Site Selection for Norfolk Day Services Facility

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Site Selection for Day Shelter Facility in Norfolk, Virginia, U.S.A.

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Objectives

The project objective is to find an optimal location(s) for a potential Norfolk day shelter facility based on two scenarios that are based on:
1. Proximity to social and health services
2. Proximity to a neighborhood that would most benefit from a day shelter
3. Is easily walkable
4. Based on survey results from the main stakeholders in a day shelter
5. Incorporates the voice of the houseless

Significance

In May of 2021, the City of Norfolk and the Urban Renewal Center partnered to open the first low-barrier homeless shelter in the city. After five and a half months of utilizing the old Greyhound station as a campground for emergency shelter, The Center had to make a transition to an indoor living facility to house people through the winter months once again. In mid-October, The Center moved from its Downtown location to a residential area a few blocks away.

The new location now serves a new population and is an impactful resource to the community, but there has also been a decrease in Day Guests - guests that utilize day services but are not overnight residents with the program.

Considering the move, a pressing, geographic barrier homeless shelter in the "best" area, dramatically changing the results.

Discussion

There is not one zip code, neighborhood, or street that could possibly serve the entire houseless community the "best". Everyone has specific needs that must be met, and when looking for a location, must be weighed. This study highlights how factors thought to be important from a GIS analyst's perspective are different from the most important stakeholders': the houseless community.

Acknowledgements

I would like to thank the Urban Renewal Center for inspiring this study. The URC’s work not only helps folks survive the day but is committed to providing support and services that seek to end homelessness. I would also like to thank the City of Norfolk for giving me the opportunity to continue to serve the community and conduct this research.

Results

The first method highlights both Park Place and Ward’s Corner while the second method found Downtown Norfolk, Oceanview, and Military Circle to be the most optimal locations (Fig. 3). Though the first method was designed to focus on elements that were thought to be important to the houseless community, there was no optimal area overlap of the two methods. The survey results reflected that the houseless community would rather be near an economic district rather than travel to a HUB Zone. Being close to a bus line was much more important than the walkability of an area.

Steps involved in Method One optimization

The first method was a suitability study involving known aspects and locations important to the houseless community that utilized spatial analysis techniques including join, intersect, and erase.

1. Shapefiles for HUB zones, Economic districts, and Civil service boundaries were downloaded from the City’s open-source data
2. Addresses from the Norfolk Resource list and CSB locations were geocoded and converted to display XY data
3. Table data was collected from walkscores.com, converted to a standalone table, and joined to the civil service boundaries (Fig. 1)

Methods

Method One

The second method utilized the results of a survey conducted by adults experiencing homelessness and additional suggestions on the factors they believe to be important.

1. Shapefiles for the City of Norfolk’s zip code boundaries were downloaded from the City's open GIS data website
2. Survey results were transferred to an excel sheet, converted into a standalone table, and joined to the Norfolk zip code shapefile (Fig. 2)
3. Insight and comments from survey (proximity to economic zones and bus lines) were added and used to narrow down locations

Method Two

Figure 1: Steps involved in Method One optimization

Figure 2: Survey results and combined survey score

Figure 3: Results for each method

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