

The City of Los Angeles's Accessibility Gap to Charter Schools and Magnet Programs

Introduction and Problem Statement

In 2015, the Los Angeles Times published an article mentioning the large gap in K-12 education, specifically for California's Black and Latino students.¹ Even though all ethnics groups have made significant academic gains in the past 10 to 12 years, the gap separating blacks and Latinos from whites and Asians have slightly changed. This article also explains the correlation between low-income students and their declining school test scores, calling the issue a social and economic imperative. Similar patterns are stated in the Education Equality Index, showing substantial gaps in Los Angeles City in comparison to other California cities.² The Education Equality Index (EEI) released data stating "students from low-income families in Los Angeles and Long Beach are less likely to attend schools that put them on an equal playing field than those in other major California cities, such as San Francisco, San Diego, Irvine, and Fresno". Although minimum progress was captured between 2011 and 2013, this only indicates that there is there is a long way to go to ensure students from low-income families equal access to better education.

To narrow the achievement gap, based on the analytical researcher and empirical studies I made Los Angeles City should invest in developing more tailored schools and programs to student's needs. Los Angeles Unified School District is already working with such schools and programs known as charter schools and Magnet programs. Charter schools are a publicly funded school operating independently. The success of Charters schools is due to their flexible curriculum focusing more on student's interest and needs. As a result, based on data from

¹ Blume, H. (2015, September 11). Achievement gaps widen for California's black and Latino students. Retrieved from <https://www.latimes.com/local/lanow/la-me-ln-achievement-gaps-widen-20150911-story.html>

² Education Equality Index. (2016, March 22). *Los Angeles Home to a Large But Narrowing Achievement Gap, New Index Confirms*[Press release]. Retrieved November 20, 2018, from <http://www.educationequalityindex.org>

California Education Dataquest (2017), within three years from 2013, charter schools always excel in SAT scores compared to Traditional Public Schools. Furthermore, data from LAUSD shows students from charter schools have better achievement in other exam scores and leading students to higher acceptance rates in college.

However, many of the charter school benefits are not supported by equity or accessibility aspects for all families in the Los Angeles area. Based on the National Alliance data for the charter school dashboard, Charter schools concentrate more on urban areas, with more than 50% of schools in the city. Meanwhile, Traditional Public Schools are focused on the demand of community’s need. They are located in urban and rural areas in comparison with charter school where they are mainly located in urban areas.

Location	Charter School	Traditional Public School
City	52.20%	24.50%
Suburbs	20.60%	27.70%
Town	7.70%	14.40%
Rural	16.00%	33.10%

Source: National Alliance for Public charter schools Dashboard

In Los Angeles City (LA), public charter schools are under the jurisdiction of Los Angeles Unified School District. LAUSD is the second largest school district in the United States. The number of charter schools currently serving LAUSD is 277 schools (53 affiliated, 224 independent), serving more than 138,000 students from Kindergarten through 12th grade. Under LAUSD jurisdiction, in LA City only 92 charters schools are serving a 272 neighborhood. Therefore, it can be concluded that not all neighbors have accessibility to a charter school. This project aims to investigate accessibility to charters school in three different facets; first,

low-income household accessibility to charter school; second, African American students' accessibility to charter school; and thirdly, Latino students' accessibility to charter school.

Data

To do an analysis of the problems mentioned above, I will conduct a GIS-based analysis. The data that I use are as follows:

1. Charter school location data in Los Angeles City

This data comes from public school data at LAUSD which consisting of public and charter schools in the LAUSD jurisdiction. This data is in form of shapefiles and is sourced from the Los Angeles GeoHub site (<http://geohub.lacity.org/>). This is an official site owned by the city of LA which is a platform for exploration, visualization, and analysis of data using maps.

From the shapefile, I only selected charter schools in the LA city area. First, I eliminated public school data. Next, I selected the charters schools that are only located within LA City.

2. Median income household data.

This data is the median income household in the city of LA divided by neighborhoods. This data is in form of shapefiles and is sourced from the Los Angeles GeoHub site (<http://geohub.lacity.org/>). I then processed the median data into 2 classifications; low income and non-low income.

In this project, low-income household standard is determined by the US Department of Housing and Urban Development. stating \$ 72,100 as an income limit for a household of 4 people.

3. Population data by races.

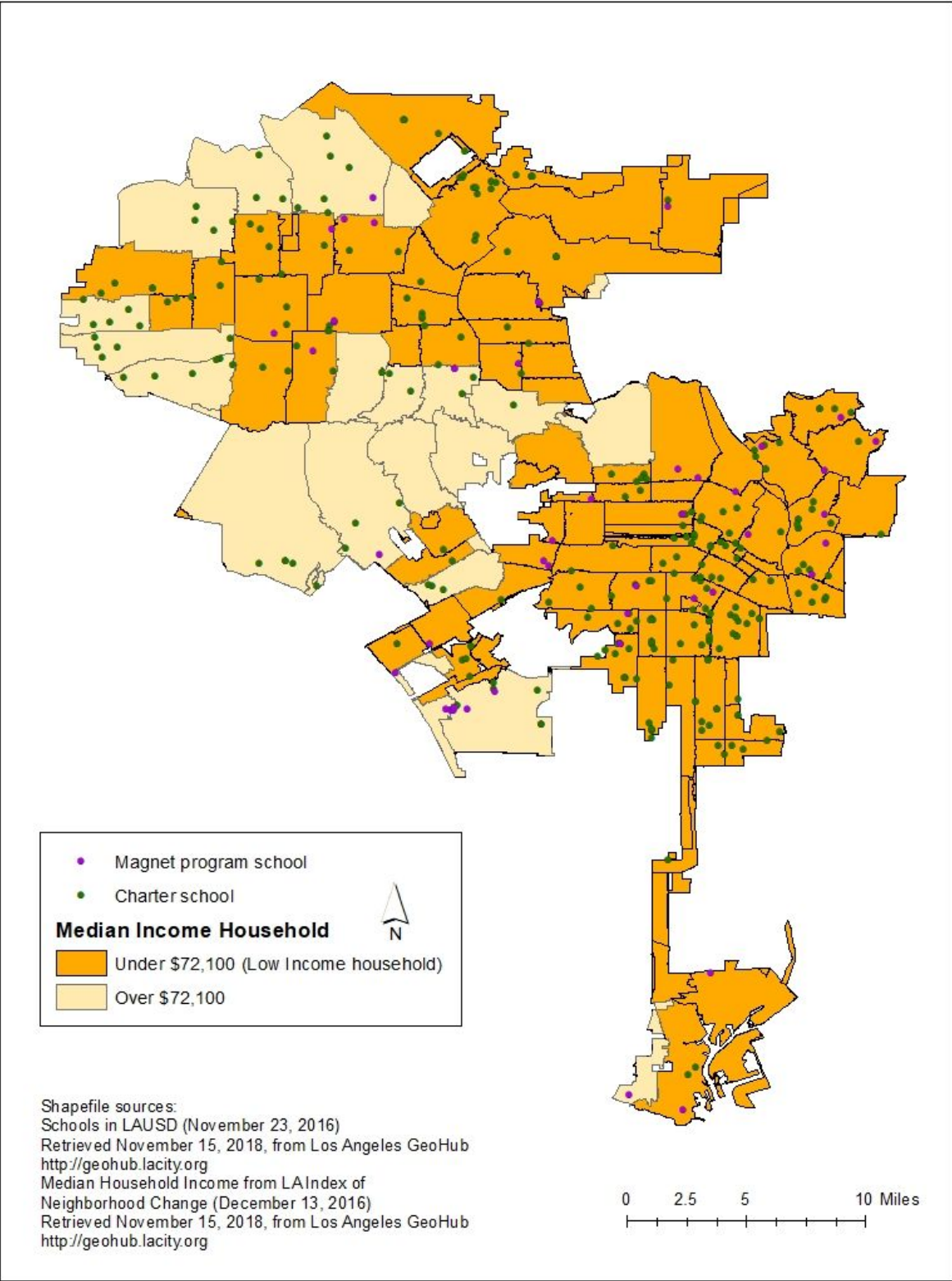
This data is based on population numbers by race, specifically African American and Latino. I only selected these two races due to the predominantly large gaps that continue through the years. Students from those races have a big gap in terms of educational achievement

compared to other races (White and Asian). This data was obtained from the Data of Neighborhood Change in the City of LA which was sourced from the Los Angeles GeoHub site (<http://geohub.lacity.org/>).

Analysis

A. Accessibility of students from Low-Income Household to Charter Schools and Magnet Program

Figure 1. Distribution of Charter Schools, Magnet Program Schools, and Median Household Income



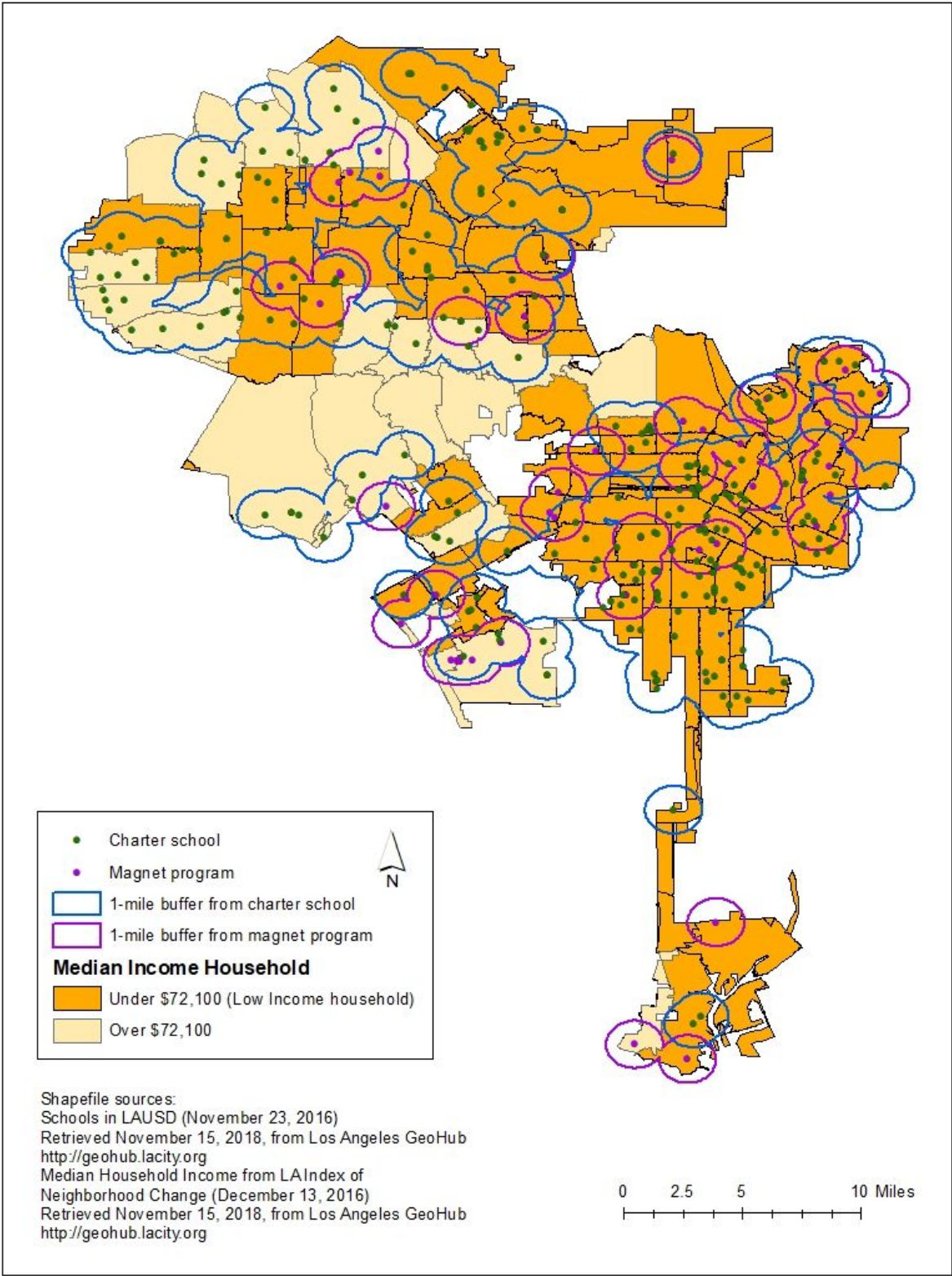
The map above is a combination between median household income, charter school and magnet program distribution in the city of LA. Based on the map above, by visual, more than 50% of the area in the city of LA is classified as a low-income household. It is also seen that only half of the low-income household area that has a charter school, including some large neighborhoods such as Los Feliz, Shadow Hills / Sunland, and Wilmington.

To see how students' accessibility to charter and magnet program, I created a 1-mile buffer of each charter and magnet school. The standard of “1-mile” is obtained from the agreement between practitioners at Safe Routes to School National Partnership of walkable distance for elementary school students³.

Figure 2.

Charter School and Magnet program with 1-Mile Buffer and Median Household Income

³ Safe Routes to School National Partnership Blog (<https://www.saferoutespartnership.org/blog/too-far-walk>)

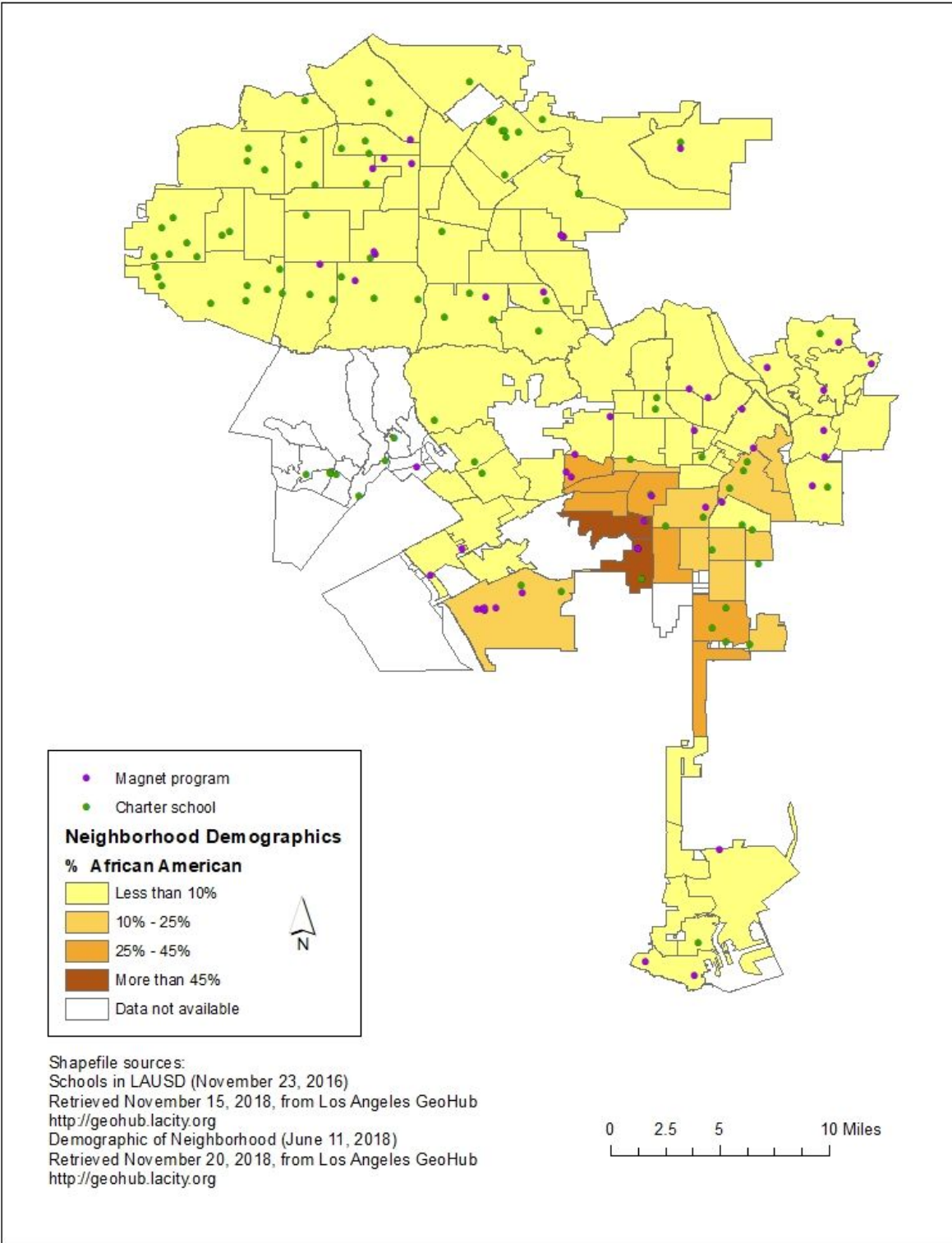


From Figure 2, we can analyze that even within 1-mile buffer, not all area in the city of LA especially a low-income household area is covered with charter schools boundaries. From the map, low-income household neighborhood areas that are not fully accessible to charter schools are listed as followed:

- Wilmington
- Harbor City
- Beverly Grove
- Hollywood Hills West
- Los Feliz
- Mid-City/Carthay/Pico-Robertson/Beverlywood
- Fairfax/Mid-Wilshire/Hancock Park
- Harbor Gateway
- San Pedro
- Tujunga
- Shadow Hills/Sun Valley
- El Sereno/Montecito Heights
- Van Nuys/Lake Balboa
- Lake View Terrace

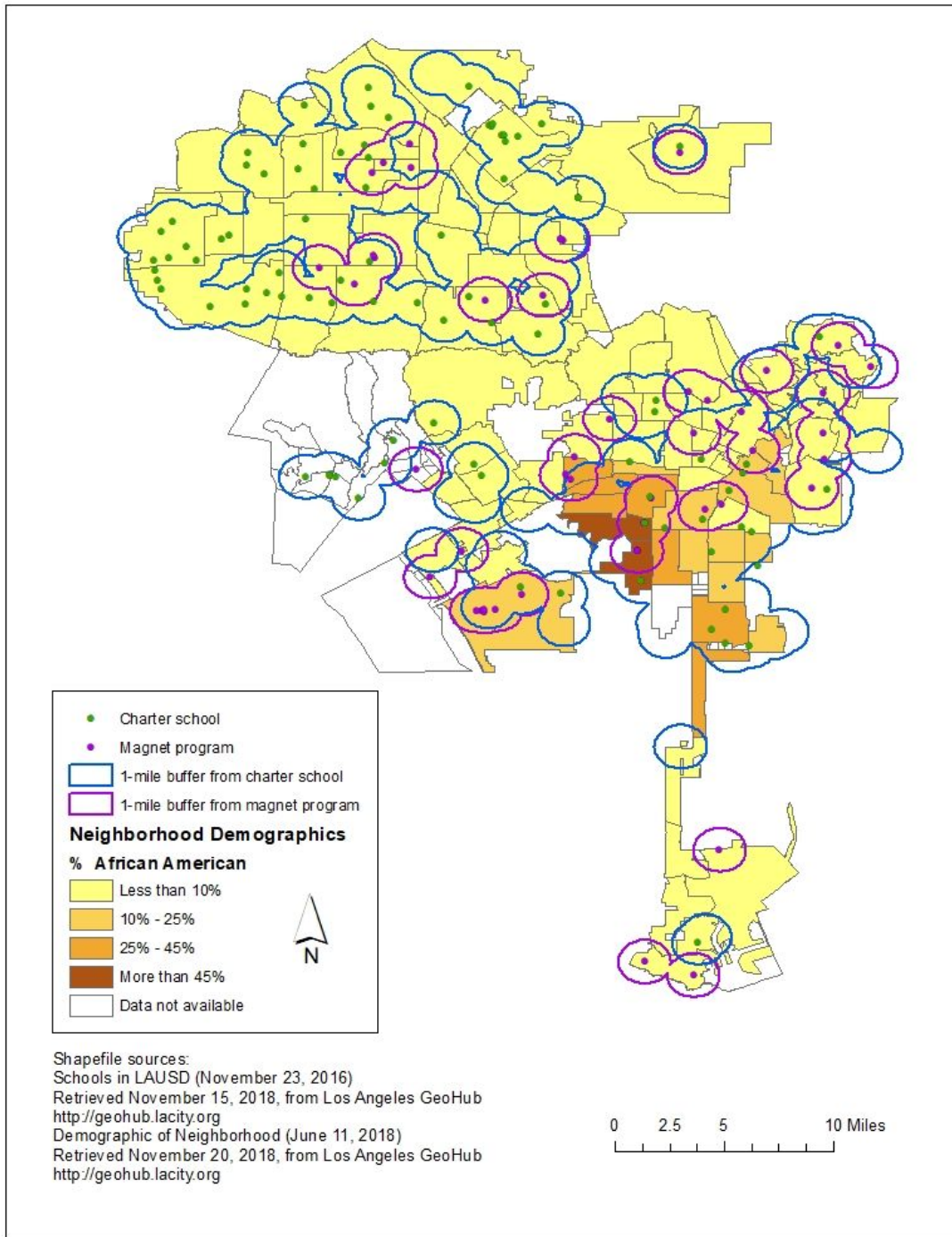
B. Accessibility of African American and Latino Students to charter schools and magnet program

Figure 3. Percentage of African American Population by Neighborhood and Distribution of Magnet Program and Charter Schools in LA City



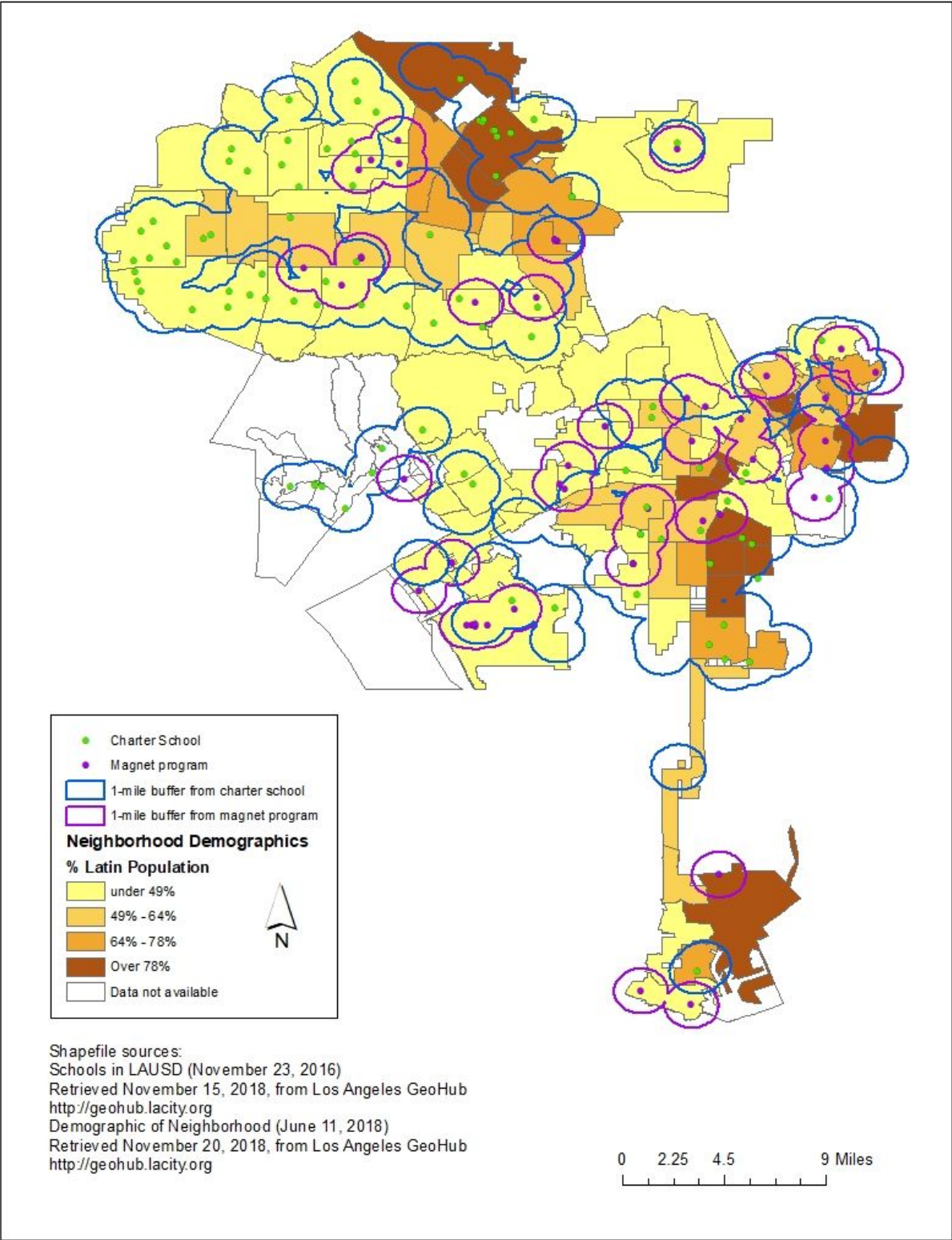
From Figure 3, there are few neighborhoods located in central part of LA city that are occupied by over 25% African American population. From those neighborhoods, there are five neighborhoods that do not have any charter school (Pico, West Adams, Mid City, Harbor Getaway North, Baldwin Hills/Crenshaw). However, within 1-mile buffer of charter schools (see Figure 4), a considerable portion of those five neighborhoods area have an access to Charter School.

Figure 4. Percentage of African American Population by Neighborhood and Distribution of Charter Schools and Magnet Programs in LA City (with 1-mile buffer)



In Figure 5, a worst situation captured from the Latino population, at least 16 neighborhoods with more than 49% Latino population do not have a full access to charter schools (a small part of some area have accessibility to charter schools).

Figure 5. Percentage of Latino Population by Neighborhood and Distribution of Charter Schools and Magnet Programs in LA City (with 1-mile buffer)



Meanwhile, from all neighborhoods that are inhabited by more than 78% of Latino population, there are 3 neighborhoods that do not have access to the charter school and magnet program which are Greater Cypress Park, LA-32, and Wilmington neighborhood.

Conclusion

The current distribution of charter schools does not reach all neighborhood mostly occupied by low-income household, African American population, and Latino population in the city of LA. Based on some literature, limited funding is one of reasons for the uneven distribution of charter schools in the city of LA. However, by visual analysis, we could capture some charter schools and magnet programs that located in the same area/neighborhood less than two miles. This situation can be overcome by relocating one of the adjacent charter schools and magnet programs to another neighborhood that does not have any of them. If this policy is taken by the city of LA, neighborhoods (low-income household, African-American population, and Latino population neighborhood) with lack of accessibility to charter schools/magnet programs are as follows:

Wilmington, Harbor City, Beverly Grove, Hollywood Hills West, Los Feliz, Mid-City/Carthay/Pico-Robertson/Beverlywood, Fairfax/Mid-Wilshire/Hancock Park, Harbor Gateway, San Pedro, Tujunga, Shadow Hills/Sun Valley, El Sereno/Montecito Heights, Van Nuys/Lake Balboa, Lake View Terrace, Greater Cypress Park, LA-32, and Wilmington.

Limitation

This data has a limitation that is there are differences in the number of neighborhoods of two source shapefiles. In Demographic of Neighborhood shapefile, there are 97 neighborhoods recorded. Whereas in the LA data Index of Neighborhood Changes shapefile there are 155 neighborhoods. These two shapefiles come from the same source which is the Los Angeles GeoHub site (<http://geohub.lacity.org/>). In addition, I could also include the data of population density of children aged 6-17 years as a factor, especially in some industrial area with probability

of less school-aged children. However, in this paper I assume all neighborhoods have the same demand for charter schools. Then, each charter school will adjust its capacity to the demand.