

Identifying the Need for Youth Services in the North Lawndale Neighborhood

DePaul University GEO442 Winter Quarter

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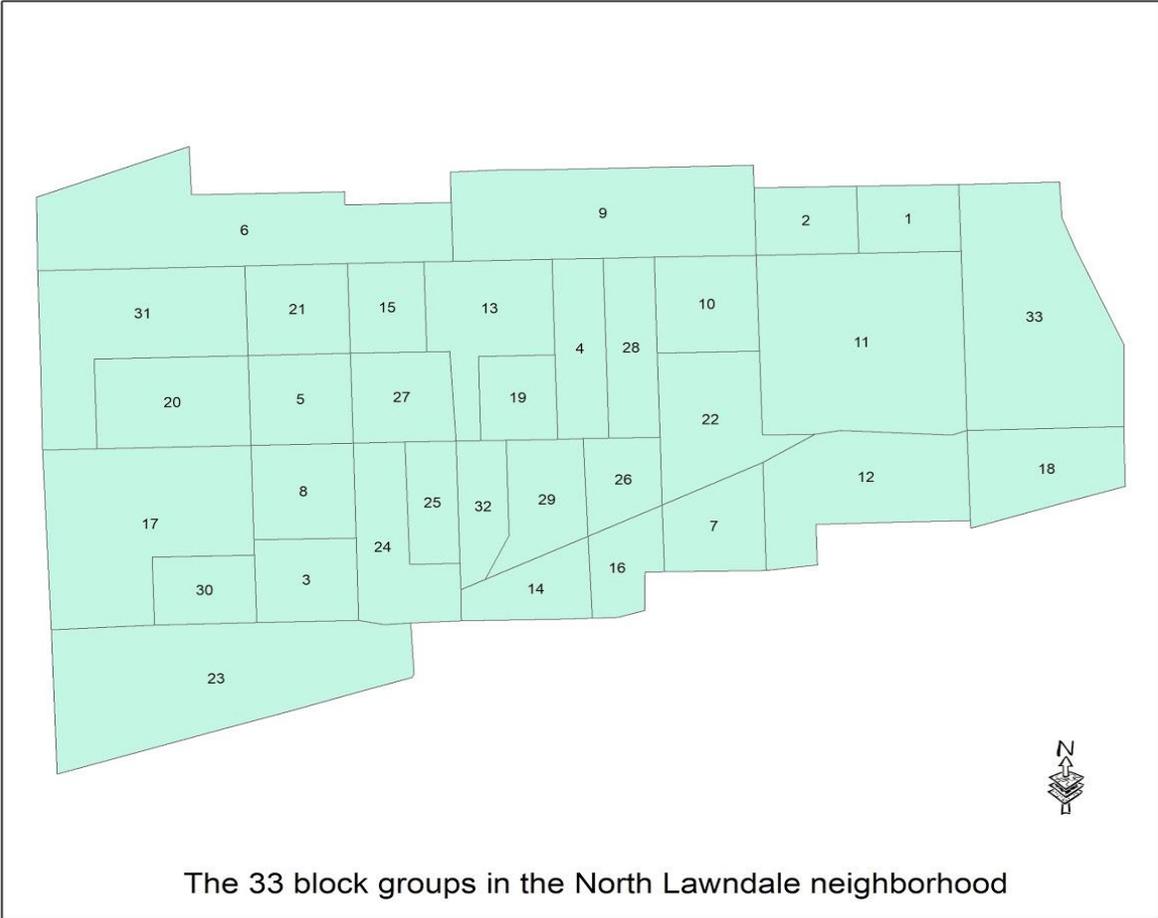
Abstract

North Lawndale is a neighborhood within the City of Chicago that has experienced sharp rates of population loss, crime and socioeconomic inequalities that reflect a community that is underserved. Sankofa Safe Child Initiative aims to “provide supporting services, referrals, resources and skills that encourage underserved families and communities to be strong, self-sufficient and remain intact,” the goal of this project’s efforts is to use GIS as a tool to help Sankofa fulfill their mission of keeping families intact by showcasing factors contributing to where children are at a risk for harm and where resources are needed to help families, through spatial analysis of crime data obtained from the Chicago Data Portal and community demographic information obtained from the US Census Bureau. By showcasing where resources are needed Sankofa will be able to provide visual evidence of risk within the community to receive funding to further their mission and in essence therefore reduce the rates of children entering the foster care system as well as the trauma associated with out-of-home placement. Strengthening homes of North Lawndale will hopefully lead to a stronger community of North Lawndale overall.

Keywords: Community, children, GIS, demographic, crime, Chicago and North Lawndale.

Overview Map

North Lawndale



Background

The purpose of this research project is to gather and present data sources that will help Sankofa Safe Child Initiative achieve its mission of keeping families together and children of the North Lawndale community out of entering the foster care system. Data was collected from American Community Survey, Chicago Area Metropolitan Planning agency (CMAP) and Chicago Data Portal regarding the North Lawndale area of Chicago. Data included information related to crimes involving children, sex offenses, children's perception of safety, children entering the foster care system, income and poverty levels, juvenile arrests, education attainment levels and ethnic backgrounds. Questions being considered as part of this research objective include but are not limited to:

- What areas of North Lawndale experience the highest rates of crimes involving children and are susceptible to high risk of family separation?
- What areas of North Lawndale are susceptible to high rates of poverty?
- Where can Sankofa direct its resources in order to minimize child-family separation and avoid trauma related risks of the foster care system?

These research questions will help Sankofa better understand any potential connections between community areas with higher rates of children care placement and associated indicators such as crime, income, and ethnic background. Therefore, the purpose of this research is both to help Sankofa more effectively allocate its resources as well as increase its impact within the community of North Lawndale and effectively lower the rates of children who enter the foster care system. Specific objectives of the research project are to:

- Identify most vulnerable populations within North Lawndale from crime and demographic data

- Provide community resource and asset maps to support children and their families
- Develop a story map that will help support the organization's needs

Community-Based Organization

The Sankofa Safe Child Initiative is a 501(c)3, non-profit organization located in the North Lawndale community of Chicago, Illinois. Opening in 1999, Sankofa's mission is to "provide supporting services, referrals, resources and skills that encourage underserved families and communities to be strong, self-sufficient and remain intact (Sankofa)." Every year, the organization serves and supports more than 400 underserved families that are involved in the juvenile justice system in the Chicago area and greater Illinois. They work to reduce recidivism rates among juveniles as well as provide services to improve life prospects among low-income families in the North Lawndale community. They also provide support services to grandparents who are raising their grandchildren in North Lawndale. Their services include providing education and employment services, life skill coaching, legal services, domestic violence services, and substance abuse services. Additionally, Sankofa supports the community through providing a 58 unit housing facility designed for grandparents raising their grandchildren and youth aging out of the foster care system (Sankofa).

This partnership sought to provide the organization with resources that will allow Sankofa to develop and execute greater targeted recruitment efforts for families in the North Lawndale community. Due to extenuating circumstances such as limitations of data collection within the specified study area and lack of participation with Sankofa itself, these goals pertaining to their initial project scope were not fully reached. We do believe the final map

materials created will serve as a resource for Sankofa to petition and secure additional funding opportunities to further help them in their mission, should they desire to use them. The goal of these efforts is to provide resources to children and their families in order to help keep them connected and therefore reduce the rates of children entering the foster care system as well as the trauma associated with out-of-home placement.

Related Work

In 2011, the US Department of Health and Human Services estimated that 1,570 children died from maltreatment (Cardazone et al). Maltreatment of children pose both early development and lifelong consequences such as physical injuries due to abuse, susceptibility to disease brought upon by stress as well as neurobiological slowed growth (Cardazone, et al). In Hawaii an evaluation study was conducted to enhance services of the Hawaii Children’s Trust Fund Coalition (HCTF), a group dedicated to improving child welfare, and the outcome involved using GIS as a model to identify where services were needed to increase visibility regarding child abuse and neglect (CAN). A multi-faceted campaign of the HCTF, One Strong Ohana (OSO) was set up in 2012 to distribute information on CAN throughout Hawaii through print and media and surveys to the community to identify where service was needed and public awareness surrounding the issues. The HCTF evaluation involved increasing the public's knowledge of CAN, increasing public awareness that CAN can be prevented in their communities through protective factors, increasing knowledge of HCTF and what it does, increasing visibility and ability of organizations to prevent child abuse and neglect and lastly to increase donations made to HCTF to further their goals. “GIS analysis of public awareness survey data will aid in identification of regions that may be specifically targeted for public awareness activities”

(Cardazone, et al). The study used a combination of GIS and network analysis tools as a way to help inform coalition-driven public awareness efforts and to build a stronger HCTF network overall. Thematic maps were created with ArcGIS using the collected survey information and US Census Data, and areas of Hawaii were mapped to showcase the respondents awareness of child abuse factors were lacking and where efforts were needed to increase visibility.

A private partnership model was created to tackle the growing issue of delivering adequate healthcare to the urban poor of quicking growing urbanized areas. This study looked specifically at Ahmedabad City in India. Urbanization around the world is seeing a shift due to rapid growth. As cities grow, poverty grows as well. The urban population is growing nearly three times of the rural population and this is especially notable in India where the population has been growing at a rate of more than 30 percent since the 1990's (Mavalandratta, et al). Urban poverty is a complex issues as it needs to tackle issues of deprivation, malnutrition, complex social relationships, low human resource development and overall a low quality of human life. GIS was used as a tool to map out a community health needs assessment. The study used GIS as a methodology for estimating service levels and representing them visually through "Identifying alternate locations for urban health centres (UHC) in each ward by comparing the locations of the slum clusters and the health facilities. As well as to estimate the service levels offered by each alternate location" (Mavalandratta, et al). Essentially the GIS Maps created helped to visually identify existing areas of slum crowding and health care services and to understand where more UHC's were needed in the area.

Study Area

North Lawndale is a neighborhood on the West Side of Chicago that can be geographically located between Pulaski Road and Cicero Avenue. It has experienced significant population loss and dramatic demographic changes in the last several decades. In 1930 the total population of the neighborhood was 112,261, by 1970 it was 94,871, and by 2009 it was 36,243 (Community Areas Historical Data). There are four key demographics that are highlighted in this project by block group; these are summarized below:

Demographic	Description	Mean	Minimum	Maximum
Household Poverty	Household annual income below \$25,000	47%	13%	77%
Youth	Under the age of 25	40%	21%	49%
No High School Degree	Above the Age of 25 with no high school degree	30%	6%	61%
Minority	Non-white ethnicity	97%	77%	100%

A few additional demographics include: a median household income of \$24,003 (compared to the City’s \$50,434), an unemployment rate of 21.7%, and a median age of 29.6 (compared to the City’s 33.9) (“Community Data”). A few statistics related to the structural landscape of the neighborhood include: a household vacancy percentage of 24% (above the City of Chicago’s 13%), 14.5% of land categorized as vacant, and median number of rooms per household at 5.7 (Community Data).

Community Asset Map of North Lawndale, Chicago

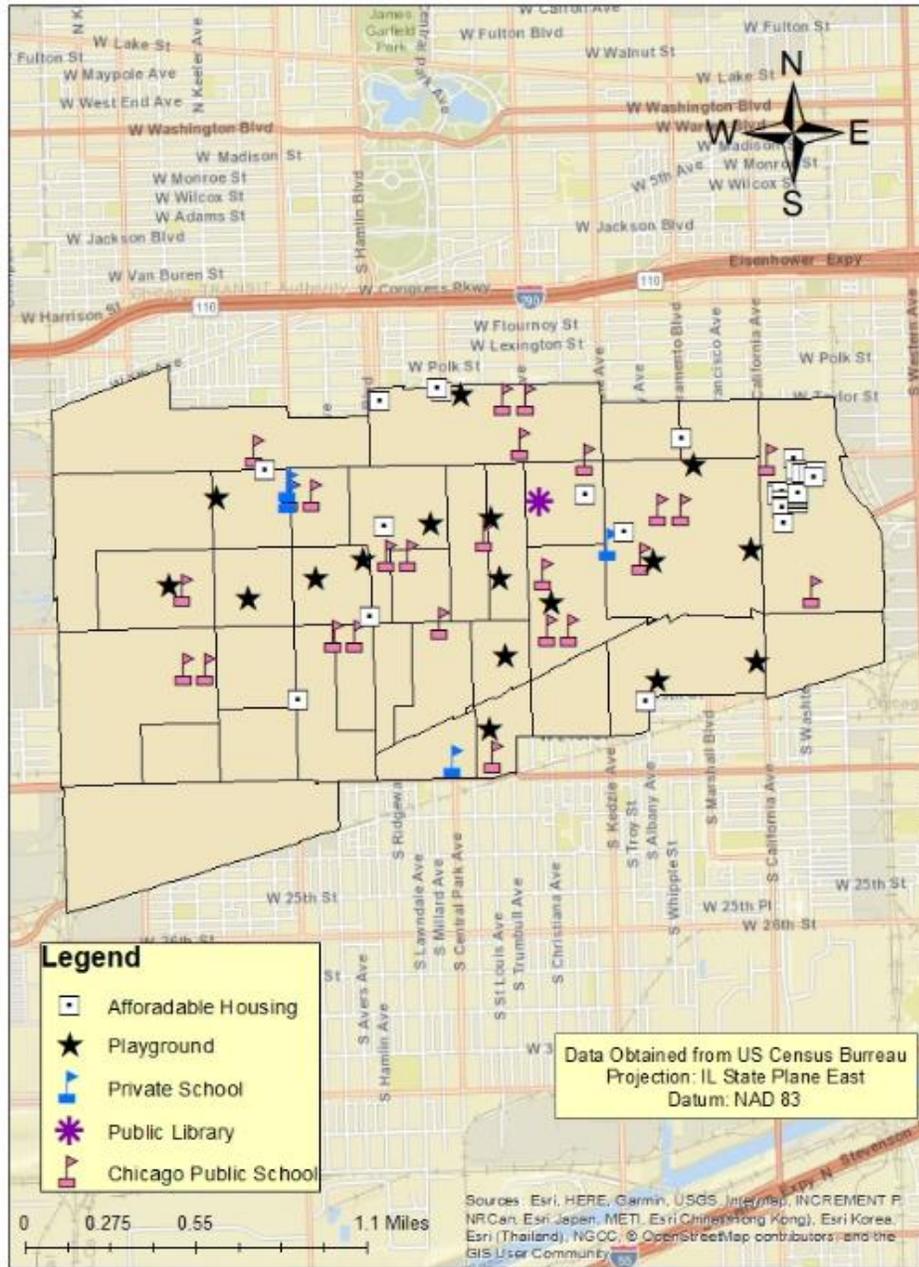


Figure 1: Study area: North Lawndale

Data Sets

Data	Data Type	Geographic Unit	Source	Projection & Datum	Year	Web link
Crime data	Point	X Y Locations	Chicago Data Portal	IL State Plane East and NAD 83	2009-2018	data.cityofchicago.org/Public-Safety/Crimes-2001-to-present/ijzp-q8t2
City of Chicago Parks-Playgrounds	Point	X Y Locations	Chicago Data Portal	IL State Plane East and NAD 83	2016	data.cityofchicago.org/Parks-Recreation/Parks-Chicago-Park-District-Facilities-current-/5yyk-qt9y
Cook County-Private Schools	Point	X Y Locations	Chicago Data Portal	IL State Plane East and NAD 83	2016	data.cityofchicago.org/Education/Cook-County-Private-Schools/7rj8-26fg
City of Chicago-Public Schools	Point	X Y Locations	Chicago Data Portal	IL State Plane East and NAD 83	2015	data.cityofchicago.org/Education/Chicago-Public-Schools-School-Locations-SY1415/3fhj-xtn5
Geographic community area Boundaries	Polygon	Lat/Long	Chicago Data Portal	IL State Plane East and NAD 83	2018	data.cityofchicago.org/Facilities-Geographic-Boundaries/Boundaries-Community-Areas-current-/cauq-8yn6
Affordable Housing Units	Point	X Y Locations	Chicago Data Portal	IL State Plane East and NAD 83	2013	data.cityofchicago.org/Community-Economic-Development/Affordable-Housing-Units-by-Community-Area/yvj4-y3fb

Demographics (Youth, Poverty, Ethnicity, and Education)	Polygon	Lat/Long	American Community Survey	IL State Plane East and NAD 83		Received by Professor as <i>Community_Area.zip</i>
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Primary Methods

To complete this project several forms of spatial analysis were used to better visualize our gathered data and understand factors playing into risk factors of family separation in the North Lawndale community. The following forms of spatial analysis were used to achieve visualization of crime and demographic data within the study area:

- Kernel Density Analysis: This tool calculated the density of certain features within the given geographical area. This was used to identify areas where there was greater density over others and thus made it easier to infer particular relationships with other variables. We used this tool with the Crimes dataset to better identify areas of North Lawndale where Sankofa could potentially thwart or counteract criminal activity through community safety initiatives or programs.
- Choropleth: This process portrays the selected features (in this case key demographics) within a gradient color scheme by the designated geographical feature (in this case Block Groups). We used these four choropleths to both help characterize the North Lawndale neighborhood while also using two of the maps (the Youth and Household Poverty maps) to create the final map.
- Interpolation (Inverse Distance Weighting): This tool predicts values for cells in a raster from a limited number of sample data points. This tool was used to convert the point data

from the *Crimes Involving Children* and *Sex Offenses Involving Children* layers into a raster format which can then be used with the demographic layers to produce a map identifying the areas that have the risk factors most linked with foster care placement.

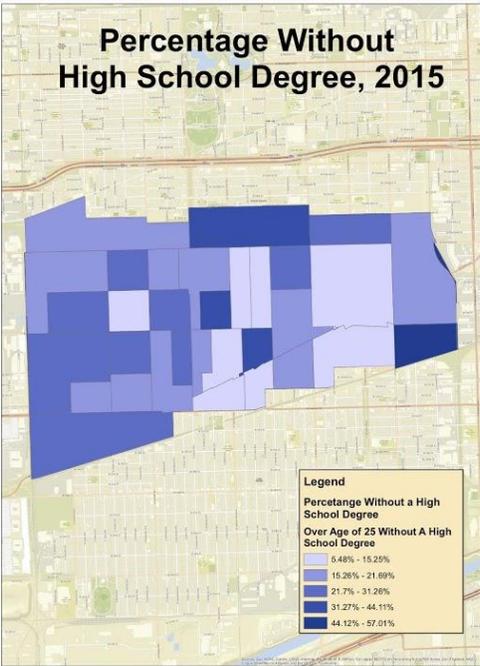
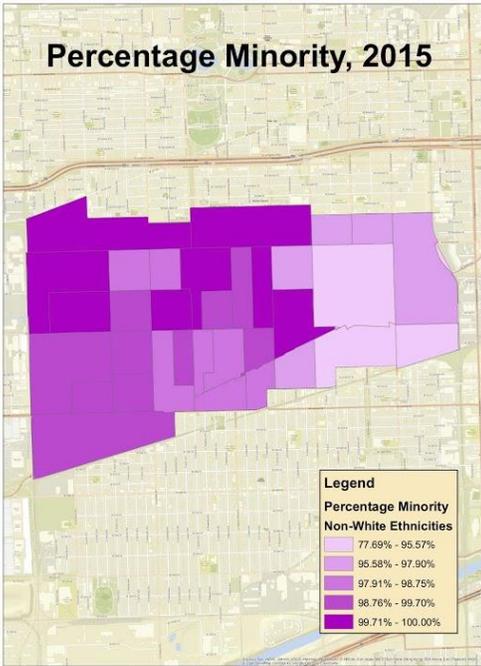
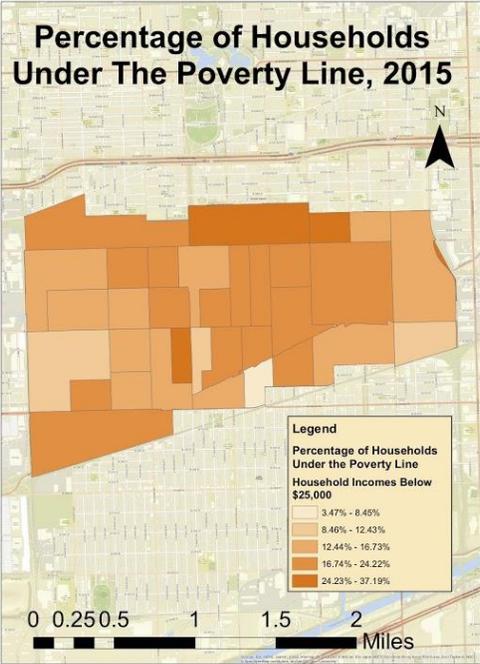
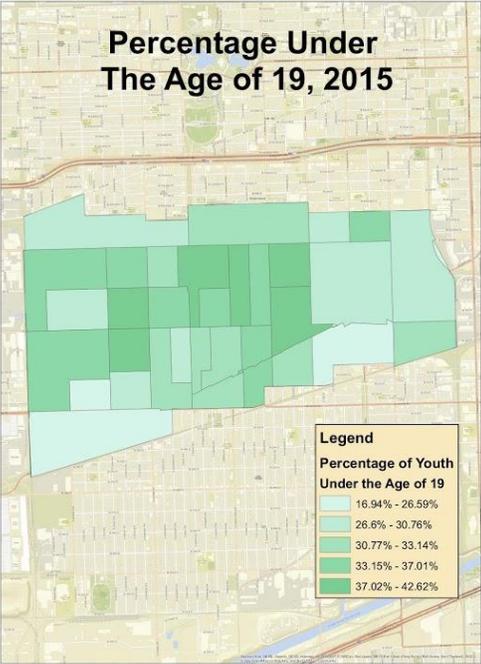
- Map Algebra: used to combine the three reclassified maps into a single final map that ranks the areas that are most in need of service

Results

The several maps we produced for this project (including the final Vulnerability Map) show that there are areas within the North Lawndale neighborhood that are higher in likelihood of having children who will end up in the foster care system than in others based on four indicators: youth (percent of the population under the age of 25), household poverty (percent of the household population below \$25,000 annual income), proximity to crimes involving children, and sex offenses involving children. These results show that the east and west ends of the neighborhood have a lesser vulnerability rating than those in the center north area. There are also generally seems to be a band of higher vulnerability in the northern portion of the neighborhood.

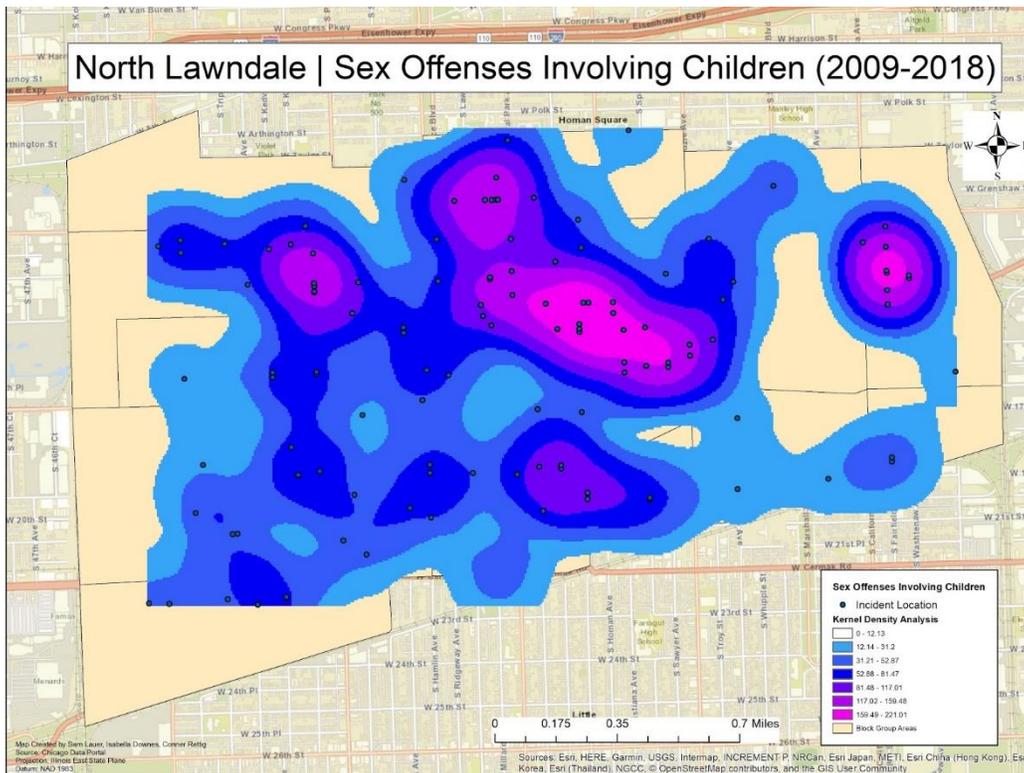
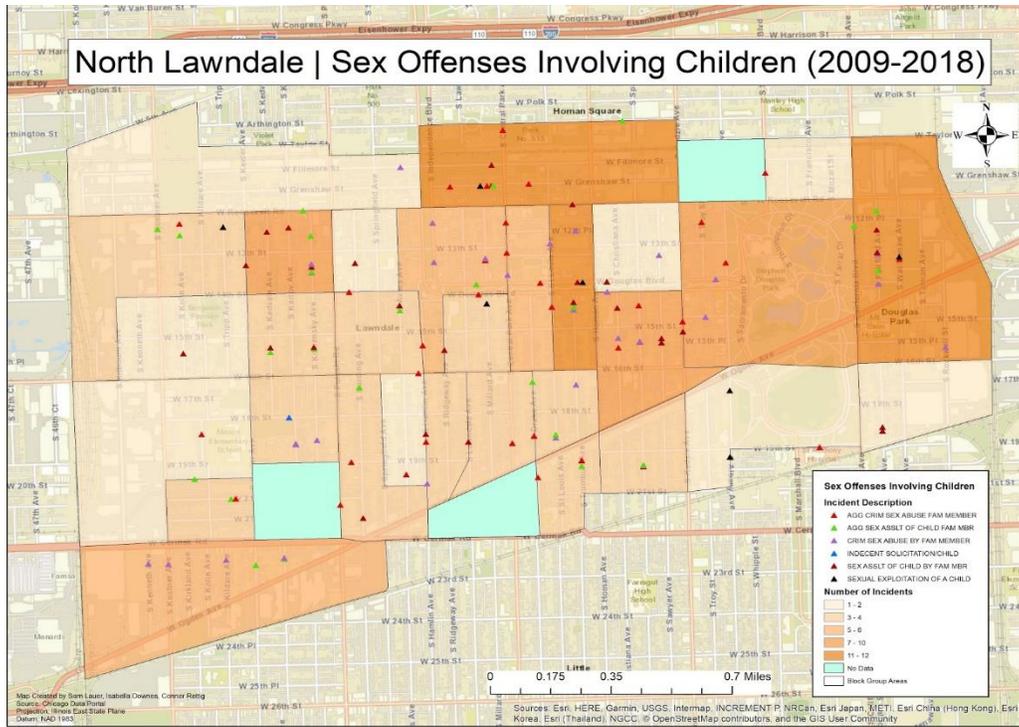
Related Maps

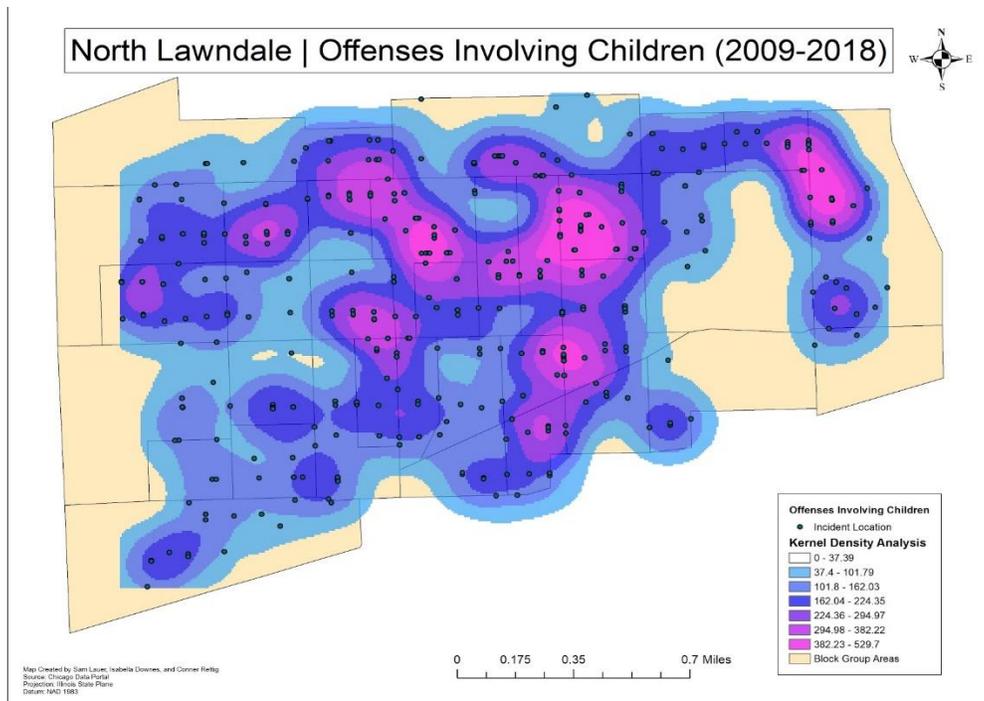
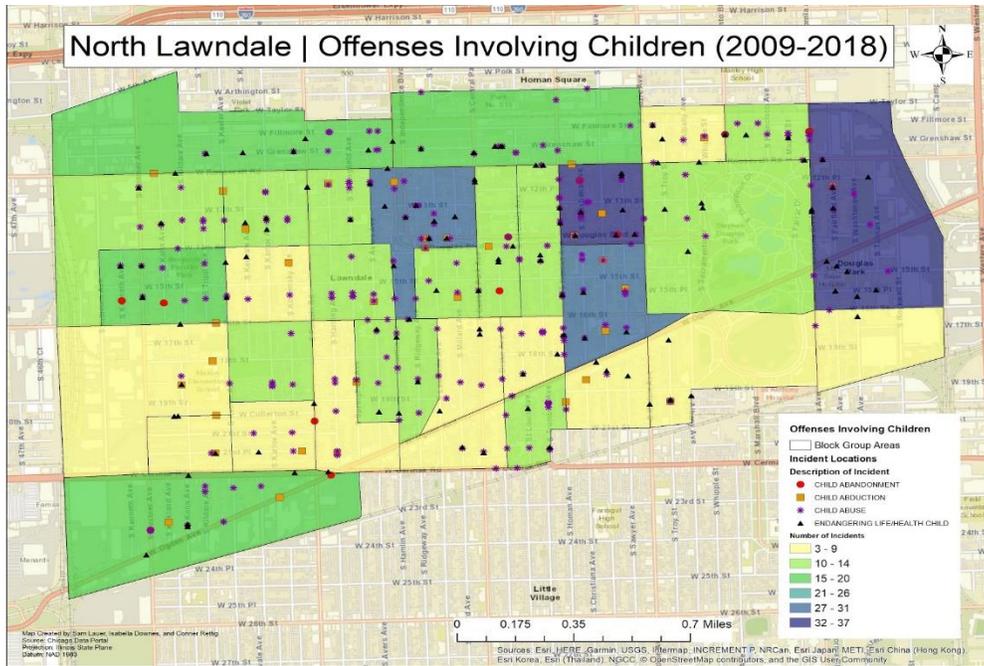
Key Demographics of North Lawndale

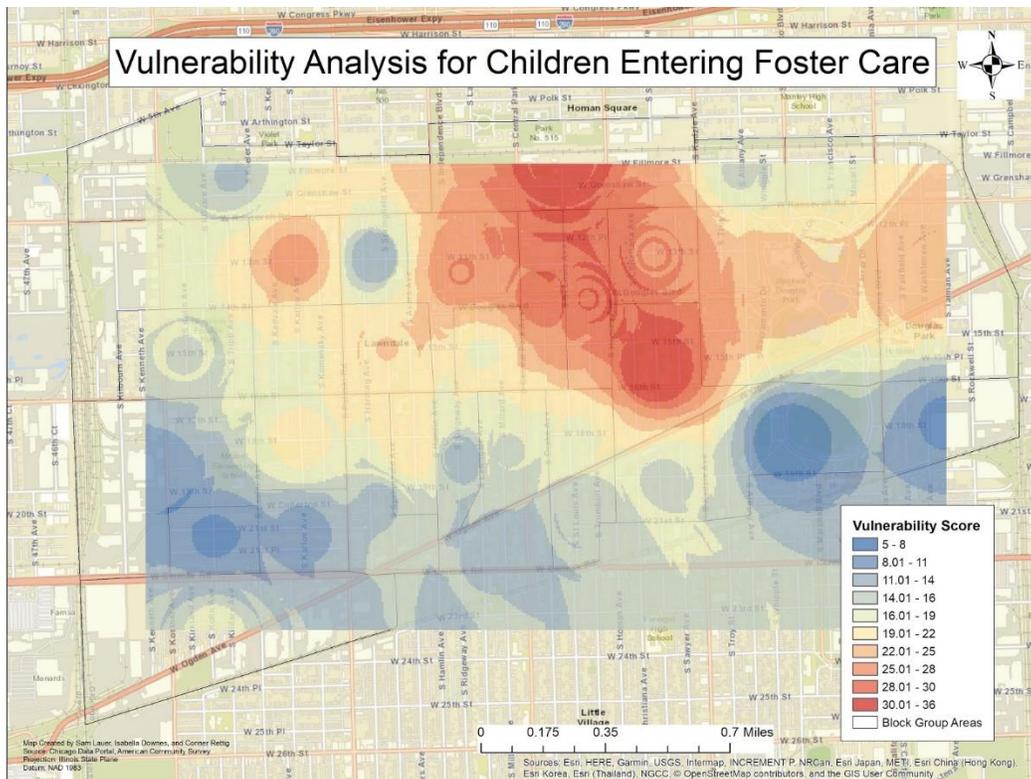


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Data Source(s): United States Census Bureau,
American Community Survey (ACS)
Datum: WGS_1984_UTM_Zone_16N
Projection: Transverse_Mercator







Conclusion:

The North Lawndale neighborhood is a community that faces severe systemic challenges that most other neighborhoods in the City of Chicago never face. From a high rate of crime involving children to low educational attainability, these challenges require extensive allocation of resources and services that target the youth and families of the community. The Sankofa Safe Child Initiative is a community organization that is directly serving these residents and actively making strides in making North Lawndale the best it can be. Through their programming and services, the Sankofa Safe Child Initiative is recommended to utilize this report to support their Targeted Recruitment Effort which will be used to “reduce the trauma of out-of-home placement, by keeping children connected to their communities, schools, places of worship, and family when safe to do so”.

The results provided in this project report show that Sankofa's services and resources can be used in key target areas to respond to the factors that are correlated with foster care placement. We recommend that the Target Recruitment Effort, and additional utilization of Sankofa resources and service, focus on the north central portion of the neighborhood where the vulnerability is the highest. By honing in on this portion of the neighborhood Sankofa can effectively and efficiently serve those most in need while also continuing their exceptional work in serving the entirety of the North Lawndale neighborhood.

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