Overcoming Juvenile Adversity in Troubled Areas

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Main Goal

The project Overcoming Juvenile Adversity in Troubled Areas was created in order to collect information about the neighborhoods in Alachua County, Florida so that local government would easily be able to locate areas considered vulnerable for children. Therefore, the main goal of this project is to address the vulnerable neighborhoods for children within Alachua County, and then assess and compare how convicted incarcerations relate to these areas.

Background

The purpose of this project is to ask where the troubled areas for children of Alachua County exist and how the incarcerations in the areas are affecting them. The reason we want to answer this is because there is evidence that family income level, quality of neighborhood, and exposure to crime can affect a child's future. According to the journal article "Children and Poverty", poverty can have significant impacts on school achievement and mental health. Children that come from wealthier families and live in safer neighborhoods have been shown to graduate from high school more often than children from poorer families (Lewit et al., 1997). Another study shows that children that come from poor families that show signs of family issues such as single parent families or abuse may be more likely to exhibit emotional problems. The children may show more disobedience and aggression. In addition, there is evidence that these children may display more juvenile delinquency than children from more stable, wealthier families (Moore et al., 2009). Another study has shown that children that live within ten blocks of a murder has lower test scores for both vocabulary and reading. In addition, many children in poor neighborhoods that experience violence suffer from Post Traumatic Stress Disorder, which can affect them into adulthood (Braunstein, 2012).

With this information, we can conclude children can be greatly impacted by their family's income level, the quality of their neighborhood, and the level of exposure to crime. Therefore, it is important that Alachua County see the neighborhoods that we deem vulnerable for children, so that they may assist these areas through financial support, help centers, etc. Within Alachua County, about half of children receive free lunch and there are about 800 homeless children or children in foster care. This information could suggest financial struggles for these children's families or a lack of basic necessities for the children. Therefore, we know that children in Alachua County are in need of assistance, so we will pinpoint where the children that need the most assistance are located.

Objectives

In order to achieve this goal, there are two objectives to this project.
The first objective is to identify vulnerable neighborhoods for children by:

- Looking for unsafe areas and poor influences by identifying areas with six or more juvenile offenses
- Looking for low income areas by finding the areas with children using free and reduced lunch at school and for homeless children
- Looking for unsafe areas by identifying areas with reported cases of child neglect and abuse, as well as family offenses

The second objective is to identify convicted incarcerations within the selected vulnerable areas to see if there is a correlation between vulnerable areas for children and the number of incarcerations around them.

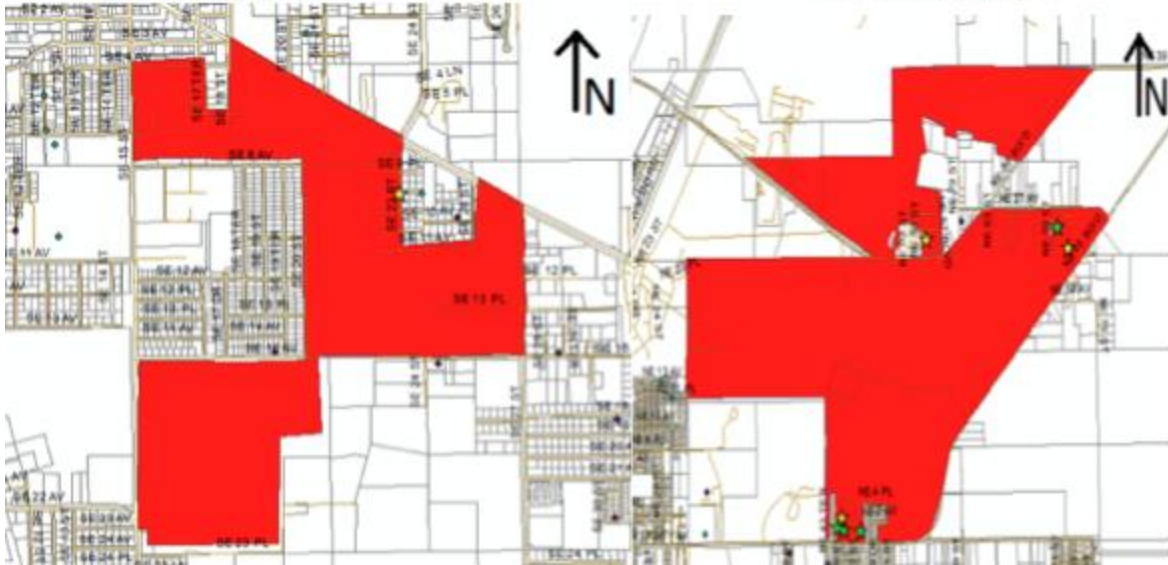*Methodology and Analysis Process*

Once the objectives were defined, the analysis process began. The first step was to define our neighborhoods that we wanted to analyze. Neighborhoods were defined by tracts from the census. The reason for this will be explained in more detail soon. After the neighborhoods were defined, we identified our vulnerable neighborhoods based on specific criteria. Once these neighborhoods were located, we located the convicted incarcerations within our vulnerable areas. We then located the convicted incarcerations within 10 miles of the areas with more than six reported juvenile offenses. Then, we compared the number of our criteria met and the number of convicts in order to analyze our data.
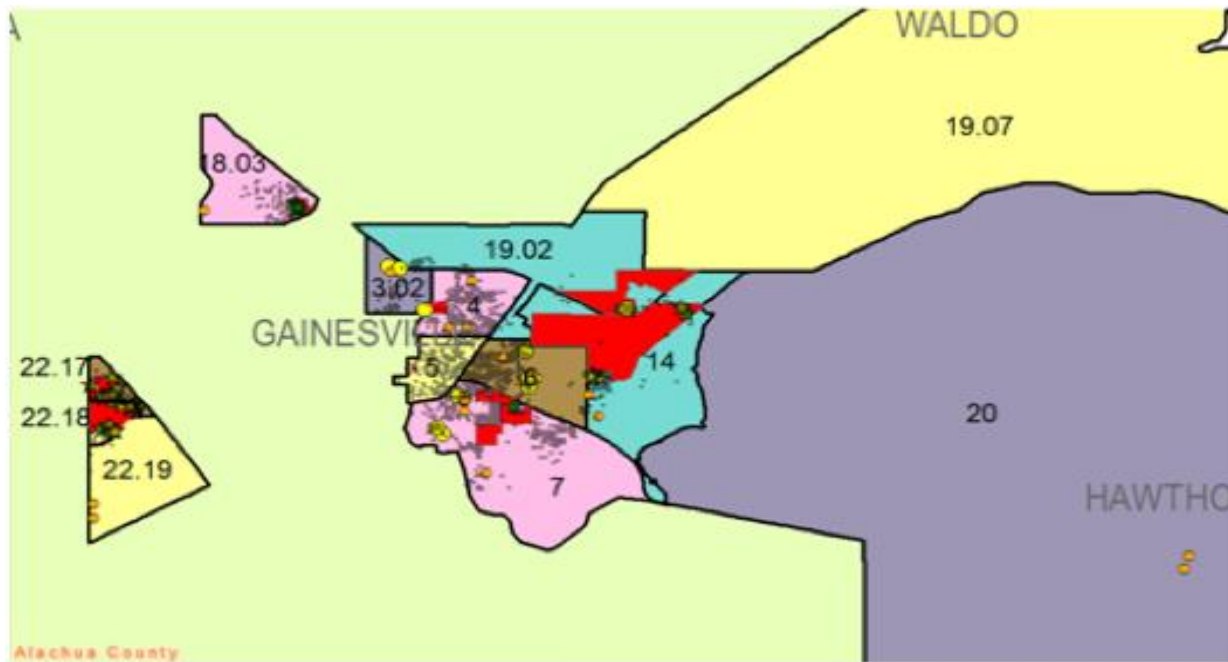
As stated above, our first step was to define the neighborhoods we wanted to do a more in-depth analysis within. We defined these neighborhoods using five criteria: juvenile offenses, free or reduced lunch, homelessness, family offenses, and child neglect. We started in GIS by selecting the areas with six or more juvenile offenses. We then compared our other criteria to these areas. We did this because, out of all five of our criteria, only the juvenile offenses were shown as areas not points. From there we located the points of the other four criteria that intersected with the six or more juvenile offenses areas. It turns out that there were only child neglect cases and homeless children in the areas of six or more juvenile offenses. Using this method we focused in on four trouble neighborhoods shown on the next page. The first trouble area, Trouble Area 1, is in west Gainesville. It is located just west of I75 and just north of SW 20th Avenue. This area has been recognized before as a troubled neighborhood and therefore the SWAG Family Resource Center has been founded here. The resource center is there for children to come to play and learn after school so they're not out on the streets. Trouble Area 2 is located at the corner of NW 34th Avenue and US 441 in north Gainesville. A new Walmart is going up in this area and will hopefully boost the economy in this area and provide more jobs. Trouble Area 3 and Trouble Area 4 are both in east Gainesville, which has historically been the part of Gainesville with lower incomes and not so safe areas.
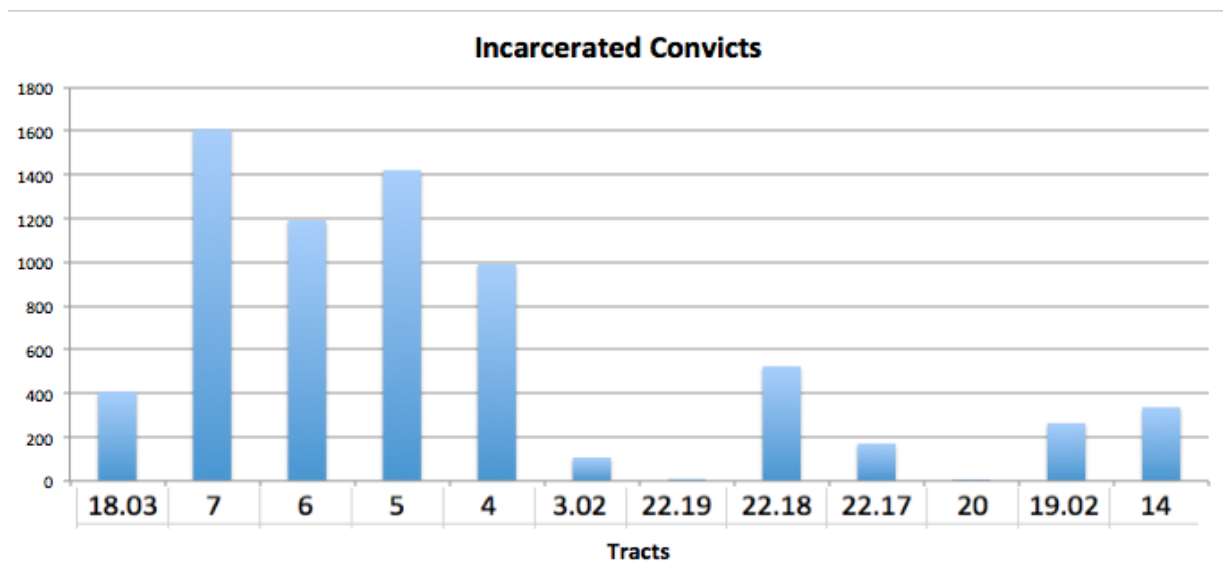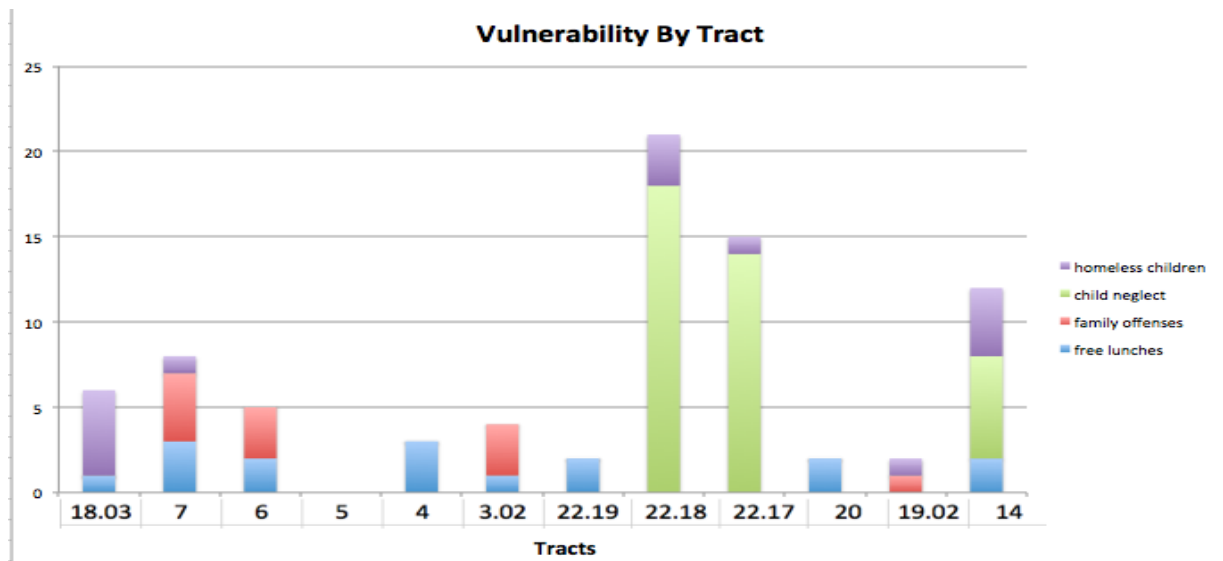
Trouble Area 1

Trouble Area 2

Trouble Area 3

Trouble Area 4

Overall, the data used in this analysis has undoubtedly shown that there is some correlation between our chosen criteria and nearby incarcerations. However, we needed to use areas in Alachua County within which our analysis could be compared over time and used by officials to take the appropriate actions. Thus we decided upon implementing focus areas containing the different census tracts in Alachua County. THE Reason for this is that tracts remain fairly constant from census to census and are useful in research studies involving observation of similar variables over long periods of time.

Through a combination of "selection by location" GIS techniques we were able to narrow down the most troublesome tracts in Alachua County. Out of all the census tracts within Alachua there were only 12 tracts which contained our desired criteria, most of which surrounded Gainesville, FL. In the figure directly above: yellow dots represent family offenses, orange represents free school lunches, the red areas represent locations with 6 or more juvenile offenses, and the purple dots represent convicted incarcerations. Furthermore, since each of the tracts vary in area, a more accurate analysis of the affected juveniles can be understood better by displaying the given tracts into their different concentrations of individuals under the age of 18. These categories are shown above from lowest to highest concentrations: blue, yellow, brown, purple, and pink respectively.

Vulnerability By Tract

Incarcerated Convicts

The above figures portray quantitative values per census tract for our criteria. Tracts 7 and 6 show strong correlation between high rates of family offenses and free lunches with the number of incarcerated individuals, the first and third highest out of all the tracts respectively. However, tract 5 shows zero criteria are met, even though it contains the second largest number of convicted incarcerations. This demonstrates that our second objective of identifying a relationship between incarcerated individuals and juveniles offenders is a valid assumption as well as the dominant factor. Other areas of note include tracts 22.18 and 22.17, which include high rates of child neglect and large areas of juvenile offenders but medium to low rates of incarcerated persons. Thus it can be concluded that our remaining criteria simply add on to the problem, whereas the criteria of convicted incarcerations is the controlling feature in affecting juveniles in troubled areas.

Discussion

The susceptibility of juveniles at risk increases with poverty, neglect, and exposure to areas with incarcerated victims present. In a study performed at the University of Cambridge, they analyzed whether disadvantaged neighborhoods cause an increase in risk for children to become juvenile delinquents or to commit future offenses. This is similar to our study, where we assessed vulnerable neighborhoods based on specific criteria of children's living situation, neglect, family problems, food availability and 6 or more situations of juvenile offenses present. The studies' findings prove there is a significant variation in the number of juvenile offenses based on socioeconomic status.

The second phase of their study was to examine the relationship between their criteria and if that can predict future offenses. According to their data, it can. In our study, we took this assumption one step further and compared the susceptible areas determined from our criteria. A large percentage of children under the age of 18 met the greater part of our criteria in certain areas; we then compared these areas to the number of incarcerated convicts. Just as predicted, the greater the number of incarcerated convicts, the more vulnerabilities the area presented.

Thus, our information can be presented to legislation to show vulnerable areas requiring funding, as these studies show that the at-risk areas are more likely to have children who will commit future offenses when compared to areas with less vulnerability (Wikstrom and Loeber 2000). By looking at criteria for vulnerability, number of convicted incarcerations, or both, troubled areas can be pinpointed. Further action can then be taken to insure children in these areas have access to the resources that can lead to better life choices, and potentially a better education. Now that this relationship has been observed, the next step can be taken to further address and aide these at-risk neighborhoods, and specifically the children within them.

Conclusion

To address the large problems that children in Alachua County face, it is necessary to know what issues these children are facing, and which areas are being affected the most by these same issues. From this study, we have been able to define trouble areas within Alachua County, and assess their need for better funding and resources. This served as a preliminary study to determine a correlation between our two objectives of comparing vulnerable areas for children, and incarcerations within these vulnerable areas. Within these identified areas, we have analyzed the criteria defining these vulnerable neighborhoods and compared them to areas with high numbers of incarcerated convicts. A high correlation was indeed identified between convicted criminals close to the areas with high juvenile offenses. Thus, these children will benefit from this study in that further action may be taken through consideration of our study.

<u>*References*</u>

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