

Analyzing Changes in Urban Areas Using Landscape Pattern Metrics

Benjamin J. Davis* and Dr. Jennifer Koch

Department of Geography and Environmental Sustainability

South Central Climate Science Center, University of Oklahoma, Norman, OK

benjamin.j.davis-1@ou.edu

Determining how landscape patterns are changing in urban areas is important to modeling future changes in cities. We performed a literature review to determine some of the most commonly used pattern metrics. These metrics were then applied to the 1992, 2001, 2006, and 2011 National Land Cover Dataset for the state of Oklahoma using Fragstats, a computer program for calculating landscape metrics. The results were compared to determine if there is evidence for the value of these metrics changing over time. Patterns in any observed changes could be incorporated into urban landscape models.