

Identifying an Ideal Location for a New Skatepark

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Introduction

Skateboarding, compared to many other sports and forms of recreation, is relatively young, yet has grown significantly in popularity in the past decade. Today, the sport continues to thrive as a part of youth and pop culture and ranks as the sixth most popular sport by number of participants. Despite this, skateboarding is still commonly seen as a nuisance in public spaces. Many municipalities have banned it from their streets and sidewalks, and there is often a lack of adequate places for skaters to enjoy their craft and hone their skills without being harassed or encroaching on pedestrian spaces. However, the increased development of dedicated skateparks—public or private—has provided more opportunities for participants of the sport. This project examines the locations of skateparks in the Tristate area, along with New Jersey, and seeks to identify potential locations for the construction of new skateparks.

Methods

Before any analysis could be done, several criteria were considered and established to pinpoint the ideal locations for potential parks. An exhaustive list is not possible, as there is simply too much individual discretion, stipulations, and arbitrary preferences that would be applied for any given analysis. Instead, location was decided on the following factors: First, there must be reasonable distance to other parks to warrant the construction of a new skatepark. While denser areas tend to have more parks in closer proximity, the goal is to establish a location (or several) that would increase accessibility for those further from existing parks. Second, the target population must be adequate enough to make meaningful use of a new park. Existing public parks were also considered as a matter of presumed lower cost versus acquiring and plotting new property. Lastly, proximity to public transportation was taken into account as a function of accessibility.

The first step in this analysis was to compile data on existing skateparks. There are numerous websites that host publicly contributed lists of skateparks around the globe. The most comprehensive site found was concretedisciples.com. A search for parks by each state (Pennsylvania, Maryland, Delaware, and New Jersey) was conducted, and results were manually added to a spreadsheet containing fields for park name, street address, city, and zip code. Once these results were compiled, they were added as a table to an ArcMap document and geocoded to the four states. The target population was established from conversation with a local skateboard shop owner and reasonable assumptions. Census data was gathered online and a query was conducted for total population of people ages 10-24 of both sexes by county. The results were not terribly revealing, so the same query was then applied to census tracts to better examine population distribution that would help further pinpoint ideal build sites before the next step of analysis.

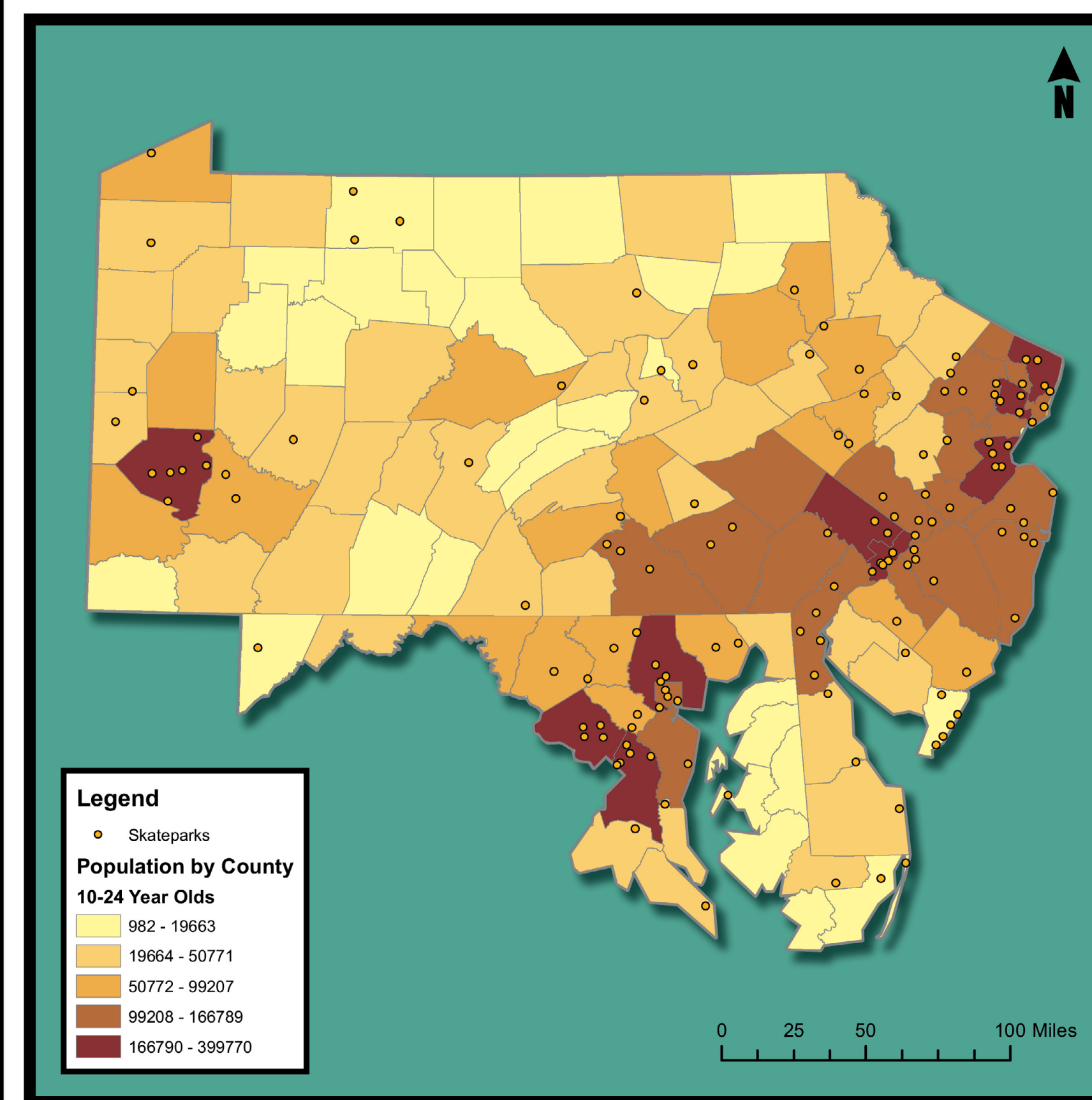


Fig. 1: Population by County

Initial analysis illustrates an expected outcome. Skateparks are clustered near urban areas, and heavier concentrations of males and females ages 10-24 also appear in and around these regions. The heaviest concentrations are clearly spread out across Southeast Pennsylvania and Central/Northern New Jersey.

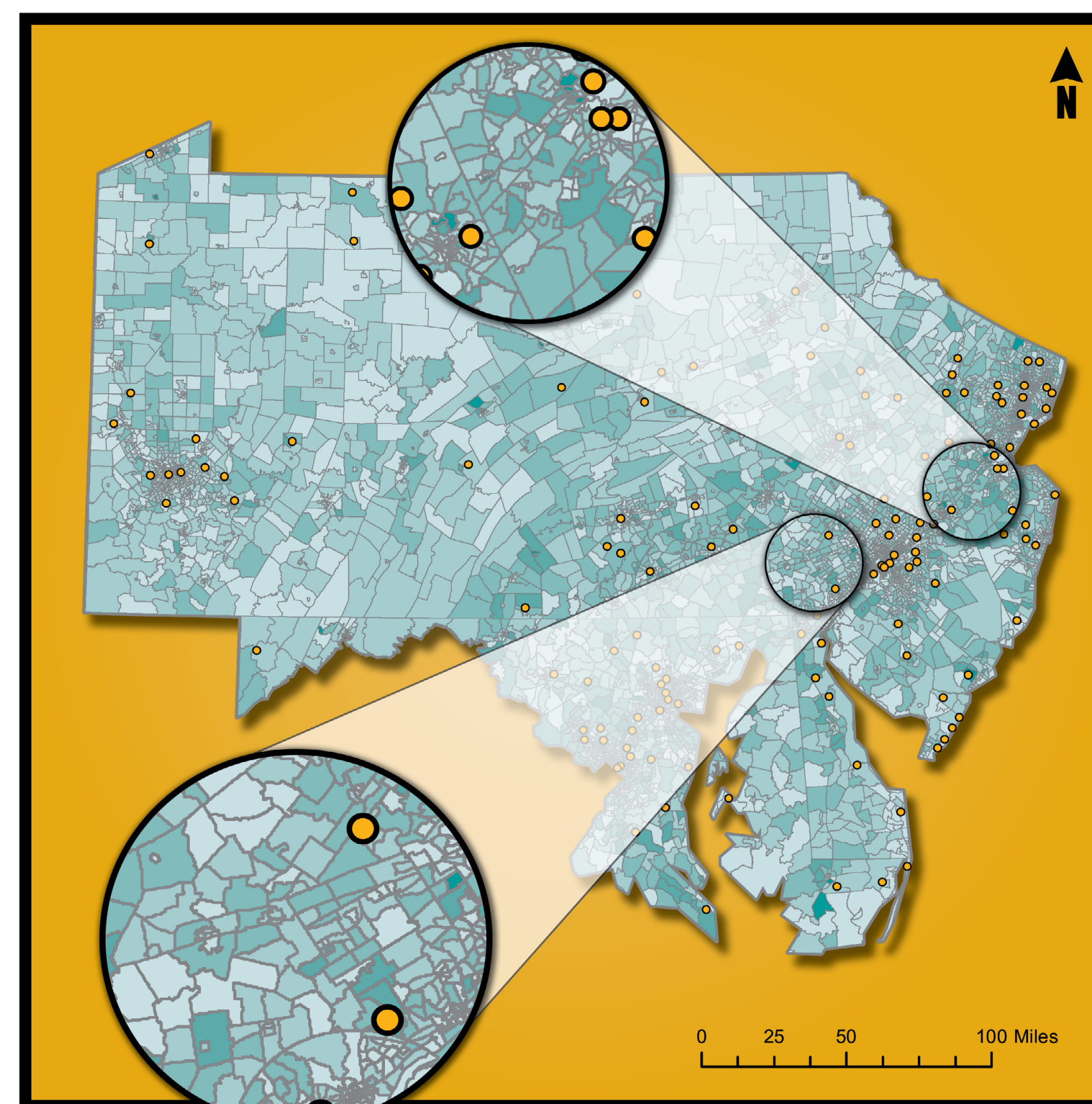


Fig. 2: Population by Census Tract

Further exploration reveals in more detail the distributions of the target population. Several areas have been identified as potential locations for new skatepark construction, but further analysis is necessary. Note that these areas still fall within or near the heavier urban areas.

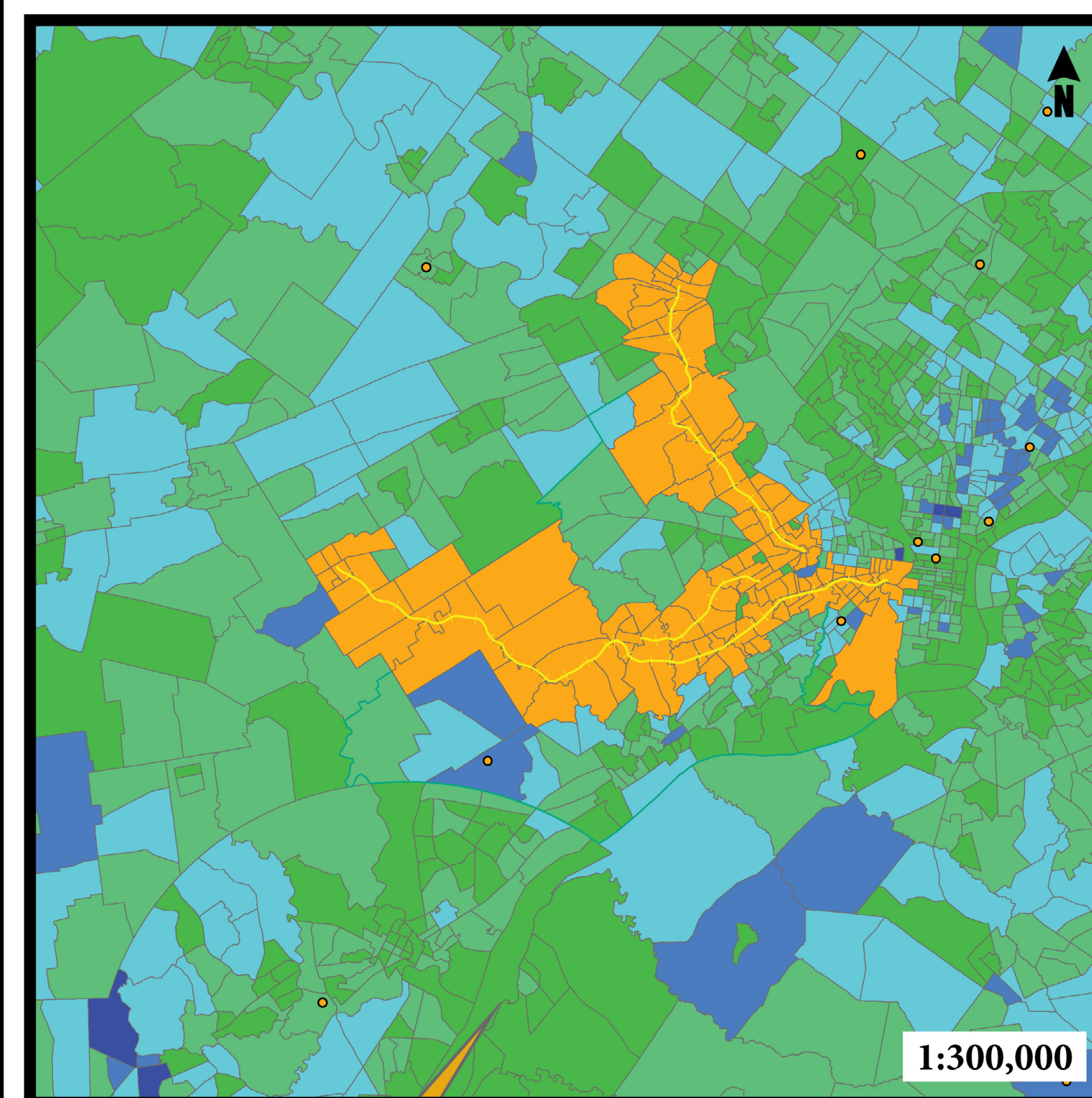


Fig. 3: Potential service area

Census tracts highlighted in orange represent those within a half mile of public transit (railways). These would fit the prescribed criteria for distance, population, and ultimately accessibility.

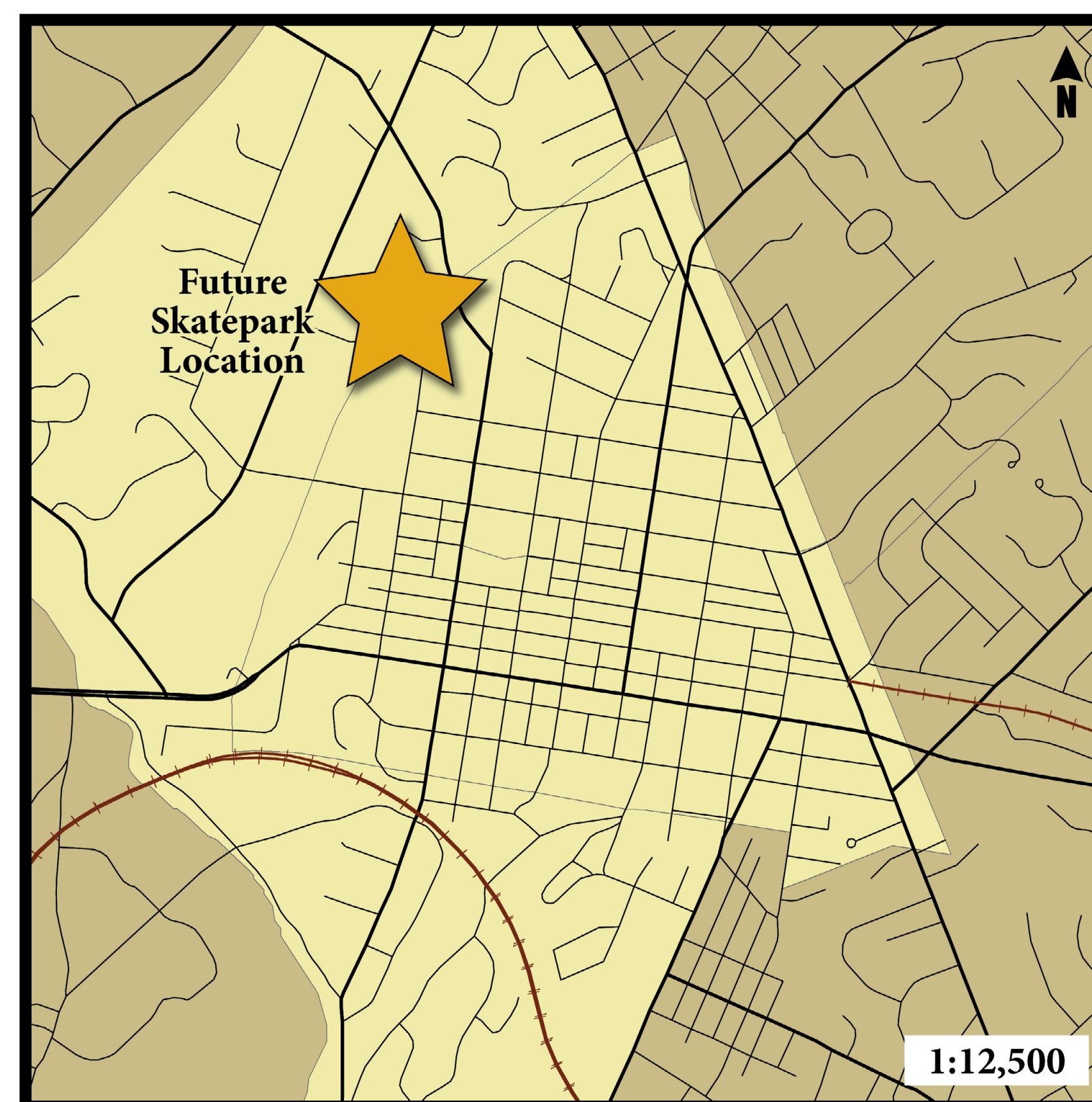


Fig. 4: Chosen location for a new skatepark

The borough of Media, Pennsylvania seems to have the potential to host a skatepark that would best serve the area. A public park is located within several blocks of a trolley line.

Methods (continued)

Railways were added to the state to examine where public transit is in relation to more populous census tracts. Rails were selected based on attributes, and a search by location relevant to census tracts returned a selection of tracts within a half mile. These results were added as a new layer to the analysis (fig. 3). Ignored were the selections where existing skateparks are found in or near these areas. Finally, a manual search of parks close to the remaining selected tracts revealed a potential building location in Media, Pennsylvania (fig. 4) based on the initial criteria developed at the onset of this project.

Conclusion

There are a surprising number of skateparks already in existence across these states, with 54 recorded in Pennsylvania alone, and 48 in New Jersey. As shown, one can see clusters of parks near urban areas with various other parks scattered throughout the region. Delaware and Maryland were almost immediately eliminated in the analysis due to Maryland's heavy concentration of parks and Delaware's minimal public transit. The criteria developed for the purpose of this analysis was based primarily on individual discretion, yet some research did reveal criteria not considered, such as distance of a skatepark to residential areas. Since part of the criteria was building in an existing park, this was not a concern. Rail was specifically challenging to work with as the types of rail differed greatly; only passenger lines still in operation were of interest. Several of the results from this research proved to be more obvious than anticipated, such as the proximity of existing parks to populous areas, and denser populations near public transit. However it was still possible to identify a build location. The borough of Media appears to be potentially under served for the target audience prescribed in this project. Future research could include other criteria, such as crime rates, proximity to schools, and data on actual public park usage and attendance.

Resources

U.S. Census Bureau/TIGERline® (2010) Counties <www.census.gov>
TIGER/Line Shapefile (2013) Delaware County, PA, Address Range-Feature County-based. <<http://catalog.data.gov>>
SEPTA Regional Rail Lines (2012) Southeastern Pennsylvania Transportation Authority. <www.pasda.psu.edu/uci/>
Concrete Disciples. <www.concretedisciples.com>
Skatepark Association International. <www.spausa.org>

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