

ABSTRACT

Over the last few decades, household incomes have been rising steadily but the biggest share of that growth has been in the top income quintile. This inequitable growth is exacerbated by spatial factors, such as a household's home location and the distribution of opportunities and resources around it. This thesis examines the effects of the distribution of places of employment and healthy food retailers on socioeconomic outcomes for households in the Phoenix Metropolitan Statistical Area (MSA). The main research objectives are to: i) calculate accessibility to employment and healthy food for public transit and automobile and identify low-access areas for the two modes; ii) determine the underlying reasons and recommend mitigation measures for the access gaps; and iii) investigate the associations between the calculated accessibility measures and socioeconomic outcomes for households. This is achieved by calculating healthy food accessibility, general job accessibility, occupational job accessibility (i.e., access to jobs by the different North American Industry Classification System (NAICS) different industry sectors) and occupational mismatch (i.e., the difference in the general job accessibility and the occupational job accessibility). We employ a modified Enhanced 2-step Floating Catchment Area (E2SFCA) method with continuously decaying weights using census data at the census block level, employment data from the Longitudinal Employer-Household Dynamics (LEHD) program in various North American Industry Classification System (NAICS) sectors, and locations of grocery stores from the Safegraph places dataset. Using spatial regression models, we estimate the associations between these calculated measures and socioeconomic outcomes. The analysis shows that there is a lack of transit access to healthy food and employment in the periphery of the MSA and that greater access is clustered around interstates and primary roads. The access by transit is worse than access by automobiles for most of the block groups. The spatial regression results show that renters find block groups with better access more attractive, and homeowners trade off that accessibility for better living conditions and other factors, such as school districts. People using the Supplemental Nutrition Assistance Program (SNAP) and people not high school educated have worse occupational job accessibility; jobs that they are employed and qualified in are not accessible to these vulnerable populations. City planners and policy makers can use these findings to implement policies that can address the access gaps found and impact communities.