



Urban Dynamics: Willamette Valley Region

The Willamette Valley of Oregon, along with the Columbia Plain around Vancouver, Washington, has experienced tremendous urban growth over the past 50 years, and the trend is expected to continue well into the next century. Analysis of land-use change data is essential to help resolve complex issues that accompany population growth and urban development.

The region is unusual in that its voters have adopted urban growth boundaries in an effort to better manage the evolution of their landscape. By analyzing the data from this study area and comparing that analysis with those done in regions without growth restrictions, we will gain valuable insights into the effectiveness of "managed growth" legislation.

The Willamette River also has been designated an American Heritage River (AHR). Meeting AHR objectives requires analysis of land-use change data collected throughout the Willamette River watershed.

This project will examine the patterns of urban growth in a region with urban growth restrictions, and will support American Heritage River activities.

Researchers have developed a temporal geographic information system (GIS) of urban lands, primary transportation, and waterways for eight time periods between 1850 and 1996. A geographic analysis that correlates historical, socio-economic, and population information with the urban growth data is underway. Modeling of future growth will also be conducted.

This project is a joint activity between USGS, Oregon Historical Society, Metro Regional Government, Oregon Department of Water Resources, Oregon Department of Transportation, University of Oregon, University of California Santa Barbara, and Lane Council of Governments.

Customers include Metro Regional Government, Oregon Department of Water Resources, Oregon Department of Transportation, University of Oregon, Lane Council of Governments, all city and county governments in the region, newspapers, radio and television stations, and the general public.

For more information:
<http://edcwww2.cr.usgs.gov/urban/portland/intro.html>