



University of Idaho  
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## **Conventional Tools for Farmland Protection**

**Lots of Noise; Limited Results\***

by

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## *Executive Summary*

### **Conventional Tools for Farmland Protection**

#### **Lots of Noise; Limited Results**

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Policy makers have had some success using conventional tools to protect relatively small areas of special lands (environmentally special, historically special). However, such conventional tools have not been particularly successful for protecting large contiguous areas of farmland from development. So innovative ideas and tools are needed if areas of local agricultural land, and the local agricultural economies they support, are to be maintained in regions under pressure from suburban sprawl.

#### **Agricultural Protection Zoning (APZ)**

- Authorities must be committed for APZ to be effective.
- Frequent and indiscriminate issuance of conditional use permits can negate intent of APZ.
- APZ becomes less effective as economic pressure from sprawl increases.
- Many landowners react negatively to APZ, because they are threatened by any kind of zoning. This is especially true in American West today where citizens feel their personal property rights are threatened from many quarters.

#### **Differential Assessment Programs (DAPs)**

- DAPs are extremely difficult to initiate where differential assessment policies with no penalties for conversion have already been institutionalized.
- DAPs can be costly to local governments (reduces their revenues).

#### **Purchase of development rights (or purchase of conservation easements)**

- PDR programs can be an effective way for state and local governments and other entities (foundations) to protect special lands from development.
- PDR programs generally prohibitively expensive for protection of agricultural lands.

#### **Transfer of development rights (TDR)**

- TDR programs are appealing because they rely on private market activity to protect farmland from development.
- TDR programs are very complicated.
- Data suggest TDR programs do not work well unless they are accompanied with effective agricultural protection zoning. Maybe strongly enforced agricultural protection zoning, on its own, would work as well.



## **Conventional Tools for Farmland Protection Lots of Noise; Limited Results**

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Development and suburban sprawl, when interspersed with farming, can cause farm operations to be sufficiently inefficient to be noncompetitive. This paper includes a brief discussion of selected tools that have been used in the U.S. in efforts to protect farmlands from these intrusions. The tools described in this paper are by no means a comprehensive list of all the tools that are used for farmland protection in the U.S. They are, however, some of the most common land use management tools in use in the U.S., and many of the other tools in use are based on one of the tools discussed here. A much more comprehensive list of land use management tools, along with a great deal of information about each tool listed can be found on the American Farmland Trust Internet website ([www.Farmland.org](http://www.Farmland.org)). Similarly, the state farmland protection programs that are discussed in this paper do not represent a comprehensive list of such programs. However, they are thought to be representative of the types of programs that have been tried in the U.S.

### **Selected Tools for Farmland Protection**

Four major types of farmland protection tools are discussed here. These include agricultural protection zoning, differential assessment programs, purchase of development rights, and transfer of development rights. These tools are critical elements in many farmland protection programs.

#### **Agricultural Protection Zoning (APZ)**

Agricultural Protection Zoning (APZ) is county and municipal zoning that supports and protects farming by stabilizing the agricultural land base. Such zoning identifies areas where farming is the desired land use, and other land uses are discouraged or disallowed in these areas.

#### Benefits of APZ

- APZ is an inexpensive way to protect large areas of agricultural land.
- APZ separates farms from nonagricultural land, thus reducing the likelihood of conflicts between farmers and non-farming neighbors.
- APZ helps prevent suburban sprawl and reduces infrastructure costs.
- APZ is easy to explain to the public because most landowners are familiar with zoning.
- APZ can usually be implemented much more quickly than more complicated programs such as purchase of development rights and transfer of development rights.



- APZ is flexible — if economic conditions change, zoning can be modified as desired. (This may be a drawback if permanent protection of farmland is desired).

#### Drawbacks of APZ

- APZ is not permanent. (This may be a benefit if flexibility is desired).
- APZ can reduce land values, at least in the short to intermediate term. However, if development pressure continues and zoning changes, land values will usually increase in the long term.
- Landowners may react negatively to APZ, because they are threatened by any kind of zoning.

#### **Differential Assessment Programs (DAPs)**

Differential assessment programs involve farmers contracting with local governments to keep farmland in agriculture for defined periods of time in return for reductions in their property taxes on the land. Development of differentially assessed land can only occur when contracts have expired or upon payment of substantial penalties specified in the contracts.

#### Benefits of DAPs

- DAPs are voluntary.
- DAPs provide farmers with an alternative to development that may be financially competitive.
- DAPs are flexible. They allow development to occur if returns are enough to pay penalties.

#### Drawbacks of DAPs

- DAPs are not permanent. (This may be a benefit if flexibility is desired).
- DAPs can be costly to local governments (reduce their revenues).
- DAPs is politically very difficult to put in place in situations where agricultural land already receives preferential tax treatment, but with no quid pro quo.

#### **Purchase of Development Rights (PDR)**

Purchase of development rights, also known as purchase of agricultural conservation easements, involves landowners selling development rights (or conservation easements) to qualified public agencies or private conservation organizations. Landowners retain full ownership and use of their land for agricultural purposes.

#### Benefits of PDR

- PDR programs are voluntary.



- PDR programs can be implemented by state or local governments, or by private organizations.
- PDR programs protect farmland permanently.
- PDR programs provide farmers with a financially competitive alternative to development.
- PDR programs can protect ecological as well as agricultural resources.

#### Drawbacks of PDR

- PDR programs are expensive, thus funds for PDR are generally not enough to keep up with farmer demands to sell easements.
- PDR programs can rarely protect enough land to eliminate development pressure on unrestricted farms.
- Purchasing easements is a complicated and time-consuming process.

#### **Transfer of Development Rights (TDR)**

A transfer of development rights program allows landowners to transfer the right to develop one parcel of land to a different parcel of land to prevent farmland conversion of the parcel from which the right is transferred. TDR programs establish “sending areas” where land is to be protected by agricultural conservation easements and “receiving areas” where land may be developed, but only by adding development rights to parcels on which development is planned. “Sending area” landowners sell development rights to “receiving area” landowners in a private market. When development rights are sold on a parcel, a conservation easement is recorded and enforced by local government.

#### Benefits of TDR

- Participation in TDR programs is voluntary.
- TDR programs promote orderly growth by concentrating development in areas where such growth has been planned.
- TDR programs allow landowners to retain their equity without developing their land.
- TDR programs are market driven. Private parties pay to protect farmland. More land is protected when development pressure is high.
- TDR programs, as they have been enacted, protect farmland permanently.

#### Drawbacks of TDR

- TDR programs are technically complicated and require a significant investment of time and staff resources to implement.
- TDR is an unfamiliar concept. A lengthy and extensive public education campaign may be required to explain TDR to citizens.
- TDR programs, as they have been utilized, are inflexible in that they permanently protect farmland.



## **Review of Selected State Programs**

Most state programs for farmland protection can be classified as focusing primarily in one of four broad areas: 1) Programs relying primarily on agricultural protection zoning, 2) programs relying primarily on tax protection (differential assessment) for agricultural lands, 3) programs relying on purchase of development rights and 4) programs relying on transfer of development rights.

### **Agricultural Protection Zoning in Oregon**

Agricultural protection zoning has worked well, but not perfectly, in many states. Authorities must be committed to agricultural protection for APZ to be effective. Frequent and indiscriminate issuance of conditional use permits can negate agricultural protection. Oregon has had rather strong agricultural protection zoning since 1973. Agricultural zones in Oregon were specified as being exclusively for farm use. As development pressures have increased over time in many parts of Oregon, farmlands have been converted to suburban and to rural residential uses. However, there is evidence that much less conversion has taken place than would have occurred if Oregon's strong agricultural protection zoning had not been in place.

### **Differential Assessment Programs with Penalties for Development of Agricultural Lands in California and Michigan**

Programs in California and Michigan are representative of differential assessment programs for farmland with substantial penalties for subsequent development of such lands. In such programs, farmers contract with local governments to keep farmland in agriculture for defined periods of time. Development of such lands can only occur when contracts have expired or when substantial penalties or buy-out fees are paid. There is evidence that these programs have resulted in less conversion of farmland to suburban and rural residential use than would have occurred without the programs, yet such programs allow conversion of lands that yield sufficiently high returns to development to pay conversion penalty costs.

### **Purchase of Development Rights Programs in Pennsylvania and Washington**

Purchase of development rights (or conservation easements) programs have been used in many states. Programs in Pennsylvania and Washington seem to be representative of successful purchase of development rights programs, and will be discussed here.

In Pennsylvania, purchase of development rights first occurred in 1980. Through 1998, development rights were purchased, mostly by the State of Pennsylvania and local governments, on 123,423 acres. Pennsylvania farmers continue to have much interest in participating in the program. However, its growth has been greatly restricted by limitations in funding.



A somewhat similar program of purchase of development rights was initiated in King County (Seattle) in Washington in the 1970s. A goal was set for public purchase of 30,000 acres of development rights on agricultural land. However, only 12,500 acres of such rights had been purchased through 1998.

Clearly, purchase of development rights programs are greatly limited by the availability of funds to make such purchases. Consequently, such programs seem to work best for protecting lands of special importance (environmentally important, historically important, esthetically important, etc.), rather than for protecting that part of an economy's economic base that is related to agriculture.

### **Transfer of Development Rights Programs in 16 States**

Transfer of development rights transactions have occurred in at least 16 states since 1972. In many of these states, transfer of development rights programs have not been accompanied by agricultural protection zoning.

From the time the first transfer of development rights transactions occurred in the U. S., through 1998, only about 67,700 acres of farmland were protected. It seems that all of this land is under permanent protection. That is, under existing programs, when development rights are transferred away from a parcel of land, that land has a permanent easement prohibiting development. Of the approximately 67,700 acres that were protected under transfer of development rights programs in 1998, about 40,600 were in Montgomery County, Maryland. Montgomery County, Maryland, has one of the few transfer of development rights programs in the nation that is accompanied by agricultural protection zoning. This strongly suggests that for transfer of development rights programs to be successful, they must be accompanied by strong agricultural protective zoning.

### **Conclusions**

Agricultural protection zoning has worked well, but not perfectly, in many states. Authorities must be committed to agricultural protection for APZ to be effective. Frequent and indiscriminate issuance of conditional use permits can negate agricultural protection. So, as economic pressure for suburban sprawl increases, APZ often becomes less effective. In addition, many landowners react negatively to APZ, because they are threatened by any kind of zoning. This is especially problematic in times and places (American West today) where citizens feel their personal property rights are threatened from many quarters.

Differential assessment programs with substantial penalties for conversion of agricultural lands for development can be a useful tool for protecting farmland. However, it would be extremely difficult to initiate such rules and policies in many of today's agricultural states, since differential assessment policies with no penalties for conversion have been institutionalized in most such states since the 1970s. It would be politically very difficult



to change such policies now to penalize landowners who convert farmland out of agriculture.

Purchase of development rights (or purchase of conservation easements) can be a very effective way for state and local governments and other entities (foundations) to protect special lands from development. However, the use of such programs to protect agricultural lands in general has proven to be prohibitively expensive. Purchase of development rights type programs are working rather well now to protect special lands in many states, but seem to have little potential for protecting large areas in agriculture.

Transfer of development rights programs are very appealing because they rely on private market activity to protect farmland from development. There is good evidence, however, that such programs do not work very well unless they are accompanied with effective agricultural protection zoning. Probably an argument could be made that strongly enforced agricultural protection zoning on its own might protect farmlands as effectively as transfer of development rights. Even when accompanied with agricultural protective zoning, transfer of development rights programs are very complicated. This may make establishing and maintaining functioning markets for transfer of development rights fairly expensive.

Another issue that should be considered by policy makers as they evaluate transferable development rights programs is the fact that lands protected by TDR programs are generally thought of as being protected permanently. It is conceivable that a TDR program could be enacted for a limited period of time, or that protection for land in a particular area could be lifted by a change in zoning. TDR programs with such flexibility would still be market based and fairly equitable, assuming that, when protection ends, previously protected land could only be developed if it had necessary development rights attached to it. To develop previously protected land, owners would be required to purchase rights elsewhere, including those needed to replace rights sold previously.

Literature review by this author identified no cases where such systems of flexible transferable rights have been enacted elsewhere. So there is probably no model "to go by." It would be necessary to develop rules for such a system "from scratch." This surely increases the likelihood of legal problems and unintended consequences.

Certainly a system of flexible transferable development rights (FTDR?) would be extremely complicated and difficult for the public to understand. It might also be very costly (staff time and legal costs) to establish such a system.

Policy makers have had some success using the tools discussed herein to protect relatively small areas of special lands (environmentally special, historically special). However, such conventional tools have not been particularly successful for protecting large contiguous areas of farmland from development. So innovative ideas and tools are needed if areas of local agricultural land, and the local agricultural economies they support are to be maintained in regions under pressure from suburban sprawl.



## References

- American Farmland Trust. "Fact Sheet – Agricultural Conservation Easements." Farmland Information Center, Washington, D.C. Sept. 1998.
- American Farmland Trust. "Fact Sheet – Glossary." Farmland Information Center, Washington, D.C. Sept. 1998.
- American Farmland Trust. "Fact Sheet – Purchase of Agricultural Conservation Easements." Farmland Information Center, Washington, D.C. Sept. 1998.
- American Farmland Trust. "Fact Sheet – The Farmland Protection Toolbox." Farmland Information Center, Washington, D.C. Feb. 1999.
- American Farmland Trust. "Fact Sheet – Transfer of Development Rights." Farmland Information Center, Washington, D.C. Jan. 2001.
- Criss, Jeremy. "Farmland Preservation Options in Montgomery County, Maryland – Transfer of Development Rights," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998..
- Druffel, Sarah M. and Paul W. Barkley. "Is Selling Development Rights a Wise Economic Decision?: The Case of King County, Washington," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.
- Kelsey, Timothy M. and Stanford M. Lembeck. "Purchase of Conservation Easements for Farmland Preservation: Pennsylvania's Experience," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.
- Liberty, Robert. "Oregon's Farmland Protection Program," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.
- Nelson, Arthur C. "Farmland Preservation Policies – What Works, What Doesn't and What We Don't Know," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.
- Norgaard, Kurt J. "Twenty-Four Years of Farmland Preservation in Michigan," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.
- Trott, Kenneth E. "Impacts of the California Land Conservation Act," Proceedings – The Performance of State Programs for Farmland Retention, A National Research Conference. Columbus, Ohio. Sept. 1998.