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SUBJECT: Analysis of Early Care and Education Programs in the City of El Monte

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Introduction

Quality early care and education (ECE) programs are pertinent to the academic and lifelong success of a child. This is especially true for low income and minority children who often start school less prepared. With the majority of the population in the city of El Monte comprising of a Hispanic minority, it is especially important to ensure that these children, ages 0-5, receive the quality ECE programs that they need in order to enter school ready to succeed and in order to address the achievement gaps that have persisted for so many low-income children of color.

Background

The first five years of a child's life are markedly the most influential in a child's educational and emotional development. Participating in quality early care and education programs enhances a child's cognitive, language, social development and overall well-being¹. ECE programs range greatly from participation in pre-kindergarten to attending day care programs for children ages five or younger. Early care and education programs are crucial to preparing children for success in kindergarten and on and to help address the achievement gaps from the start².

Race, ethnicity and socioeconomic status can drastically impact the academic achievement gaps and, in some cases, widen the gap. Quality ECE programs have been utilized as an intervention to reduce the achievement gaps, especially among minority and low-income students. This is

¹ Advancement Project. "Babies and toddlers in Los Angeles County: prioritizing high-quality early care and education to set children on a path to success".

² Advancement Project. (2018). Early Care and Education. Retrieved from <http://advancementprojectca.org/what-we-do/educational-equity/early-care-education>.

because children from families of lower socioeconomic status enter kindergarten far less prepared than students from affluent families³. However, these families often find that ECE programs are expensive and difficult to approach⁴.

In the case of the City of El Monte, whose population majority is an ethnic minority, the shortage of early care and education programs exacerbates the achievement gaps. There also exists high need of ECE programs in areas where there is only one registered ECE program among a population of around seven-hundred children ages five or younger. This is not taking into account that in some areas of the city around thirty percent of the population is living in poverty, making quality ECE programs inaccessible⁵. Finding solutions to address the high need and the shortage of quality early care and education programs is pertinent to giving each child in El Monte the resources to begin kindergarten and life ready to succeed.

Data Sources

For this report, an overview of the demographics of the city of El Monte is provided through the analysis of five maps. These maps show the distribution of children ages 0-5, the number of early childhood education services in the area, the distance of the ECE programs, the percentage of Hispanic minorities in the city, the percentage of children enrolled in preprimary education, and the percentage of the population living in poverty. The sixth map is an analysis of the high need for early care and education programs in the city. This map combines the shapefiles of the five previous maps in order to establish where the placement of a new ECE program would be most beneficial within the city of El Monte.

³ Reardon, S. F., & Portilla, X. A. (2016). Recent Trends in Income, Racial, and Ethnic School Readiness Gaps at Kindergarten Entry. *AERA Open*, 2(3), 1-18.

⁴ Advancement Project. "Babies and toddlers in Los Angeles County: prioritizing high-quality early care and education to set children on a path to success".

⁵ First 5 LA. (2013). *Assessing Children's School Readiness in LA County Neighborhoods*. Retrieved from First5LA.org

The data was retrieved from two sources:

- **EASI Census US Data 2018:** The data on age, ethnicity, enrollment in preprimary, and percent in poverty of the population in El Monte were retrieved from SimplyAnalytics as a shapefile. SimplyAnalytics uses the most recent Census data to provide the information.
- **Los Angeles County GIS Data Portal:** The data on the registered ECE programs in the City of El Monte were retrieved from the L.A. County GIS data portal as a shapefile. This file originally contained a comprehensive list of information on services in the area that ranges from health centers, libraries, parks, and schools. The data containing city boundaries was also retrieved from the same data portal in the form of a shapefile.

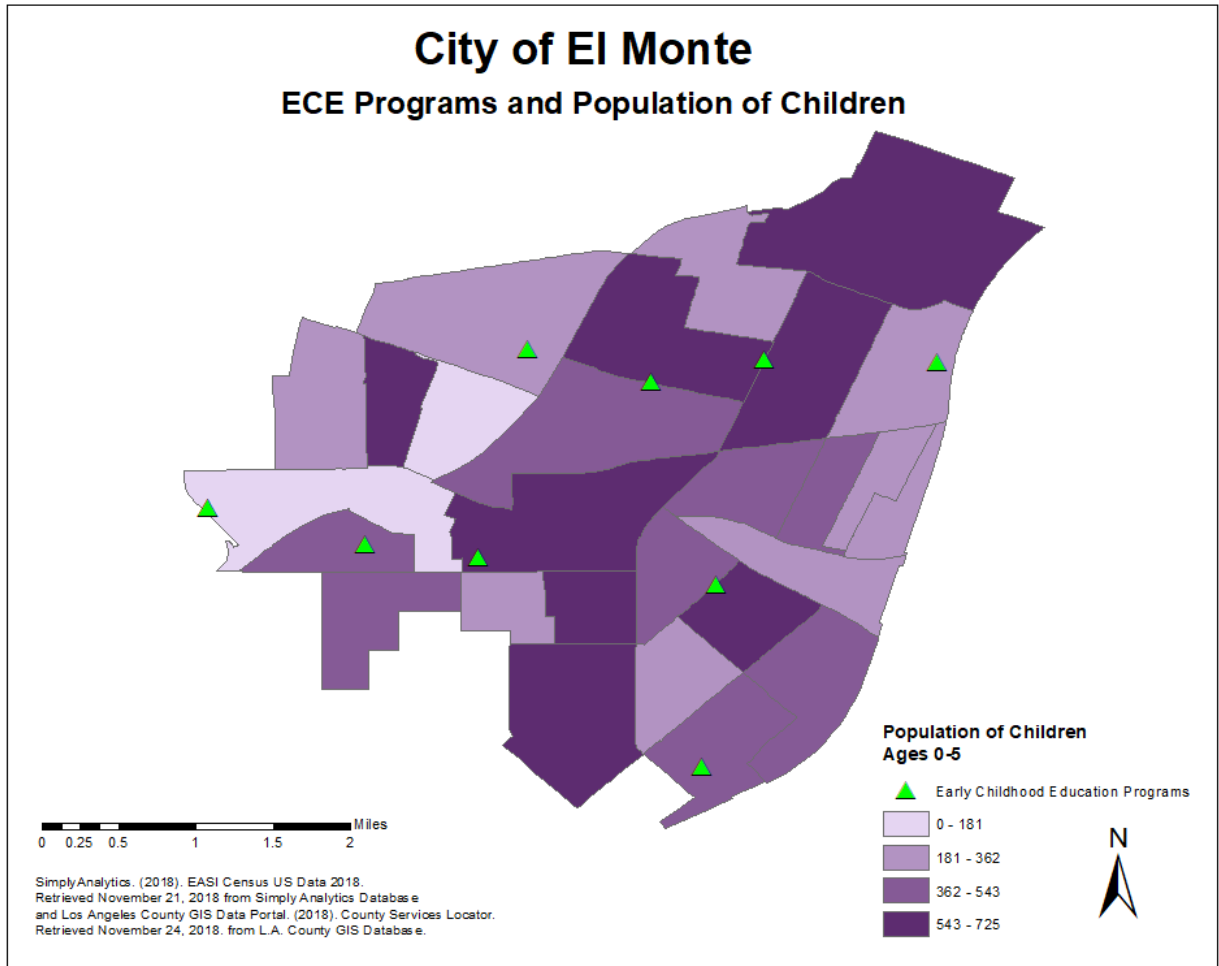
Methodology

In order to complete an analysis of ECE programs in the city of El Monte, **Figure 1** combines two shapefiles: the distribution of children ages 0-5 and the surrounding ECE programs. First, some data cleaning was required. The ECE programs were manually selected from the table included in the shapefile from the L.A. County GIS Data portal. Twenty-two selections, listed within the city of El Monte, were made that were categorized as Early Childhood Education & Head Start and Child Care in the table accompanying the shapefile. A new layer was then created that contained only the twenty-two selections of the ECE programs. This layer was then placed over the shapefile showing the population of children ages 0-5. However, after the new layer was created, only nine of the addresses were geocoded to the City of El Monte. The remaining thirteen locations were cross-checked to ensure that the addresses were not within the city. They were not addresses within the city of El Monte. Only nine ECE programs reside within the city and are shown in **Figure 1**.

Figure 2 required three layers to show the distance of the early care and education programs from each other. The first layer includes the city boundaries retrieved from the LA County GIS data portal. The second layer consists of the ECE programs in the area as explained in the previous paragraph. A buffer layer was then created and placed on top of the layer with the city boundaries to show distances of ½ mi. **Figure 3** through **Figure 5** did not require additional layers as the shapefiles consist of one layer of Census data for each. The maps were first created with the help of SimplyAnalytics, which retrieves the most current data from the Census. Afterwards, the shapefiles were exported in order to use and edit in ArcMap. All maps are created using census tract data because it provides the most consistency when comparing maps. The final map, **Figure 6**, is a comprehensive analysis of the need for ECE programs in the city of El Monte. To produce this map, four shapefiles had to be merged into a new shapefile containing all of the data. The combined shapefiles were the distribution of children ages 0-5 (**Figure 1**), the percentage of children enrolled in preprimary education (**Figure 3**), the percentage of Hispanics in the city (**Figure 4**), and the percentage of the population living in poverty (**Figure 5**). A composite score of all of the data was calculated by creating a new field in the table accompanying the newly created shapefile. The composite score indicates where in the city of El Monte there is a high need for a new ECE program. This shapefile was then displayed against the location and distance of early care and education programs in the city (**Figure 2**).

Findings

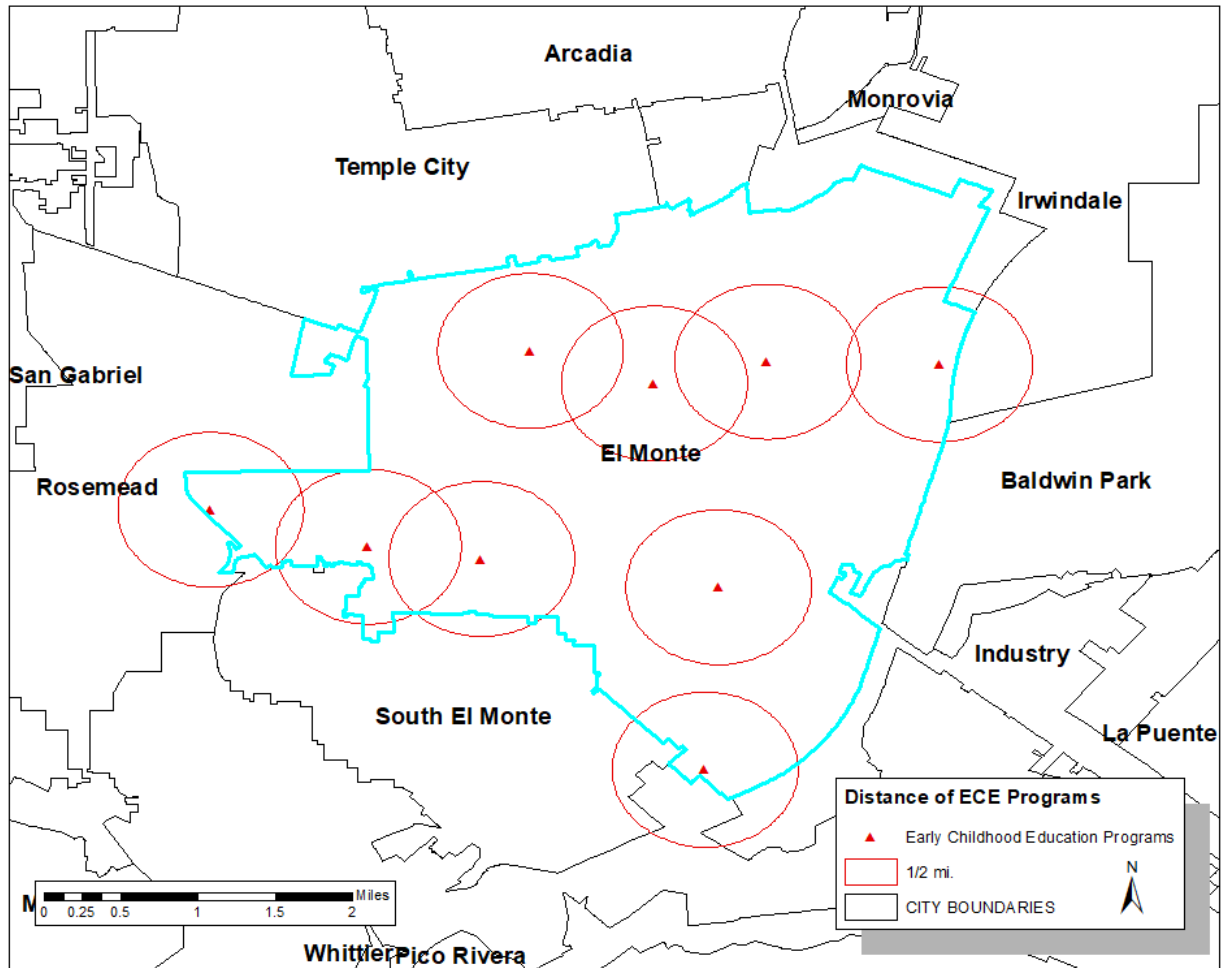
Figure 1 ECE Programs and Population of Children Ages 0-5



Only nine Early Childhood Education programs are registered in the area. This is a significantly small number considering that parts of the city reach a population number of nearly 1,000 children of ages 0-5. Particularly the northern part of El Monte is drastically affected by the lack of ECE programs in the surrounding area. This is an issue considering that prekindergarten

programs are advised to have no more than twenty children per classroom in order to provide quality ECE programs⁶.

Figure 2 Distance of ECE Programs in El Monte



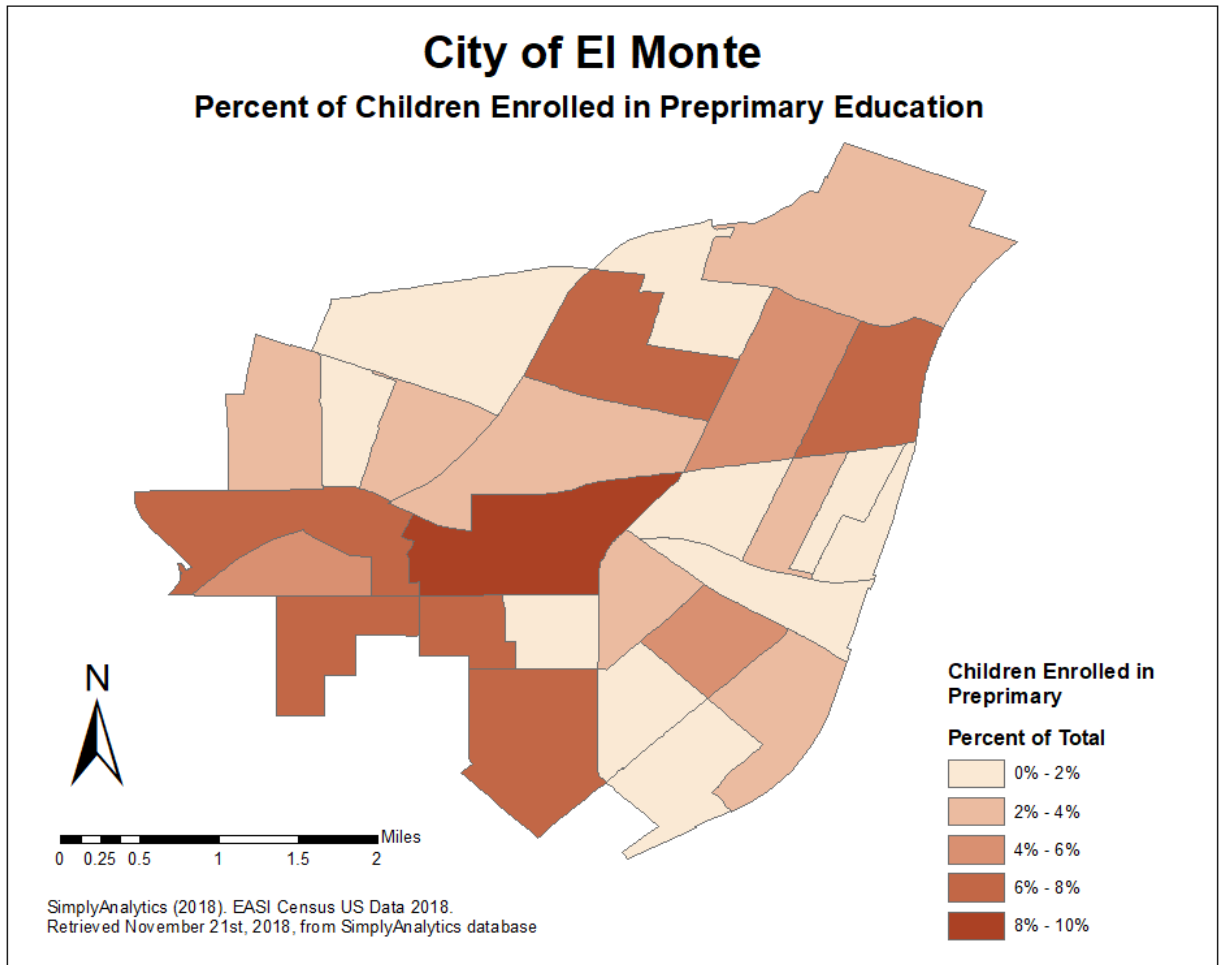
Source: Los Angeles County GIS Data Portal. (2018). County Services Locator. Retrieved November 24, 2018 from L.A. County GIS Database.

Some of the ECE programs are half a mile apart from each other, 2,640 ft to be exact. However, most ECE programs are not as accessible since they are not walking distance. This map shows

⁶ Barnett, Steven W. et al. (2004). Class Size: What's the Best Fit? National Institute for Early Education Research. Retrieved from <http://nieer.org/wp-content/uploads/2016/08/9.pdf>.

that there is a horizontal gap in the middle of the city in which no ECE program is within walking distance. In that area and in the northern part, programs are more than a mile apart.

Figure 3 Percent of Children in Preprimary Education



In the majority of the city, less than ten percent of children ages 0-5 are enrolled in preprimary education which include pre-kindergarten and day care services. This is an overwhelmingly small portion of children when you consider the high number of children that live in the area. Both this map and the previous map reveal the shortage of ECE programs and the increased need for the services. More needs to be done to address the achievement gaps that begin with lack of quality ECE programs especially for low-income and ethnic minorities.

Figure 4 Hispanic Population

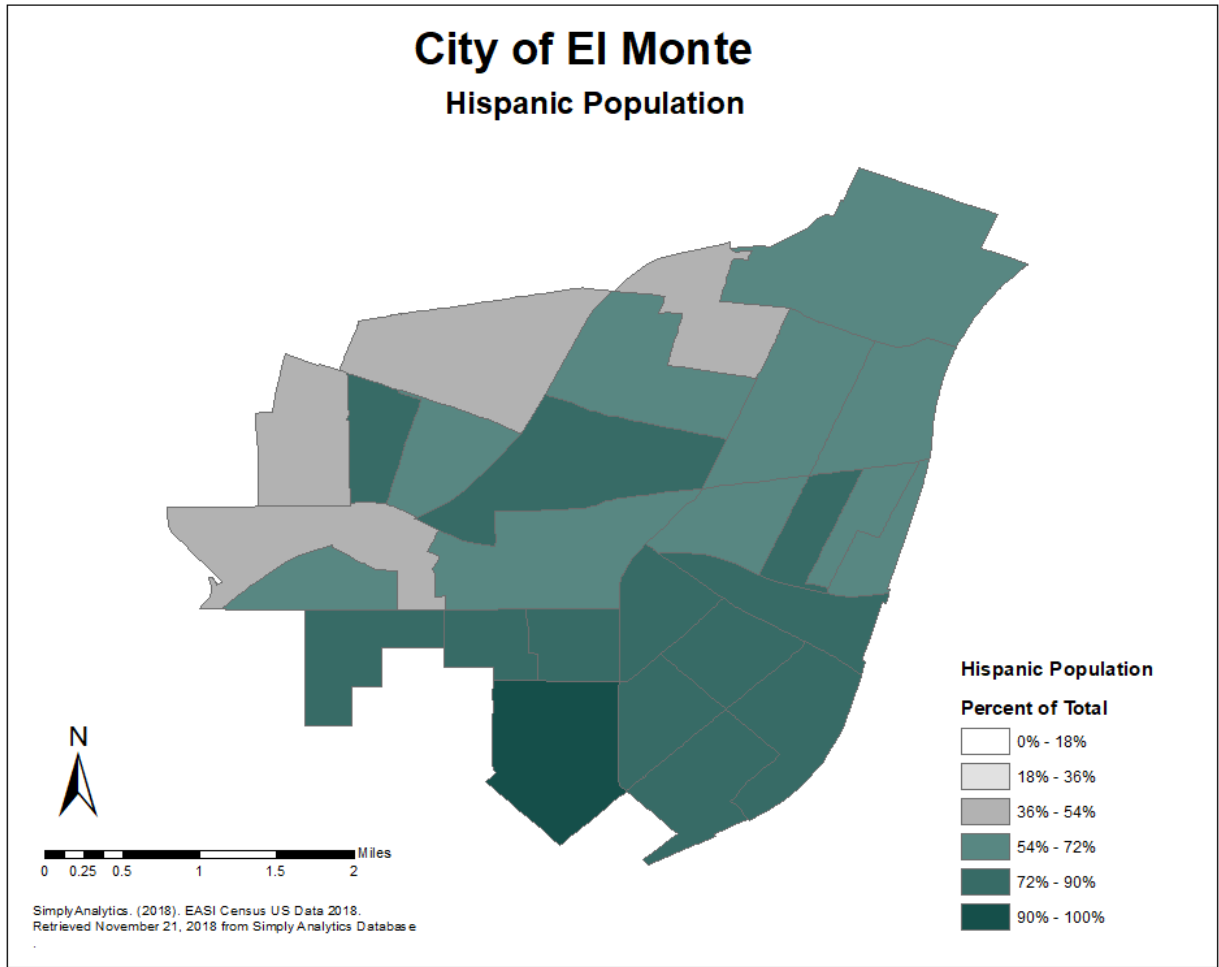
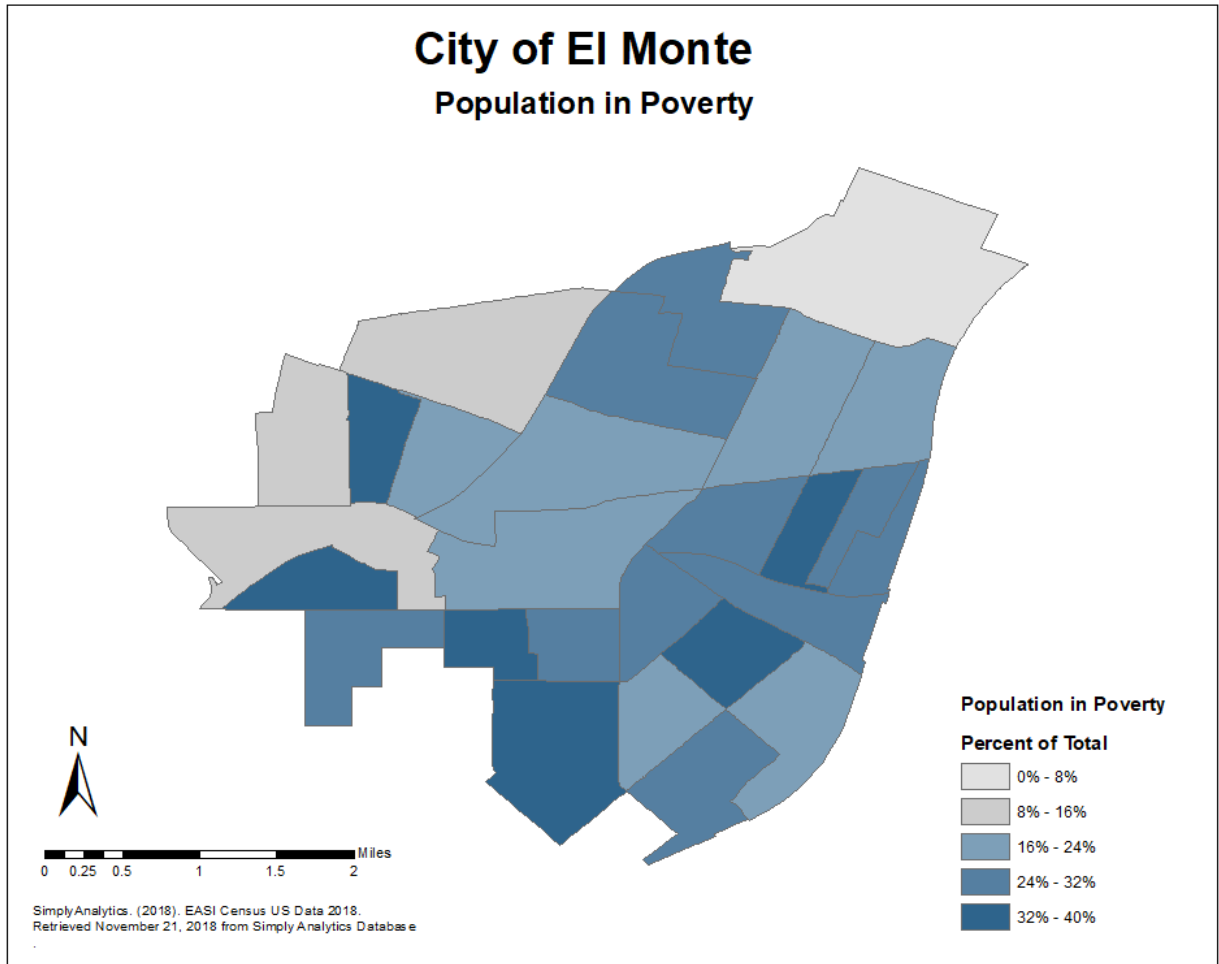


Figure 4 shows that the city is predominantly composed of an ethnic minority. In almost two-thirds of the city, there are more than fifty percent of Hispanics residing within city boundaries. This is alarming because academic achievement gaps have been shown to begin from kindergarten and persist, in many cases widen, over students' academic careers.⁷ Once racial and ethnic factors are taken into account, the achievement gaps widen.

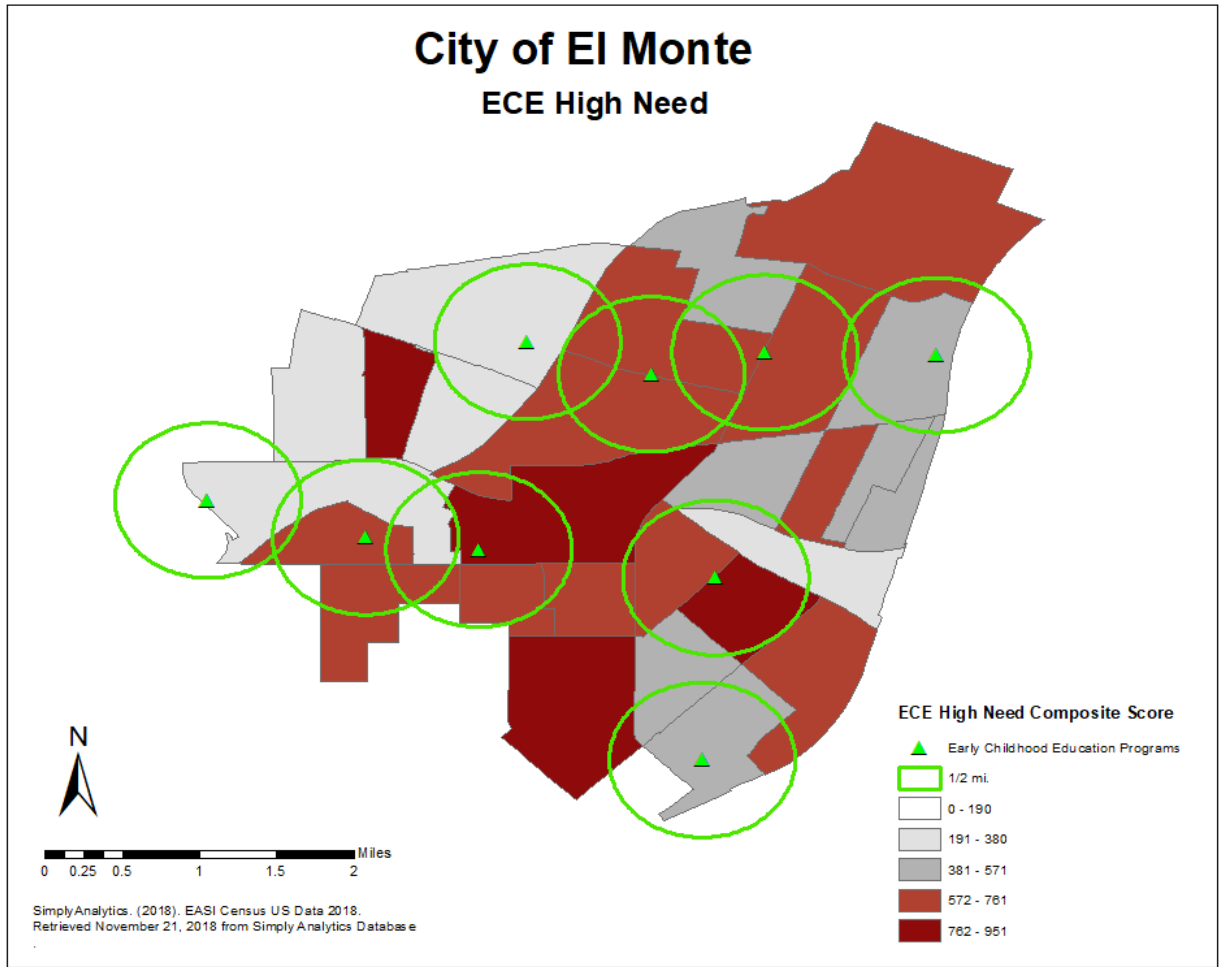
⁷ Reardon, S. F., & Portilla, X. A. (2016). Recent trends in income, racial, and ethnic school readiness gaps at kindergarten entry. *AERA Open*, 2(3), 2332858416657343.

Figure 5 Population Living in Poverty



In the city of El Monte, a large amount of the population is living in poverty; in some cases, more than thirty percent. As the map shows, the location in which most of the people living in poverty reside is in the southern part of the city. Interestingly, that is also the area where there is a high concentration of Hispanic minorities, up to ninety percent in some places. As previously discussed low-income and minority children are among the most affected by the lack of access to quality ECE programs.

Figure 6 High Need for Early Care and Education Programs



In combining the four criteria previously mentioned, we can get a sense of where there is a high need for early care and education programs in the city. The composite score of the four criteria reveals that there is a high need in the southern peak of El Monte. This is where the highest composite score was calculated, and it is also where a high population of Hispanics living in poverty reside.

Conclusion

The five maps provide a demographic of the population residing within the city. They also provide a visualization of the needs and shortage of quality early care and education programs.

The last map gives insight into where in the city the needs and shortage of ECE programs are most dire. This is based on the composite score of the four criteria: high population of children, low percent of children enrolled in preprimary education, high Hispanic population and high population living in poverty.

If a new ECE program were to be established, we can conclude that its placement would be most beneficial in the southern peak of the city, where the darkest shade of red indicates a high need.

This report is meant to map out the problem in the area in hopes to start the conversation of ECE programs in the city of El Monte and to provide the children within the community the resources and access to begin school and life ready to succeed.

Limitations

The primary limitation is that there is no comprehensive list or database that lists all of the ECE programs in L.A. County. This has been an issue that early childhood education advocates have been trying to address. To make matters worse, there is no consensus on what consists of quality early care and education. Another limitation is that the definition of preprimary education includes children in kindergarten. This report is focusing on children in education before reaching kindergarten⁸. The percent of children in preprimary education could, in fact, be less than reported in **Figure 3**.

⁸ SimplyAnalytics. (2018). EASI Census Data. Retrieved November 25th from SimplyAnalytics database.