

The Value of Agricultural Land in the Urban Fringe

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INTRODUCTION

- Surveys show that 90% of British Columbians believe that government should limit urban development to protect farmland¹; 81% of Central Saanich residents feel that farmland preservation is beneficial²
- Agricultural land in B.C. is scarce (3% is capable of growing a reasonable range of crops, and 0.6% is prime farmland)
- Over the past 35 years, the number of farms in Canada has gone down by 37.3%, but B.C. has increased by 7.8%
- The Agricultural Land Reserve (ALR) is a province-wide zoning policy (created in 1973) which prohibits non-farm uses, subdivision, or more than one house on farmland
- Farm have positive and negative externalities on urban uses

OBJECTIVES

- Explore the effectiveness of agricultural protection policies
 - Protection status (ALR) should make farmland cheaper
 - Land is often a farm's largest capital investment so land price is a major determining factor of farm viability

DATA and METHODS

- Study area: Saanich Peninsula (southern Vancouver Island)
- GIS layers from federal, provincial and local governments
- Estimated and market (sales) prices from B.C. Assessment
- Hedonic pricing statistical methods used to decompose prices into constituent parts and determine marginal prices
- GIS used to analyze spatial patterns

Example of a GIS map (Saanich Peninsula) with farms (in yellow) and hobby farms (red dots)



RESEARCH RESULTS

- The protection status of the land (ALR or non-ALR) matters but not as much as expected; hobby farmers drive farmland prices up (especially for small parcels) and developers speculate on being able to have ALR land removed from the land reserve
- Despite all the urban influences, still evidence that better quality farmland and less fragmented parcels sell for more
- Evidence that tax policies encourage hobby farming



Factor <small>(Only statistically significant results reported)</small>	Description and Results <small>(The impact of each factor is measured for a lot of 2.0 ha in size, in 2006, unless otherwise indicated, with all other factors held at the mean)</small>
Parcel size	The value of land decreased rapidly (per ha) with an increase in parcel size
ALR	While ALR initially had a positive impact on prices (+\$23,000/ha in 1974), ALR land was worth \$86,000/ha less (18% of non-ALR price) in 2006
Distance from ALR boundary	Land situated 1.5 km from the ALR boundary (within the ALR) was worth \$92,000/ha (25%) more than land next to the boundary
Fragmentation index	Entirely isolated parcels were worth up to \$126,000/ha (31%) less than parcels within a large block of farmland
Vacant land	The absence of buildings decreased value by \$176,000/ha (40%)
Farm type	Horses: increase land value by 8.9% (p<0.01); Other livestock: decrease by 7.2% (p<0.10); Vegetables: decrease by 13.8% (p<0.01); Direct marketing: increases by 8.7% (p<0.10)
Distance to Victoria	Parcels furthest from city centre (30.5 km) were worth \$58,000/ha (14%) less than those nearest (within 5.1 km)
Distance to main highway	A land parcel 5 km from Hwy 17 was worth \$47,000/ha (12%) more than one next to the highway
Maximum elevation	Parcels at the highest elevation (180 m) were worth \$113,000/ha (31%) more than the parcels at the lowest elevation (5 m)

POLICY IMPLICATIONS

- The price of farmland will affect new farmers' ability to enter the market, or for existing farmers to expand their operations
- Policies that encourage productive agriculture, environmental conservation or preservation of open space recognise non-market values for farmland (agrarian, environmental and aesthetic values)³
- For the ALR to effectively keep land prices low, it must convince people that zoning won't change in the future (deterring speculation)

