KIB Tree Canopy Planner: Wayne Township

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Introduction

Indiana is known as the crossroads of America. Indianapolis is the largest city in the state of Indiana. The street trees are a vital part of city life that people living within the city enjoy and produce benefits for the city. The trees within this city help mitigate environmental impacts like stormwater runoff, energy costs, and air pollution (Lindsey). Which is why it is so important that trees are protected and the existing tree canopy is maintained. Wayne township is one of nine townships that make up the Indianapolis area. This study wanted to analyse the existing tree canopy for Wayne Township by using the Keep Indianapolis Beautiful (KIB) Tree Canopy Planner.

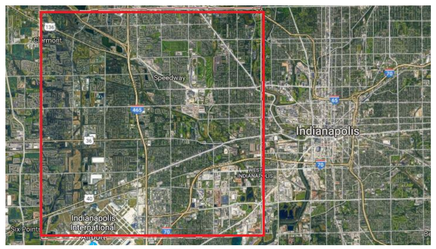

Figure 1. Wayne Township

Methods and Results...

For Wayne Township, we decided that areas with low existing tree canopy, possible urban tree canopy, and economic vitality have high priorities. Another reason we ranked these components as high is due to the fact that they have a large impact on where and how many trees can be planted in Wayne township. Plus, by prioritizing these components as high they can influence all the other components ranked as medium and low priority.

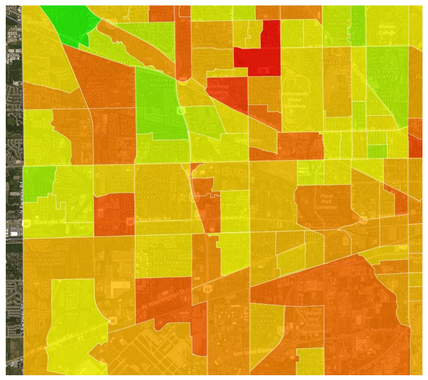

Figure 2. Image taken from KIB Tree Canopy Planner of Possible UTC and Low Exisiting Tree Canopy filters set to “High” and all other filters set to “None”.

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By setting the filter to “High” for the Possible UTC, or Urban Tree Canopy, the available space for new trees to be planted is illustrated on the map. By also setting the filter to “High” for the Low Tree Canopy, the areas with the lowest amount of tree canopy cover are illustrated on the map. These two filters used together give the best picture of the locations within Wayne Township in the most need of tree planting as seen in Figure 2 below/left. The area illustrated in red with the highest need is a large area of grass next to the Indianapolis Motor Speedway and is surrounded by residential neighborhoods. It is currently used for parking and merchandise sales during race days. There are some existing trees in this location but many more could be planted. As this is a grass parking lot instead of an asphalt lot, trees will be able to survive in this locations. Another area shown with high need is the Speedway Shopping Center and Speedway High School. This area is almost entirely paved parking surrounding large buildings. Planted trees in parking lots do not survive because of their small area of soil and the non porous asphalt that limits their growth.

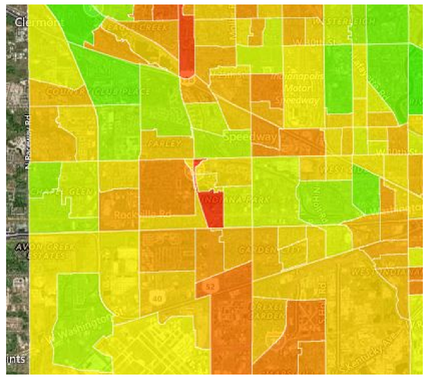

Figure 3. Image taken from KIB Tree Canopy Planner of all filters set to “Medium” except Possible UTC set to “None”.

The Tree Canopy Planner can be utilized to find canopy patches in most need of protection. By setting the filters Low Existing Tree Canopy, Urban Heat Island Mitigation, Stormwater Reduction, Energy Savings, Water Quality, Air Quality, Public Realm Assets, Low Economic Vitality, and Vulnerable Populations to “Medium”, it is possible to see the current canopy patches in Figure 3 above. These filters each represent a benefit of the current canopy and by utilizing their filters, the areas in the most need of protecting these canopy patches are shown. The only filter set to “None” is the Possible UTC which is not included because possible future canopy is not related to the current canopy analyzed in this situation. One of the canopy patches illustrated to be in the most need of protection include the apartment complexes north of the Sam’s Club at the intersection of Rockville Road (36) and I465.

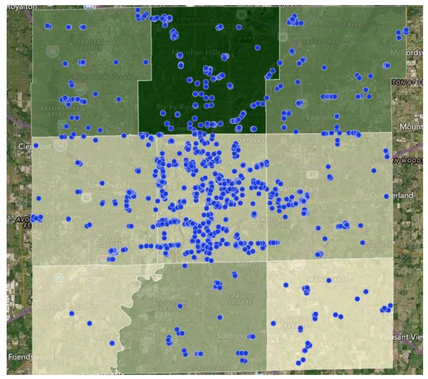

Figure 4. Image taken from KIB Tree Canopy Planner of Tree Planting Projects in different townships surrounding Indianapolis.

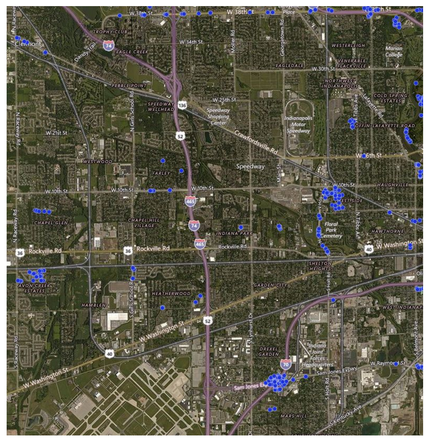

Figure 5. Image taken from KIB Tree Canopy Planner of Tree Planting Projects in Wayne Township.

Conclusions

During our time working on the project we found that whenever you go to the plan section of the tree canopy report the only area option you have is to view city blocks and not townships. It would have been easier for us if we could have viewed Wayne township. It also would have been easier for us if we could have filtered out the other townships and really focused in on ours. Also, by allowing the trees that have been planted by KIB to carry over to the plan stage would have been useful in discussing tree canopy availability. Figures 4 and 5 demonstrate the potential uses for the TCP. Anyone in the public can see current Tree Planting Projects to help with their decision making in planting, or cutting down trees. If KIB wants this tool to be accessible to the public, it should be organized in a way that will allow the user to focus on a specific area and ignore the rest. This is in relation to the View and Plan sections of the TCP and how you can’t break it down into individual townships.

Literature cited

Keep Indianapolis Beautiful. *Tree Canopy Planner.* Retrieved from http://pg-cloud.com/KIB

Lindsey, A. A. (1961). Vegetation of the Drainage‐Aeration Classes of Northern Indiana Soils in 1830. Ecology, 42(2), 432-436.

Acknowledgments

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