

Food Systems Modelling: Spatio-Temporal Access to Healthy Food in Sedgwick County

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Abstract: The purpose of this study was to make a gritty examination of the availability of Healthy food in Sedgwick County using the availability of time and the geographical location. Initially, the hours of stores in Sedgwick County and their GPS coordinates were documented using Google Maps data. Using this information, we calculated the distance between the centroid of the nearest census tract and the store. Further, we evaluated a Spatio-temporal accessibility measure in which we found out the number of stores within 2 miles of every census tract for different slots a day throughout the week. To show our findings graphically, we made a heatmap of the data using the Microsoft teams. Ultimately, our fundamental outcomes show that healthy food was broadly accessible during the busiest shopping times for more metropolitan census tracts. Whereas the rural regions experienced significantly longer drive times to get healthy food.

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