

## **“Hedonic Valuation of Alternative Land Protection Methods in the Rural-Urban Fringe” (82)**

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In the face of “rural sprawl” development pressures, a variety of land protection measures have evolved, ranging from public open space designation, to private acquisition for protection, to conservation easements; the actors include public land agencies, private land trusts, and even homeowner associations pushed by land planning authorities to set aside conservation areas as part of development plans. Among the methods used to estimate the economic value of land conservation, hedonic price models have been used for urban and suburban open space (e.g., Shultz and King 2001, Geoghegan 2002, Ready and Charles 2003), but so far the work includes few hedonic models applied to the case of ex-urban development, nor to the planning of “cluster housing” with associated conservation land.

This study applies a spatial-lag hedonic model (Anselin 1988) in the context of the rural-urban fringe in a high-growth, high-amenity region, to estimate the degree to which the amenity value of several kinds of land protection will be internalized into the values of nearby residential properties. The sample is a randomized selection of 5,800 single-family residential transactions in the non-urban portions of Larimer County in northern Colorado from the period 1995-2004. The model allows for differentials among topographically different areas, in a region that is geographically diverse and includes numerous types of publicly and privately preserved lands.

Key findings include: (1) property values exhibit robust relationships to core hedonic attributes, namely parcel attributes and neighborhood characteristics; (2) strong neighborhood price externalities exist within census block groups; (3) significant price differentials apply to topographically distinct subsections of the county property market; (4) under a variety of model specifications, only proximity to national and state parklands has a significant positive impact on property values, while city/county land, national forest, and privately conserved land exhibit marginally significant or no significant effects; (5) inclusion of a property in a county-mandated “cluster development” decreases its value.

The results suggest important considerations for policy makers designing development rules and alternative land protection measures aimed at managing rural sprawl.

TALUC conference topic areas C, K, L; approaches 3 and 6.

### REFERENCES:

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