THE EFFECTIVENESS OF DIFFERENTIAL ASSESSMENT
AS A LAND USE CONTROL

by

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Chapter 1

INTRODUCTION

The urbanization statistics of our nation may give the false impression that we need not fear urban and suburban expansion. Only 1.5 per cent of our country's land is urbanized, yet urban land use has increased more than 25 per cent during the 1960-1970 decade and is presently greater than 2 per cent per year. The loss of rural land is visible around cities, and there is increasing public concern over the decrease in agricultural land and open space. This research focuses on one political tool that has been designed to guide and direct rural to urban land use conversion: differential assessment.

Urban Encroachment and Land Value Changes

The population of the United States has almost tripled since the beginning of the century. This rapid growth has been accompanied by a massive redistribution of the people from rural areas to cities. In 1900, less than 40 per cent of the population resided in urban areas. In 1970 the figure was almost 75 per cent, with 58 percent living in urbanized areas. Although population concentration has occurred at the national scale, there has been decentralization at the metropolitan scale. Since 1950, the majority of urban growth has taken place outside
the central city. Between 1960 and 1970 the population of the central cities increased 6.4 per cent, while the suburban population increased 26.7 per cent. In 1970, densities in the fringe areas were 40 per cent lower than those inside the central cities. Metropolitan areas are encompassing more area at a decreasing density rate.

Rising income levels, preference for single-family dwellings, and federally financed housing programs have precipitated the sprawl of urbanized areas. The sprawl has not been continuous and even, but rather patchy and scattered. Heavy demand for houses and services, combined with the independence of decisions among many competitors, resulted in hasty investments and developments.

Two major costs provide the incentive for land investments; relative costs and administrative costs. The cost of the land in the fringe area, relative to lands closer to the central city, is usually cheap. Land prices generally decrease with greater distance from the central city. The price of land for residential use falls until it reaches the value of land for some alternative use such as agriculture or recreation. Administrative costs, those costs that are associated with the actual purchase of the land, also stimulate land purchases outside the contiguously developed areas. Developers are able to purchase larger, single, tracts of land involving fewer negotiations than they could within the city. The more distant undeveloped and
mostly agricultural lands are purchased with the intent to develop. Often parcels are purchased relatively cheaply and remain undeveloped because the landowner anticipates increased land values that will allow greater intensification of land use.

Lands held for speculative purposes are not available to developers. Speculation and competition for land results in "leapfrog" development. The actual and anticipated sprawl, i.e., the initial increase in speculative demand, inflates land values at the fringe area where conversion is expected. Expected future resale value is the basis for all property valuation, but the magnitude of expectations is greater for undeveloped suburban land than for most real estate.

Problems Associated with Land Value Changes

Land value changes associated with urban sprawl present a number of problems for communities in the fringe areas. One concern is the issue of public finance. When market value assessment is used to determine shares of the taxes paid, the fringe land owner will ultimately pay higher taxes than he did previously. Agriculturalists argue that they receive an unfair burden of property taxes when their land is assessed at its developmental value rather than present use. Rising farmland values and relatively stagnant farm incomes have increased the farmer's burden. The average value of farmland
in 1950 was $46 per acre. In 1972 the average value was over $250 per acre. In terms of real or constant dollars, between 1950 and 1972 farmland value doubled, while net farm income actually declined. Nationally, the average farmer pays seven per cent of total personal income for property taxes or twice the percentage of the urban dweller. Increased assessed values of agricultural land at the urban fringe further increases the farmer's tax burden. Developments surrounding existing agricultural land require municipal services.

Sporadic development leads to higher tax rates because of the inefficiency of service and utility costs. Agricultural landowners are taxed on increasing land value at an increasing rate while income remains constant, to provide services that were hitherto unnecessary. It has been estimated in 1970 that in discontiguous residential development the provision of services costs an average $150 per family more than in contiguous residential development.

Agricultural interests further claim that higher and inequitable property taxes promote premature conversion from agriculture to other uses. Higher tax levels are perceived to force the intensification of land use, probably to levels that require an urban-oriented use, which may encourage abandonment of farming.

Fundamentally more important, the higher values and tax levels that are induced by urban sprawl promote non-optimal
allocation of land. Negative social, environmental, and economic consequences result from urban sprawl and speculation. The absolute loss of agricultural land, often prime, flat-lying cropland is one such concern. Although long-term predictions suggest we are not in immediate danger at the national level, aggregate statistics mask major changes in individual states or regions. For example: Michigan, New York, and New Jersey have lost 21, 24, and 34 per cent of their respective farmlands since 1950. Furthermore, much of the agricultural land converted to urban use is the most productive in terms of soil grade, irrigation potential, and inherent fertility. As global food demand and concern for preservation of agricultural resources grows in the future, loss of agricultural land will be of critical importance for not only the nation, but for the entire world.

The conversion of agricultural land also impacts the surrounding community. Visually, aesthetically pleasing open space disappears. Wildlife habitats in the field margins are lost. Structures and pavement increase run-off and cause micro-climatic changes.

A large amount of vacant land results from speculation. Anticipated increase of land values reduces the impetus for immediate development or sales. Thus, the opportunity costs, the costs associated with holding the lands for future gain as compared to what could be realized in present alternative
investments, are high. This could inhibit development or renovation of available urban land.

Rural land conversion has several advantages. It has provided many people with pleasurable living environments. The process has also benefitted builders, developers, and entrepreneurs. The disadvantages of the conversion process, however, demand scrutiny.

**Land Use Controls**

The problems associated with urban sprawl and changing land values have been tackled by the use of land use controls. Although land use controls are a recent step, a multitude of policies and control measures are being experimented with. A land use control may be defined as all those governmental actions, which directly or indirectly, have a substantial impact upon the use of the land.\(^{21}\) Platt identifies three major avenues of public intervention in private land use decisions: acquisition, regulation, and persuasion.\(^{22}\) Williams adds to the list all public action in planning and building of public works, in particular the location of sewers and highway interchanges.\(^{23}\)

Land use controls, the object of much heated debate and legal attack, are gradually being adopted and expanded. The range of new ideas and approaches reflect the evolutionary changes in land use controls since the early 20th century.
One study claims a subtle revolution has already taken place in land use control devices and the future portends changes of even greater magnitude.\textsuperscript{24} It is becoming apparent that the traditional principles and values under which existing land use controls have operated are not adequate.\textsuperscript{25} Current control practices demand a critical reevaluation of their ability to articulate the purpose they intend to serve.

\textbf{Regulation}

Regulatory tools include health regulation, building codes, subdivision regulations, wetland/floodplain regulations, and zoning. All can be implemented at the state, but are primarily instituted at the local level, particularly zoning.

Zoning is the predominant regulatory tool local governments can use to control development within its borders, and as some have argued one of the least effective.\textsuperscript{26} Prior to the 1920's few municipalities experimented with zoning other than eliminating slaughter houses and gun powder storage areas from neighborhoods. State enabling legislation became common in the 1920's and by 1925, 19 states had given municipalities specific authority to zone.\textsuperscript{27} In 1926 the U.S. Supreme Court's landmark decision of \textit{Village of Euclid vs. Amber Realty Co.} (272 U.S. 365, 1926) upheld the constitutionality of zoning.\textsuperscript{28} During the next 50 years it was the major local land use regulation.
Several criticisms may be directed toward zoning. Although municipalities are delegated authority to zone through state enabling legislation, they are not required to zone. The effective potential of zoning exists, but it is not mandated.

The foremost rationale for implementing zoning is to reduce the negative externalities of incompatible land uses. In order for zoning to be constitutional it must be determined reasonable and necessary to protect the public health, welfare, and safety. It has been argued that zoning has had more success in protecting the private land values of some at the expense of decreasing the land values of others. If constitutional rights of the people are protected, the community is stripped of its power to regulate and guide land development in a comprehensive plan and the public at large may suffer long-term consequences from the affirmation of private rights in land. A compensation system to supplement zoning may reduce the unreasonable (and unconstitutional) burden where severe regulations are determined necessary.

Zoning is also open to legal challenge. In the absence of strict land use planning, dedicated interest groups or persons can initiate the legal action necessary for rezoning. It has also been argued that some municipalities have zoned to optimize their fiscal position. Fiscal zoning, as it is called, has been used to zone for more profitable development (those that will contribute more to the city revenue) and not
provide for necessary, but less profitable development.\textsuperscript{31} In such cases it is questionable whether zoning is reasonable and necessary to protect the public health, welfare, and safety.

Unless legislation is enacted to authorize cities to extend their zoning powers beyond their political jurisdictions, areas in the fringe may not be subject to any strict regulation. Local zoning efforts are inadequate to cope with problems that are statewide or regionwide in scope, such as rural to urban land use conversion. Zoning effectiveness could be improved if the level of implementation matched the magnitude of the problem.

Presently three states; Vermont, Maine, and Hawaii have enacted statewide land regulatory systems.\textsuperscript{32} Although the legislation of the three differs dramatically, all include statewide development provisions. Statewide land use planning has met with greatest success in Hawaii. The Land Use Law, instituted in 1961, zoned the entire state into four categories: urban, rural, agricultural, and conservation. The four types of districts determine how land use is regulated by the county.

At present there is no national legislation directed towards land use regulation, though such legislation appears imminent. Legislation has been proposed in the Senate (March 6, 1975 by Senator Henry M. Jackson, D-Washington) and in the House
(February 20, 1975 by Representative Morris K. Udall, D-Arizona). The proposed bills are substantially similar and are designed to encourage and support the establishment of effective land use and management programs by states. The legislation would act as a guidance rather than as a regulatory tool. However, as of December, 1978, there still is no such legislation.

Other national legislation that affects the use of the land include, but are not limited to: National Environmental Protection Act (1969), Coastal Zone Management Act (1972), Technology Assessment Act (1972), and the Flood Disaster Protection Act (1973). All have a significant impact on land use.

Additional regulatory tools that local municipalities have used to guide or thwart development include: building and sewer moratoriums, amenity requirements, building codes, carrying capacity, conservation zoning, environmental controls and standards, down-zoning, exclusive districts, height restrictions, population caps, and timing-phasing. There have, however, been several court litigations concerning the extent of local autonomy for controlling usage of the land. The constitutionality of many regulatory tools has been questioned and in many cases remains unresolved.
Acquisition

One of the most effective ways for political entities to control land use is to own it. Land may come into the possession of the local political entities through direct purchase, eminent domain, gifts, or tax defaults. Public acquisition could either inhibit or encourage leapfrog development because the land may or may not be developed, leased or sold sooner than if it were in private hands. However, the increased value of the fringe lands may become too high for purchase by the local government. 35

Land received as gifts is the easiest way for the public to acquire land. The value can be deducted from the owner's taxable income, thus there is an incentive to forfeit undeveloped land to the public. The donated parcels of land, however, may not be in desirable locations for public control or of beneficial use to the community.

Tax-delinquency is responsible for some lands coming into the possession of public ownership. Usually the tax delinquent properties are poorly located or scattered randomly and may not benefit a comprehensive land use plan.

Eminent domain is central to many public programs such as highways and urban renewal. However, unlike direct purchase or gifts, eminent domain is compulsory. Land can be taken from private to public ownership, if just compensation is given. The process is generally more costly and time-consuming than
other acquisitive techniques.

**Incentive**

The third avenue of public land use control is persuasive or incentive techniques. Incentives can take the form of: income tax deductions, location of roads and sewers, density bonuses, taxation of capital gains, transferable development rights, and differential assessment. All provide an economic incentive to develop or not to develop.

Income tax deductions and density bonuses may encourage intensive development in the city rather than low density residential development in the fringe area. Capital gains tax could have a negative impact on development and further encourage speculation. A land buyer may withhold land from development until a high density use would be profitable.

An innovative approach to incentive land use controls is transferable development rights. Development rights are the rights an owner has to change or intensify the use of the land. They are analogous to mineral rights, i.e., they are severable from the fee simple ownership rights of the land. Under a comprehensive plan, an absolute amount of development rights are allocated and distributed throughout the particular area. Development rights may be bought and sold from one landowner to another. An owner may be encouraged to maintain undeveloped land if a profit can be made from the sale of
development rights.

Another persuasive alternative is differential assessment. Differential assessment allows specified lands to be assessed according to their current use-value rather than their market value. Differential assessment generally applies to farmland, although some states include open space land, forest land, or lands of historic, scenic, or ecological value. The legislation is intended to reduce the artificially increased property values in the transition zone created by sprawl and speculation.

Differential assessment laws may be classified into three categories: preferential assessment law, deferred tax laws, and restrictive agreements. Preferential assessment is valuation according to current use. No penalty is imposed if the land is subsequently converted to another use. "Circuit breaker" and classified property taxes may be factored into preferential assessment. Circuit breakers allow payments that exceed a certain percentage of income to be deducted from state income taxes. Classified property taxes specify a fixed property tax/income ratio. Tax exemptions and rate limitations, which put a lid on the assessed payment per acre have also been incorporated.

Deferred taxation assesses eligible lands according to use-value, but a penalty (rollback) tax is levied against the owner when the use changes. The tax usually equals the amount
of the taxes assessed based on the new use for a specified number of years (ranging from 2 to 15).

Restrictive agreements involve a pact with the landowners and the local government. The landowner agrees to maintain current use of the land in exchange for preferential assessment. Change in land use must be petitioned in addition to payment of rollback taxes. Currently 43 states have adopted some form of differential assessment legislation. Several others have the legislative ability to enact such laws.

STATEMENT OF THE PROBLEM

This research concentrates on one type of land use control: differential assessment. The objective of differential assessment is twofold: to provide tax relief for the farmer and to preserve and direct desired land use. 

Advocates for differential assessment claim concern for the farmers high tax burden resulting from increased value in the urban fringe areas. The second objective is to thwart conversion of socially and environmentally valuable lands to alternative uses. This research focuses on the latter concern. Specifically, it answers the question: will differential assessment significantly affect land use in the rural-urban transition zone with reference to the Kansas situation? This is more than an academic question since Kansas recently approved a constitutional amendment that will allow the
legislature to enact some form of differential assessment. Thus, it is necessary to first answer the following questions: Why experiment with differential assessment in Kansas? What are Kansan's expectations of differential assessment? and furthermore, are these expected outcomes realistic when compared to the likely outcomes?

Kansas has few urbanized areas, less conversion pressures than many states, and agriculture is the most important component of the economic base. Given this setting it is hypothesized that differential assessment will have no significant effect on land use. Preferential assessment without rollback taxes or penalties will not guarantee agricultural use of the land.

Deferred taxation with short-term rollback taxes will also be ineffective. Penalties amounting to taxes of two to five years is likely to be an insignificant cost in selling the land. It is possible that deferred taxation may encourage speculation. Speculators and prospective developers may purchase land and then lease it back to the agriculturalist. The land will remain in agricultural production and qualify for preferential assessment, while the owner awaits increased valuation. If and when the value rises and development is profitable, a rollback tax may prove to be an insufficient deterrent.

Restrictive agreements will not hinder land conversion.
Only those farmers far removed from rural to urban conversion pressure zones who are certain they will not convert their land, will apply for such assessment. Restrictive agreements may offer tax relief to farmers far removed from the transition zone, those that would remain in farming regardless, and not significantly affect land conversion in the areas most desirous of control.

It is also expected that the perceptions of Kansans on differential assessment will be found unrealistic. Differential assessment may be inaccurately perceived as a land use control in the absence of, or as a substitute for, a statewide comprehensive land use plan.

METHOD OF APPROACH

The research problem will be resolved in a four-part approach. First, the theoretical context, i.e., the rationale for adopting differential assessment as a land use control will be articulated through a comprehensive literature review. The next step will be an evaluation of the effectiveness of differential assessment as a land use control based on the success in other states. This will be followed by an investigation of the expectations provoking the experiment in Kansas. This will be determined in a general sense from the public record and selective interviewing throughout the state.

Having articulated the theoretical situation and the basis
for the Kansas experiment (expectations) the probable effects will be argued drawing upon the record in other states.

JUSTIFICATION

Geographers are students of the spatial organization of human activity. They have long been concerned with the processes that shape the landscape. Differential assessment is an example of how the political process may be used in an attempt to guide or direct landscape organization. Here, the endeavor is to analyze one mechanism of land use control whose purpose is to produce an allocation of land use that is more socially desirable in the sense of equity, productivity over the long-term, and to achieve other environmentally desirable objectives. Increased awareness of the processes that give rise to land use patterns can offer valuable insights into policy formulation.

PLAN OF STUDY

The theoretical basis for differential assessment is articulated in Chapter Two. Chapter Three analyzes the effectiveness of the three types of differential assessment through other states' experiences. Chapter Four provides a justification for experimentation in Kansas and the probable outcomes based on the empirical record in other states. Chapter Five summarizes and concludes the study. Policy
implications and relationships to land use planning are assessed.
Footnotes - Chapter One


3. An urban area is defined as an incorporated area with at least 2,500 people.

4. An urbanized area is defined as a closely settled territory that includes a central city or cities of 50,000 or more. Hart, op. cit., p. 9. ' 

5. A central city is defined as the larger city or cities in a standard Metropolitan Statistical Area. It has a population of at least 50,000.


22. Platt, op. cit., p. 16.

23. Williams, op. cit., p. 29.


26. Williams, op. cit., p. 29.

27. Ibid., p. 21.


29. Ibid., p. 21.

30. Ibid., p. 21.


32. Bosselman and Callies, op. cit., p. 3.

33. Ibid., p. 7.


35. Isberg, op. cit., p. 156.


37. Ibid., p. 6.
Until recently real estate or property taxation was used solely as a means to generate local public revenue. During the past two decades, however, it has also become a tool for achieving non-revenue objectives such as directing urban development on agricultural land. Differential assessment provides for the levy of real estate taxes on the basis of the agricultural production value of farmland rather than on the market value for which it could be sold for non-farm uses. It represents a deviation from the central concept of "ad valorem" property taxation which assumes that all properties should be assessed at a uniform proportion of market value.

The objectives of differential assessment are twofold: ease the tax burden of farmers and preserve agricultural lands. In reality the first objective appears to override the second, although the two are interrelated. Attainment of the first objective leads to the achievement of the second although it doesn't guarantee it.

In the rural-urban fringe the value of agricultural land is increasingly a function of potential development. The land value is bid up by developers, investors, and speculators who are willing to pay more than the land is worth in agricultural
use because they can develop and sell it for a profit. The appraised values of the land will rise accordingly as the development value increases. Thus farmer's taxes consequently increase even though economic surplus from food production remains the same. The additional tax burden may raise the cost of maintaining a farm to levels greater than the farmer can afford. Farmers who resist selling their land often find themselves the victims of higher property tax assessments. Higher taxes decreases their funds for capital improvements and investments necessary to maintain a farm, and forces them to sell out eventually as the upkeep of the farm goes down.³

Farmers are producers of two entirely different classes of goods for two markets: agricultural commodities and development sites.⁴ The common link between the two commodities is the farmers' land. In rural areas where agriculture is the only commodity the land can produce, the value of the land is defined by its economic rent. The property tax is administered according to the land's assessed agricultural use value and is a percentage of net income (or surplus) from the land.⁵

In theory, differential assessment is not seen as a subsidy to farmers, but as a method for relieving the pressure of high taxes which increase the probability of selling farm-land for urban development.⁶ The laws are intended to alleviate the pressure by ignoring the development value of
the land and re-establishing the agricultural economic surplus as the basis of the real property tax. The tax relief would provide more income for the farmer than he would have in the absence of taxation of the development value of farmland, permitting him the ability to survive in the farming business.

HISTORY OF DIFFERENTIAL ASSESSMENT LEGISLATION

Maryland was the first state to adopt a differential assessment law. After a veto in 1955 by the Governor, preferential assessment legislation was enacted in 1956.7 Preferential assessment laws, modeled after Maryland's, were subsequently adopted by Florida in 1959, Indiana in 1961, and Connecticut in 1963.8

Hawaii was the first state to consider and pass a deferred taxation law. Following its enactment in 1961, Oregon and New Jersey passed similar legislation in 1963 and 1965 respectively.9 California was the forerunner in adopting the most stringent of differential assessment laws. The California state legislature approved a restrictive agreements law, known as the Williamson Act, in 1965.10

During the first nine years of differential assessment history, only eight states had initiated legislative action to allow agricultural land to be assessed at its use-value (Figure 1). The fresh legislation, like most new laws, was soon questioned in the courts. Most states' constitutions
contain provisions that require uniformity, or equal treatment, in levying property taxes. Thus differential assessment appeared to be in direct conflict with the constitutional requirement because it allowed for special assessments for classified lands.

The constitutionality of differential assessment was first brought to court in Maryland. In 1960 Maryland's preferential assessment law was found to be in violation of the uniformity rule and consequently declared unconstitutional. Later the same year the state constitution was amended to permit differential assessment of agricultural lands. Subsequent passage of differential assessment legislation by other states carefully bypassed the constitutional question by initially amending the uniformity requirement. Since 1960, twenty states altered their state constitution prior to the enactment of such legislation.

From 1966 to 1970, seventeen states enacted differential assessment legislation (Figure 2), increasing the total number to twenty-five. Unlike the first ten-year period of differential assessment history, preferential assessment did not dominate. Less than half (seven states) of the legislation passed between 1966 and 1970 were of this type, increasing the total preferential states to ten. During the same time period the popularity of deferred taxation began to rise. Eight states initiated legislation of this type and one state (Maryland)
Figure 2

STATE ADOPTION OF DIFFERENTIAL ASSESSMENT LEGISLATION BY TYPE, 1956-1970

- Preferential
- Deferred Taxation
- Restrictive Agreements
even altered their existing preferential law into one of deferred taxation. By the end of 1970, a total of thirteen states, or slightly over half of all states with differential assessment legislation were of the deferred taxation type.

Between 1966 and 1970, only Vermont passed a restrictive agreements law, bringing the sum total of restrictive agreements states to two.

By the end of 1970, twenty-five states had passed some form of differential assessment legislation. Of these twenty-five states, ten had created preferential assessments laws, thirteen adopted deferred taxation laws, and two instituted restrictive agreements laws.

Since 1970, eighteen additional states have passed differential assessment laws. At present there are forty-three states that have these laws (Figure 3). Five have added to the preferential list. Twelve contributed to the total deferred taxation states while one changed from preferential to deferred taxation. One more state joined the two existing restrictive agreements states. Currently fourteen states engage in preferential assessment. Deferred taxation, by far the most popular form of differential assessment, has had legislative success in twenty-six states. The poorest reception of the three types has been restrictive agreements. At present only three states provide restrictive agreements programs for agricultural lands.
PROVISIONS OF STATE DIFFERENTIAL ASSESSMENT LAWS

Following the decision to adopt one of the three types of differential assessment legislation, fundamental decisions must be made concerning the definition of use value and participation eligibility. The first question that must be answered is: who is eligible?

ELIGIBILITY CRITERIA

Careful consideration should be given to eligibility as it effects who benefits from the laws. Ideally differential assessment legislation is meant to assist the bona fide farmer. The preferential tax treatment is given in hopes that the farmer will maintain his land in agricultural production. Therefore, it is desirable to provide enough tax incentive for the farmers, the intended beneficiaries, while discouraging the unintended beneficiaries like land speculators, developers, and sub-dividers from converting agricultural lands to urban uses. This problem has been approached by incorporating specific eligibility criteria into the legislation.

Eligibility criteria include: minimum farm income, history of eligible use, minimum length of tenure within family, minimum size, and compliance with planning or zoning specifications. The provisions elected by each state are classified in Table 1.
Minimum Income Requirement

A cursory glance at Table 1 reveals that the preferential states are more lax in their requirements than deferred taxation states. Of the fourteen states that provide only preferential assessment, only two require a minimum income to be derived from agricultural production. Eleven of the deferred taxation states have such a requirement. None of the restrictive agreements states require a minimum income.

The minimum income requirement is generally based upon annual gross receipts, certain amount of income per acre, or a minimum percentage of the farmer's total income derived from agricultural production. The minimum gross income requirements range from $100 in New Mexico,\textsuperscript{14} to $500 in Oregon,\textsuperscript{15} $1000 in North Carolina,\textsuperscript{16} $2000 in Pennsylvania,\textsuperscript{17} and $10,000 in New York.\textsuperscript{18} Gross income alone may be an insufficient indicator of bona fide farmers. It is a measure of output; the total production multiplied by price. However, dollars are not always a reliable measuring device in agricultural production, particularly from year to year.\textsuperscript{19} For example, if a year of poor prices follows a good price year, gross income may be down even though the farmer may have produced more in physical terms the second year. Yields may also fluctuate, depending on climatic conditions, resulting in gross income varying even though the basic farm organization remains the same. Gross farm income may be used effectively
### Table 1

**PROVISIONS OF STATE DIFFERENTIAL ASSESSMENT LAWS**

<table>
<thead>
<tr>
<th>Program Characteristics</th>
<th>Pure Preferential Assessment</th>
<th>Deferred Taxation</th>
<th>Restrictive Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eligibility Requirements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. Farm Income Required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History of Eligible Use Required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. Length of Tenure w/in Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Must be Planned for Eligible Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Must be Zoned for Eligible Use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Size</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sanctions on Conversion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rollback Taxes Collected (no. of yrs.)</td>
<td>7</td>
<td>10 3 2 1 0 2 4 3 4 5 7</td>
<td>2 5 5 4 1 0 7 2 5 3 5 5 7</td>
</tr>
<tr>
<td>Interest on Deferred Taxes</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penalty Based on Mkt. Val. in Yr. of Conversion</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Penalty</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Restrictive Agreements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. Length of Term (no. of yrs.)</td>
<td>10/10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scope of Program</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statewide</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Option</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voluntary, Requires Application</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automatic for Eligible Lands</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Subvention Payments Provided to Offset Revenue Loss</td>
<td>*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by author.
to measure volume of business if price and yield fluctuations are brought into consideration. The same holds true for minimum gross income per acre requirements. While the minimum income requirement is intended to serve as an indicator of those who are producing a certain amount of agricultural products, used alone it may not always provide a sound basis for determining who is a bona fide farmer.

**Minimum Percentage of Income Requirements**

The minimum percentage requirement is designed to differentiate between full-time farmers and those who derive only a small portion of their total income from agricultural production. The percentage requirements range from 15% in Montana, 20 25% in Alaska, 21 to 33% in Minnesota.22 Used alone the percentage requirement may discriminate against the owner who has a sizable agricultural investment, yet derives from it a small portion of total income. Other considerations such as size or total production may aid in determining a viable agricultural activity. If one of the intentions of differential assessment is to preserve agricultural land, and not just provide a tax relief for farmers, even part-time farmers should be able to participate in a program to maintain agricultural production.
History of Eligible Use Requirement

Eighteen of the forty-three states require that the agricultural holdings have been in production for a certain amount of time preceding the application for differential assessment. These range from two years in Oregon and Wyoming, to three years in Illinois and Michigan, five years in Utah and South Dakota, and ten years in New Mexico (if the land is used for grazing). This type of requirement may ward off speculators who might purchase tracts of idle land and hope to qualify for differential assessment while the land appreciates in value. However, it may discourage bringing marginally productive land into cultivation. Reduction of property taxes would reduce the total fixed costs and possibly enable marginally productive lands to be economically viable.

Family Tenure Requirement

Three of the forty-three states, Missouri, Minnesota, and North Carolina, stipulate that the agricultural lands have been previously farmed by the same family for a specific number of years. In each of the three states, seven year tenure prior to application for differential assessment is required. In addition to this specification, all three necessitate a minimum income to be derived from the land. The legislative argument in favor of this type of criteria
rests on the opinion that speculators will not be able to exploit the differential assessment law to their advantage. Land speculators, in the absence of such requirement, might purchase a tract of land, lease the holding and qualify for differential assessment until an inflated sale is possible. The restriction may, however, discourage a prospective agriculturalist from investing in farm property in the event an owner wishes to sell out.

**Minimum Size Requirements**

Five of the preferential states, fourteen of the deferred taxation states, and one of the restrictive agreements states demand agricultural holdings to be of a minimum size to qualify for differential assessment. The size requirements range from a minimal five acres in Delaware\(^ {30} \) and Utah,\(^ {31} \) to ten acres in Iowa,\(^ {32} \) forty acres in Michigan,\(^ {33} \) and five-hundred acres in New York provided the land is zoned for agricultural use.\(^ {34} \) Although acreage may not be the best indicator of the size of an agricultural enterprise, particularly when the statewide agricultural production might be very diverse (such as strawberries and corn), over half of the twenty states that require a minimum acreage demand less than ten acres, and almost a third require only five. In Utah an owner of less than five acres may appeal for differential assessment if submission of proof can verify that 80% or more of his income is derived
from the acreage in question.  

Five of the twenty minimum acreage states demand that no other criteria be met. Twelve states demand a minimum acreage along with either a minimum income requirement, previous agricultural use, or a specific number of years within the same family.

Zoning Requirement

Four of the states require that the agricultural land must be zoned for such purposes. This is the only provision that directly links differential assessment to the land use planning process, yet it is required by less than 10% of the differential assessment states. In the states that make this demand, agricultural use must be allowed under the zoning ordinance to be eligible, but there is no provision that other uses could not be allowed under the zoning category. The eligibility for differential assessment is terminated when the owner applies for a zoning change or files a subdivision plan. Although it may be desirable to tie differential assessment to the planning process, traditional zoning efforts and their associated inefficiencies (outlined in Chapter One), might prove more problematic than beneficial.

USE VALUE

Another step in the legislative process is deciding what
is use value. Use valuation varies considerably among the states, but it is possible to group the methods into four major categories: 1) comparables and cost, 2) capitalized income, 3) productivity potential, and 4) unspecified (Table 2).

Unspecified Approaches

Twenty states have deferred the valuation matter to the local tax assessor by not specifying a preferred method for use value determination. Five of the preferential states have elected this option. Half the deferred taxation states and two-thirds of the restrictive agreements states have also delegated use valuation to the local authorities. A total of twenty states have legislated, through precise specifications or total absence of such decision, this duty to the local tax assessor.

Comparables Approach

Three of the preferential states and five of the deferred taxation states have incorporated the comparables-cost approach into their legislation. The comparables method is an estimate of what comparable properties in agriculture are selling for. It is the fair cash value that property would bring at a fair, voluntary sale with the intention of using it solely for farming or other agricultural purposes. This approach has
### Table 2

**TYPES OF DIFFERENTIAL ASSESSMENT AND USE VALUATION OF AGRICULTURAL LAND**

<table>
<thead>
<tr>
<th>Use Valuation Types</th>
<th>Assessment Types</th>
<th>State(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preferential Assessment</td>
<td>Arizona, Indiana, North Dakota</td>
</tr>
<tr>
<td></td>
<td>Deferred Taxation</td>
<td>Alaska, Illinois, Kentucky, Minnesota, Oregon*</td>
</tr>
<tr>
<td></td>
<td>Restrictive Agreements</td>
<td></td>
</tr>
<tr>
<td>Comparables and Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capitalized Income</td>
<td></td>
<td>Colorado, Oregon*, Washington, Wisconsin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity Potential</td>
<td></td>
<td>Delaware, Iowa, New Mexico, South Dakota, Wyoming</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hawaii, Maryland, Montana, New Jersey, New York, Virginia</td>
</tr>
<tr>
<td>Unspecified</td>
<td></td>
<td>Arkansas, Florida, Idaho, Missouri, Oklahoma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecticut, Maine, Massachusetts, Nebraska, Nevada, New Hampshire, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Michigan, Vermont</td>
</tr>
</tbody>
</table>

*Oregon utilizes either comparables and cost or capitalized income approaches; the decision is made by the local assessor.*

Source: Compiled by the author.
merit and validity if one is seeking the current value of a property, particularly houses and apartment buildings. Use of current market data will yield an immediate selling price, and take into account short-term fluctuations in the real estate market. However, problems can rise when this approach is applied to farms when few properties are transferred on the market or there are too few similar properties being sold. In valuation of agricultural land, the assessor is mandated by law to disregard the potential value of the land for uses other than agricultural. Thus, any sales of farms that have been sold for development must be ignored. This could mean that properties distant from the ones in question might have to be used for comparison and considerable care given to evaluating any differences the distant properties might have.

Replacement Cost Approach

The cost approach, or replacement-cost approach, is similar to the market comparison method in that it also relies on current prices in the market. This approach rests on the assumption that production costs are closely related to value and if a property were lost or destroyed the owner would logically replace it. Like the comparables method, the cost approach is most appropriate for urban-oriented uses, with considerable improvements on the land. The same problem of placing a replacement value on the site exists in the cost method.
Only properties used solely for agricultural production may be selected for comparison.

**Capitalized Income Approach**

The most common method used for determining value of income producing properties is the capitalized income approach, although only five states use this method to determine the agricultural value of the land. Farms may be viewed as productive factors with almost unlimited productive lives and can realize a predictable future flow of income. The current value of land is determined by estimating the expected average levels of income and present returns. A capitalization formula is commonly used to discount future value into present worth. The formula may be expressed as follows:

\[
V = \frac{a}{r}
\]

where:

- \( V \) = the value of the property,
- \( a \) = the expected average annual income accrued from the property, and
- \( r \) = the capitalization interest rate.  

Using this formula a property with an expected average annual land rent, or net return to land, of $1,000 is worth $20,000 when this income is capitalized at 5% ($1,000 ÷ .05 = $20,000). Using a 10% capitalization rate, it would be valued at $10,000. Thus an accurate valuation is dependent
upon careful selection of interest rate and a sound estimation of net income to land. A very slight change in the interest rate will have a great impact on the final figure. A $1,000 producing property capitalized at 7% will have a value of $14,285 compared to a value of $20,000 capitalized at 5%. The rate of interest applied in the income capitalization method is a factor of the risk involved in property investment. High risk properties will generally be capitalized at a high interest rate (above 10%) and likewise low risk holdings will be capitalized with a lower interest rate. With farm properties, the going farm mortgage interest rate is usually accepted as an appropriate capitalization rate. Since the going interest rates may change with fluctuations in the general economy, it is not desirable to specify an interest rate that must be used. In Colorado, the productivity is capitalized at "commonly accepted rates," and in Washington the net income to land is "capitalized at a rate of interest charged on long term loans secured by a mortgage on a farm and agricultural land." The next step in capitalizing net income is selecting an accurate estimate for future income. This can involve difficulties as farm incomes may vary year to year depending on changes in the physical elements and price indices. The land rent determination process usually considers the physical resource base of the farm, the productivity of the soil, and
the average crop yields reported for the farm during the preceding five to ten year period. In Colorado the income is averaged "over a reasonable period of time" and in Washington over the last five years.

Productivity Potential Approach

The fourth method for valuation of agricultural properties is productivity potential indices. Currently five of the preferential assessment states and six of the deferred taxation states use this approach. This approach assumes that there is a reasonable basis for estimating the innate productivity of land and its value in agriculture should reflect its productivity potential. Soil surveys are generally used as a basis for determining innate productive capabilities of the land. Soils are grouped into prime and non-prime categories. Reflected in the groupings are factors relating to mechanical and chemical composition, drainage, inherent fertility, slope and erosion. This approach differentiates between different classes of agricultural land and leans towards higher valuation of more productive land. This is comparable to the urban-oriented theory of valuation that land should be valued on its highest and best use.

In Delaware, the available knowledge on the characteristics of the soils are combined with their economic potential according to current uses in agriculture. Soil types are divided
into five groups ranging from those of very high productivity to soils with very severe limitations for cultivated crops. The five soil groups reflect their value for agricultural use based on the moisture retaining characteristics of the soil, inherent and potential fertility, its mechanical composition, draughtiness, drainage, slope, erosion and related soil properties. The rating ignore non-soil factors such as access to highways and markets, and are based solely on the suitability of the land for crops normally grown in the area. The land in each county is classified as cropland, other land, and forest land and each is given a productivity rating of 20, 5, and 3 respectively. The acreage of each class is multiplied by the productivity factor. The sum total is capitalized at 10.5%, then divided by the sum resulting from multiplying the acres in each land use class by the productivity rating for that class. The resulting "land value factor" is then adjusted by multiplying the soil productivity ratings of individual acres to obtain the value for each farmer's land.

New Jersey's valuation procedure is very similar to Delaware's, but it includes an additional qualification. To be eligible, lands must be able to produce at least $500 a year in agricultural goods.

Iowa also evaluates the physical properties of the soil in calculating the use value of agricultural land. The soil
survey of Iowa has been mapped and each unit given a corn suitability rating (CSR), that provides an index for comparing all soil mapping units in the state. The CSR's reflect soil and weather differences that affect yield potential. However, slope characteristics are incorporated as the major factors that determine crop type. Correlation-regression methods were used on selected counties to determine the association between the CSR's and average capitalized income per acre. The CSR's proved to be an accurate predictor of income for various tracts of land. The correlation coefficient between income and the CSR's was .917. When regressed against the market value data the correlation coefficient was .696, representing a lower degree of association than that between land sales data and agricultural productivity.

The range of eligibility criteria and use valuation vary considerably among the states, thus creating difficulties in comparing the effectiveness of the three types of differential assessment laws. The effectiveness of differential assessment legislation in preserving agricultural land is assessed against the experience in three other states in which there is information available relating to the land use control effect. The states chosen for discussion are: Colorado (preferential), Illinois (deferred taxation), and California (restrictive agreements). Each varies in the eligibility requirements and use value determination, but can provide a representative
discussion of each of the three types of differential assessment laws. The effectiveness of each type, as a land use control, is discussed in Chapter Three.
Footnotes - Chapter Two


5. Ibid., p. 23.


7. Keene, op. cit., p. 132


9. Ibid., p. 4.


12. Keene, et. al., op. cit., p. 132.
13. Barlowe and Alter, op. cit., p. 5
16. Ibid., p. 20.
22. Ibid., p. 18.
23. Ibid., p. 20.
24. Ibid., p. 22.
35. Utah State Tax Commission, op. cit., p. 5.
36. Keene, et. al., op. cit., p. 15.
38. Ibid., p. 320.
40. Ibid., p. A-12.
43. Ibid., p. A-12.
THE EFFECTIVENESS OF DIFFERENTIAL ASSESSMENT: THREE CASE STUDIES

**Preferential Assessment - Colorado**

Evaluative research on the effectiveness of preferential assessment as a land use control is scarce. Although one of the stated objectives of all forms of differential assessment is to preserve agricultural lands, it is generally recognized that preferential assessment offers no deterrent to the landowner in the event of selling his agricultural properties and is virtually powerless as a land use control. Therefore, studies pertaining to preferential states have focused on the changes in the tax base.

Colorado is an example of a preferential assessment state that has questionable land use control validity. Prior to the 1967 enactment of the preferential assessment legislation, the State of Colorado operated under the constitutional uniformity rule regarding property valuation. In 1956, the state passed a constitutional amendment permitting the classification of property for tax purposes and stipulating that all taxes shall be uniform upon each of the various classes of real and personal property. Similar to many other states, agricultural lands were traditionally assessed at a lower rate than the 30% of market value as required by the statutes.
Few counties had reappraised their farmland, which brought the threat of a massive statewide reappraisal. A reappraisal did occur, but not before the legislature passed the preferential law (Colorado Revised Statutes, 1937-1-3 (6)). The new statute reads: "The actual value of agricultural lands exclusive of improvements thereon shall be determined by consideration of the earnings or productive capacity of such land during a reasonable period of time, capitalized at commonly accepted rates." In 1973, an additional legislative directive was adopted which provided that the assessor should use an 11-1/2% capitalization rate when pursuing the capitalization approach in appraising agricultural properties.

The legislation mandates little in the way of eligibility requirements and allows for broad interpretation for land owners. To be eligible for agricultural assessment the land must presently and primarily be used to obtain profit by raising, harvesting and selling crops or by the feeding, breeding, management, and sale of livestock, poultry, fur-bearing animals, honey bees, dairy stock, or their products, for any other agricultural or horticultural use. The land must also have been so used the preceding two years, and must also have been classified as agricultural land for the preceding ten years.

Use-value assessment in Colorado has had a stabilizing effect on farmland taxes, particularly since the law was
passed prior to a massive reappraisal. While property assessments in general have risen, farmland assessments have remained relatively constant. The extent to which it has been successful as a land use control is doubtful. Landowners who receive preferential assessment on their agricultural properties and subsequently sell or change its use are not required to pay back any taxes or penalty. Thus, the special treatment is seen as an incentive to remain in farming, but there is no penalty the farmer must pay if he decides to sell or develop.

Data on actual acreage kept in agriculture in Colorado reveal a relatively constant figure preceding and following the passage of the legislation (Table 3). The figures indicate the total acreages in farmland since 1959, eight years prior to the enactment of the legislation. Although the absolute figure has not changed greatly since 1959, there is reason to believe that Colorado has not lost large amounts of total agricultural acreage due to the recent addition of lands not formerly agriculture. Where counties are composed of strictly agricultural lands, very little, if any, transitional properties exist. The preferential assessment of agricultural properties has halted the rise in farmland property taxes and thereby reducing the selling of agricultural properties due to tax bills that cannot be met. It may have encouraged speculators to purchase land for development or
Table 3

Land in Farms in Colorado, 1959-1970

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres (1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>40,500</td>
</tr>
<tr>
<td>1960</td>
<td>40,300</td>
</tr>
<tr>
<td>1961</td>
<td>40,100</td>
</tr>
<tr>
<td>1962</td>
<td>39,900</td>
</tr>
<tr>
<td>1963</td>
<td>39,700</td>
</tr>
<tr>
<td>1964</td>
<td>40,100</td>
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<tr>
<td>1965</td>
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<td>1966</td>
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<td>1968</td>
<td>40,000</td>
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<tr>
<td>1969</td>
<td>40,000</td>
</tr>
<tr>
<td>1970</td>
<td>40,000</td>
</tr>
</tbody>
</table>

Source: U.S.D.A., 1973
investment purposes, lease it to a farmer and pay taxes based on use value while anticipating increased value for development.\textsuperscript{9} There is a definite lack of coordination between the property tax system and a sound land use control program.\textsuperscript{10}

Deferred Taxation - Illinois

The Law

On August 19, 1971 Senate Bill 212, known as the Green Belt Bill and Agricultural Assessment Bill, introduced differential assessment to the State of Illinois. Four major arguments were made in favor of the legislation:

1) bona fide farmers on the rural-urban fringe needed assistance because their farmland was being assessed at its potential market value rather than at its actual agricultural use value, 2) the premature sale of farmland to subdividers often resulted, 3) preservation of open space around Chicago would be facilitated by differential assessment, and 4) to prevent developers and speculators from particularly benefiting from this legislation, a tax rollback provision should be included in the bill.\textsuperscript{11} The public act applies to land owners who meet the following criteria and whose properties lie in counties with a population greater than 200,000:

\begin{enumerate}
\item Real property which is used for farming or agricultural purposes and has been so used for three years immediately preceding the year assessment is made.
\item Real property shall be valued on the basis of its fair cash value, estimated at the price it would
bring at a fair, voluntary sale for use by the buyer for farming or agricultural purposes,
3) if it is more than 40 acres in area and devoted to the raising and harvesting of crops; to the feeding, breeding, and management of livestock; to dairying, or to any other agricultural or horticultural use or combination thereof, and
4) with the intention of securing substantial income from these activities.
5) The person liable for taxes on real property used for farming or agricultural purposes must file a verified application with the county assessor of the county where the real property is located by January 1 of each year for which that valuation is desired.
6) When the real property described in any application filed under this section is no longer used for farming or agricultural purposes, the person liable for taxes on that property must notify the county assessor in writing, of this fact.
7) When the real property is no longer used for such purposes the county treasurer, by the following September 1, the difference between the fair cash value estimated at the price it would bring at a fair, voluntary sale for its "highest and best use" and the fair cash value for farming or agricultural use for each of the three preceding years,
8) together with five percent interest on the back taxes. 12

Two special interest groups, the Farm Bureau of Illinois and the Illinois Agricultural Association were in strong favor of this bill. The final vote was supported by thirty-seven senators. The four dissenters were from the built-up sections of Cook County, around Chicago. 13

The following year, two amendments were made to the original legislation. The 200,000 population county limit was removed and the forty acre minimum was lowered to ten acres. 14 The more lenient restrictions allowed for greater numbers of owners to be eligible for differential assessment.
Response

A detailed analysis of the Chicago Metropolitan Area (Figure 4) provides a suitable basis to assess the effectiveness of the deferred taxation legislation as a land use control. A look at the market value, or fair cash value, of differentially assessed land in the Chicago Metropolitan Area reveals a traditional semi-concentric pattern of decreasing land value as one moves further from the urban center (Figure 5). As one would expect, the distribution correlates with distance from the built-up urban area; lands closest to the City of Chicago valued as high as $10,000 per acre. When compared to the agricultural value of differentially assessed land (Figure 6), there is some correlation between use value and market value. The agricultural properties valued highest with a slight exception of Northern Lake County, are closest to the Chicago built-up area.

According to the legislation, the use value of agricultural properties is based on "its fair cash value, estimated at the price it would bring at a fair, voluntary sale for use by the buyer for farming or agricultural purposes." Because of the lack of agricultural land transactions of comparable properties, General Soils Maps were used to define the productivity value of the land. The agricultural value (Figure 6), therefore, is strongly associated with the quality of the soils; high valued land ($500-15000 per acre) is
Figure 4

CHICAGO METROPOLITAN COUNTY STUDY AREA

source: Vogeler, p. 18.
FAIR CASH VALUE OF DIFFERENTIALLY ASSESSED LAND, 1973

FAIR CASH VALUE PER ACRE

- $10,485 - 1,900
- $1,399 - 1,100
- $1,099 - 500
- $499 - 25

(1974 data was used for eight townships in Cook County.)

source: Vogeler, p. 55.
AGRICULTURAL VALUE OF DIFFERENTIALLY ASSESSED LAND, 1973

AGRICULTURAL VALUE PER ACRE

- 1,500 - 500
- 499 - 500
- 299 - 100
- 99 - 1

(1974 data was used for eight townships in Cook County.)

source: Vogeler, p. 57.
generally associated with prime agricultural land. There also appears to be a relationship between the differentially assessed acreage and distance from the Chicago built-up area. Figure 7 reveals that the greatest amounts of differentially assessed acreage are furthest away from Chicago.

Cook County, which encompasses the urbanized area of Chicago, had 62 applicants in 1972, the first year the legislation was implemented. These applicants accounted for 6,639 acres of agricultural land. The following year the number of applicants rose to 154 with 15,916 acres. Although the applicants and acreage more than doubled in one year, the 1973 acreage figure represented only one-third of the total crops harvested that year of which only 36% was located on prime agricultural soils. Even though most of the owners lived within the county, over half were classified as non-farmers. These owners maintained agricultural production on the land but were not involved in the farming activities themselves. It is possible many were speculators anticipating an eventual sale of the property.

Lake County, directly north of Cook, had 327 applicants for differential assessment on 47,911 acres. Throughout the county the rural townships had the largest number of applicants and the most acreage, while the urban and primarily recreation townships had little participation in the program. Unlike the more urbanized Cook County, Lake County's differentially
DIFFERENTIALLY ASSESSED ACREAGE, 1973

source: Vogeler, p. 59.
assessed acreage accounted for 76% of the total crops harvested in that county; 34% of which was on prime agricultural land. Bona fide farmers dominated the group of participants with the exception of non-farmers dominating in the recreational and more urban townships. Most of the applicants lived within the county with the exception of two extreme western townships.

DuPage County is surrounded by Cook County on two and one half sides and is feeling the development pressures from the city. In 1973 DuPage County had 383 applicants for differential assessment on 47,997 acres. The recipients of differential assessment were mostly farmers, except for two of the easternmost townships in the county, were non-farmers received the benefits of reduced taxes on agricultural land. There is a relationship between the distribution of differential assessment and prime agricultural land. There has been only slight increases in applicants between 1972 and 1974 and three of the townships located in the center of the county lost acreage.

Kane County, the westernmost county in the Chicago Metropolitan Area, 1,812 land owners covering 247,250 acres applied for differential assessment. The lowest acreages were concentrated in the five southeastern urban townships. Most of the land owners were farmers and operated farms below the county average size. Due to the fact no soils maps were
available, an arbitrary method for determining agricultural value was used. This explains why the agricultural value of the land in the county (Figure 6) is lower than adjacent counties, despite the fact that 80% of the acreage rests on prime agricultural land.

As of 1976, there have been no applicants for differential assessment in Will County. Supposedly it has been due to the traditional farm attitudes in the county and lack of understanding and fear of state and federal programs.¹⁷

Effectiveness in Preserving Farmland

As expected, the potential market value of land decreased as distance from urban development pressure increased (Figure 5). The distribution of differentially assessed land also varies outward from the urbanized area (Figure 7). The acreage of differentially assessed land varies directly with the availability of agricultural land and inversely with urban development. With the exception of Kane County, the agricultural value of the land represents the inherent productivity of the land. A comparison of Figures 6 and 7 reveals that most of the differentially assessed land does not correspond with the prime agricultural land.

Throughout the entire study area, the amount of differentially assessed acreage increased from 308,556 in 1972 to 374,846 in 1974.¹⁸ Since most of the eligible lands are
now in the program, the figure will not increase substantially. Although the amount of differentially assessed acres has increased during the first two years of the legislation, the amount of lands in farms has continued to decline, along with some reduction in total crops harvested. Table 4 summarizes the change in farmland in the Chicago Metropolitan Area from 1969 to 1974. Prior to the legislation, all counties (with the exception of Lake County in 1970) were experiencing a decline in farm acreage. The decreases continued after the differential assessment legislation was enacted. Cook and DuPage Counties lost agricultural land at a faster rate between 1972-1974 than they did between 1970 and 1972. These two counties are the most urbanized and consequently the fair market value of the land is the highest. (The total acres of crops harvested has also declined but at a slower rates, indicating there is more land classified as farms than is actually producing agricultural goods.) Except for the 1970-1972 change in Cook County, the rate of decline was less than the rate of farmland.

The outer counties of Lake, Will and Kane, also experienced loss of farmland since 1969. Since Will County has no differentially assessed farmland, it may serve as a control county. All three counties continued to lose agricultural land following the differential assessment legislation, although at a slower rate than Cook and DuPage. The total acres of
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook</td>
<td>92,883</td>
<td>81,977</td>
<td>-12</td>
<td>76,919</td>
<td>-6</td>
<td>62,272</td>
<td>-19</td>
<td>66,018</td>
<td>60,259</td>
<td>-9</td>
<td>53,353</td>
<td>-11</td>
<td>49,262</td>
<td>-8</td>
<td>6,639</td>
<td>27,503</td>
<td>+14</td>
</tr>
<tr>
<td>Du Page</td>
<td>71,204</td>
<td>57,959</td>
<td>-19</td>
<td>53,430</td>
<td>-8</td>
<td>45,196</td>
<td>-15</td>
<td>46,931</td>
<td>43,575</td>
<td>-7</td>
<td>40,380</td>
<td>-7</td>
<td>40,057</td>
<td>-1</td>
<td>44,719</td>
<td>48,780</td>
<td>+9</td>
</tr>
<tr>
<td>Lake</td>
<td>110,669</td>
<td>116,993</td>
<td>+5</td>
<td>107,847</td>
<td>-8</td>
<td>101,910</td>
<td>-6</td>
<td>62,718</td>
<td>61,147</td>
<td>-3</td>
<td>60,511</td>
<td>-1</td>
<td>63,267</td>
<td>+5</td>
<td>14,994</td>
<td>48,811</td>
<td>+26</td>
</tr>
<tr>
<td>Kane</td>
<td>275,228</td>
<td>261,338</td>
<td>-5</td>
<td>254,580</td>
<td>-3</td>
<td>253,926</td>
<td>-2</td>
<td>197,548</td>
<td>196,349</td>
<td>-1</td>
<td>194,386</td>
<td>-1</td>
<td>208,299</td>
<td>+7</td>
<td>242,204</td>
<td>249,752</td>
<td>+3</td>
</tr>
<tr>
<td>Will</td>
<td>393,460</td>
<td>354,283</td>
<td>-10</td>
<td>343,923</td>
<td>-3</td>
<td>321,665</td>
<td>-6</td>
<td>290,025</td>
<td>290,025</td>
<td>-4</td>
<td>274,763</td>
<td>-1</td>
<td>278,707</td>
<td>+1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Vogeler, p. 62.
crops harvested through 1972, followed by an increase in all three counties. Like Cook and DuPage, the decreases prior to 1973, were at a slower rate than the loss of total farmland. The 1973 increases may have been a result of higher crop prices that year encouraging more acres to be farmed, even though there was more land classified as farms than was actually productive. Will County, experienced decreases in crops and total farm acreages similar to Lake and Kane. Although Kane County lost a lower percentage of its farmland than Will County in 1972-1974 the two years following the differential assessment legislation, the rate of loss prior to the enactment of the law was also lower. Both Kane and Lake Counties, slightly decreased their rate of farmland loss between 1972 and 1974, while Will County displayed a pattern similar to Cook and DuPage Counties, even though the rate in loss of acres harvested declined and eventually increased. In the rural counties, high crop prices appear to have been more responsible for maintaining productive agricultural land than differential assessment alone. Farmland in the two most urbanized counties, Cook and DuPage, continue to decline. In these two counties, over 50% of the beneficiaries were non-farmers who were either developers, speculators, or individuals not receiving a substantial portion of their income from farming. This active zone of transition also had the highest percentage of absentee ownership, indicating
the owners lived elsewhere and were not actively involved in farming the land themselves, and possibly with no intention of ever doing so.

The two years following Illinois' differential assessment program gives some insight to the immediate impact of such legislation. It appears that the legislation has no significant impact on preserving agricultural land. The rate of loss varies little from past patterns and there is some evidence to suggest that the legislation may have even encouraged speculation. The two most urbanized counties lost farmland at a faster rate than they did prior to the legislation. It is possible that many tracts of idle land were deemed eligible for differential assessment and consequently sold as land values increased. Apparently the roll-back tax is not sufficient to deter land sales.

The Agricultural Assessment Bill of Illinois has had some success. One objective of differential assessment has been accomplished: property tax relief for farmers. The second stated objective of differential assessment is questionable. Based on the evidence from the experience of the five county Chicago Metropolitan Area, it appears that the legislation has been virtually ineffective as a land use control, and in more urban counties, it may have even encouraged speculation and agricultural land conversion.
Restrictive Agreements - California

Since 1950 California has been concerned about its rapid urbanization and the resultant loss of agricultural lands. Several early attempts were made to encourage agricultural preservation and were initially warmly received by farmers who were concerned about the tremendous increase in their property taxes. In 1955 the Green belt Exclusion Law marked the first legislative attempt in preserving agricultural land. The law was primarily a zoning effort that excluded all land uses other than agriculture in designated area. Even though the pressure for preservation was great, the development pressure was greater. The subsequent passage of the Agricultural Assessment Law in 1957 joined the zoning efforts to preserve agricultural land. This effort was designed to give tax relief for farmers within zoned agricultural lands. Due to the unreliable nature of zoning, the combined attempts were deemed unsuccessful. In 1965, the state legislature turned toward more stringent tactics and passed the Williamson Act. This law was based on the theory that once a parcel of land was legally restricted, the market would set a realistic value on it based on its restricted use. Differential assessment is provided for eligible farmers on a contract basis for a minimum of ten years. The stated intent of the Williamson Act is "to provide assessment priorities that would preserve the existence of open space lands used for the
production of food and fiber and would ensure the use and enjoyment of natural resources and scenic beauty for the economic and social well being of the public."\textsuperscript{22} Assessors were directed to assess only on the basis of such uses and could consider no other factors when placing a value on that land. The major provisions of the legislation pertaining to agricultural land follow.

Eligible Land

Land must be within an agricultural preserve of at least 100 acres that has been established by any city or county which has a general land use plan.\textsuperscript{23} This requirement is designed to designate area within each city or county that will be willing to enter into contracts and to ensure compatibility with a general plan. If land is designated in a preserve it must be devoted to one of the following:

1. agricultural use, defined as means using to produce an agricultural commodity, which includes any plant and animal products produced for commercial purposes.\textsuperscript{24}

2. uses compatible with the above as determined by the city or county and established by resolution after a public hearing.\textsuperscript{25}

Contracts

Owners of eligible land may enter into a contract with the city or county and agree to use the property only for the purposes set forth.\textsuperscript{26} Contracts must be for an initial period of at least ten years, but the term may be longer. It prohibits
uses for land other than agriculture and is automatically extended for another year at each anniversary date unless notice of nonrenewal is given by either party.\textsuperscript{27} The non-renewing party must notify the other party prior to the renewal date; landowners must give at least ninety days prior written notice, while the governing body must give sixty days prior notice.\textsuperscript{28} The contract may be cancelled by a landowner only if he can show the governing board that the cancellation is not inconsistent with the original intent of the Williamson Act and that it is within the public interest. Existence of an opportunity for another land use or the diseconomies of existing agricultural use is not sufficient grounds for cancellation. A public hearing must be held with notice given to all landowners within the agricultural preserve in addition to those within one mile of the land in question.\textsuperscript{29} The landowners notified, in addition to the governing board, may protest the cancellation. In the event the cancellation is approved, the landowner must pay a cancellation fee equivalent to 12-1/2\% of the full cash value of the land as through it were not restricted.\textsuperscript{30}

Use Valuation

Assessors must use criteria pertaining to the agricultural value of the land and ignore all other factors that could potentially increase the value of the land. They are specifically mandated not to use sales data on comparable
properties unless they can show by convincing evidence that the restrictions will be removed or substantially modified in the predictable future. The argument can rest on the past history of the treatment of similar restrictions in the taxing jurisdiction or because of some other similar reason. The assessors are to rely on the capitalization of income procedure. The agricultural value is based on "the sum of anticipated future installments of net income, less the allowance for interest and risk potential or no receipt of income." The anticipated future income is that which a prospective buyer could expect to realize from agricultural production. The assessor must calculate the income derived from the property and not improvements on the property. Therefore the agricultural income must be segregated from the total income statement. A discount factor, or capitalization rate is applied to the net income. This capitalization rate is based on an interest component, a risk component, a property tax component, and an amortization rate for investments in perrenials to reflect decline in income in future years.

Evaluation of the Program's Effectiveness

The state of California covers 100,185,000 acres of land. In 1959, 39,000,000 acres were classified as farmland. As of 1972, this figure had declined to 35,000,000 acres. Of the 4,000,000 acres lost, an estimated 1,800,00 had been
converted to urban use. Table 5 indicates the acreages that have received differential assessment under the restrictive agreements program since it was first legislated. The 1972 and 1973 figures represent approximately 30% of the total privately owned farmland in the state. It has been estimated that in 1976 the total acreage under contract was 14,000,000,\textsuperscript{36} however, this figure is an aggregate of all lands eligible, including open space easements and forest lands. Therefore, it is likely that the farmland figures have remained relatively constant since 1973.

Since the legislation has been in existence the termination rate has been quite low (Table 6). The total acreage, either through non-renewal or cancellation, represents only .6% of the total acreage of farmland under contract. Over eighty percent of the terminations have been due to non-renewal which will ensure that the land in question will still remain in agricultural production until the contract period runs out which is at least ten years. The contracts terminated by cancellation account for .1% of the total acreage under contract. This represents a very small amount of land that was originally restricted that would be allowed to develop immediately. The contracts terminated by non-renewal must wait at least another ten years, and in some cases as many as twenty-five.

The Williamson Act covers about 30% of all privately owned farmland and has a very high retention rate for the
<table>
<thead>
<tr>
<th>Year</th>
<th>Acres of Land Under Act</th>
<th>Acres of Prime Land Under Act</th>
<th>Acres of Urban Prime Land Under Act</th>
<th>% of Land Under Act That is Prime Land</th>
<th>% of Prime Land in State Under The Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>2,061,968</td>
<td>131,273</td>
<td>84,241</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>1969</td>
<td>4,252,157</td>
<td>576,611</td>
<td>274,589</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>1972</td>
<td>11,431,085</td>
<td>3,427,000</td>
<td>717,092</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>1973</td>
<td>11,440,008</td>
<td>3,428,437</td>
<td>709,146</td>
<td>30</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 6

SUMMARY OF THE WILLIAMSON ACT CONTRACT TERMINATION BY NON-RENEWAL AND CANCELLATION, 1967-1973

<table>
<thead>
<tr>
<th>Year</th>
<th>Termination by Non-renewal</th>
<th>Termination by Cancellation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Contracts</td>
<td>Number of Acres</td>
</tr>
<tr>
<td>1967</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1968</td>
<td>2</td>
<td>2,645</td>
</tr>
<tr>
<td>1969</td>
<td>6</td>
<td>478</td>
</tr>
<tr>
<td>1970</td>
<td>16</td>
<td>5,979</td>
</tr>
<tr>
<td>1971</td>
<td>17</td>
<td>10,537</td>
</tr>
<tr>
<td>1972</td>
<td>112</td>
<td>33,776</td>
</tr>
<tr>
<td>1973</td>
<td>21</td>
<td>3,576</td>
</tr>
<tr>
<td>Totals</td>
<td>174</td>
<td>56,990</td>
</tr>
</tbody>
</table>

* 6000 acres in Tejon ranch - allegedly a mistake

Source: Keene, et al, p. 285
lands participating. One of the intentions of the legislation was to inhibit premature development of prime agricultural lands, particularly at the urban fringe areas. Thus it is important to consider what lands, and landowners are participating in the program.

Table 5 indicates that as of 1973 30% of the land under the Williamson Act is classified as prime agricultural land. This represents almost fifty percent of the total prime agricultural land in the state, of which only 6% is in urban areas. The majority of the lands under contract are not in the transition zones where premature development is likely to take place. Thus the areas less likely to have development pressures have signed into contracts to be eligible for differential assessment. Figure 8 shows the 12 counties that have no lands under contract. Twelve of the 58 counties in the state of California, as of 1975, did not have any participants in the program. Of these twelve, one is completely urbanized (San Francisco), six have more than 65% of their land government owned (Alpine - 91%; Del Norte - 75.2%; Modoc - 66%; Mono - 79.2%; Inyo - 79.5%; and Imperial - 66.7%), and one is lightly populated with 52.2% government owned and encompasses Yosemite National Park (Mariposa). Los Angeles and Yuba Counties have no rich agricultural lands, and in the remaining two that do, Merced and Sutter, it is believed that there is no need to implement the program because none of the
Figure 8
COUNTIES NOT PARTICIPATING IN THE WILLIAMSON ACT, 1975
CALIFORNIA

Non-participants
agricultural land is in danger of being developed. On a county wide basis, it appears that the counties with very little to gain have not contracted any lands under the program. The eligibility requirements for entry into the program are very liberal and it seems that lack of participation is due to the landowners expectations of future developmental value of the land. A sampling of the counties participating indicate the lands restricted are at a distance from the cities and may extend beyond the crucial transition zone in danger of premature development.

Although the acreages of farmland lost has decreased since the initial concern in the 1950's, it is difficult to say whether the Williamson Act has been responsible. It has been suggested that the reduced rate of loss may be due to the factors of higher density development and a slowing in the state's population growth. The program has met with success in providing property tax relief to agricultural land owners, however, the areas that are ripe for development have not enrolled in the program. Due to the strict enforcement of the legislation and the administrative and economic penalties involved in cancellation of the contracts, it is the landowners that are most certain of maintaining their land in agricultural production for the next ten years that have signed up for the program.
SUMMARY

The power of property taxation has recently been used to achieve land use objectives. In the form of differential assessment favorable taxation is supposed to encourage retention of primarily agricultural lands that might otherwise be sold due to high property tax bills. The three types of differential assessment are all based on the concept of use value, i.e., the value of the land as a factor in agricultural production. Each varies according to its provisions and penalties for subsequent sale or withdrawal from the program. Variations in eligibility requirements occur within and between the three types. These variations determine the programs' attractiveness and the class and number of potential participants.

Pure preferential assessment, sans penalty or rollback taxes is a very weak attempt to control land use. The primary objective of this form of differential assessment is to provide property tax relief for farmers. It requires no commitment on the part of the landowner to abide by any land use plan or objectives. It can be argued that the reduction in property taxes would allow farmers to remain in the agricultural business if they so desire, however property taxes are only one of the many factors in the decision to sell a farm. Figure 9 shows the many interrelated factors that are considered by farmers in the event of a land sale. The incidence of high property taxes is not a sole consideration in making the land sale
Figure 9

Factors Influencing a Farmer's Decision To Sell

very high price offered

young or middle age

net returns after property taxes not sufficient to remain in farming

net returns after property taxes sufficient to remain in farming

land enrolled in differential assessment

f(p)

 Desire for change

no desire for change

suburban intrusions

no suburban intrusions

DECISION: ATTEMPT TO SELL FARM ON OPEN MARKET

DECISION: DO NOT ATTEMPT TO SELL FARM ON OPEN MARKET (except to son, relative, or neighbor for farming purposes)

nearing retirement age

no son, other relative, or neighbor willing to take over farm

son, other relative, or neighbor willing to take over farm

change type of farming

--- Largely demographic factor
----- Largely economic factor
-------- Largely transitional factor
---------- Largely secondary factor

f(p) = Function of Price

source: Plaut, p. 18.
Deferred taxation programs attempt to tighten the control on landowners by mandating rollback taxes in the event of a sale. This gives an additional incentive to the landowner to maintain agricultural production on his land. However, as shown in the case of Metropolitan Chicago, the landowners likely to participate are those that are seriously committed to farming and are not under great development pressures. Again, the reduction in property taxes is not seen as a great incentive to remain in farming if the future will see a substantial capital gains in selling farm property. The critical urban-fringe areas are not likely to participate in the program, and even if they do the penalty of the rollback tax will be insignificant in the decision to sell the land.

Restrictive agreements programs, as seen in California, have a lower dropout rate than deferred taxation and pure preferential assessment programs. However, its effectiveness in preserving agricultural land may not be any greater. The majority of the participating lands are in areas at a great distance from urban development pressures. The strict nature of the program insures that the participating landowners have a long-term commitment to remaining in the agricultural business, but may dissuade the landowner who is uncertain about the future. California has tried to incorporate their differential assessment program with a comprehensive planning
tool, however, landowners are not required by law to enroll in the program.

In conclusion, it appears that regardless of the stated objectives of differential assessment legislation, programs to assess agricultural land on its use value are not effective in preserving agricultural land. The decision to sell farmland is still highly motivated by personal and other economic factors and the property tax seems to be only one of many reasons to keep or sell the land. There also appeared to be no major difference between the three major forms of differential assessment in terms of ability to preserve agricultural land.

Chapter Four will review the events and issues in Kansas that led to the decision to enact differential assessment legislation. Based on the experience of the other states, the efficacy of differential assessment in Kansas will be discussed.
Footnotes - Chapter Three


32. Williamson Act Study Group, op. cit., p. 131.
33. California Revenue and Taxation Code, Section 423.
35. Williamson Act Study Group, op. cit., p. 60.
37. Ibid., p. 288.
38. Ibid., p. 288.
39. Ibid., p. 288.
Chapter 4

DIFFERENTIAL ASSESSMENT LEGISLATION IN KANSAS

Urban Growth and Agricultural Land Loss in Kansas

Total acreage of farmland in Kansas has not substantially decreased since its peak of 50.5 million acres in 1950. In 1977 the Kansas Department of Agriculture reported 49 million acres of land in farms, placing it third among the fifty states in land area in farms. Although the number of farms has decreased, the average size of farming operations has increased. Over the last ten years, Kansas experienced a 2.1% decrease in farmland. This percentage loss is about half the 4% decrease for the nation as a whole.

Aggregate statistics for the state, mask the variation of farmland loss between smaller areas of the state. Figure 10 shows the farmland acreage changes in Kansas counties between 1969 and 1974. Although most counties experienced a decline, several gained as much as 8 and 10%.

Loss of farmland is a function of several economic and social factors, including diseconomies of farming, lack of an heir to carry on in the event of the owners death, a change in lifestyle, and/or a changing physical environment such as drought or depletion of ground water for irrigation. If it is suspected that economics is the major reason to abandon farming,
Figure 10
Farmland Acreage Changes in Kansas Counties, 1969-1974

% change
- 5.1+
- 1.1 to 5
- -1 to 1
- -1.1 to -5
- -5.1+
then increasing property taxes due to urban pressures would further deteriorate the farmer's financial position. Thus, a correlation between urban growth and decline of farmland would be expected.

Figure 11 illustrates the percent change in population in Kansas Counties during 1970 and 1975. A cursory visual comparison between Figures 11 and 12 gives the impression that there is a slight correlation between the two. A Spearman Rank Correlation was calculated between the acres of farmland change and the population change for the counties. The $r_s$ coefficient was -.05, indicating that there is an insignificant relationship between increase in population and a decrease in acres of farmland.

The above correlation, however, may give a false reading on the relationship between urban growth and loss of farmland. The largest tracts of land that have gone out of agricultural production have been in some of the western, non-urban counties. Cheyenne, Rawlins, and Sheridan had losses that exceeded 50,000 acres. Finney County alone lost over 100,000 acres. Since less than half the counties in Kansas are at least 50% urban, a correlation was calculated for those counties with one or more incorporated urban areas over 25,000. Figure 12 indicates the location of these counties and their major urban areas.

Although the losses in the nine urban counties account for
Figure 11

% change
8.1+
2.1 to 8
-2 to 2
-2.1 to -8
-8.1+
Figure 12

INCORPORATED URBAN AREAS IN KANSAS WITH 25,000 OR MORE INHABITANTS, 1970

only a tiny portion of the state's total agricultural land, these are the areas that would be most likely to receive the benefits from differential assessment. Farms in these nine urban counties average 338 acres in size compared to the state average of 605 acres. There is a significant difference between the two means at the .01 level of significance.

The total loss of agricultural land in the urban counties between 1969 and 1974 accounts for less than one-half of one percent of the total farmland in the state. Even though the average market value per farm of the agricultural products sold is significantly different at the .01 level of significance between the urban counties and the state as a whole ($30,166 and $46,497 respectively), the breakdown in percent of agricultural activities is not significantly different. About 45% of the urban counties' agricultural value is from crops and hay and about 50% is related to livestock and livestock products. This is not significantly different from the state's market value that is about 50% from crops and hay and 45% from livestock and livestock products.

The correlation between the loss of agricultural land and population change in the urban counties revealed a negative coefficient between the two. An \( r_s \) of -.33 indicates a stronger relationship between change in population and change in farm-land, although it is not strong. While it is recognized that total county population growth is not an exact measure of urban
growth, it serves as a workable surrogate to compare with changes in farmland.

Another measure of urban growth is land area covered by urban areas. This measure combined with population densities and population changes are seen in Table 7.

Total land area for the urban areas increased by 85.8 square miles, or 28.1%. During the same time period, overall population density decreased by 21.9%. As one would expect, there is a negative relationship between land area and population density. A $r_s$ of -0.77 reveals a strong relationship between increasing land area and decreasing population density. However, another factor that needs to be considered is the absolute change in population. Between 1970 and 1975, half the urban areas lost population, reducing the total urban area population by 1.9%. In addition to increased land area, the population loss reduces the overall density.

As previously shown, there is a weak relationship between population change and change in farmland in the urban counties. A correlation was calculated between change in land area and change in agricultural land to determine if boundary expansion is related to loss of agricultural changes, rather than absolute population changes. Due to the unavailability of agricultural land data in the urban areas, a correlation was computed between change in agricultural land acreage in the urban counties and the change in land area for the ten urban

92
Table 7

LAND AREA AND POPULATION CHANGES IN URBAN AREAS OVER 25,000 IN KANSAS, 1970-1975

<table>
<thead>
<tr>
<th>Land Area (square miles)</th>
<th>Population Density (per square mile)</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hutchinson</td>
<td>13.4</td>
<td>19.6</td>
</tr>
<tr>
<td>Kansas City</td>
<td>56.8</td>
<td>110.5</td>
</tr>
<tr>
<td>Lawrence</td>
<td>16.7</td>
<td>17.0</td>
</tr>
<tr>
<td>Leavenworth</td>
<td>8.9</td>
<td>11.7</td>
</tr>
<tr>
<td>Manhattan</td>
<td>7.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Overland Park</td>
<td>46.2</td>
<td>46.8</td>
</tr>
<tr>
<td>Prairie Village</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Salina</td>
<td>15.8</td>
<td>17.4</td>
</tr>
<tr>
<td>Topeka</td>
<td>47.5</td>
<td>59.1</td>
</tr>
<tr>
<td>Wichita</td>
<td>86.5</td>
<td>94.6</td>
</tr>
</tbody>
</table>

Total                       | 305.5| 391.3| 28.1     | -21.9 |     |          | 864,422 | 848,322 | -1.9    |
State total                 | 81,787|       |          | 27  | 28  | 3.7     | 2,279,899 | 2,249,071 | 1.4   |

areas. The change in land area for Prairie Village and Overland Park, both in Johnson County, were combined. The calculated was \(-.166\), indicating an insignificant relationship between increase in land area in the major urban areas and loss of agricultural land within those counties. Thus, it is difficult to conclude that growth in the larger urban areas is the prime factor causing reduction of agricultural land in Kansas. Because the largest losses of agricultural land are in the more rural sections of the state, it appears that loss of agricultural land in Kansas is a complicated issue.

**Historical Highlights**

Prior to November 2, 1976, the Kansas State Constitution section 1 of Article II, provided for uniform and equal rate of assessment and taxation for real property and specified that each parcel of land be appraised at its fair market value and assessed at thirty percent thereof. Fair market value was defined as the amount of money that a well informed buyer was willing to pay and a well informed seller was willing to accept without undue compulsion to either party. Discussion of differential assessment in Kansas first appeared on the public record in the "Report on Kansas Legislative Interim Studies to the 1973 Legislature," by the Special Committee on Assessment and Taxation. The major issue of the report concerned classification of personal property for tax purposes,
however, a discussion of differential assessment was included.

"Another problem area concerns one class of real property - agricultural lands. The majority of the Committee concluded that land used for agricultural purposes should not be assessed on the basis of sales price, but rather on an income basis as a more equitable approach to the taxation of this class of real property. Solution of this problem, in an agriculturally-oriented economy, should facilitate a broader approach to the solution of other problems affecting both urban and rural areas. The committee recognizes that the proposal will result in some adjustments in the composition of the local property tax base, the results of which cannot be forecast with any degree of accuracy."³

The Committee recommended an amendment to Section 1 of Article II of the Constitution which would provide that land used for agricultural purposes be valued on the basis of income as may be provided by law. The equity issue appears in the statement, and although it is not specifically spelled out, the "other problems affecting rural and urban areas" may have referred to loss of agricultural lands in rural-urban areas.

The Kansas Farm Bureau and the Kansas Livestock Association were among the first interest groups to publicly support differential assessment. In the fall of 1974, both groups appeared before the Special Committee on Assessment and Taxation in favor of differential assessment legislation.⁴ Their statements focused on the equity issue and little attention was given to instituting differential assessment as a potential tool for preserving agricultural land. It
was pointed out that over half of the other states had already enacted such legislation and because agriculture was the major component of the economic base of Kansas, the state legislature would be wise to quickly enact such legislation.

Governor Elect Bennett, who had made differential assessment a keystone issue in his campaign, supported these statements and shortly after the gubernatorial election, the 1974 Interim Legislative Committee began to investigate differential assessment practices in other states. During the 1975 session of the Kansas Legislature, House Concurrent Resolution 2005 (HCR 2005) was adopted. The proposed amendment would add a new section to the State Constitution relating to the valuation, assessment, and taxation of agricultural land. The resolution was passed by two-thirds of the House of Representatives and two-thirds of the members of the Senate.

The proposed amendment, which appeared on the general election ballot in November 1976 for public approval read as follows:

"Land devoted to agricultural use may be defined by law and valued for ad valoren purposes upon the basis of its agricultural income, or agricultural productivity, actual or potential, and when so valued such land shall be assessed at the same percent of value and taxed at the same rate as real property subject to the provisions of Section 1 of this article. The legislature may, if land devoted to agricultural use changes from such use, provide for the recoupment of a part or all of the difference between the amount of the ad valorem taxes levied upon such land during a part or all of the period in which it was valued in accordance with the provisions of
this section and the amount of ad valorem taxes which would have been levied upon such land during such period had it not been in agricultural use and had it been valued, assessed and taxed in accordance with Section I of this article.\textsuperscript{6}

The proposed amendment was purposely non-specific as to what type of differential assessment program and provisions the legislature might adopt. It is suggested in the amendment that the agricultural value of the land be based either on its income or productivity, real or potential. The legislature could adopt a pure preferential program, or "provide for the recoupment of a part or all of the difference between the amount of ad valorem taxes levied upon such land........
in which it was valued in accordance with the provisions........
and the amount of ad valorem taxes which would have been levied........had it not been in agricultural use." The latter condition would imply a deferred taxation program. It is also important to note that public approval of the amendment would allow, not mandate, the legislature to enact a differential assessment program. Thus, an option for the legislature would be to do nothing.

During the 1975 Legislative Session, several groups representing various interests, spoke before the Special Committee on Assessment and Taxation. Representatives for the Kansas Livestock Association, the Kansas Farm Bureau, the Committee of Kansas Farm Organizations, the Kansas Federation of Taxpayers, Inc., and the Kansas Electric Cooperatives, Inc., gave testimony in favor of use valuation of
agricultural lands. Their statements emphasized the equity issue. Support for HCR 2005 was on the basis of "its tax equity," "necessary because of the inflation of farmland prices," "identify with other states," and because "the only way for a farmer to make a profit these days is to sell his land." 7

Opposition of HCR 2005 came from the City Commissioner, City of Lawrence, and the League of Kansas Municipalities. Both felt the objective of the HCR 2005 was to give farmers a tax break and shift the burden of taxes to urban property owners who already pay too high a portion for the services the property tax revenue generates. 8

Little attention was given to the potential preservation of agricultural land. To the public, the issue of differential assessment was a matter of tax breaks and burdens. The question of preserving agricultural land did appear, however, in the "Report on Kansas Legislative Interim Studies to the 1976 Legislature," prepared by the Special Committee on Assessment and Taxation. The report explained the language and possible implications of the proposed amendment. 9 The objectives of a differential assessment program were spelled out. The equity issue and the preservation of agricultural land were discussed and examples from other states were given.

Early in 1976, Dr. Barry L. Flinchbaugh, Extension Economist, Kansas State University, prepared a study to
estimate the impact of differential assessment in Kansas. Although in his conclusion he makes brief mention of the negligible effect a use value program would have on controlling land use, the main purpose of the report was to determine the changes in the tax base in each county and unified school district.10

Only weeks prior to the general election, similar questions appeared on the public record. "Who's to pay - for what?" "Land Use Assessment Incomplete," and "Unknowns Cloud Land Use Value," appeared in several newspapers.11 The major arguments dealt with shifting of the tax burden and making a more equitable tax system for farmers. Although Flinchbaugh's study claimed that use value would have little effect on urban counties' tax base, many urban interests felt that the burden would inevitably be shifted to cities that already pay a higher portion of the taxes for services.12

Paid political announcements in favor of the amendment also dealt with the tax equity issue and denied the opponents' claim that it was intended as a tax break for farmers. Such statements as:

"Former Governor Alf Landon says 'the purpose of this constitutional amendment is not to grant advantage to anyone, but rather to improve our tax system by authorizing the Legislature to develop an equitable method of appraising and assessing truly agricultural property,';"

Former Congressman Bill Roy says 'this is not a tax break for farmers. They will bear the same burden as now but it will be applied more fairly,';
and Former Senator Frank Carlson says 'the income potential of an apartment complex, office building, factory or shopping center determine their value. We should apply the same approach to agricultural land.'

'For Land's Sake Vote Yes on Use Value Appraisal.'

The proponents appeared to devote their efforts toward disclaiming the notion that the proposed amendment was a tax break for farmers than propounding the idea that it might possibly be a tool to preserve agricultural land.

On November 2, 1976, the citizens of the State of Kansas decided they would like to see their legislature enact some form of differential assessment. After the votes were tallied, the use value amendment had passed 433,347 in favor to 343,259 opposed. The legislature was now ready to seriously begin thinking about a differential assessment program for the State of Kansas.

Drafting the Legislation

During the 1977 legislature, both the House of Representatives and the Senate began work on drafting a differential assessment program for the state. The House created a special committee, the House Select Committee on Use Value to "make recommendations to the Assessment and Taxation Committee on differential assessment of agricultural land, to implement the constitutional amendment, and to establish procedures to determine use value."13 From January
18, 1977 to February 22, 1977, the House Select Committee met regularly with several interested and expert individuals. Among the conferees were representatives of Kansas State University, the Soil Conservation Service, Crop Reporting Service, Federal Land Bank, Kansas Farm Bureau, Kansas Livestock Association, Kansas Association of Wheat Growers, Kansas Irrigation and Water Resources, and the Department of Property Valuation.

The House Select Committee set out to define concepts that would be necessary to implement differential assessment legislation in Kansas. The first step they took was to review other states' legislation, and with the help of Dr. Flinchbaugh they drew up preliminary plans for a differential assessment bill. It was felt that a deferred taxation law was the preferred method, although not as easily implemented as preferential assessment.\(^{14}\) It was felt that the restrictive agreements program in California was a "nightmare" and deferred taxation would be more palatable for most people.\(^{15}\) An initial motion called for a three year rollback period with no interest on change from agricultural use.\(^{16}\) The rollback would be the difference between the tax under use value appraisal and what it would have been under fair market value. The motion was carried and the committee began to prepare the draft bill. On February 23, 1977, House Bill 2631 (H.B. 2361) was introduced.
The Senate Committee on Assessment and Taxation had also been busy working on differential assessment and on February 1, 1977, Senator Doyen introduced Senate Bill 135 (S.B. 135). After reviewing both bills the Senate Committee introduced Senate Bill 484 (S.B. 484) on April 7, 1977, which was almost identical to the bill from the House. Table 8 outlines the major features of each of the bills. Major differences between the three bills concern the qualifying period, determination of net income, capitalization rate, and calculation of the rollback tax. All three are based on the deferred taxation scheme and require a rollback tax in the event of a change in agricultural use.

Following the introduction of these bills, public hearings were held and various interest groups voiced their opinions on the proposed legislation. Representatives from the Kansas Farm Management Association, the Kansas Crop and Livestock Reporting Service, the Soil Conservation Service, and the Wichita Federal Land Bank provided expert consultation and information concerning specific aspects of the legislation.

The questions asked by the agricultural interests were directed mainly toward how the legislation would or possibly could effect their production and farm management practices. For example:

How to determine cash rent in a crop sharing system? Should yields and prices be averaged over the same time period?
### Table 8

**COMPARISON OF MAJOR FEATURES OF 1977 BILLS PROVIDING FOR USE-VALUE APPRAISAL OF LANDS DEVOTED TO AGRICULTURAL USE**

<table>
<thead>
<tr>
<th>Application</th>
<th>H.B. 2631</th>
<th>S.B. 135</th>
<th>S.B. 484</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land devoted to production</strong></td>
<td>of plants, animals and horticultural products, etc.</td>
<td>Land actively devoted to production for sale of plants, animals and horticultural products, etc.</td>
<td>Same as H.B. 2631 except or in place of and</td>
</tr>
<tr>
<td><strong>Qualifying Use Period</strong></td>
<td>None</td>
<td>Previous five years for primary purpose of obtaining a monetary profit or being restored through conservation and classification as ag land during five of preceding eight years.</td>
<td>Same as S.B. 135</td>
</tr>
<tr>
<td><strong>Valuation Basis</strong></td>
<td>Ag income or ag productivity attributable to inherent capabilities of the land in current usage under a degree of management reflecting median production levels.</td>
<td>Ag income or ag productivity.</td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td><strong>Classification Basis</strong></td>
<td>Criteria established by soil conservation services.</td>
<td>Director shall establish reasonable classes for the various types of land.</td>
<td>Same as H.B. 2631</td>
</tr>
</tbody>
</table>

*As used herein, director means the Director of Property Valuation*
### Table 8 (cont.)

<table>
<thead>
<tr>
<th></th>
<th>H.B. 2631</th>
<th>S.B. 135</th>
<th>S.B. 484</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agricultural Productivity</strong></td>
<td>Determined for all land classes within each county or homogeneous region based on a ten-year average and a degree of management reflecting median production levels.</td>
<td>Determined on basis of average yields or production on comparable land devoted to production of comparable plants, animals, or horticultural products, averaged over a five-year period.</td>
<td>Same as H.B. 2631 except five-year average.</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>Crop and livestock reporting services, SCS, or other source deemed appropriate.</td>
<td>Crop and livestock reporting service, ASCS, SCS, State Board of Agriculture, and other information or evidence deemed pertinent.</td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td><strong>Agricultural Income</strong></td>
<td>Dry crop and irrigated land-landlord share of net income normally received from various land classes in each county or homogeneous region after deduction of expenses typically incurred by the landlord.</td>
<td>Determined on the basis of net rental income on comparable land devoted to the production of comparable plants, animals and horticultural products, averaged over a five-year period.</td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td></td>
<td>Pasture or rangeland—landlord's net rental income after deduction of expenses typically incurred.</td>
<td></td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td></td>
<td>Commodity prices and pasture and rangeland rental rates and expenses shall be based on ten-year average.</td>
<td></td>
<td>Same as H.B. 2631, except five-year average.</td>
</tr>
<tr>
<td></td>
<td>H.B. 2631</td>
<td>S.B. 135</td>
<td>S.B. 484</td>
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<td>--------------------------------</td>
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</tr>
<tr>
<td><strong>Capitalization Rate</strong></td>
<td>Effective rate of interest on new federal land bank loans in Kansas averaged over five years.</td>
<td>Rate representing fair return on investment as established by the director.</td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td><strong>Appraiser Guidelines</strong></td>
<td>Director shall make an annual determination of the value for the various classes within each county or homogeneous region and furnish the same to the several county appraisers.</td>
<td>Director shall annually determine and publish a range of values for each of the several types of land devoted to ag use in various areas of the state... to be used by appraisers in determining use value of ag land.</td>
<td>Same as H.B. 2631</td>
</tr>
<tr>
<td><strong>Rollback Tax</strong></td>
<td>On change of use, tax equal to the difference between a tax based on market value and the tax based on use value for the three years or part thereof preceding the change in use becomes payable.</td>
<td>Same as H.B. 2631, plus an express provision tax equal to 8 percent of difference between market value and use value of eminent domain.</td>
<td>On change of use, tax equal to 8 percent of difference between market value and use value becomes payable.</td>
</tr>
</tbody>
</table>
What information will be used for averaging crop yields? Should grassland, irrigated land, and non-irrigated land be segregated? Should average yield be calculated according to land capability class? How does rainfall and irrigation tie in? How will the capitalization rate be calculated? Will the legislation force farmers into practices that will realize the "potential" value of their land?

It was felt that the answers to these questions could have a significant effect on farm management practices. Questions relating to averaging time periods could affect many western farmers where summer fallow is a common practice. Potential value of farmland could also raise serious problems. Should a farmer be penalized if he does not irrigate his land as much as his neighbor? Would the legislation force farmers to grow corn rather than keep it in grass and livestock? The main concern seemed to rest on whether the legislation would regulate what is grown and how it is grown. Relatively little discussion was given to the recoupment of taxes and as one participant observed:

"Most of our 50,000,000 acres of agricultural land today will be agricultural land tomorrow. From a practical point of view the recoupment provision will only be used around towns and cities where land use changes. Our main concern with the recoupment is that it could be too great and cause some unnecessary development problems."

Agricultural interests expressed concern over land that changed use due to eminent domain and in the event of an estate passing through the family. Disregarding the effect the rollback taxes would have on the farmers near the cities,
many felt the taxes could be too high for the agricultural land owner who might have his property condemned by eminent domain or face stiff estate taxes when property passes through a family via a will. Although Dr. Flinchbaugh detailed the intent of the rollback tax to discourage change of use of agricultural land in his reports to the committee members and before the public hearings, the concern seemed to rest on how the recoupment procedures would affect the bona fide farmer not threatened by urban pressures.

Following the hearings, a Special Committee on Use Value Appraisal was formed with members of the House and Senate. The Committee decided to use H.B. 2631 as a vehicle for revision. During the 1978 legislative session House Bill 2732 (H.B. 2732) evolved from H.B. 2631. The revised edition was similar to H.B. 2631 with a few changes relating to agricultural income and capitalization rate.

The major provisions of H.B. 2631 remained the same, including the rollback provision that called for a recoupment of the tax equal to the difference between a tax based on market value and the tax based on the use value for the preceding years. The original H.B. 2631 called for the difference based on the preceding three years, whereas the newer bill mandated a six-year rollback period.

It appeared likely that H.B. 2732 would be passed during the 1978 legislative session. The House Committee amended
details in the proposed bill and the following major provisions remained.

Eligibility

Land eligible for agricultural assessment under H.B. 2732 is defined as:

"land, whether it is located in the unincorporated area of the county or within the corporate limits of a city, which is devoted to the production of plants, animals or horticultural products, including but not limited to: forages; grains and feed crops; dairy animals and dairy products; beef cattle, sheep, swine and horses; bees and apiary products; fruits, nuts and berries; vegetables; nursery, floral, ornamental and greenhouse products."22

The bill also states specifically what lands are not eligible for agricultural assessment. Agricultural assessments shall not apply to:

"those lands which are used for recreational purposes, suburban residential acreages, rural home sites or farm home sites and yard plots whose primary function is for residential or recreational purposes even though said properties may produce or maintain some of those plants or animals listed in the foregoing definition."23

There are no minimum income or size requirements listed in H.B. 2732, nor previous history of agricultural production is required. The eligibility requirements are broad enough to include virtually every possible type of agricultural activity that might be found in Kansas. Without additional size or income requirements it is possible some arbitrary decisions on "hobby" farmers may be made.
Use Valuation

Under the proposed legislation, land eligible for differential assessment "shall be valued for ad valorem tax purposes upon the basis of the agricultural income or agricultural productivity attributable to the inherent capabilities of said land in its current usage under a degree of management reflecting median production levels." The income approach would generally be used for pasture and range-land and in cases where insufficient physical data is available.

Use valuation under the productivity approach would begin with a classification of all agricultural land based on criteria established by the United States Department of Agriculture. The classes would then be delineated on aerial photographs. The use value would be based on an average of the eight years immediately preceding the valuation. The director of property valuation would determine the median production levels with a degree of management and information based on state and federal crop and livestock reporting services, the Soil Conservation Service, and any other sources of data that the director considers appropriate.

The net income approach would be based on the net income normally received by the landlord by deducting expenses normally incurred by the landlord from the share of the gross income normally received. The income shall be capitalized:
"at a rate determined to be the sum of the contract rate of interest on new federal land bank loans in Kansas on July 1 of each year averaged over a five-year period, which includes the five years immediately preceding the calendar year which immediately precedes the year of valuation, plus seventy-five hundredths of one percent (.75%)." 27

The .75% represents the difference between the contract rate of interest and the effective rate of interest which includes added expenses such as closing costs.

Rollback Provisions

When an owner changes the use of his agriculturally assessed land, he must give sixty days written notice to the county appraiser. In the event of a land use change there will be a recoupment of the ad valorem taxes which were not levied upon the land in its agricultural state. The taxes would amount to:

"the difference between the amount of taxes actually levied upon such land during the six years, or during each of the years if less than six preceding such appraisal in which the land was valued according to its market value." 28

Unlike many other deferred taxation states, the proposed Kansas legislation does not include an interest rate applied to the rollback taxes. The constitutional amendment allowed for the legislature to "recoup part or all of the difference between the amount of ad valorem taxes levied upon such land..... and the amount of ad valorem taxes which would have been levied had not the land been in agricultural use." The amendment

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does not specify application of an interest rate to the roll-back taxes, and for the legislature to include it in the proposed legislation would violate the constitutionality of the bill.

For the purposes of the legislation, a change in land use would occur in the event of a recording of a plat or when the land ceases to be in agricultural production. If the change in land use results from exercise of the state or through the power of eminent domain, no recoupment will take place.

The last section of the bill reads: "This act shall take effect and be in force from and after its publication in the statute book." Such publication would appear following passage by the House of Representatives and the Senate. The passage of H.B. 2732 during the 1978 legislative session appeared hopeful. The House of Representatives gave their approval to the bill, however, the Senate was reluctant to pass it. As a result, as of the close of the 1978 legislative session there was no differential assessment legislation in the Kansas statute book.

The major concern was over the shifting of the tax base. Although Dr. Flinchbaugh concluded little change would occur in the tax base of the urban counties, several felt there would be inequitable shifts elsewhere. In addition to an increase of $24.7 million in state aid to education to make
up the difference of lower revenues from agriculturally assessed property, there would be several shifts in the counties tax base. These shifts include: a partial shift in the county tax base to irrigated land from other property in most counties; a shift in county tax base from grassland to other property; in the event of a reappraisal, a partial shift to residential and other real property (excluding agricultural land); and in the event of no reappraisal the shift would be to agricultural land from other property including residential.

The major concern was over the change in state aid to education. Using the current state aid formula and the proposed bill, had the legislation been in effect during 1976, $24.7 million more would have been required in state aid to education to make up the loss of revenue generated by the property tax. Of the 306 school districts, 270 would have received more state aid, 6 would have received less state aid, and 30 would have had no change in the amount of aid received from the state. If the local effort were adjusted to freeze state aid at the current level, 193 districts that have a relatively large amount of agricultural land would have received more state aid, 73 districts with little or no agricultural land would have received less state aid, and 40 districts would have no change in the amount of state aid received. The potential revenue changes provoked discussion
over the current state aid formula and it was concluded that revisions should be investigated if differential assessment legislation would appear in Kansas. Thus, the proposed bill was not passed.

The concern over revenue changes will likely promote amending the state aid formula and in the event H.B. 2732 is passed, it will probably not be altered in the content or provisions. Therefore, it is possible to project the likely effects the bill could have on land use in Kansas.

**IMPACTS OF THE PROPOSED LEGISLATION**

The proposed legislation in Kansas is most similar to the case study of Illinois. Both involve deferred taxation and the recoupment of taxes in the event of a change in land use. The eligibility criteria in Illinois are stricter, however, Illinois legislation specifically spells out the intent to preserve agricultural land in the urban fringes. The initial requirement that counties have at least 200,000 population and a forty acre minimum reflect this intent.

The urban pressures in the State of Kansas may not be as great as in the Chicago Metropolitan Area, however, they still exist. Nine of the urban areas are expanding their corporate limits and half have experienced a population increase. It is unlikely that these facts alone account for loss of agricultural land in the urban counties.
The diseconomies of high property taxes will exist in urban areas where the development potential is the greatest. Thus, for most of the state, diseconomies in farming will not be solely attributable to rising property taxes.

Perhaps the key issue in the effectiveness in retaining agricultural land in urban areas will be the rate of participation. As seen in the case of California and the Chicago Metropolitan Area, the majority of the eligible landowners did not apply for differential assessment. In California, many felt the ten year agreement was too long; that the owner might receive substantial gains or recind his decision to farm the land. Although the legislation in Illinois does not bind an owner to remain in farming, the owner must pay the difference between the use value and market value of back taxes, plus a five percent interest charge. The temptation to receive use valuation for several years was generally outweighed by the potential gains that might be realized in the event of the sale or change in use of the land.

Property taxes are but one factor in the decision to sell farmland. Thus, in most cases, in Kansas, the property taxes will not make or break the farmer.

The urban development pressures in several of the larger urban areas in Kansas are likely to influence undeveloped agricultural land. If Kansas landowners act in a manner similar to those in the shadow of urban development, they will
not be the ones to apply for differential assessment. The areas, then, that are prime for retention, will be least likely to participate. Furthermore, the strong agricultural interests are more content to lower the property taxes of the state farmers rather than preserve the land that accounts for 8% of the total state market value of agricultural products.

It appears likely that Kansas will eventually pass the deferred taxation bill. If and when it does, it will be largely a result of public pressure to adjust the tax structure for farmers who feel they pay too high property taxes, and not in the name of agricultural land preservation. The urban areas most in need of a differential assessment bill account for a small percentage of the state total farmland acres and if urban growth continues, many farm owners may not participate in the program. Because the largest tracts and greatest percentage losses have occurred in the most rural areas of the state, it seems probably that the economics of farming are much more complicated than proponents of differential assessment profess.

A review of differential assessment history in the country and the background leading up to the passage of such legislation in Kansas, provide a dismal outlook for using differential assessment to preserve agricultural land in the urban fringes. In spite of the fact that 43 states have enacted differential assessment laws, few could admit it has retained substantial portions of agricultural land in the
urban fringe areas. Most states initially claimed this to be one of the main intentions of the legislation, perhaps in an effort to appease land use control proponents. Kansas, however, did not play up the land use control issue. Although it was mentioned but a few times, the ultimate decision on passage will be the change in the tax base and how it will affect the farmers' agricultural activities. As a land use control, deferred taxation might prevent a few marginal farms on the urban fringe from being sold to developers, but it is unlikely to have a significant influence. It is not the definitive answer in preserving agricultural land. In theory the concept is logical. However, in practice it has not been successful. If the State of Kansas is seriously concerned about preserving agricultural land in the urban fringes, although the background to H.B. 2732 would indicate that they are not, other alternatives should be investigated.
Footnotes - Chapter Four

1. Kansas Department of Agriculture, "Number of Farms and Land in Farms," (Kansas: Department of Agriculture, Statistical Division, January 7, 1977).


4. Minutes of the Committee on Assessment and Taxation, Kansas Legislature, Topeka, Kansas, November 7, 1974.


7. Minutes of the Committee on Assessment and Taxation, Kansas Legislature, Topeka, Kansas, March 19, 1975.

8. Ibid.

9. Special Committee on Assessment and Taxation, 1975, op. cit.


11. The Wichita Eagle-Beacon (Wichita), Sunday, October 31, 1976, 3G.

Topeka Capital-Journal (Topeka), Sunday, October 24, 1976, p. 53.
Kansas State Collegian, (Manhattan), Thursday, October 14, 1976, p. 5.


18. Meetz, John, Prepared statement before the Assessment and Taxation Committee of the Kansas Senate, April 27, 1977.


22. Special Committee on Use Value, op. cit., p. 39.

23. Ibid., p. 40.

24. Ibid., p. 40.
25. Ibid., p. 40
26. Ibid., p. 41.
27. Ibid., p. 42.
28. Ibid., p. 42.
29. Ibid., p. 43.
30. Ibid., p. 45.
32. Ibid., p. 13.
34. Ibid., p. 14.
Chapter 5

SUMMARY AND RECOMMENDATIONS

Preservation of agricultural land in the United States is a topic of growing concern. In addition to the romantic regard for the agricultural way of life and the desire to maintain open spaces for environmental and aesthetic reasons, the value of farmland as a factor of food production cannot be overemphasized. From the local to the global scale, maintenance of agricultural activities demands attention.

The rapid development and expansion of the urban areas in our country have created unique problems for farmers in the shadow of the city. Urban pressures have pushed the development potential and value of undeveloped lands upward near the periphery of cities. Under the market valuation of real estate, the rising property values will result in higher property tax bills for the landowners. The financial burden may create dis-economies in the farming operation and force the farmer to sell out.

Traditional land use controls have had little success in preserving agricultural land. Regulatory controls such as building codes, subdivision regulations, and zoning have been implemented at the local level. The effectiveness of these tools has been strongly criticized. Due to the nature of the
controls, they are open to legal challenge, exceptions are often made, and generally enforcement is nonexistent.

Acquisitory controls have also had little success. The cost of purchasing the desired land is often too great for a municipality to cover and gifts and tax delinquencies are not always desirable pieces of real estate.

Incentive techniques appear to be the most promising land use controls. In the form of differential assessment, an economic incentive through the reduction of property assessment, is given in hopes that it will encourage a farmer to maintain active agricultural production. This method is particularly appealing to the urban fringe farmer where the market value of agricultural land far exceeds its value in agricultural production. The record, however, can offer little evidence to suggest that differential assessment has had an impact in retaining farmland on the rural-urban fringe. There appears to be no significant difference between the three basic forms of land value assessment with respect to preserving agricultural land.

In the literature, there is little documentation of the preservational qualities of a pure preferential assessment scheme. The case of Colorado exemplifies the lack of attention placed on preferential assessment as a land use control. It is the general opinion of researchers of differential assessment that the main intent of preferential assessment is
to provide a tax break for the farmers and little regard is given to its ability to preserve agricultural land.

Deferred taxation programs would appear to have stronger preservational qualities. A penalty must be paid by all land owners if they change their agriculturally assessed land to a use other than farming. The case of the Metropolitan Area of Chicago reveals that the program has been supported mainly by those farmers who are at a distance from urban development pressures. The areas most needy of land preservation are not enrolled in the program. Thus, in the Chicago Metropolitan Area, the deferred taxation program has provided farmers in the outer lying areas with a reduction in property taxes, however, the lands closest to the development pressures have not applied for differential assessment. The key issue seems to rest on the low rate of participation of fringe farmers. The reduced property tax assessment is not attractive enough to outweigh a possible gain in the event of a future sale of the land.

The most stringent form of differential assessment is found in California. In addition to penalties for withdrawal from the program, the agricultural landowner must sign into an agreement with the local governing body not to alter the use of the land. The agreement is difficult to terminate and the record shows a very low withdrawal rate. However, the initial participation of fringe farmers is very low. There is a situation similar to Chicago in California. Agricultural land-
owners who would remain in farming practices regardless of preservation programs are the majority of the enrollees. Farmers on the fringe areas are reluctant to bind themselves to a ten-year contract of agricultural production. Therefore, the program has not had a significant effect on preserving agricultural land in the rural-urban fringe.

The proposed legislation in Kansas is a deferred taxation program. Similar in form to the Illinois bill, H.B. 2732 offers little hope in preserving agricultural land in the rural-urban fringe. In Kansas, where the majority of farmland exists in the rural counties, is experiencing some expansion of urban areas. If the Kansas fringe farmers act similar to those in the rest of the country there will be a low rate of participation and differential assessment will be a failure in terms of preserving agricultural lands in the urban fringe areas. Furthermore, the general public views the intent of the proposed legislation primarily as a taxbreak for farmers. In the history of drafting the bill, this attention overshadowed the land use control issue almost to the point of making it a non-issue. In the event H.B. 2732 is passed, the primary effects will be felt in the tax base of the counties and the property tax bills of landowners, agricultural and non-agricultural alike. It is unlikely that one of the side effects will be preservation of agricultural lands in the rural-urban fringe.
Some difficulties that arise in researching the potential effects of a land use control include: reliance on case studies that have been carried out, often sketchy and based on particular research motives that may be peripheral to application; lack of case studies; and the short history of implementation of such legislation. As seen in the case of differential assessment, the underlying assumption of landowners' behavior in the rural-urban fringe is misleading. Differential assessment seeks to induce the agricultural landowner to maintain a productive farm though lowering his property taxes. It has been concluded that high property taxes are only one of many reasons to sell a farm. Further investigations into potential effects of land use controls should ultimately begin with a careful study of the factors involved in the decision to sell agricultural investments.

Innovative techniques should also be investigated. Traditional controls and incentives have not been successful in retaining agricultural lands. Transferable development rights schemes have been suggested in several parts of the country. If reduction of property taxes is an insignificant economic incentive to remain in farming, then perhaps sale of the entire development potential of the land would be sufficient to encourage maintenance of agricultural activities. An added benefit of a TDR scheme is orderly placement of continued urban growth and development.
Despite the fact that 43 of our fifty states have legislated some form of differential assessment, it has not met with success in preserving agricultural land in the rural-urban fringe. If the states are serious about this issue, critical evaluation of such programs is needed. Following a firm statement of intent, alternative methods and concepts need to be investigated. This is necessary if we are to significantly affect retention of a valuable resource.
PERIODICALS


BOOKS


TECHNICAL REPORTS AND DISCUSSION PAPERS


NEWSPAPERS

Capital-Journal (Topeka), December 1, 1974.
Kansas State Collegian (Manhattan), October 14, 1976.
The Wichita Eagle-Beacon (Wichita), October 31, 1976.

GOVERNMENT DOCUMENTS


STATE LEGISLATION

California. California Revenue and Taxation Code, Section 423.


OTHER


THE EFFECTIVENESS OF DIFFERENTIAL ASSESSMENT AS A LAND USE CONTROL

by

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B.A., Michigan State University, 1975

AN ABSTRACT OF A MASTER'S THESIS

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ABSTRACT

The growth and relocation of our nation's population has become a major competitor with agricultural production for the rural-urban fringe landowners. Often, the urban forces have been able to outbid the farmer for such lands. An urbanization encroaches upon farmland, the development potential (hence economic value) of the land rises. The increased land value ultimately raises the farmer's property taxes and may cause severe diseconomies in farming. This research focuses on one political tool designed to combat this problem: differential assessment.

The objectives of differential assessment are twofold: 1) ease the tax burden of the farmer and 2) preserve agricultural land. Valuation based on the agricultural value rather than the market value of the land is the basic concept of differential assessment. It is designed to provide an economic incentive for farmers to maintain agricultural production, particularly in the rural-urban fringe where the difference between the market value and use value of farmland is the greatest. This research effort seeks to determine the effectiveness of differential assessment as a land use control; specifically in the rural-urban transition zones in Kansas. Because Kansans recently approved a constitutional amendment to allow the legislature to enact such a program,
this issue demands attention.

Following a history of the 43 states that have enacted one of the three forms of differential assessment, there is an analysis of the various provisions of such legislation. Once an understanding of the three basic types; preferential, deferred taxation, and restrictive agreements, has been established, three case studies are reviewed. Each case study represents one of the three forms of differential assessment and provides the basis for projecting the probable effects of differential assessment as a land use control in Kansas.

From the studies of Colorado, Metropolitan Chicago, and California, it is concluded that differential assessment has not had a significant effect in preserving agricultural land in the rural-urban fringes. There is little difference between the three forms in terms of their preservational qualities. The key factor seems to rest in the participation rate. Program enrollees tend to be located in areas far from urban development pressures and would likely remain in farming regardless of preservation programs.

The major urban areas in Kansas are experiencing some population growth and areal expansion. The major farmland losses, however, are in the most rural parts of the state. The loss of agricultural land is a complex issue and high property taxes are only a small part of the decision to sell agricultural land. Based on the experience from other states, and the lack of attention in Kansas to the preservation issue,
it is unlikely that the proposed legislation will have a significant effect on preserving agricultural land in the rural-urban fringes.

If the State of Kansas is serious about preserving agricultural land, particularly in the rural-urban fringe, it is strongly suggested that the proposed legislation undergo careful evaluation.