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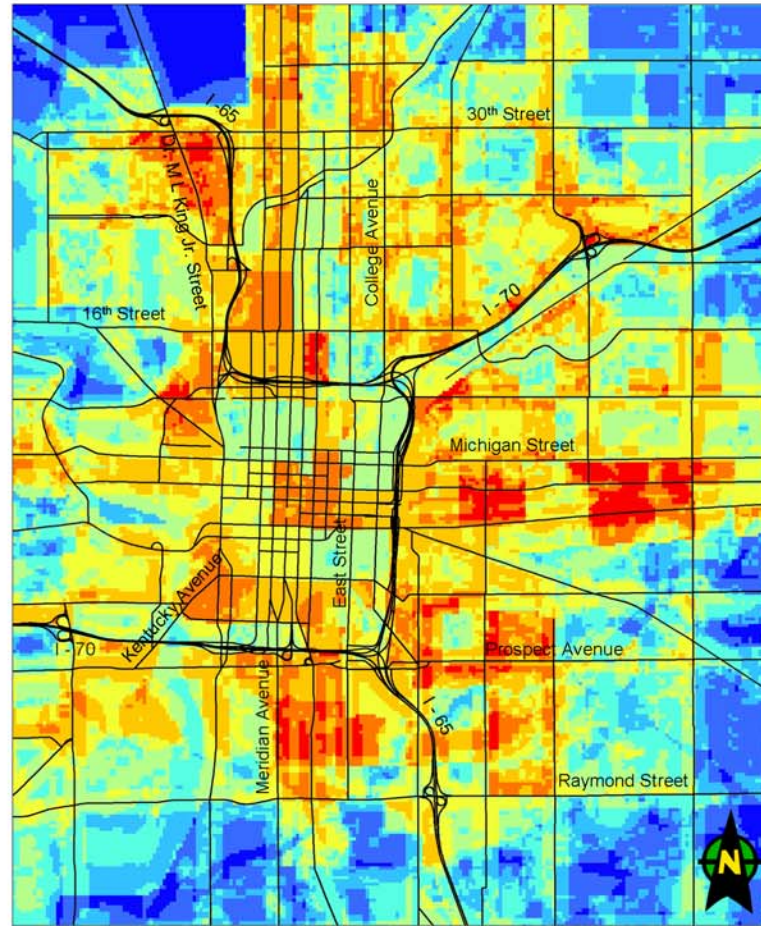
# Addressing Social and Environmental Needs through Community Tree Planting



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**Method:** Each of the nine layers represent an attribute of interest in developing this site selection model. The information in each layer was reduced to a binary or 0/1 grid. Zero indicates that the criteria fell below a pre-defined point in the data, such as the average crime rate or the median income. One indicates criteria at or above this point. The nine layers were then added together with each pixel in the grid representing a value from zero to nine.

**Results:** A value of zero indicates that none of the criteria were met and that the site would not be ideal for restoration. These values appear as blue in the model output. A value of nine indicates that all nine criteria were met and the site would be highly suitable for restoration. These values appear as red in the model output.



## Desired criteria for Center Township, Indianapolis, IN:

- Median family income below township average
- Higher than average crime rates
- Residential zoning
- Title V industrial sites
- Above average asthma rates
- Proximity to major streets
- Above average surface temperatures
- Below average tree canopy density
- Above average impervious surface density

### Criteria Met



## Criteria used in model development

Income	Crime	Zoning	Industrial	Asthma	Streets	Thermal	Canopy	Impervious
Median household income. Darker colors indicate lower income. The model utilized two categories: above and below average income.	Crime per square mile. Darker colors indicate higher crime rates. The model utilized two categories: above and below average crime rates.	Zoning map with residential areas indicated in light pink. The model utilized two categories: residential and non-residential areas.	Industrial sites with a designation of Title V area shown in red. The model utilized two categories: Title V sites (including a quarter mile buffer) and non Title V sites.	Asthma rates per 100,000 children ages 5-14. The model utilized two categories: above average asthma rates by zip code (shown in dark pink) and below average rates.	Major streets with a 500 foot buffer shown in brown. The model utilized two categories: Areas located within 500 feet of a major street and areas greater than 500 feet from a major street.	Surface temperature. Areas in red indicate warmer temperatures, blue indicates cooler temperatures. The model utilized two categories: above and below average temperatures.	Tree canopy density. Brown indicates lower tree density, green indicates higher tree density. The model utilized two categories: above and below average tree canopy density.	Impervious surfaces are indicated in black. The model utilized two categories: above and below average impervious surface density.