

The logo for FOSS4G 2006, featuring a stylized red and white graphic that resembles a ribbon or a stylized letter 'G'.

# FOSS4G2006 - Free And Open Source Software

Contribution ID : 11

## GIS-based Urban Growth Simulation Modeling

Thursday 14 Sep 2006 at 15:00 (00h30')

We have developed a hedonic modeling approach within the GRASS GIS to identify the attractiveness of areas around cities to new residential development. The process considers the effect of driving time to attractors such as existing urban areas, roads, highways, intersections and access ramps along with slope and proximity to water and forest. The current urban pattern is used to automatically calibrate the relative effect of the different attractors. Once calibrated, proposed regional planning options can be tested to identify anticipated changes in attractiveness to new development. This model has been applied to many locations across the United States and is available for application to any other locations.

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