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T GIS 506

**Accompanying analysis:**

☐ 1 paragraph explaining what three sets of critical facilities you included in your analysis and where you got your data for those facilities. (1.5 points)

I included schools as a layer by itself (*Figure 1 & Figure 2*) in addition a staging location (Amtrak), and two types of pick-up locations (senior citizen and general population). These locations are at various types of sites, including schools, department stores, libraries, community centers, parks, and bus stops. All of these layers came from the [City of New Orleans GIS Open Data Portal](#). One downside to this was how they appeared very cluttered despite adjusting labeling several times.

☐ 2-3 paragraphs summarizing flood risk in the city, with attention to the relationship between hazards and vulnerabilities. (3.5 points)

It's apparent, based on several tragic experiences that the New Orleans community and the US went through in 2005, that this city is a high flood risk for all populations, both homeowners and renters. Despite the significant efforts to buoy the waters away from inner city limits by use levee systems and a large number of people that have moved away from the Orleans Parish and surrounding areas since Hurricane Katrina, there is still an enormous population left in the major metropolitan area. I'm sure this is largely due to the physical damage it may have costed those who owned land and don't want to simply forego the generations of work that their family may have put into their property, let alone the psychological devastation.

There are two layers I used to express the flood plains, both 500-year and 100-year. The areas where they cross-hatch are likely at most increased risk, but again, this entire city is underneath sea level and the only things prohibiting flooding are the levee walls. I was not able to find anything further on the integrity of these levees, but that would be an interesting choropleth to provide those interested in the New Orleans revitalization project(s).

☐ 1 paragraph providing suggestions for community flood preparedness. (3 points)

This city is an overall high flood risk, due to its dense populous, low elevation and proximity to major waters and hurricanes. Much like the island of Puerto Rico, if there is any whisper of natural disaster they begin preparing. It drastically takes away from the lifestyle and prohibits the freedom of citizens to live "normal" lives. I would say the way to prevent this is to continue putting financial infrastructure into the levees and assistance with allowances for long-time residents an option to move their residents to safer areas through use of relocation assistance programs.

Figure 1

# 2019 Population Density and Flood Hazard Analysis

est. total population 389,648

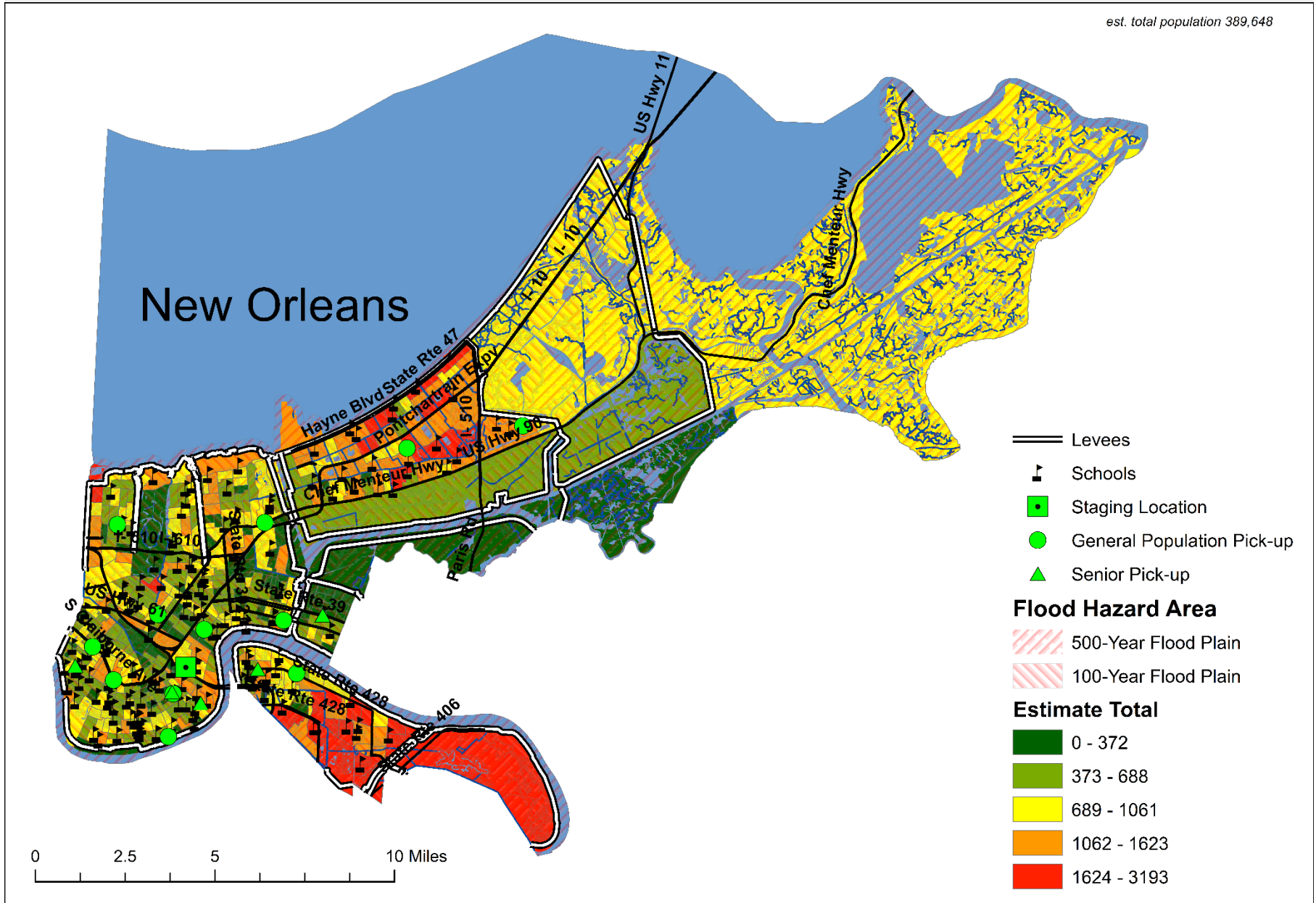


Figure 2



# 2019 Home Owners, Flood Hazard & Evacuation Spots

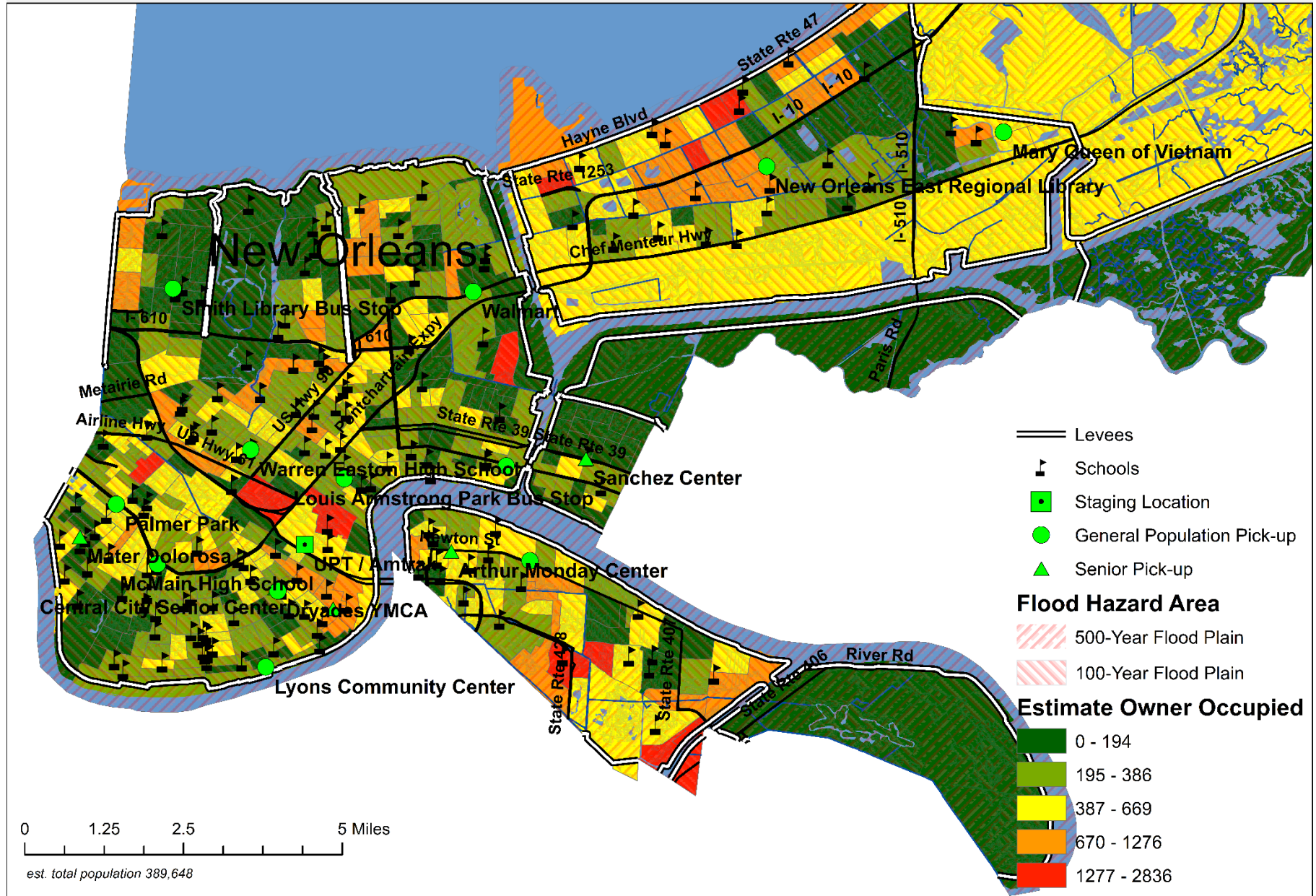




Figure 3



# 2019 Renters, Flood Hazard & Evacuation Spots

est. total population 389,648

