

Presentation Type (specify podium or poster presentation): podium

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Title: An Analysis of Existing Public Transit Networks and Recommendations for Potential Expansions of Service

Abstract:

The Jacksonville public transportation systems must serve a significant number of people and, like any transit network, has the potential to underserve some of the city's residents. The first step of this research to identify populations might be underserved by public transit and where they are located. Additionally, neighborhoods with a high density of poor and disabled people should be identified for additional transit resources. The data used to identify these areas include census data with applicable demographic variables, and land use classification to determine the optimum regions for improved bus routes. GIS methods, for this project include, overlay, and site suitability analysis. As the name suggests, the data is geoprocesed to find the most suitable areas for the improved public transit for areas underserved and identify specific routes and roads for new bus routes. The study's preliminary results show that a significant amount of the Jacksonville population is beyond one mile from the closest bus stop. There are very few places that are adequately reached by public transportation. All over the city, the state, and the nation, there are those who, due to disability or inability to afford one, are unable to use a car, so they must rely on the public transportation provided to them for their livelihood. And if they cannot access public transportation, they cannot function in society.