

# **URBAN SPRAWL ANALYSIS AND ITS MANAGEMENT POLICY IN MADISON, WISCONSIN METROPOLITAN AREA**

**Jay Sharpe, Department of Physics, Astronomy, Geosciences, and Engineering Studies**

**Faculty Sponsor: Dr. Jia Lu, Department of Physics, Astronomy, Geosciences, and  
Engineering Studies**

Studies show that urban sprawl can cause significant negative consequences. Many cities in the US introduce policies and plans to help alleviate sprawl and contribute to smarter land use and urban growth. The City of Madison, Wisconsin has been considered an area of smart growth. This study will look at population and land use data between 1990 and 2000 to determine if there is significant issue with urban sprawl; and if so, what policies shall be suggested for smart growth in the future. Preliminary data indicates that there is, indeed, urban sprawl within the area. A more in depth study using interviews and survey of the urban development plans and policies implemented will determine which factors are contributing to the sprawl and suggest related policies to minimized urban sprawl.