

Team 4: the Kamikazes

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Introduction

- Alachua County has a relatively high poverty level
 - 23% of Alachua is below the federal poverty line
 - The Florida average is 12.5%
- Based on 2011 data, the Federal poverty level is an annual net income \$10,890 for a family of 1 and \$22,350 for a family of 4



Implications of Poverty



- Poverty tends to lead to other issues:
 - Homelessness
 - Crime
 - Domestic Violence
 - Juvenile Delinquency
 - Child Neglect
- Poverty needs to be mitigated by significant investments in the community

Community Centers for Women and Children

- The goal of this project is to determine the Geographic locations of 3 Community centers
- These must be strategically placed for optimal aid
- In our analysis, we first considered what would be the most important criteria for their location based on supplied data layers



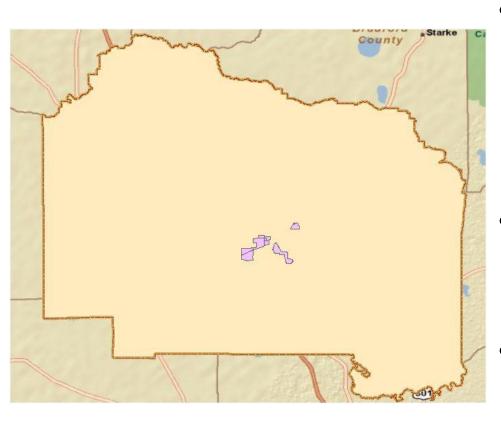
Criteria for location of Community Centers

- Socioeconomic: areas with average net annual income of less than \$15,000, large population of homeless children, large incidence of domestic violence, juvenile offenders, and child neglect and abuse.
- Land Pricing: relatively cheap, and open for development
- Located close to: schools, conservation areas, fire and police stations
- Transportation: off of roads less than 35 mph and close to bus stops

Socioeconomic Factors

- Homeless children- "youth lacking a fixed, regular, and adequate nighttime residence"
- Domestic Violence- "behaviors used by one person in a relationship to control the other, normally violence of men against women"
- Juvenile offenders- "youth 13 to 15 years of age who is charged and tried as an adult for committing an act that would considered a crime if he/she was an adult"
- Child neglect and abuse- "Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation of a child"
 - Cases of all of these tend to be more prevalent in impoverished areas

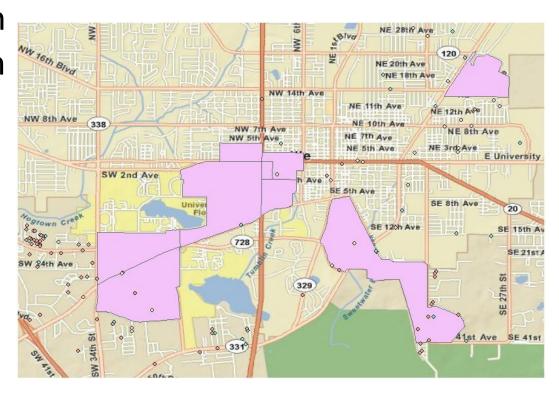
Step One: Identifying blocks of homes with net incomes less than \$15,000



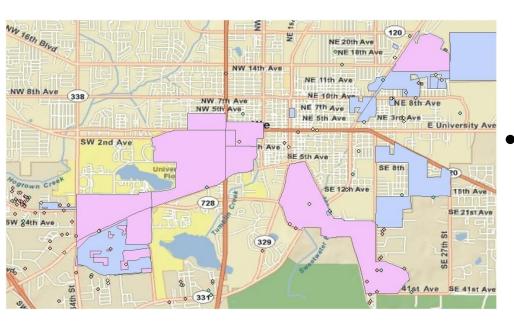
- We chose \$15,000
 because it is the mean
 between the poverty
 line of a family of 1 and
 4.
- The pink shows the selected areas that fit this criteria.
 - We decided that we want to develop around these areas to boost the local economy

Step Two: Selecting Common Poverty Issues

- Used select by location to select criteria within 1 mile of the net income of under \$15,000 and selected:
 - Homeless Children
 Present Residence yellow
 - Cases of Domestic
 Violence- dark orange
 - Cases of Child Neglect and Abuse- Teal



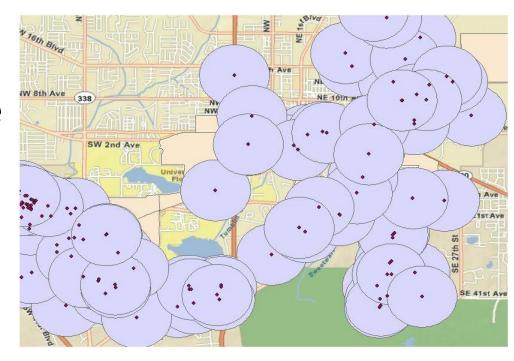
Step Three: Identify Areas of Juvenile Offenders



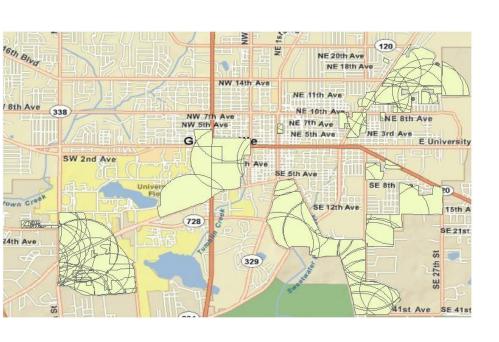
- Selected greater than 2
 Juvenile offender blocks
 (blue) that were within half mile of pink block
- These are areas that we also wanted to include for consideration so the merge tool was used to combine the two layers
- Juvenile offenders are key member society we want to aid with these community centers

Step Four: Set a Buffer around Point Layers

- Point Layers merged into one layer and considered equal attributes for the scope of this project
- A buffer was place around each point of 750 m because we considered this to be about close proximity to homes with poverty issues



Step Five: Intersect taken of Buffer with Juvenile Offenders and Poor Layer



- Here are the areas in tan that we want to consider for possible development of Centers
- Further criteria needs to be used to identify exact locations within this block layer for development