

# UPLAN

<b>Model Uses</b>	UPLAN is an urban growth model that tests the effects of land use and transportation policies on growth.	
<b>Major Categories</b>	Decision Support	<u>Subject Knowledge Level</u> Advanced
<b>Minor Categories</b>	Scenario Development	<u>Technical Difficulty Level</u> Intermediate
<b>Model Type</b>	Physical Model	<u>Geographic in Nature?</u> Yes

## Abstract

Uplan is used for testing the effects of land use and transportation policies on urban growth, and land coverage. This program spatially models urban growth based on the attractiveness of landscape features--such as highway on ramps, roads, cities, and public transportation--as well as on growth constraints--such as existing development, open space, and steep slopes. Any reasonable time horizon (20, 40, 100 years) can be modeled. The results of this model can be used to project the effects urban growth on runoff, water quality, wildlife habitat, and fiscal balance.

## Future Developments

Models of urban growth for the entire state are currently being developed

## Model Limitations

None noted

## Model Features

None noted

## Required Data Types

GIS data of county general plans, roads, etc.

## Model Outputs

GIS maps of urban buildout for projected period into the future (usually 20 - 50 years)

## Source

Robert Johnston, professor  
Dept. Environmental Science and Policy  
University of California  
One Shields Avenue  
Davis, CA 95616  
[rajohnston@ucdavis.edu](mailto:rajohnston@ucdavis.edu)

## Source (URL)

<http://www.des.ucdavis.edu/faculty/johnston/research.htm>

## Hardware Requirements

None noted

	Supported Platforms			
DOS	<input type="checkbox"/>	UNIX	<input checked="" type="checkbox"/>	
Windows	<input checked="" type="checkbox"/>	Macintosh	<input type="checkbox"/>	

## Software Requirements

ArcView 3.x

## Cost, Licensing and Availability

Free. Downloadable from above website.