Who and Where?: Single Mothers in Los Angeles County Using Census Tract Census Data

Introduction

The number of single mothers in the American population have increased over the years (2013 Census Bureau Analysis of 2012 Current Population Survey). While the proportion to the population might not have changed greatly, the number of single mothers living below the poverty level are considerably large when compared to their married counterparts. Since these women live in poverty with dependent children, housing challenges are an issue. Policymakers and advocates are informed by Census data and other sources of information. However, some of these data sources have been found to be problematic and may affect the way single mothers and their residence issues are identified.

This project will use the 2006-2010 American Community Survey to explore the distribution of single mothers in the Los Angeles County and its potential effects on policy implications.

Literature Review

Contrary to popular belief, single mother headed households are not simple living arrangements consisting of a single mother and her dependent children. The 1968-1985 PSID (Panel Study of Income Data) files failed to account for single mothers who were subfamily heads, which created a bias in age, race, welfare use, and poverty status (Rendall, 1997). These subfamily heads were single mothers who still lived with their parent(s) with their dependent

children. As a result, younger single mothers were undercounted while older black single mothers were overcounted.

Not only are there single mothers who are subfamily heads of households, Winkler (1993) used the Current Population Survey Data from 1986 to determine the types of living arrangement of single mothers and found that they were many different arrangements. Single mothers were found to live independently, with single family members as a subhead of household (usually living with parent), be a subhead of household by living with a married couple (usually the single mother's parents), or with an unrelated male (cohabitation), demonstrating the need to classify single mothers' living arrangements beyond living independently or cohabitation.

In their study of Fragile Families, Sigle-Rushton and McLanahan (2002) found that the living arrangement of new, unmarried single mothers varied greatly and depended on the quality of the relationship with partner, demographics, human capital, and cost of housing. Almost half unwed single mothers were cohabiting with the child's father at the time of birth and only 17% were living alone.

Other previous trends and living arrangements were also affected by data coding errors. Using data from 1970-1995 Current Population Surveys, London (1998) examined trends of single mothers' living arrangements. Due to coding errors of single mothers with dependent children living in multigenerational households before 1984, they were undercounted by 200,000 to 300,000 for each of the years. London (1998) found that "these single mothers were subfamily heads living with their parents, and the problems occurred disproportionately among teens and black women. The uncorrected trend falsely indicates a large increase in the share of single mothers living with their parents. In reality, there was a little change in the percentage of single

mothers living in this arrangement over the time period." (p. 125). London (1998) found that there was an increase in cohabitation rates and a decrease in living independently.

With coding errors and different living arrangements taken into account, Folk (1996) found that income levels affected the living arrangements of single mothers with dependent children. Racial differences in the impact of cohabitation on living arrangements were found in the research. White mothers experienced an increase in income and decrease in dependency on public assistance while black mothers did not. Both white and black mothers who lived with their parents were less likely to depend on public assistance for their subsistence. White single mothers who lived with their parents found that they spent less time on household chores while black mothers did not. White single mothers usually had both parents present in their household while most black single mothers lived with one parent. As a result, black single mothers did not benefit from less time demands due to household chores simply by living with a parent.

The lives of Black women from the years 1968-1996 were traced using quantitative and qualitative data from the Baltimore Study (McDonald and Richards, 2008). Over the course of almost thirty years, the McDonald and Richards (2008) found that the women had five major housing trajectory patterns: persistently poor, downwardly mobile, upwardly mobile, persistently nonpoor, and sporadic. The study found that single women who had additional children and remained unmarried experienced downward mobility while women who got married or remained married experienced upward mobility. Women who chose to live with relatives ended up residing in poor neighborhoods and getting on welfare caused women to experience downward residential mobility.

Using longitudinal data from the Panel Study of Income Dynamics (PSID) and local census data, South and Crowder (1998) found that marriage and employment helped single

mothers, in general, to move into better neighborhoods. In addition, the mothers living in nonpoor neighborhoods are more likely to cohabit than their counterparts living in poor neighborhoods.

South and Crowder (1998) found that mothers who live in nonpoor neighborhoods were found to be more educated, have higher income, and less likely to receive AFDC (Aid to Families with Dependent Children). Other factors that act as barriers to residential mobility for single mothers were age and homeownership. Older single mothers were found to be less likely to change residences, either downward or upward, and owning a home, even in a poor neighborhood, acted as an obstacle for residential mobility. Owning their own home, enables single mothers to be with their children without having to rely on other relationship situations, such as cohabitation, to keep their children in a home.

In this study (South and Crowder, 1998), 71% of black women were from poor neighborhoods while 19% were from nonpoor neighborhoods. Black women were found to have greater difficulty moving from poor to nonpoor neighborhoods than their counterparts with similar education and income level. Black women who were educated and higher income levels still experienced difficulty staying in nonpoor neighborhoods and had higher rates of moving into poorer neighborhoods.

Many single mothers rely on public assistance housing for shelter. Park, Fertig and Metraux (2014) found that families experiencing homelessness and financial disadvantage were most likely to receive housing assistance. The researchers' study of 3,237 low income families in 20 large cities over a nine year period found that neighborhood characteristics had an impact as did the racial background of single mothers. Black mothers were more likely to receive housing assistance than other minority women.

Mulroy's 1990 study found that white single mothers with small families benefited the most from section 8, or public assistance housing. Minority single mothers, on the other hand, were least likely to benefit if they desired to move to better neighborhoods than their current poor neighborhoods and had other unmet housing needs.

The literature on single mothers and their residential mobility issues have been limited by under and overcounting of single mothers, incorrect assumptions about living arrangements, and focusing on mostly lower income single mothers. This project uses the 2006-2010 American Community Survey Census Data to explore the spatial distribution of single mothers at the block group level in Los Angeles County using ArcGIS geocoded files and shapefiles.

Data and Methods

This project used the 2006-2010 ACS (American Community Survey) geocoded database along with tables from the 2006-2010 ACS for information on population count, child and relationship status, and poverty count. Census Bureau partnership shapefiles were used to create data layers at the Los Angeles County level. The County shapefile was used to limit data to the County level and a place shapefile was used to identify and label specific places (or cities) within the County. The County shapefile was joined to the ACS geocoded database so that the data would be limited to Los Angeles County instead of the entire state of California, resulting in a little over 2400 cases out at the tract level. The 2010 Census website shows that 9,818,605 lived in Los Angeles County at the time of the 2010 Census data collection with 239,012 (7.9%) being single mothers or female householders with dependent children of their own.

In order to gain an understanding of the spatial distribution of single mothers or female heads of households with their own dependent children (usually blood-related), several different thematic maps were created using the 2010 Census Data. The first map investigated population

density to get a sense of which areas in Los Angeles County had higher concentration of people. A single mother density map was created in order to find out where most people who identified as single mothers lived. A series of maps that investigated the poverty level in Los Angeles was created using the Poverty Level variable from the 2010 Census. This variable accounted for individuals who were identified as having income below the poverty level. The first map was the overall level, followed by a map which looked at the gendered difference between poverty levels. Lastly, a map measuring the ratio or proportion of single mother heads of households to the poverty level was created using the data.

Findings

The values for the different variables were allowed to vary in order to detect variance within the population at different levels.

Density

The density map describes the population density at the census tract level in the Los Angeles County area. A total 2,340 Census Tracts revealed that the most populated area contained 16% of California's total population and the least populated area contained 0%. It is important to keep in mind that while topography such as bodies of water (water polygons) were taken into account, Los Angeles County has mountain ranges which are not likely to be inhabited by people.

The total population density map showed that people were highly concentrated in the Santa Clarita, Malibu, Calabasas areas as well as the eastern parts such as the San Gabriel Valley area (Pasadena, Monrovia, Duarte) to Pomona and then south, to the Signal Hill and Lomita areas.

The Los Angeles County rate for women who identified as being single female heads of households with their own dependent children (blood-related or legal) was 7.9%. The population density maps show that single female heads of households with own dependent children are lower at the Census Tract level with a high of 5.5% and a mean of 0.72%. This variable was split into 11 intervals ranging from 0.0 top 5.5% which revealed that a high concentration of single female heads of households lived in the Santa Clarita, Lancaster, Malibu, and Los Angeles areas. When the values were collapsed into a three categories with a medium cutpoint of 0.67%, the data revealed that other mid density areas such as the San Fernando Valley, Inglewood, Compton, Pomona, and Agoura Hills areas.

Poverty

A map describing the spatial distribution of poverty was generated using the 2010 Census Data count for people who identified as being below the poverty level. 2,322 tracts were counted and had a mean poverty level of 14.42% with a maximum of 27.04%.

In order to detect gendered differences in poverty level between males and females, maps for the respective poverty levels for males and females were created. Overall, males reported having higher levels of poverty at 0.65% for the maximum while females had a maximum rate at 0.45%. The geographic concentration of men and women below the poverty level also differed with males being concentrated in the Palmdale-Lancaster area and females being concentrated in the Santa Clarita, Los Angeles-South Central areas. The mean values for male and female poverty differed by 0.01% with males having a mean of 0.08% and females having a mean of 0.07%. However, males had a greater range or variance which resulted in greater standard deviation when compared to their female counterparts.

Single Mothers and Poverty

The poverty level variable and single mother variables were combined to create a thematic map which explored the geographic distribution of single mothers at the poverty level. 2,309 tracts were accounted for and had a range of 0% to 15% of women at the poverty level being single mothers with a mean of 0.67%. The highest concentration of single mothers at the poverty level were found in the Santa Clarita, Malibu, Pasadena, San Fernando, Glendale, and La Canada Flintridge areas.

Discussion

The objective for this project was to examine the spatial distribution of single mothers who live with their dependent children. Spatial analysis shows that single mothers are concentrated in various areas throughout Los Angeles County. While it is common to assume that most single mothers would reside in less affluent neighborhoods, there was a great concentration of single mothers in middle and upper middle class areas. The term, "single mother" can be a misnomer since the stereotypical single mother is usually lower income, unmarried, and younger. Women have been known to become single mothers by choice and through the dissolution of marriage or other stable relationships. The data for this project does not have information on how a woman became a single mother. Rather, it is data on being a female head of household with dependent children. Hence, the term, "single mother" for this project is a very loose, all-encompassing term for various situations.

The poverty level maps show that male and female poverty level rates have different ranges and poor males and females live in different areas. In addition, the number of single mothers at the poverty level are more concentrated in affluent areas than poorer, urban areas. The heavy concentration of single mothers below the poverty level in more affluent areas can be due

to women becoming single heads of households through divorce. The single female heads of households living in less affluent areas such as the Los Angeles and South-Central area might be underreported or report their status differently since literature reveals that lower income single mothers, especially, women of color, tend to live in multigenerational households. A single mother living with her mother or aunt might be less likely to report herself as being the head of household with dependent children. A woman who works minimum wage, under the table, especially, will not report herself as being head of the household. As a result, due to unreported circumstances, the data might be skewed.

The gendered difference in poverty level and geographic distribution was interesting because sociologists are fascinated with the notion of the "feminization" of poverty where women, due to the wage gap mostly, are expected to have lower levels of income and end up below the poverty level. However, at the tract level for Los Angeles County, it was found that men tend to have greater ranges of being poor and in greater concentrations, becoming a potential topic for future research.

Conclusion

The tract level data on population density, poverty level, and single mother status suggests that there is much more than meets the eye when it comes to single mothers and their residential areas and living arrangements. While it is common to assume that most poor single mothers would be concentrated in poor, urban areas, single female householders who reported being below the poverty line were found in more affluent areas of Los Angeles County. There may be other reasons such as alternative living arrangements, being sub-householders within a family unit for women who are in the similar situation in lower income areas.

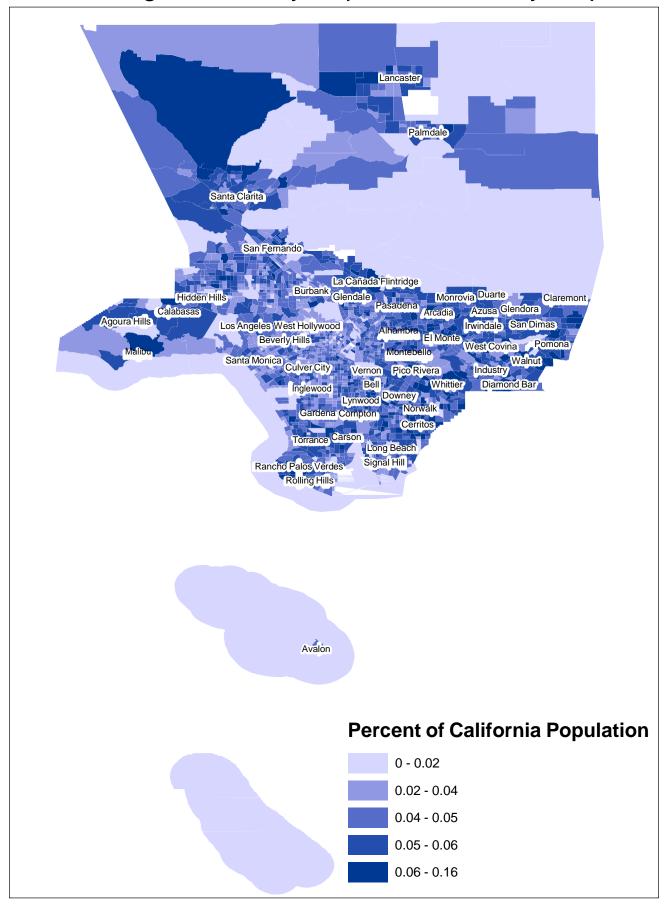
The 2010 Census Data had other variables related to change in marital status, parental status, and residential status in the past 12 months. However, the questions did not have information on the previous residence. Such information is most likely confidential. This project was a preliminary examination on the spatial distribution of single mothers by single mother status and poverty level. A more detailed study including tracing the mobility of single mothers by using address level data will be initiated in the future by accessing the Census Data Research Center at the University of Southern California. The data is expected to reveal changes in geographic distribution over a period of time. The confidential data is expected to provide more detailed information for spatial analysis.

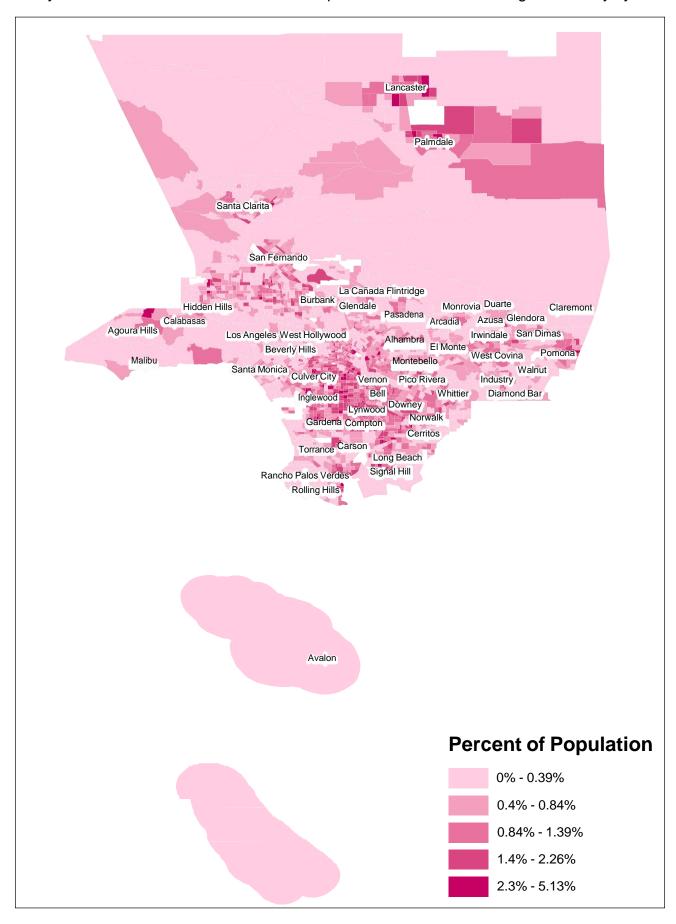
The results from study such as these are expected to inform policy makers. Single motherhood will always be a part of the population, especially with the changes in marriage patterns with more people choosing to have children before marriage or over marriage. While the findings suggest that the tract level rate for single motherhood is lower than the County rate, other factors such as aggregate data and undercounting and underrepresentation of status must be taken into account.

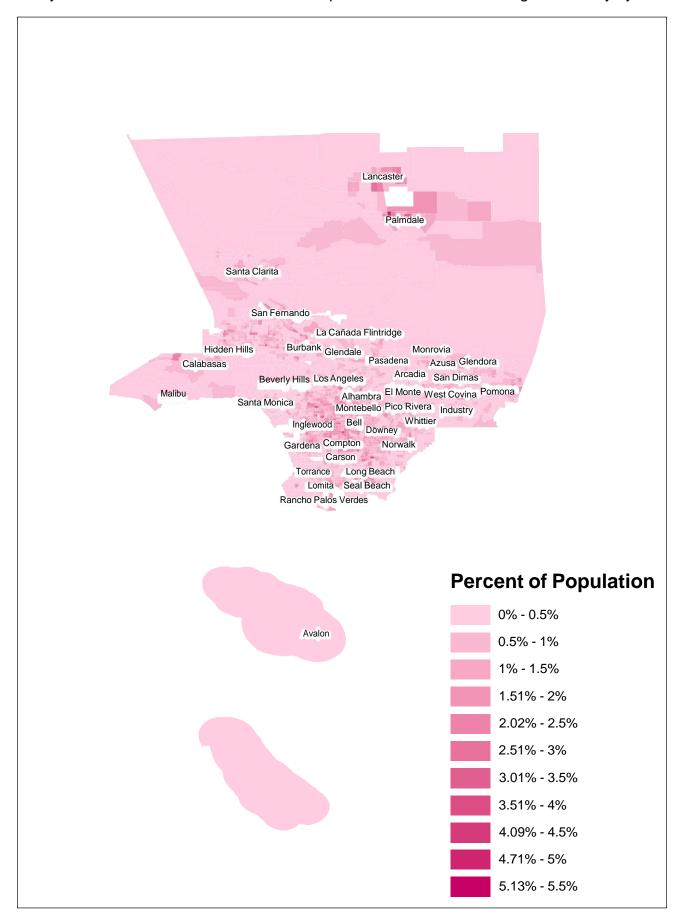
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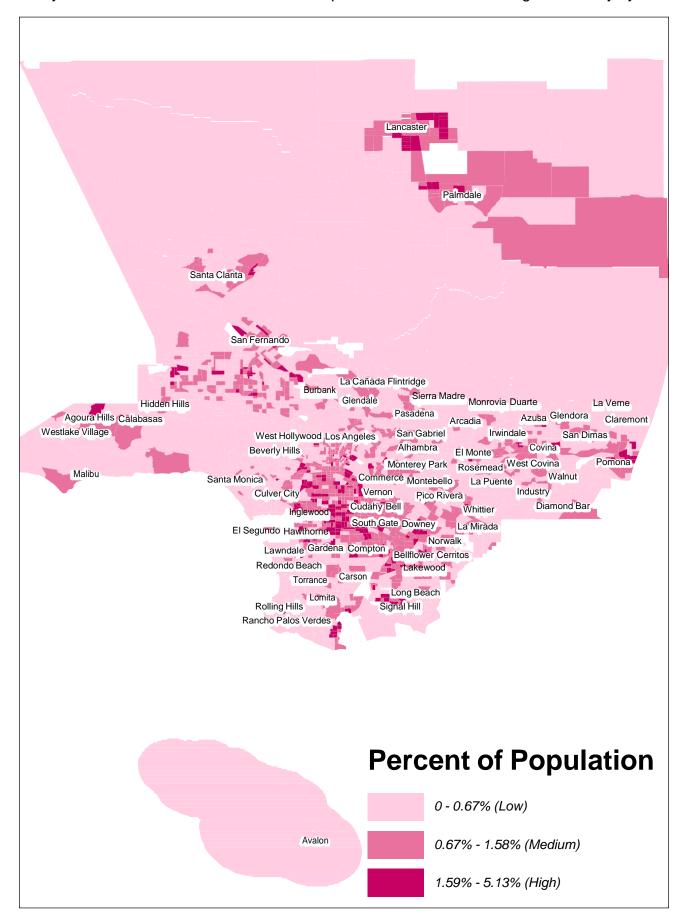
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Los Angeles County Population Density Map

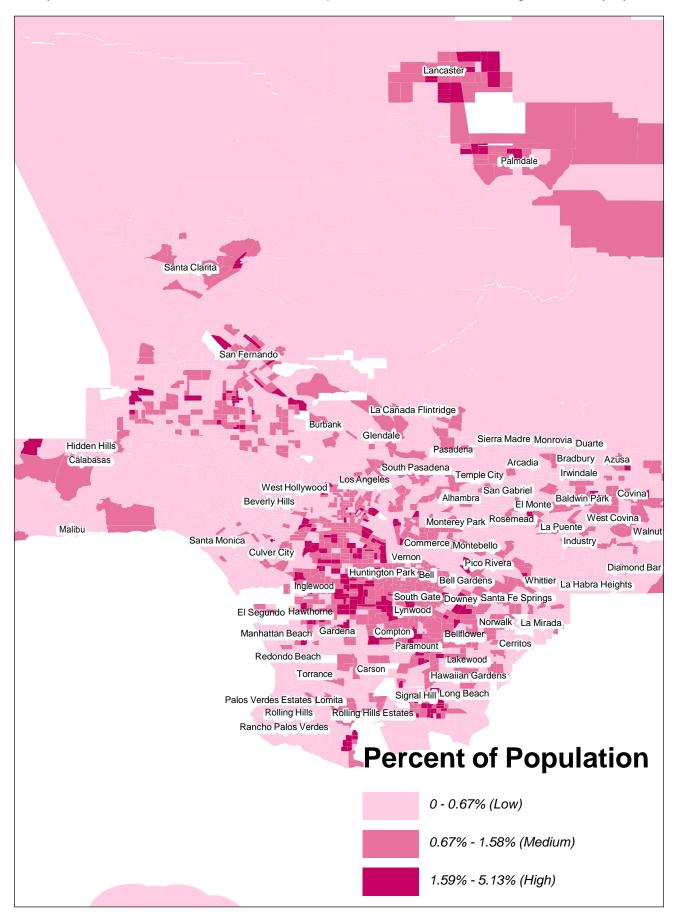




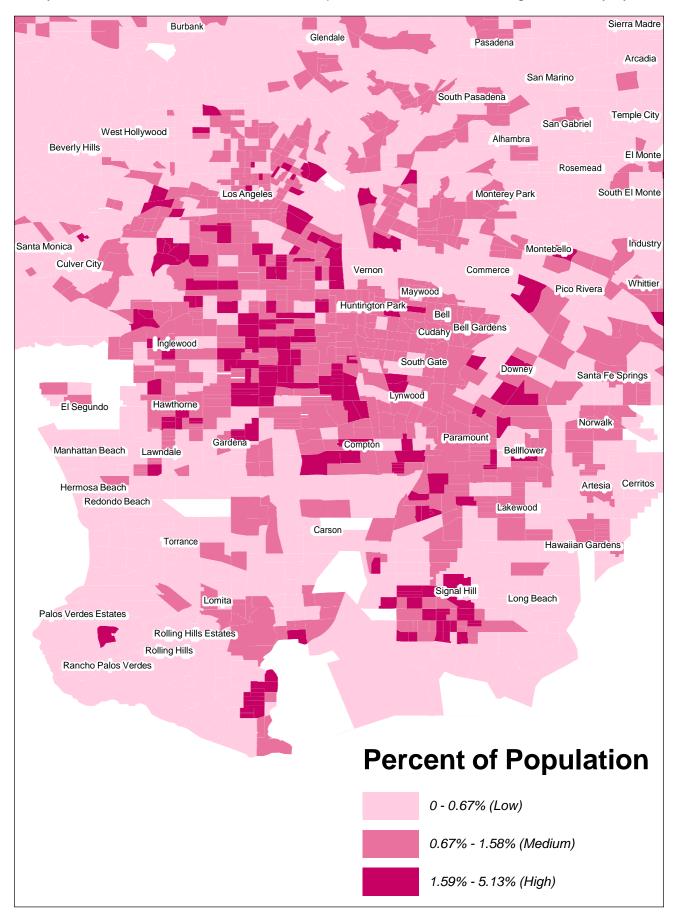




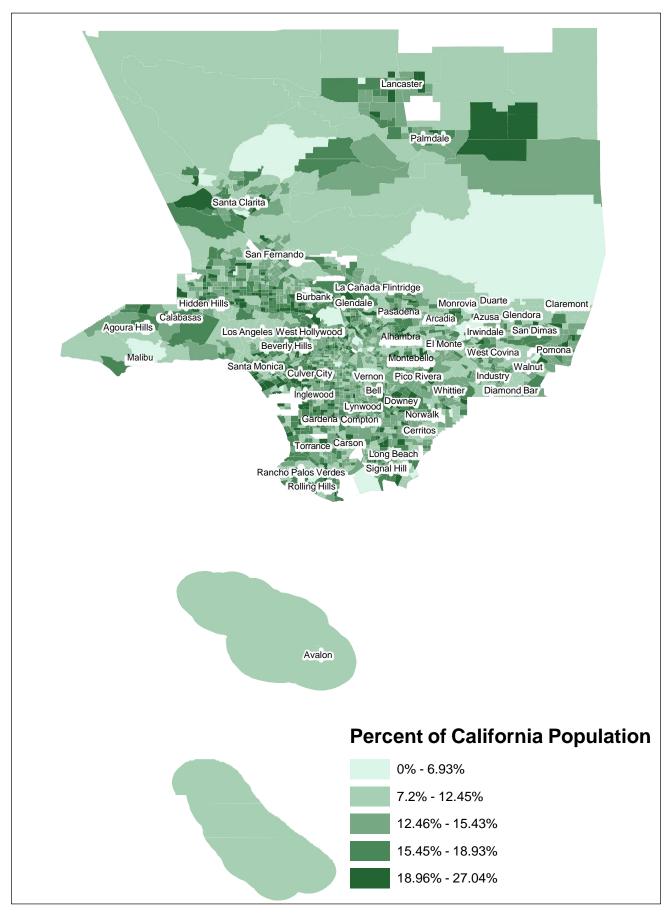
Density of Female Head of Household with Dependent Children in Los Angeles County by Tract



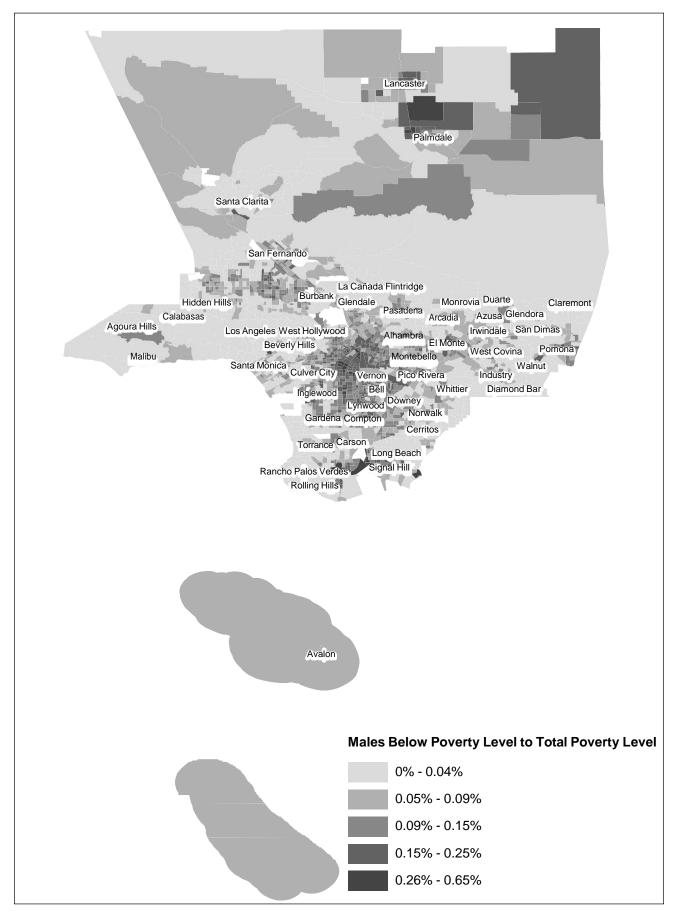
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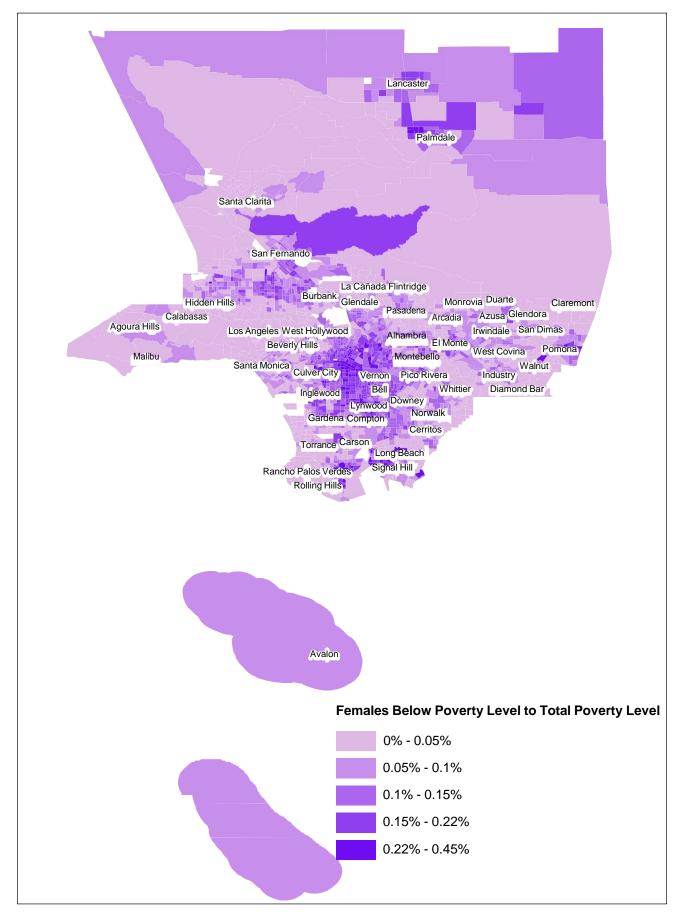
Los Angeles County Poverty Map by Tract



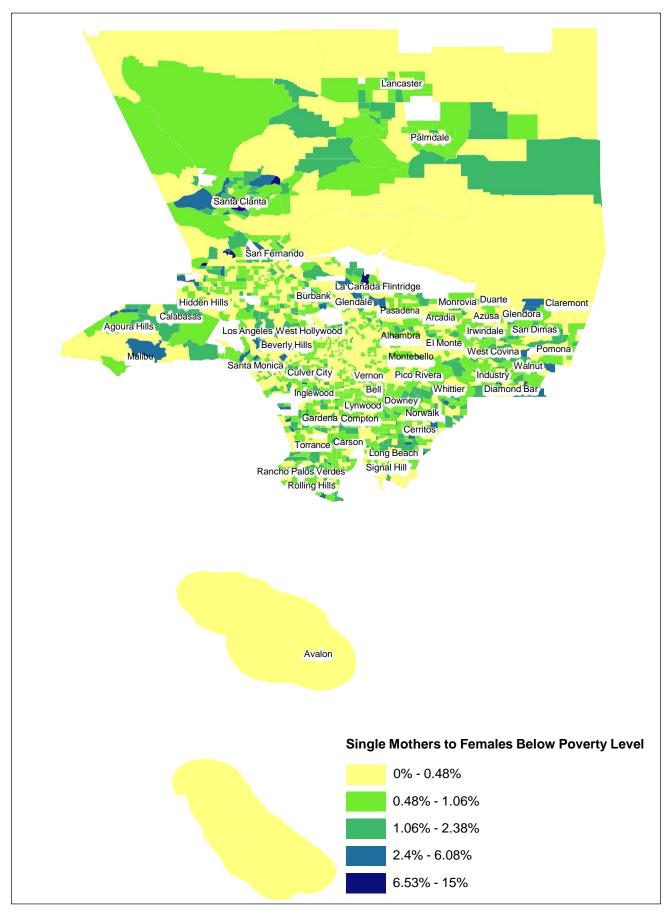
Los Angeles County Poverty Map by Tract and Gender



Los Angeles County Poverty Map by Tract and Gender

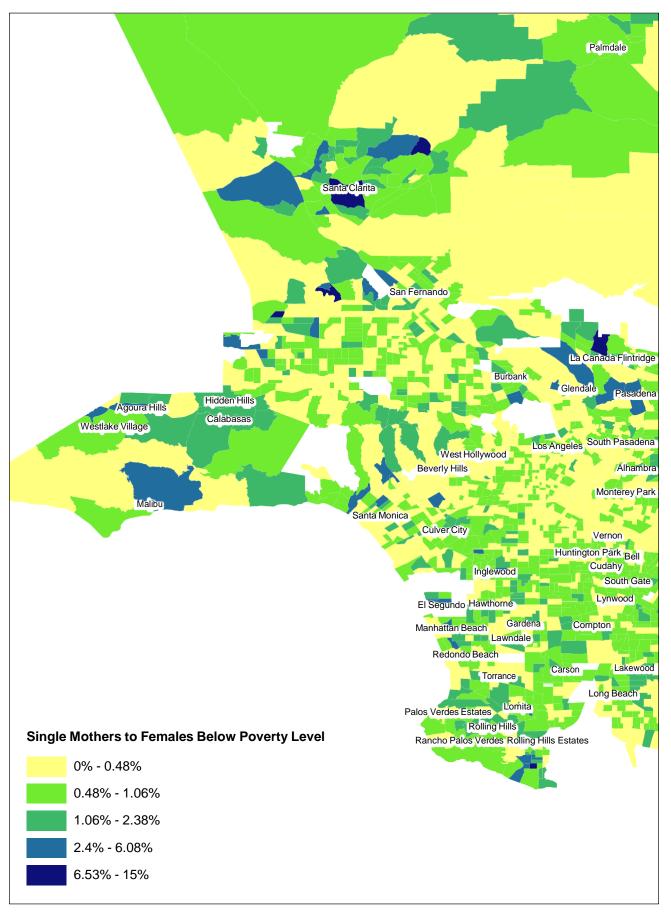


Single Mother Status and Poverty by Tract (Los Angeles County)

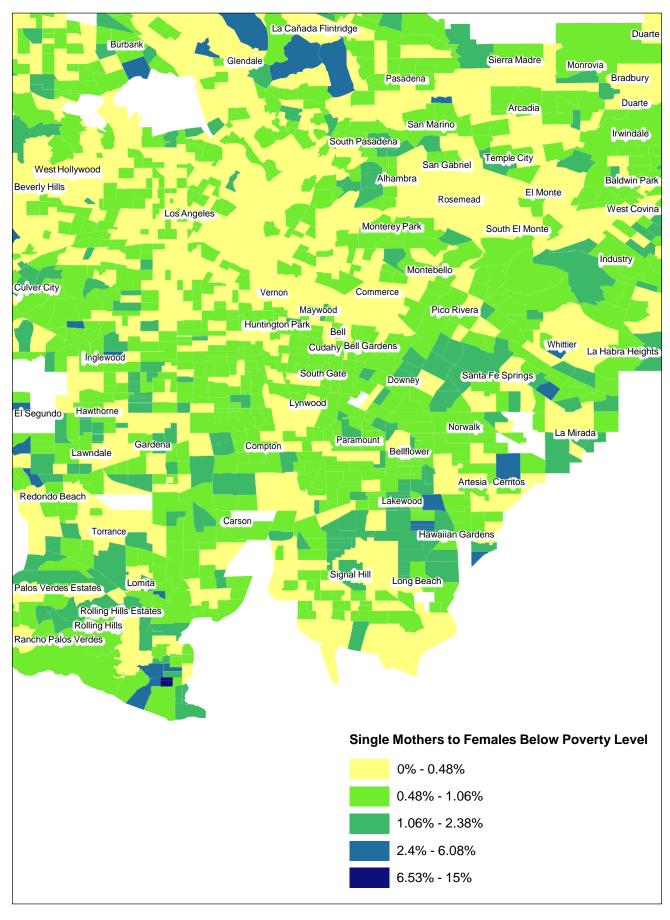


Service Layer Credits: American Community Survey 2012 5 Year Tract Data (California)

Single Mother Status and Poverty by Tract (Los Angeles County)



Single Mother Status and Poverty by Tract (Los Angeles County)



Service Layer Credits: American Community Survey 2012 5 Year Tract Data (California)