

Public Preferences for Protecting Working Landscapes (68)

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Approach or Method: 1, 3, and 6

Throughout the globe, rural communities are having parallel discussions, reflecting on the relative value of different characteristics of landscapes and pondering alternative future landscapes. Central to all of these discussions is the recognition of various externalities related to the use and management of lands and the design of policies to internalize these forces. The protection of working landscapes is often justified as a means to maintain the provision of public services generated by private, "working" landowners who are not currently compensated for such services.

This paper begins with a transatlantic comparison of approaches used and programs developed to protect working landscapes in Europe and the United States. The objective of this comparison is to identify similarities and distinctions as well as to examine drivers of variation, such as landscape characteristics, land-ownership trends, land management regulations, and regional economic characteristics. Emphasis is also given to variation in public reaction or public support for such programs.

The second part of the paper presents an empirical analysis of public preferences for protecting working landscapes using data from the State of Maine, USA. This paper contrasts recent voting results on two ballot initiatives related to land management in Maine: (1) the protection of "working" waterfront via current use taxation and (2) a bond measure to support broader public land acquisition. Results of each ballot initiative are scrutinized to empirically examine factors that significantly influenced voting outcomes and to compare and contrast outcomes over space. Building on the approaches adopted by similar studies (e.g., [1]-[4]), the empirical portion of the paper combines ballot initiatives data with demographic, economic, environmental, and local public finance data to explore public support for the various referenda.

Voting precinct data are aggregated to the county subdivision scale because this scale works well given the heterogeneous political units of Maine. A set of reduced form discrete choice models (e.g., group logit models) of the voting outcomes are derived, where the outcome is explained as a function of explanatory variables, such as, measures of age and income distributions, educational attainment, recent population and housing growth, recent net migration, and landscape characteristics. Spatial patterns in the voting response to these two ballot initiatives are explored and spatial exploratory data analysis techniques are used to characterize the spatial distribution of voting responses and permit formal comparison of the two votes over space. These models enable the testing of numerous behavioral hypotheses, including examination of current levels and spatial

distribution of different land types within jurisdictions, demographic characteristics of jurisdictions, and specific attributes of the land acquisition programs (e.g., the type of working lands affected).

The paper concludes by linking the results of the empirical analysis back to the broader discussion of policies and programs to protect working landscapes and key drivers in the variation of such programs throughout the globe.

References:

- [1] Deacon, R. and P. Shapiro. 1975. "Private Preference for Collecting Goods Revealed Through Voting Referenda." *American Economic Review* 65(5): 943-955.
- [2] Kline, J. and D. Wichelns. 1994. "Using Referendum Data to Characterize Public Support for Purchasing Development Rights to Farmland." *Land Economics* 70(2): 223-233.
- [3] Kline, J. and D. Wichelns. 1998. "Measuring heterogeneous preferences for preserving farmland and open space." *Ecological Economics* 26: 211-244.
- [4] Kotchen, M.J. and S.M. Powers. 2006. "Explaining the appearance and success of voter referenda for open-space conservation." *Journal of Environmental Economics and Management* 52(1): 373-390.