Chapter I. Introduction

1.1 The Impetus for this research:

Open space and productive farmland in the United States is rapidly giving way to sprawl-type residential and service sector development.\(^1\) Several demographic and economic trends have caused, and could accelerate this transfer of lands in the near future. First, increasing population and a continued American proclivity for urban flight combined with various governmental incentives, such as transportation subsidies and zoning laws, have resulted in continued sub-urban sprawl. Second, the service sector has experienced the largest amount of expansion compared to other sectors of the economy, such as the manufacturing and construction sectors\(^\text{2}\) during the economic boom of the last decade. This service sector expansion has caused large tracts of land to be taken over for regional malls and restaurants. Third, the average age of the American landholder is increasing. These factors working together cause the loss of farmland, rural landscapes, and related amenity values as development extends further from older central cities and new urban centers.

Sprawl can be defined as low-density development on the edge of metropolitan and urban areas that separates where people live from where they shop and work.\(^2\) Sprawl-type development necessitates the use of automobiles to move between zones for these activities increasing highway congestion and air pollution as need for commuting increases. The benefits of suburban residence include an increased perception of personal security and availability of spacious land parcels. However, studies have conclusively shown that sprawl tends to erode the tax base of local governments to pay for additional infrastructure to service a more dispersed population.\(^3\) Maryland Governor Glendening reportedly stated that while 63 Baltimore area schools were closed over 20 years because of declining enrollment, 67 schools (at an average cost of $12 million) had to be built in nearby areas; and the total number of students declined by 10,000.\(^4\)

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\(^1\) Small, S. 1998
\(^2\) Whyte, W.H. Jr. 1957
\(^3\) Robinson, S.K. 1990
The current period of economic prosperity in the United States has allowed a larger percentage of the population the financial means in which to achieve the goal of residence in the sub-urban fringe. These trends have resulted in increased demand for sub-urban open-space land and subsequently, services for families living in the expanding fringe. Demand for some services, such as transportation and school infrastructure services arise before the tax base has expanded to pay for them. Also, some forms of development, such as new single family homes, can generate more demand for services than tax revenues.\(^5\) Under these circumstances, the pressure is substantial to attract development that serves local demand and grows the tax base. This is, in part, the cause for such dramatic expansion of the service sector.

Opposition has recently intensified over the proliferation of large regional malls, department stores and restaurants that have been built to access growing consumer markets in the sub-urban fringe. The economic viability of small-town centers has been undermined through this expansion. Those opposing regional shopping complexes argue that a city’s character is destroyed when shoppers are drawn from locally owned stores and restaurants to the larger regional malls, causing a loss of community identity.\(^6\) Their concerns are exasperated by the large municipal expenditures necessary for infrastructure to accommodate these new commercial centers.

Furthermore, many are concerned that if and when this period of economic prosperity slows, the economic viability of the department stores might also end. The subsequent use of these commercial structures after the department stores have vacated is questionable, while the open-space and farmland taken to construct the facilities would be very expensive to reclaim.

\(^5\)Zinn, J. 1999
\(^6\)Ibid, Zinn 1999.
These trends are occurring in the United States at a time when the average age of the farm landholder is increasing.\textsuperscript{7} An aging landowner demographic suggests an impending occurrence of landowner deaths and subsequent estate turnovers that contain land parcels. It is estimated that almost 50\% of the farmland in the United States will change hands in the next 20 years in the form of estate transfers.\textsuperscript{8} The economic viability of the agricultural sector has not kept up with the expansion of the rest of the U.S. economy. The average on-farm income of the American farmer has decreased over the last decade, deterring the heirs of a farm estate from continuing the farm enterprise when faced with the opportunity cost of not selling the land to development interests. In many regions of the U.S., these factors have combined to create a land market with large amounts of high priced land that is likely to change hands in the near future.

On an individual landholder level the result of high-valued land is an estate turnover that is subject to federal estate tax. The heirs of an estate often find themselves unable to pay the taxes. This is in light of the fact that while federal income taxes have steadily diminished in the last 15 years, estate taxes remain very high. While the highest income tax for individuals is 39\%, an estate worth $4 million can be taxed at 55\%.\textsuperscript{9}

Demographic profiles of many US landholders support the description: ‘land rich and cash poor’.\textsuperscript{10} Due to current estate tax laws, even if the family wants to retain ownership of the land in present use, the heirs might be forced to sell the land, or a portion of it, to pay the estate taxes. As development value brings the highest returns and the family’s disassociation with the land diminishes the utility it derives from its use, economic rationality results in the land being sold to development interests.

Furthermore, there is often a problem with adjustments for the ‘buyout’ of estate holdings held by off-farm siblings. A land parcel that is held by several siblings, while only one remains on the parcel operating a farm causes this situation. The income the

\textsuperscript{7} USDA 1997 census data
\textsuperscript{8} Ibid, Small 1998.
\textsuperscript{9} US Tax Code –this figure is tax at the margin, $625,000 being the threshold of estate taxation in 1999, phased to $1 million in 2006.
farming sibling can earn from agricultural production is not sufficient to purchase the full (development value) land value from the off-farm siblings. The off-farm siblings are often not willing to sustain an economic loss to keep the land parcel in agricultural production. These market factors are causing land to be sold to development.

The public good value of farmland warrants explanation. Agricultural land can serve many vital environmental purposes. In addition to providing open space, it offers a habitat for wildlife and resting grounds for migratory birds. Agricultural land can function as natural drainage and water recharge areas. Open lands enable dispersion and cleansing of air pollution and can provide windbreaks. Conversion to developed uses reduces the area’s natural environmental support system at the same time that it increases pollution. Intensive farming, fertilizing and pesticide usage can offset some of the environmental benefits of maintaining land in agrarian uses, as can the conversion of wetlands to agricultural use. Aesthetic benefits are also associated with land left in open space or farmland use.

As a result of heightened popular concern, governmental organizations have been more active in the retention of open-space and farmland. Local bond referendums financing open-space retention have experienced great success. Local governments have responded to their constituents by modifying zoning ordinances and purchasing open-space for parks and scenic amenities. Sprawl Watch Clearinghouse, which supports growth management efforts, reported that in the 1998 elections over 100 initiatives were passed to control sprawl. Many of these initiatives were heavily funded. If all the approved ballot initiatives are fully funded, the public commitment will approach $7 billion, raised through the sale of bonds and lottery tickets, and increased taxes. “One possible explanation for this magnitude of support is the expanded acceptance of using

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10 Ibid, Small. 1998
11 Buist, H. 1995
12 Sprawl Watch Clearinghouse. Americans Demand Smart Growth at the Polls. Press release, November 6, 1998. This figure is corroborated by the Washington Post 1/11/99, page A2
tools that have greater fiscal flexibility and that allow alternatives to purchasing land outright, such as conservation easements.”

Executive agencies in the federal government such as the Natural Resource Conservation Service (NRCS) in the United States Department of Agriculture (USDA) have increased funding requests for the retention of open-space and farmland through such initiatives such as the Land and Water Conservation Fund (LWCF). In November 1999 Republican and Democratic members of the U.S. House of Representatives reached agreement creating a permanent $900 million per year revenue source for the LWCF as well as an additional $3 billion bill to fund national conservation and preservation programs.

Over the last decade, efforts to preserve the habitats of endangered species has led to land retention achievements by special interest groups. Sportsman groups such as Ducks Unlimited have begun to acquire land parcels important to duck habitat. Land trust organizations such as American Farmland Trust and the Land Trust Alliance, and environmental conservation organizations such as the Nature Conservancy have continued to be active in the purchase of land parcels and land development rights with sensitive environmental attributes.

There is a large amount of funding being created at the local, state, and federal levels by government and private organizations for land preservation. It is important for these funds to be used in the most effective manner possible.

This thesis proposes a method through which organizations can motivate landowners to maintain their land in open space and farmland uses in an economically viable way. This thesis poses the question, If a landowner wishes to preserve their land,  

14 Ibid, Zinn. 1999
15 Ibid, Zinn. 1999
16 The Conservation and Reinvestment Act of 1999
17 http://www.ducks.org/conservation/easement.asp consulted 12/21/1999
18 Weibe, Tegene, Kuhn, 1996: page 5
how completely can they be financially compensated? As the public funding increases for this goal, could the public get more land preservation with less strain on the tax base?