USING A GEOGRAPHIC INFORMATION SYSTEM (GIS) TO COMPARE OBESITY RATES OF COMMUNITIES IN THE UNITED STATES

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Abstract: Obesity is a major health problem worldwide and especially a problem in the United States. Obesity is known to be a risk factor for many chronic diseases including hypertension, coronary artery disease, diabetes, and cancer. There are a few studies that have shown relationships between an area’s built environment and various health problems within certain communities. The purpose of this study is to evaluate and show trends between states with high and low obesity rates and identify factors that are causing the rates to increase. To use US Census data to examine work commuting and residential migration patterns; use Center for Disease Control (CDC) data to show increased obesity rates; and use Geographic Information System (GIS) to show spatial relationships and land use in the communities in the United States that were used in the CDC’s 2005 obesity study. The expected results include showing trends between states with similar obesity rates and identifying some of the built environment factors that influence obesity rates.

Keywords: Obesity, GIS, built environment