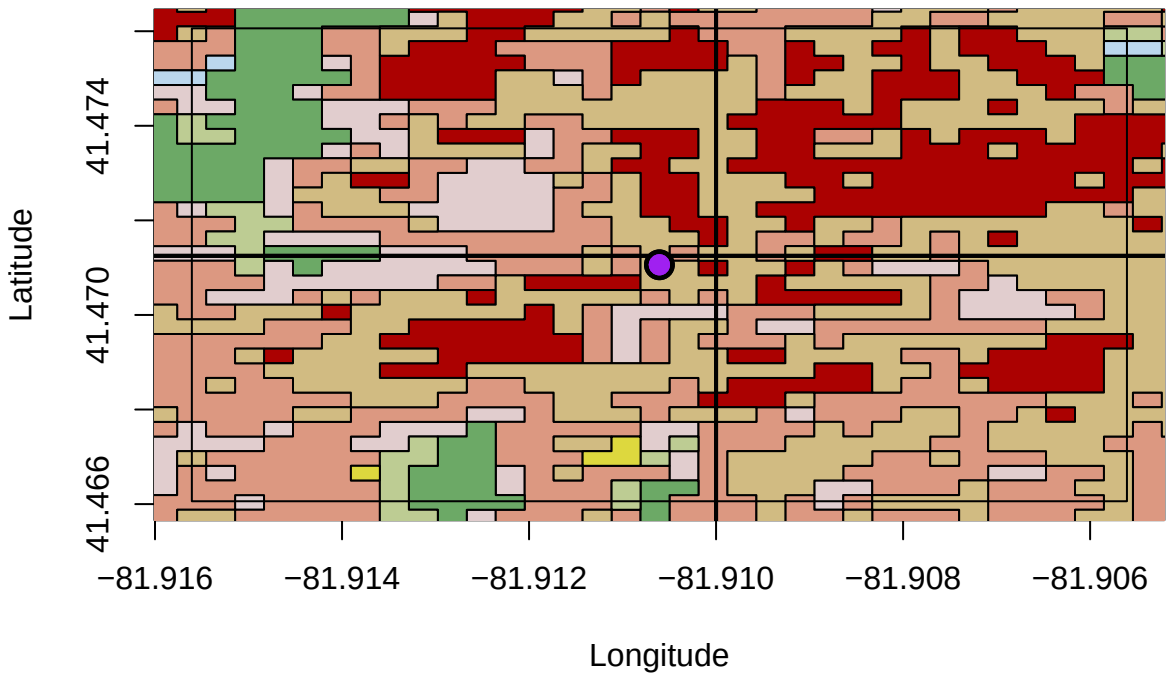


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## [1] "Final answer!"
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## [1] 0.4326922
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