Spatial Decompositions, Modeling and Mapping Service Regions to Predict Access to Social Programs

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Abstract

Although social programs intend to provide equal access for all, in the final evaluation, fairness of the distribution of services is usually dictated by location. Measuring and predicting access to social services can help these programs adjust and better accommodate under-served regions. A method is proposed which delineates the service area of providers delivering social services and produces a probability metric that maps the equity of the program of services for each household. We begin with a computationally trivial method for delineating service areas, map the probability of households being served, and propose an adjustment process, an allocation, to level access to services. We argue such methods can serve to better locate service providers and insure equity when implementing social programs.