

Modeling Growth and Predicting Future Developed Land in the Upstate of South Carolina

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From 1990 through 2000 the amount of developed land in an eight-county region of Upstate South Carolina grew from 222,745 acres to 576,336 acres. Under current practices and policies the amount of developed land is anticipated to grow to 1,523,667 acres by the year 2030. Where that growth takes place can have serious impacts and can affect the character of the region. The Upstate contains an abundance of natural, environmental, and cultural resources that could be at risk from unmanaged growth.

The Strom Thurmond Institute has had previous success modeling future growth of developed land for the area around Charleston, South Carolina. For this study a comparable model, with some improvements, was developed to predict where the growth is most likely to occur through the year 2030 for eight counties in the Upstate region of South Carolina. A geographic information system-based model was developed, combining a binomial logistic regression approach with expert information provided by informed participants from throughout the region. A map created from the output of the growth model shows what the pattern of developed land for the study area might look like by the year 2030. These results can give decision-makers better information from which to implement good growth policy for the future of the region.



Upstate Forever