



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Land Utilization  
U

1980

Selected Paper  
AAEA Meetings  
University of Illinois  
July 28, 1980

UNIVERSITY OF CALIFORNIA  
DAVIS  
SEP 26 1980  
Agricultural Economics Library

ABSTRACT

"A Self-Financing Farmland Preservation Program"

(Charles A. Sargent, Purdue University)

A farmland preservation program is proposed that combines current growth management approaches with a transfer fee plan. Agricultural zoning, fees assessed on land sold for development, plus cash benefits, would create a combination of "sticks" and "carrots" to encourage preservation. Costs and benefits are analyzed and a hypothetical example is given.

## A Self-Financing Farmland Preservation Program

Charles A. Sargent

### The Problem

The farmland preservation issue is very much on the public policy agenda. Concern is expressed not only with irreversible land use changes that reduce our food producing capabilities, but also with related problems of uncontrolled urban development. Land is being used inefficiently; witness "urban sprawl" and "strip" development that uses up and impacts large amounts of land. The most productive, level land is often used first, rather than more scenic and rolling land that may cost more to develop initially. Public service costs rise as urban growth spreads out randomly across the rural landscape. Competition and conflict between farm and non-farm uses increases as urban development invades good farm areas. Usable open space for city residents to recreate and get relief from urban congestion can disappear. (Conklin, Bryant and Sargent)

In response to these problems, a number of states and local units of government are using land use control policies and incentive programs to guide physical development and hopefully reduce the amount of productive farmland going into non-farm uses. Unfortunately, some of the early programs involving use value assessment, tax incentives and other devices, are both costly to taxpayers and are of questionable value to the community. (Barlowe, Alter and Leshner)

A few states have shown willingness to devote large amounts of tax money to farmland preservation programs or have endorsed strong land use controls, but a justifiable concern for individual property rights, potential "windfalls" and "wipeouts" from zoning controls and a mood of fiscal conservatism has made most state legislatures cautious in adopting new

programs. And, we know that individual land owners would need very large subsidies or very strong controls to stop sales to developers where market pressures are substantial and land has a high value for non-farm uses.

For these and other reasons we are forced to consider farmland preservation proposals that are rather modest in scope, that perhaps only extend a bit the present system of land use controls and minimize expenditures of public funds. In this paper we outline a program that combines current planning and zoning practices with a transfer fee plan. A number of land use control devices are listed, then the transfer fee concept and finally a total program package that makes use of a number of techniques in a unified approach. 1/

#### Current Land Use Control Policies

First are listed approaches used by many local units of government as part of their growth management policies. Ideally, these are accompanied by a comprehensive planning process. In most states enabling legislation now on the books permits the techniques to be used as part of the police power of county, city, and town units.

##### Local policies:

1. Exclusive agricultural zoning
2. Large lot zoning
3. Restrictions on timing or frequency of subdividing
4. Timed or phased development tied to availability of public services
5. Green belt ordinances

---

1/ The contribution of the Indiana State Land Use Advisory Committee is acknowledged. The author participated in extensive discussions on this subject, and legislative proposals are being formulated by this group and a legislative study committee.

6. Subdivision regulations
7. Planned unit development ordinances
8. Density zoning.

A number of policies are essentially (but not always) state level initiatives that can supplement local land use controls. The most common are listed first; others are just now being considered.

State Policies:

1. Use value assessment
2. Agricultural districts
3. Statewide, mandated zoning
4. Farmland preservation contract programs with tax incentives
5. Development rights purchase and transfer
6. Special transfer fees and taxes.

Admittedly, many of the policies, tools and devices just listed were not specifically designed to preserve and protect farmland from urban encroachment, but we are arguing that tools which have some impact on the location and standards of development, directly or indirectly can encourage agriculture and discourage other uses.

The devices will have the greatest impact on land use and potentially on agriculture when the following criteria are met:

1. When the tools are used as part of an overall growth-management approach.
2. When a package of tools are used that complement each other.
3. When agriculture and open space uses are recognized as valuable in themselves and worth preserving over time.
4. When a combination of "carrots" (incentives like tax refunds) "sticks" (like zoning regulations) are used to reinforce each other.
5. When widespread public participation and citizen input has preceded policy implementation.

6. When different levels of government (county, city and state) cooperate in a unified program.

Under the best combination of public policies and programs, private development decisions will conflict with and dominate public efforts to guide land use changes. Land use changes are made largely as a result of private sector decisions. The question is: How much should public policies intervene in essentially a free enterprise environment, to serve public purposes? This issue is worked out within each community and the results are different for each locality. In terms of farmland saved and open space protected, each community will work out on its own compromises and tradeoffs.

#### The Transfer Fee Plan Proposal

The transfer fee plan proposed here is a modification of a scheme developed by land use specialists looking for a way to create an incentive program without using regular tax revenues. (Washbon)

A state legislature passes enabling legislation that allows a county to create a "Prime Farmland Preservation Program". As discussed later, a county growth management plan is adopted and exclusive agricultural zones designated. Within this zone, land owners can voluntarily sign contracts to keep their land in agriculture for a specified period. As one benefit, they receive a cash payment each year from the county fund, based on the acreage under contract.

The preservation funds come from a fee assessed on land sold for non-farm purposes that is in the designated agriculture zone. The fee would be sufficiently high to discourage many sales, but not so high as to constitute a "taking" of land by the police power embodied in zoning. The fee could be a percentage of the sale price or a dollar amount could be stipulated. A variation of this would be to have landowners form special agricultural districts and only those signing contracts assessed the fee, if they broke

their contract and sold farmland for development purposes or developed it themselves. In counties with little demand for development land, fees would be slow to accumulate, but less incentive needed also.

Any change to non-farm use of land in the exclusive agricultural zone would have to get some kind of permission from local planning officials, in addition to a possible fee charge. Thus the "stick" of zoning is supplemented and reinforced with the "carrot" of an incentive payment to keep land in agriculture and the added cost of the fee if land is sold. This creates a double or triple impact on potential land use changes. Landowners signing contracts might also receive other benefits such as a modification of the eminent domain proceedings against farmland, elimination of special assessments for urban public services and other incentives.

Land values in the agricultural zones would be held closer to prices for farm purposes, while land values elsewhere would rise, somewhat. Developers would have to pay more for land in the agricultural area and would have to pass on added land costs or build elsewhere.

The transfer fee plan concept has similarities to the transferable development rights scheme in that both contemplate areas to be developed vs. those to be kept in their present use. Landowners maintaining land in present use and giving up their development rights, share in the benefits of those who sell out for development. The transfer fee plan has fewer administrative problems and is considerably less complicated. However, neither concept has been tried on any large scale and both raise some legal and administrative questions yet to be answered. (Barrows)

#### A County Farmland Preservation Program Proposal

The program encourages the voluntary formation of agricultural districts in areas designated for preservation -- the transfer fee concept is

### A. County Farmland Preservation Program Proposal

The program encourages the voluntary formation of agricultural districts in areas designated for preservation -- the transfer fee concept is combined with local growth management policies. Objectives of the program are to:

1. Minimize conversion of prime farmland to non-farm use.
2. Protect agricultural areas from urban encroachment and reduce conflicts over competing land uses.
3. Strengthen growth management plans and policies developed by communities with incentives and penalties.
4. Create a self-financing program that does not require large amounts of public tax revenue.

Enabling legislation permits county government to create a Farmland Preservation Program in cooperation with the state. Not all counties may choose to participate.

The local plan commission designates exclusive agricultural zones in a regular planning and zoning process, using specific criteria on soil productivity, degree of urbanization, carrying capacity, etc. County officials approve after extensive public participation. Other devices may be implemented also, such as those listed earlier to create a comprehensive growth management plan.

Landowners within agricultural area can form an "Ag. District". District must have a minimum size and a minimum amount of land owned by each individual participating.

Landowners sign contracts with county and state -- agree to keep land in agriculture and open space for a specified time.

A "transfer fee plan" program is set up for all land in agricultural zones. Any land sold for non-farm purposes is assessed a fee; money goes into a county fund and is used for incentive to agricultural districts landowners. Flat rate/acre/year paid to participants by county. Any landowner



Applying this proposal to a fairly typical agricultural county illustrates further how the program would work:

Greenfield County - Midwest - U.S.A.:

- \*Population 100,000, growing at 2% per year.
- \*County contains total of 200,000 acres of which 80% is in agriculture and open space uses, or 160,000 acres.
- \*Approximately 120,000 acres is zoned exclusive agriculture (A1); 40,000 acres zoned transitional agriculture near urban centers (A2).
- \*Balance of county zoned residential, commercial, industrial, environmental, etc.
- \*About 1,000 acres per year converted to urban development of all kinds; 400 acres come from A1 zone that planning officials have rezoned or given a special exception for development.
- \*Fee assessed at rate of \$1,000 per acre for a total of \$400,000 per year.
- \*400 farm landowners have signed contracts and 80,000 acres are involved. Incentive payments would come to \$5/acre and average \$1,000 per farm for that year from the \$400,000 income to the fund.
- \*Land for agricultural purposes in A1 zone sells for \$3,000 per acre and \$5,000 per acre for development indicating development rights are worth \$2,000 per acre. \$1,000 per acre fee allows seller of land to net \$1,000 in development rights value and another \$1,000 shared by those giving up development rights.

Setting the Transfer Fee

Obviously, one of the biggest questions to be settled is the amount of the transfer fee to be charged. A number of criteria could be used to help make this decision. The amount of development pressure and the resulting

value of development rights is one factor that might be considered. The productivity of the land and its relative importance to future food production might be evaluated, since the impetus for the program could come from the desire to preserve "prime" farmland. There may be an attempt to capture some of the windfall gain in land values, so that a graduated fee is applied based on the percentage of capital gain and the length of time the land has been held by the present owner. This would be somewhat like the Vermont capital gains tax passed in 1973. (Huffman)

The fee should be set high enough to accomplish the preservation purposes intended but stopping short of being a "taking", and thus an unfair burden on the landowner. Again, this is not an easy decision.

Any assessment scheme should minimize the amount of judgment involved in terms of placing different fees on different parcels of land. Land worth more in terms of development potential will bring a higher market price. A percentage charge on the sales price would reflect quality differences accurately. Land developed by owner and not sold, would require a different assessment procedure.

The distribution of benefits is also crucial; but would likely depend on the number of acres under contract in the program, and poses fewer conceptual problems than the cost assessment side.

#### Summary

This analysis of a proposed farmland preservation program raises a number of questions, but the following points seem to be valid:

1. Farmland is preserved where county plans call for it -- community desires better served -- and preserved in relatively large pieces -- not scattered -- away from urbanized areas -- not a "bonanza" to landowners, but done for a public purpose. Would particularly cut

down on scattered development away from cities, where development makes little sense.

2. Voluntary - incentive program -- no one forced to participate in ag. districts.
3. Creates a "double impact" on land use decision:
  - a) Incentive to preserve land under contract by participants.
  - b) Incentive to sell non-farm land for development and avoid the fee.
4. Transfer fee creates new funding source.
5. Only counties experiencing rapid loss of farmland may want to set up a program.
6. Incentives to landowner would not likely equal value of land for development in some areas under high development pressure.
7. Some administrative costs.
8. Zoning aspect is mandatory -- some may not like their zoning designation.
9. Transfer fee mandatory. Might reduce market value of farmland and increase other land values, but this is somewhat offset by benefits to farmland in terms of reduced conflict and incentive payments.

REFERENCES

- Barlowe, Raleigh and Alter, Theodore R., Use Value Assessment of Farm and Open Space, Research Report 308, Michigan State University, East Lansing, 1976.
- Barrows, Richard L. and Penguber, Bruce A., "Transfer of Development Rights: An Analysis of a New Land Use Policy Tool", American Journal of Agricultural Economics, Vol. 57, 1975.
- Bryant, William R., Farmland Preservation Alternatives in Semi-Suburban Areas, Agricultural Economics Extension 75-5, Cornell University, Ithaca, New York, April 1975.
- Conklin, Howard E. and Bryant, William R., "Agricultural Districts: A Compromise Approach to Farmland Preservation", American Journal of Agricultural Economics, Vol. 56, No. 3, August 1974.
- Huffman, Benjamin, "The Vermont Farm and Land Reform Program", Vol. 1, State Planning Office, June 1975.
- Leshner, William G. and Eiler, Doyle A., "An Assessment of Suffolk County's Farmland Preservation Program", American Journal of Agricultural Economics, Vol. 60, No. 1, February 1978.
- Sargent, Charles A., "Land Use Policy and Agricultural Land", contributed paper at American Agricultural Economics Association annual meetings, San Diego, California, August 2, 1977.
- Washbon, Wallace E., The Prime Farmlands Transfer Fee: A Technique to Utilize Non-Tax Money for Choice Farmland Retention, Cornell University A.E. Ext. 76-40, October 1976.