

Introduction

- More than **60 million people** are forcibly displaced from their homes today
- Only **1% of them** are able to get resettled in other countries
- Often they escape brutal conditions in refugee camps and **have very little resources when they arrive**



Motivation and Goal

- New American Pathways provides approximately **2,500 refugees per year** with the necessary tools to rebuild their lives and achieve long-term success.
- These refugee families need to be resettled in areas that have **access to public transit, schools, faith communities, grocery stores, ESL classes etc.**
- As more and more refugees arrive to Atlanta, it becomes essential to improve the process of **finding “optimal” housing** for them (i.e. affordable, safe, close to public transit) and our project is aimed to **automate this process**

Data Sources

- **Department of Housing and Urban Development Housing Affordability Study** for affordability, crime rates, jobs data.
- **Google Places API** for apartment complexes, schools, international supermarkets and faith centers

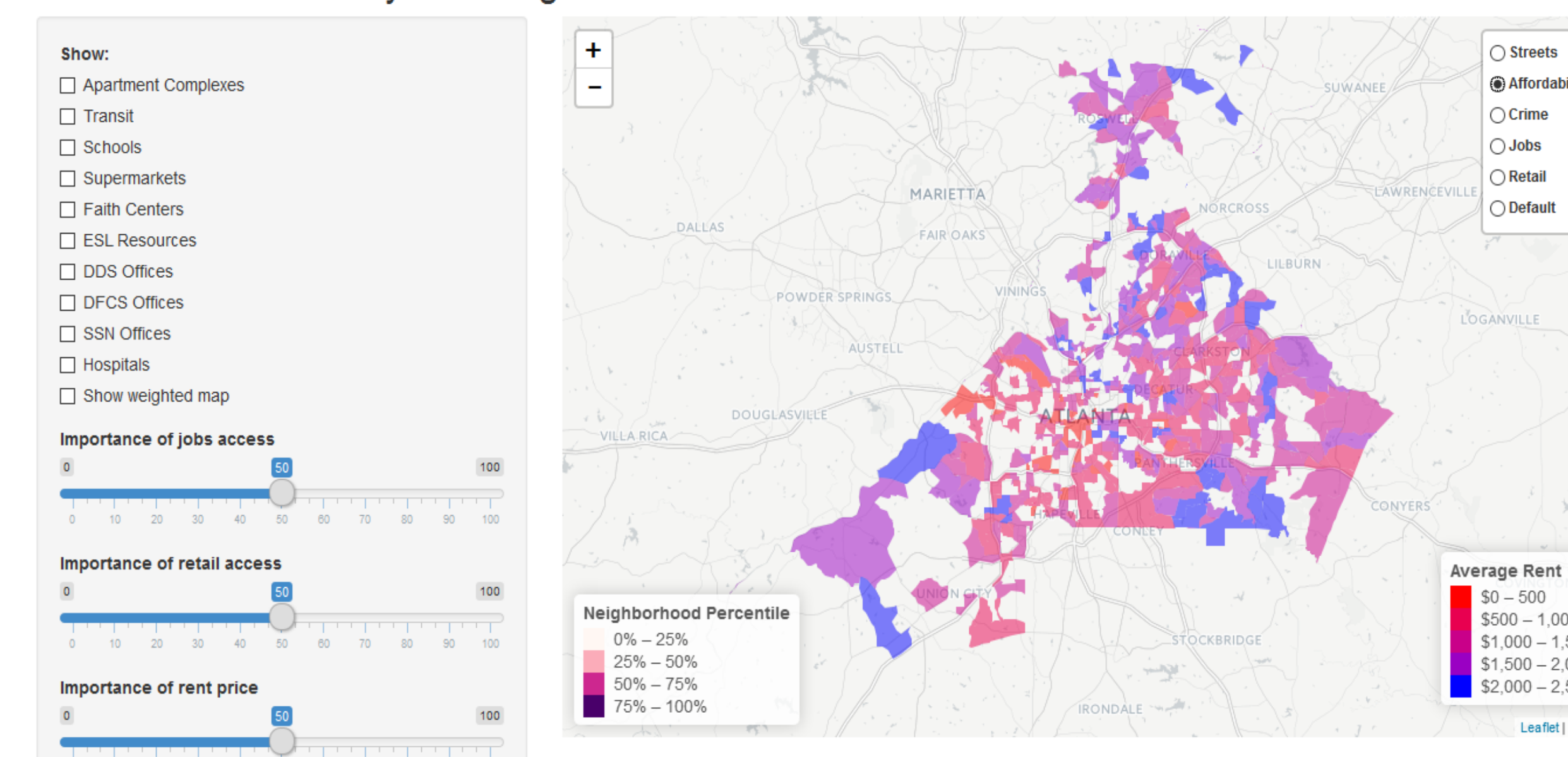


Web-based Housing Scout Tool

To help with refugee resettlement decision making and planning, **we have developed an interactive tool that pools together as much of the relevant information as possible, and allows for visualizing, filtering and examining the relevant assets.**

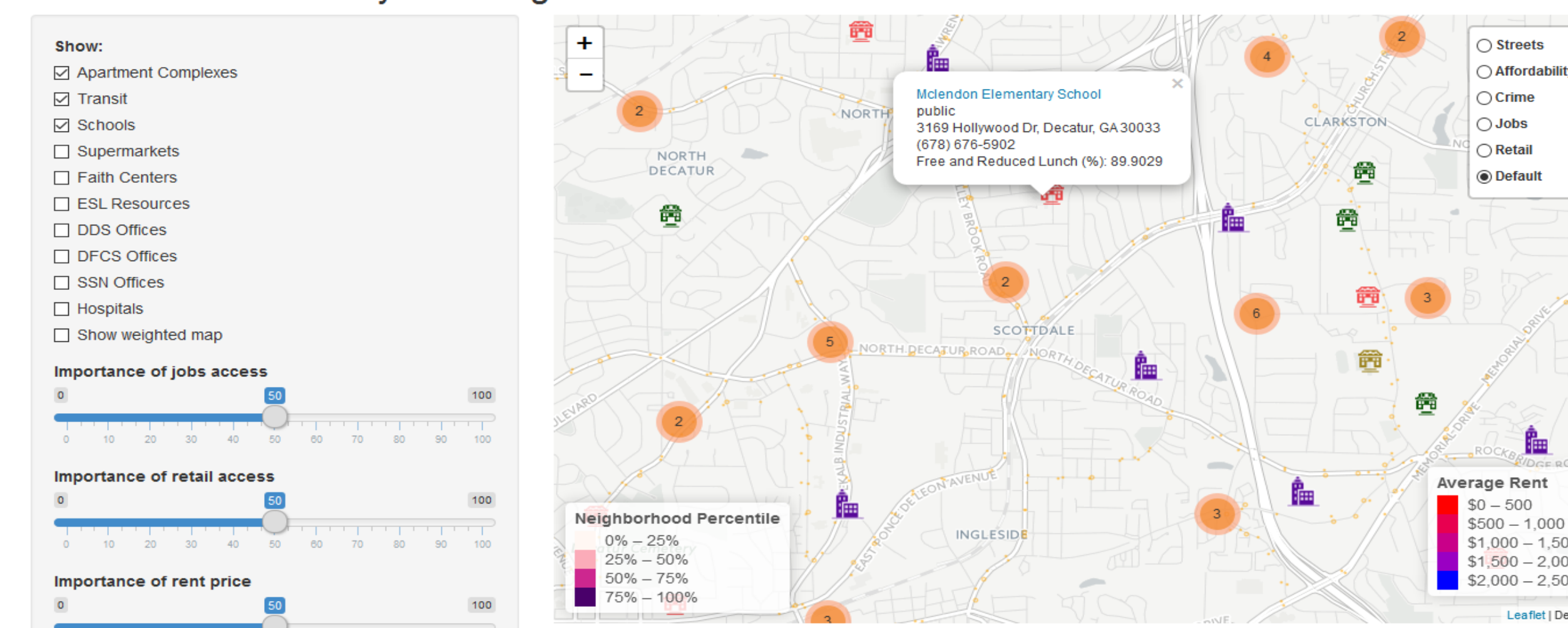
Affordability layer which shows average rent prices in Fulton and Dekalb counties in the form of heat map

New American Pathways Housing Scout



Schools around apartment complexes, color coded according to primary, secondary etc.

New American Pathways Housing Scout

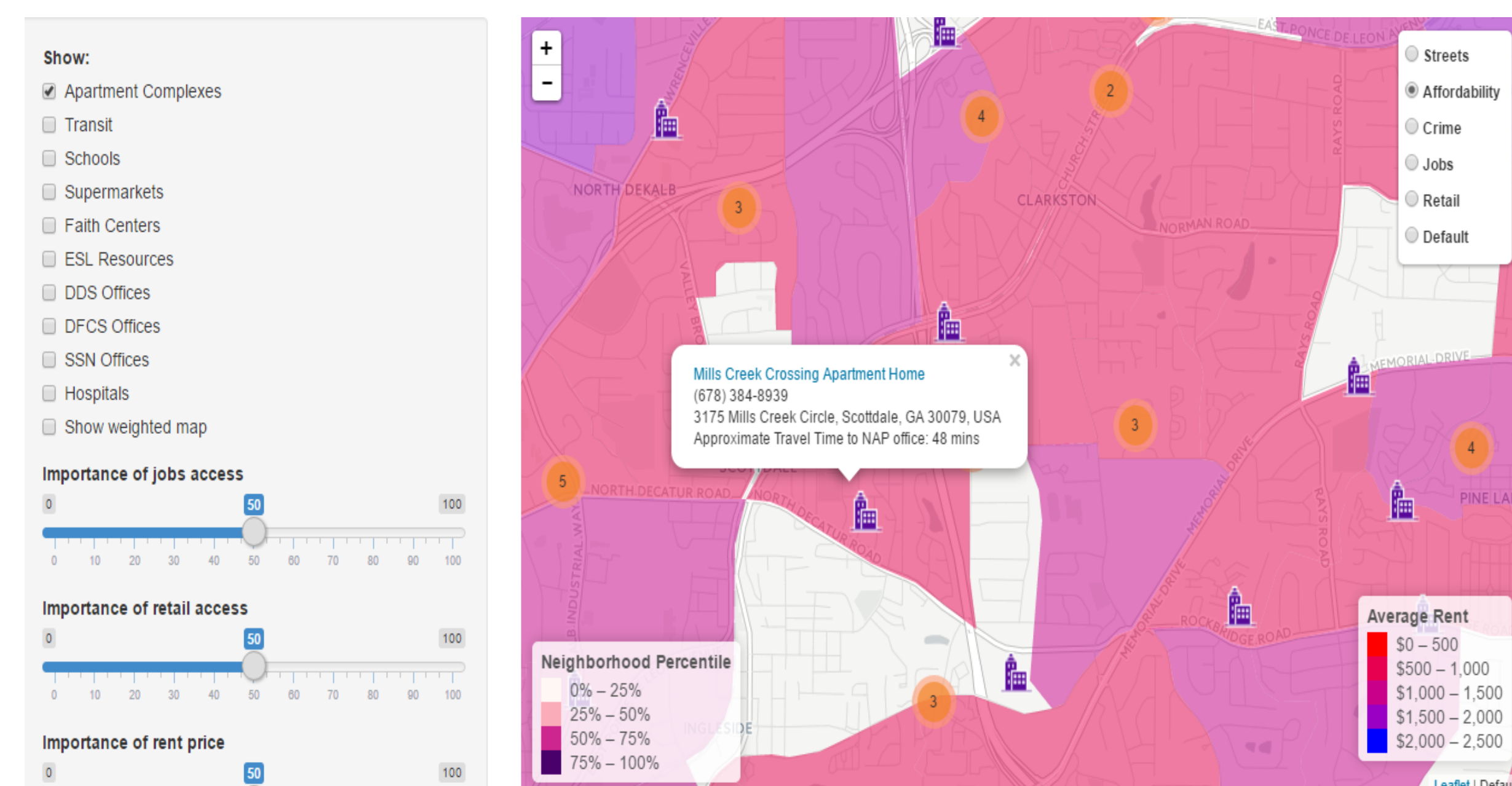


Tools

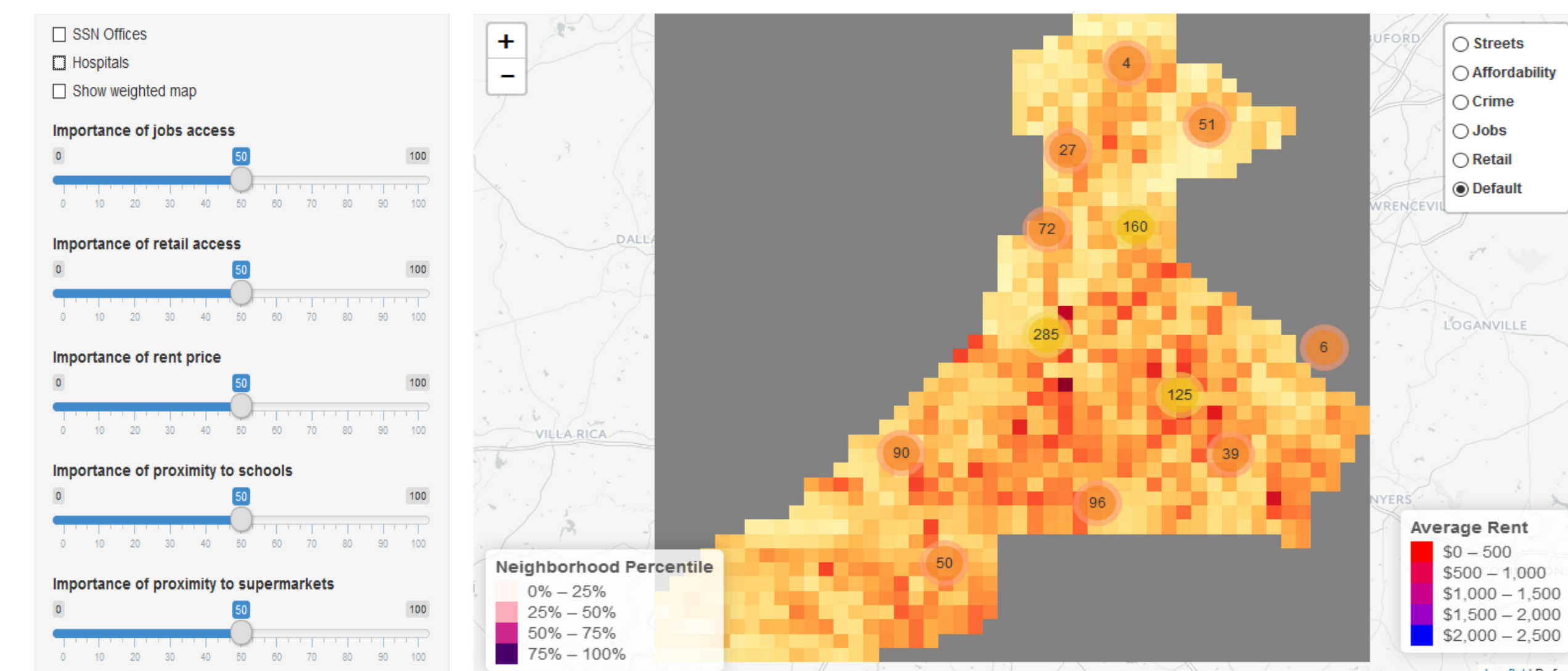
- **ArcGIS** for maps visualization
- **R Shiny** for visualization and web development
- **R Studio** for data processing



Affordability layer showing apartment complexes with a popup showing details about a specific apartment complex



Dynamic heat map showing importance weights that users can select, where red shows most desirable area according to the selected criteria



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