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Evaluating Changes in the Eligibility Provisions for Farmland Assessment in New Jersey



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October 8, 2008

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Recommended Citation

Schilling, B., Sullivan, K., Marxen, L. & Brennan, M. (2008). *Evaluating changes in the eligibility provisions for farmland assessment in New Jersey*. Food Policy Institute Report RR1008-016. New Brunswick, NJ: Rutgers, the State University of New Jersey, Food Policy Institute.

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Study Team

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Acknowledgments

The study team wishes to thank the following individuals for their guidance and input over the course of this research:

Robert Bruch, New Jersey Department of Agriculture

Troy M. Joshua, Director, USDA-National Agricultural Statistics Service, New Jersey Field Office

Ronald J. Sheay, C.F.

Dr. Mark C. Vodak, Extension Specialist in Forestry, Rutgers University

Robert R. Williams, C.F., R.P.F

The team extends its appreciation to **Julia Menzo** and **Dan Farnsworth** for their research assistance.

Lastly, the team acknowledges and thanks the following individuals for their comments on earlier drafts of this report:

Dr. Donn A. Derr, Associate Professor, Department of Agricultural, Food, and Resource Economics, Rutgers University.

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Project Goal

This project was commissioned by the New Jersey Department of Agriculture to understand the implications of potential changes in the eligibility requirements for farmland assessment on qualified acreage and agricultural industry revenues in New Jersey.

Research Objectives

Objective 1: Contextualize farmland property taxation in New Jersey relative to broader state and regional farm economic conditions and trends.

Objective 2: Simulate the impact on qualified land for five hypothetical revisions in the minimum eligibility criteria for farmland assessment.

- Determine the amount and spatial distribution of land rendered ineligible for farmland assessment under each scenario.
- Estimate the agricultural revenue impact of lands rendered ineligible for farmland assessment.

Objective 3: Review differential taxation programs governing farmland, woodland, and non-agricultural open space in other Northeastern states.

- Document the extent to which ecosystem and other non-market benefits are considered within the context of differential taxation programs in the Northeastern states.

Previous Studies

The implementation of New Jersey's Farmland Assessment Act has been the subject of several earlier studies, most notably:

- Luke (1976) – "Actively Devoted: The First Decade of the New Jersey Farmland Assessment Act"
- Koch (1986) – "The Second Ten Years of Farmland Assessment Issues, 1974-1984"
- Adelaja, Schilling & Menzo (1998) – "Farmland Assessment in New Jersey: Effects of Revisions in Eligibility Requirements on Land Use, Open Space and Municipal Finance"

A regional study of differential assessment programs in the Northeast was conducted in the 1980s.

- Tremblay, Foster, MacKenzie, Derr, Lessley, Cole & Bills (1987) – "Use Value Assessment of Agricultural Land in the Northeast"

Evolution of Farmland Assessment in New Jersey

Background

The Farmland Assessment Act of 1964 (N.J.S.A. 54:4-23.1 et. seq.) is a cornerstone of New Jersey's agricultural retention and development efforts.

Farmland assessment allows for the taxation of land "actively devoted to agricultural or horticultural use" to be assessed on the basis of its use value in agriculture, as opposed to its full market valuation. It is a critical agricultural policy in New Jersey, and elsewhere, where urbanization influences continue to inflate farmland values. New Jersey's farmland values rank consistently among the highest in the Nation due to the advanced urbanization pressures existing throughout the state.

Background

The Farmland Assessment Act was passed at a time when farms and farmland resources were being lost at alarming rates in New Jersey. Through the 1940s and 1950s, population growth, postwar economic prosperity, federal transportation policies, and advanced personal mobility (e.g., automobiles) fueled a dispersion of the state's population away from urban centers. This resulted in unprecedented pressures on the state's historically rural areas and agricultural land base.

With the growth and decentralization of the state's population came increased demand for farmland for non-agricultural purposes. Rates of farmland loss climbed significantly. In the decade leading up to the passage of the Act in 1964, roughly 31,000 acres of farmland were being lost annually. Between 1950 and 1963 alone, New Jersey lost 13,600 farms (half of those existing in 1950) and 400,000 acres of farmland (23 percent of the farmland base).

Background

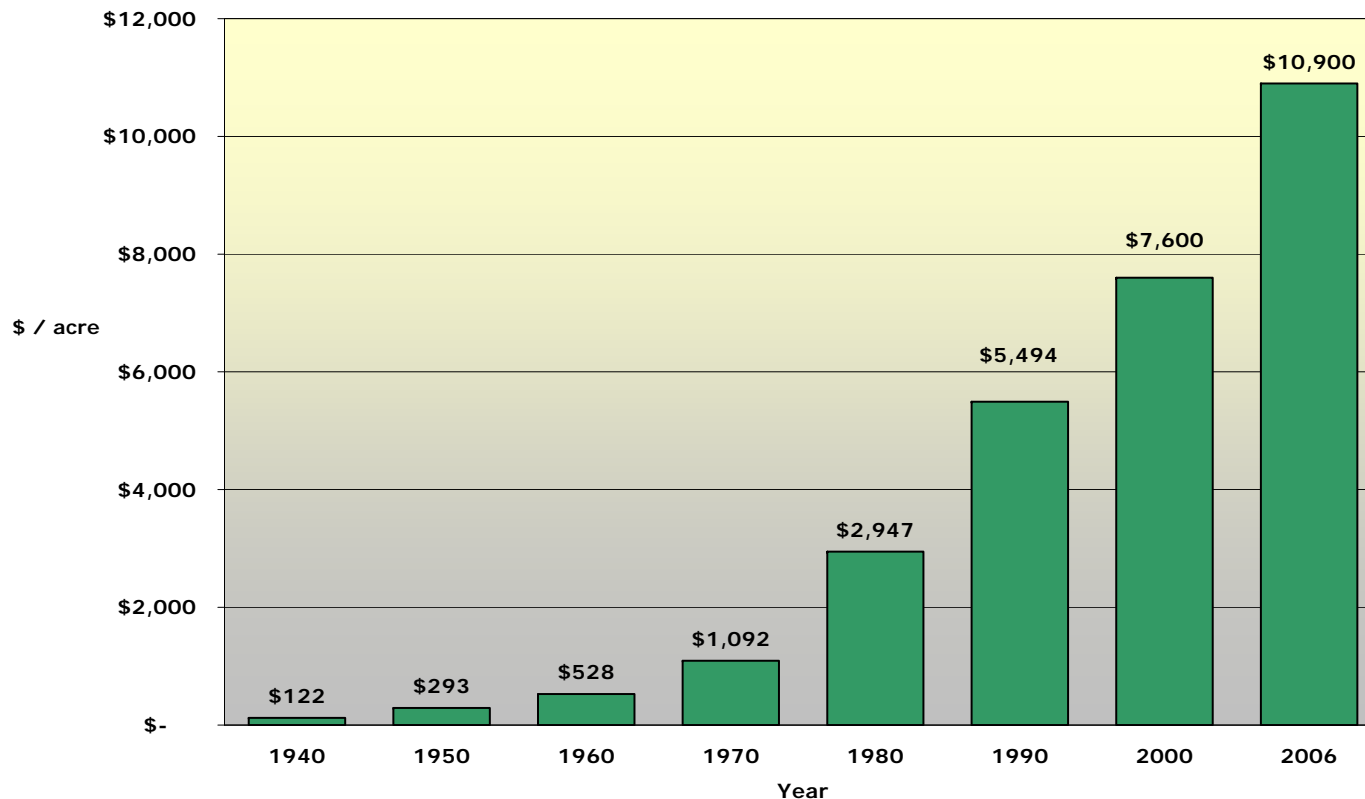
In addition to the loss of farmland, the farm sector also faced a rapid rise in farm real estate values and farm property taxes due to new development demand. Speculation of future “highest and best” uses of farmland compounded the issue, further adding to the appreciation of farmland values.

Consequently, farm real estate taxes inflated total farm expenses in excess of any increases in farm incomes, creating economic hardship for many farmers. New Jersey farm real estate taxes rose to levels that were significantly higher than those paid by agricultural producers in other states.

Background

As shown below, the market values of farmland rose dramatically in response to increased demand for non-agricultural development in the mid-1900s, and continue to increase. According to the National Agricultural Statistics Service, the average market value of New Jersey farmland was \$10,900 per acre in 2006.

Average Market Value of New Jersey Farm Real Estate (1940-2006).



Background

Public hearings on the “farmer problem” and farmland loss held in the 1950s and 1960s consistently pointed to the rapid and disproportionate increases in farm property tax bills, their impact on the economic viability of farms, and the need for relief.

Dramatic farmland losses and steep increases in operating costs caused some agricultural leaders to question the future viability of the state’s farming industry.

Background

These challenges of the farming industry in the postwar years were well-recognized and reflected in assessors' treatment of farmland. Even prior to a formal farmland assessment law, local assessors in New Jersey often treated agricultural lands preferentially. Farmland was commonly assessed for tax purposes based on its use value in agriculture only, without consideration of its potential for development and other non-agricultural uses.

This practice was largely predicated on the goals of (1) promoting the economic viability of farming and slowing farmland loss by lowering taxes on qualified farm properties to be more in line with the underlying agricultural productivity of the land, and (2) achieving property tax equity by bringing greater parity between farms' consumption of local services and payment of such taxes.

Background

Despite its common practice, the differential assessment of agricultural lands stood in violation of the New Jersey State Constitution, which contained a “uniformity clause.” Added in 1875 and amended in 1947, the uniformity clause (Article VIII, Section 1, Paragraph 1(a)) required that all real property within a given district must be assessed according to the same standard of value and taxed at the same general tax rate.

It was on this basis that a Monmouth County resident legally challenged the differential assessment of farmland. In *Switz v. Middletown Township*, the court decided in favor of the plaintiff, declaring the practice to be unconstitutional in 1957. The State Supreme Court upheld this decision.

Background

The repercussions of the *Switz v. Middletown* decision were immediately felt by farmers as revaluations of property based on full market value drove farm property taxes upward. Fearing the economic implications for farming in the state, the New Jersey Legislature passed a law in 1960 (Section 23, Ch. 51, Laws of 1960) authorizing the differential assessment of farmland, allowing its taxable value to be determined according to its use value in agriculture only.

The plaintiff in *Switz v. Middletown Twp.* again took exception to the preferential treatment of farmland and filed a lawsuit challenging the constitutionality of the law. In 1962, the New Jersey Supreme Court ruled in *Switz v. Kingsley* that the provisions of the 1960 law enabling use value assessment of farmland violated the State Constitution.

Background

With this decision, Governor Richard J. Hughes appointed a committee to examine the issue of farm valuation and taxation and its consequences for the state's agricultural industry and land base, and recommend appropriate actions for amending the State Constitution.

After extensive research and deliberation, Governor Hughes' Farmland Assessment Committee advanced a resolution proposing a constitutional amendment in March 1963. The proposed amendment required the enactment of laws allowing "land actively devoted to agricultural or horticultural uses be assessed at values on these uses only".

Background

The Committee also recommended certain qualification and administrative parameters, namely that:

- Land must be at least five acres in size to qualify.
- Land must have been “actively devoted” to agricultural or horticultural use for at least the two preceding years to qualify.
- A landowner must apply annually for differential assessment.
- A “recapture” provision be developed that allows municipalities to be protected against the effects of land speculation by charging a tax deferral payment at the time the use of qualified land changes which is equal to the difference in taxes paid under farmland assessment and those paid under the new use. Such payment would be calculated for two years prior to the change in use.

Background

Governor Hughes accepted the Committee's recommendations and Senate Concurrent Resolution (SCR-16) was introduced on March 18, 1963, which called for a public referendum to amend the State Constitution. A public hearing was held in April 1963. SCR-16 was unanimously passed in both the Senate and Assembly and signed into law.

The public referendum was held on November 5, 1963 and voters approved the proposed amendment to the Constitution by a wide margin. Senate bill S-303 was signed into law in 1964 (Chapter 48, Laws of 1964) allowing the preferential assessment of farmland beginning in 1965. The law is better known as the Farmland Assessment Act of 1964.

Eligibility for Farmland Assessment

Governor Hughes' Farmland Assessment Committee deliberated extensively over the appropriate qualification criteria for farmland assessment. The development of criteria for the determination of "actively devoted" was particularly challenging.

The original qualification criteria for farmland assessment included a minimum acreage requirement and a minimum revenue requirement.

Eligibility for Farmland Assessment Minimum Acreage Requirement

The constitutional amendment authorizing farmland assessment specifies that land must be at least five acres in size and actively devoted to agricultural or horticultural use for at least the two years immediately preceding the tax year in question.

Guidance for determining the area of land “actively devoted” is provided under N.J.S.A. 54:4-23.11. Included is land “under barns, sheds, seasonal farm markets selling predominantly agricultural products, seasonal agricultural labor housing, silos, cribs, greenhouses and like structures, lakes, dams, ponds, streams, irrigation ditches and like facilities.” Land under and associated with the farmhouse is not considered “actively devoted.”

Eligibility for Farmland Assessment Minimum Revenue Requirement

The threshold for “actively devoted” is determined by a landowner’s ability to meet a minimum revenue requirement. Specifically, the farmland assessment statute requires that land must produce an average of \$500 annually, over the two years immediately preceding the tax year in question, from gross sales of agricultural products (defined in N.J.S.A. 54:4-23.3) or horticultural products (defined in N.J.S.A. 54:4-23.4), or clear evidence must exist that such revenue is anticipated within a reasonable period of time. Payments from government soil conservation programs may be used to meet the revenue requirement.

Amendments to Eligibility Criteria

The basic minimum acreage and revenue eligibility criteria have remained unchanged since 1964. However, additional eligibility criteria have since been added. Three substantive revisions to the Farmland Assessment Act include:

1973: An additional revenue requirement was added whereby land devoted to agricultural or horticultural use that is in excess of 5 acres is required to generate average revenue of \$5.00 per acre for at least the two years immediately preceding the tax year in question in order to be considered “actively devoted.” For woodland and wetland, the additional revenue requirement was set at \$0.50 per acre (See Chapter 99, Laws of 1973).

Amendments to Eligibility Criteria

1986: A provision was added requiring owners of land “devoted exclusively to the production for sale of tree and forest products” (today termed ‘non-appurtenant woodland’) to establish and comply with a woodland management plan conforming with the requirements of the Department of Environmental Protection’s Division of Parks and Forestry. Administrative procedures for compliance were specified in the revised language (See Chapter 201, Laws of 1986).

1995: The definition of agricultural use was expanded to include the boarding, raising, rehabilitating, and training of livestock animals. Previously, the statute only recognized the breeding and grazing of livestock as an agricultural use. The amendment also allowed for the calculation of “imputed grazing values” for lands used for livestock grazing, providing such lands were attached to property otherwise qualifying for farmland assessment. Dogs were also specifically excluded from the definition of livestock (See Chapter 276, Laws of 1995).

Rollback Penalty for Change of Use

The “recapture” provision advanced by the Governor’s Committee on Farmland Assessment materialized in law as the rollback tax.

An owner of land qualified under farmland assessment is required to pay a rollback tax at the time the use of such land changes. The rollback tax is calculated as the difference between the taxes paid under farmland assessment and the taxes that would have been paid had the property been assessed and taxed at its market value. It is levied for the year in which the use of land changes and the preceding two years.

Determination of Agricultural Use Value

The Farmland Assessment Act created the Farmland Evaluation Advisory Committee (FEAC). The FEAC comprises the Director of the Division of Taxation, the Secretary of Agriculture, and the Dean of the Rutgers College of Agriculture (later known as Cook College, and since renamed the Rutgers School of Environmental and Biological Sciences).

The FEAC annually publishes a range of values to be used in determining the value of land in agricultural or horticultural use. For each county, values are derived for each of five land uses recognized under farmland assessment.

Determination of Agricultural Use Value

The major land use classes for farmland assessment are:

- **Cropland harvested**
- **Cropland pastured**
- **Permanent pasture**
- **Appurtenant woodland** (woodland contiguous to, or beneficial to land otherwise qualified for farmland assessment which has no production requirement. Examples include watershed, buffers, windbreaks, etc.)
- **Non-appurtenant woodland** (woodland actively devoted to the production of tree and forest products and in compliance with a woodland management plan)
- Since 1995, **imputed grazing values** are also determined for land used to support livestock.

Determination of Agricultural Use Value

Values for each land use class, as well as imputed grazing values, are calculated across five soil groups wherein the 215 different soil types in the state were categorized at Rutgers University by soil scientists. The basic methodology involves the capitalization of agricultural productivity (net farm income) estimates across the counties, land uses, and soil groups.

For the 2008 tax year, the FEAC published the following productivity values for 'Group A' soils (those deemed to be of the highest value for agricultural use):

Land Use Class	High Value	Low Value
Cropland Harvested	\$1,032	\$744
Cropland Pastured	\$576	\$372
Permanent Pasture	\$189	\$136
Appurtenant Woodland	\$47	\$34
Non-Appurtenant Woodland	\$165	\$120
Imputed Pasture Value	\$115	\$110

Common Misperceptions

- The belief that farmland assessment forgives farm property taxes is incorrect.
 - Farmland assessment allows land determined to be actively devoted to agricultural or horticultural use to be assessed for tax purposes at its use value in agriculture.
- The belief a farmer does not pay property taxes on the farm house is also incorrect.
 - Owners of qualified land pay taxes on the residential portion of their properties according to its full market value.

In addition, differential assessment is not extended to structures such as barns, greenhouses, silos, and other structures or facilities. Only the land under such structures is eligible for farmland assessment. A 1995 amendment to the Act allowed for the land under seasonal farm markets and agricultural labor housing to also qualify for farmland assessment.

A Current View of New Jersey Farm Economics

Key Findings

Current analysis shows:

- (1) Appreciation in the market value of New Jersey farmland has far outpaced growth in farm incomes over the past five decades.
- (2) Farmland values in New Jersey continue to be higher than those in most other states, and the U.S. average.
- (3) New Jersey farm real estate taxes per acre are among the highest in the Nation, and significantly higher than the national average.
- (4) Farm property taxes represent a higher proportion of total farm production expenses in New Jersey than in most other states.

Trends in New Jersey Farmland Value and Net Farm Income

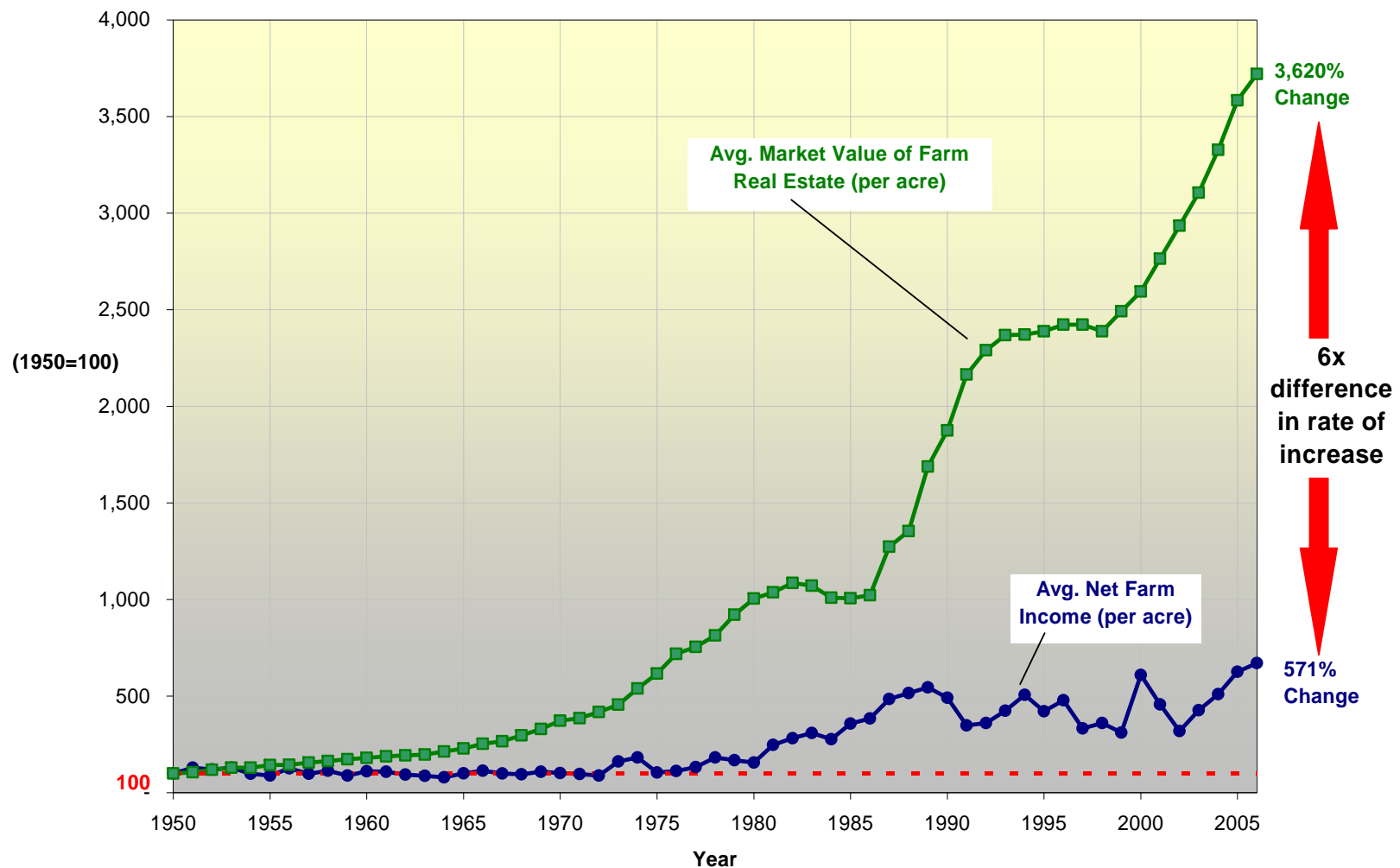
Appreciation in the average market value of New Jersey farmland has far outpaced growth in net farm income.

Between 1950 and 2006, the average net farm income reported by New Jersey farmers rose by 571 percent. In marked contrast, the average market value of farmland and buildings per acre increased by 3,620 percent.

As shown in Figure 1, the gap between net farm income and farmland values began widening from the mid-1960s through the early 1980s. The disparity between the growth rates has continued to grow significantly since the mid-1980s, with only a slight moderation during the economic downturn of the late 1980s and early 1990s.

Source: USDA Economic Research Service and National Agricultural Statistics Service.

Figure 1: Comparative Growth in New Jersey Net Farm Income and Farmland Values (Indexed, 1950=100).



Source: National Agricultural Statistics Service and USDA Economic Research Service.

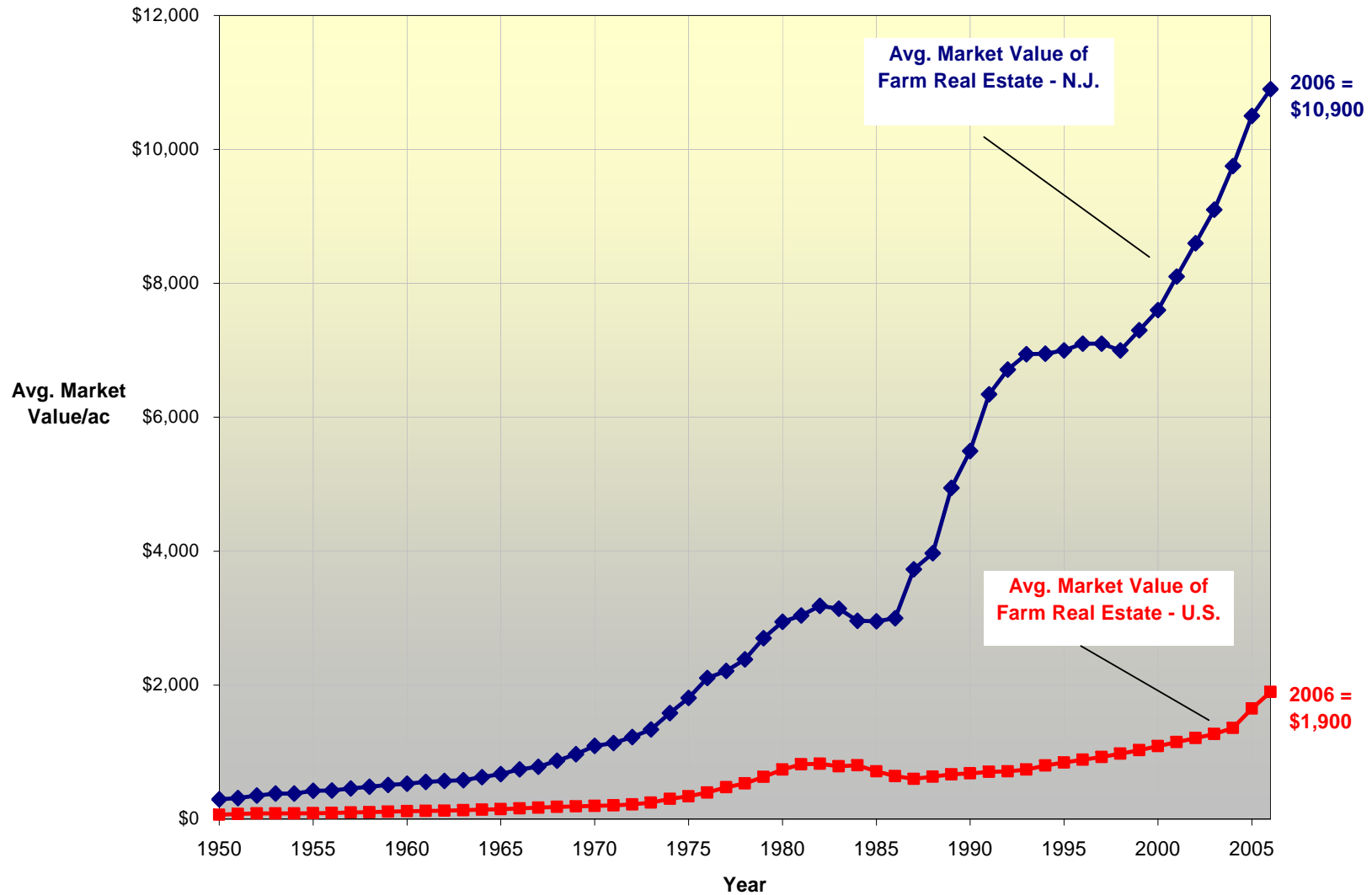
Comparison of New Jersey and U.S. Farmland Values

Farmland appreciation is occurring in many parts of the United States. However, New Jersey's position as the most densely populated and urbanized state in the Nation has resulted in premium market prices for farmland. A 2002 study found that 82 percent of the average market value of New Jersey farmland is attributable to the future option for non-agricultural development; this was the highest percentage among any state and significantly higher than the national average of 9 percent.*

In 2006, the average market value of New Jersey farmland was \$10,900; this is more than 5 times the national average of \$1,900 per acre. The high cost of New Jersey farmland has been a historical reality. As Figure 2 shows, New Jersey farmland values have appreciated at a faster rate than the national average for several decades. New Jersey has had the highest average market value of farmland in the U.S. in 47 of the past 57 years (alternating in various years with either Connecticut or, in more recent years, Rhode Island).

* Plantinga, A., R. Lubowski, and R. Stavins. 2002. The Effects of Potential Land Development on Agricultural Land Prices. *Journal of Urban Economics*; Vol. 52, Pp.561-581.

Figure 2: Comparison of Farmland Appreciation, New Jersey vs. United States (1950-2006).



Source: USDA Economic Research Service.

New Jersey and U.S. Farm Property Taxes

High farmland values affect both the accessibility to farmland for new and beginning farmers, as well as the ability of existing farms to expand. They also stand to increase the tax burden on owners of farmland. According to 2002 Census of Agriculture data, even under farmland assessment, New Jersey farmers paid more in farm property taxes (an average of \$52.13 per acre) than their national counterparts (\$5.70 per acre). Only farmers in Rhode Island, which has a very small agricultural base, paid a higher amount.

The differential impact of farm property taxation may also be seen by examining the composition of total farm production costs across states. Analysis of Census of Agriculture data reveals that farm property taxes accounted for 6.5 percent of the total production expenses reported by New Jersey farmers in 2002. This proportion stands at more than twice the national average (3.1 percent) and is fourth highest in the Nation, exceeded only in the neighboring northeastern states of New Hampshire, Rhode Island, and Vermont.

Farmland Property Values and Taxes Comparative Analysis

New Jersey farmers paid \$42 million in farm property taxes in 2002. On a per acre basis, property taxes paid on New Jersey farmland are more than nine times the national average, and twice the Northeast average.

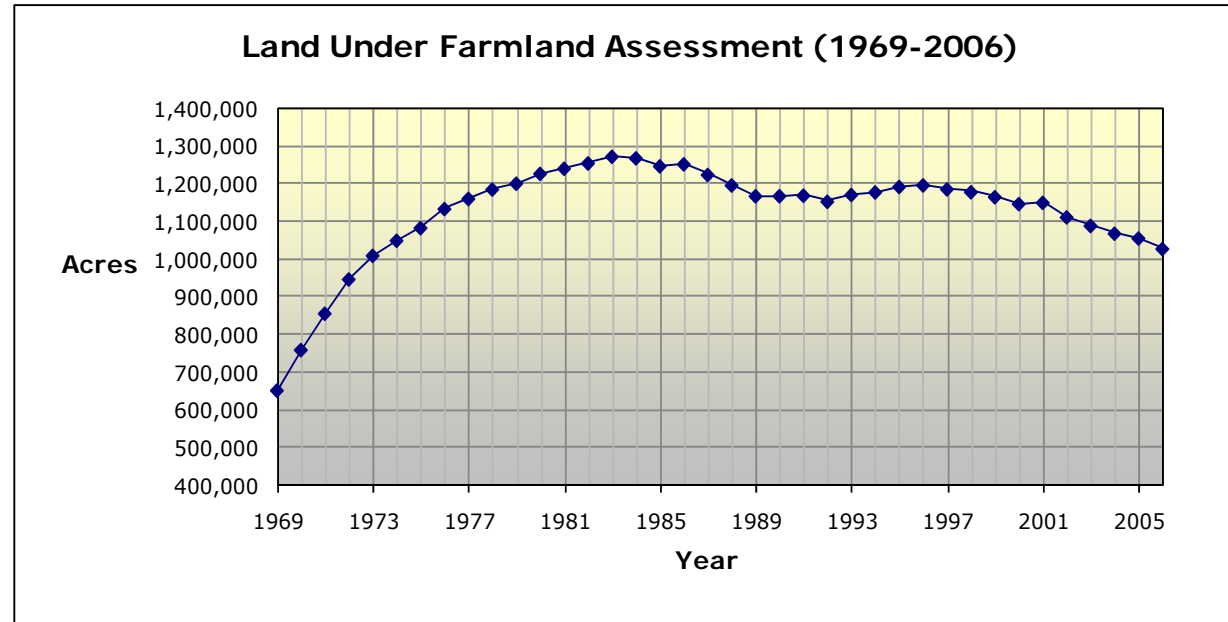
State	Farm Property Taxes Paid (\$1000)	Land in Farms (acres)	Farm Property Taxes per acre
Connecticut	\$16,975	357,154	\$47.53
Maine	\$21,081	1,369,768	\$15.39
Massachusetts	\$23,431	518,570	\$45.18
New Hampshire	\$13,606	444,879	\$30.58
<i>New Jersey</i>	<i>\$41,999</i>	<i>805,682</i>	<i>\$52.13</i>
New York	\$170,947	7,660,969	\$22.31
Pennsylvania	\$167,248	7,745,336	\$21.59
Rhode Island	\$3,640	61,223	\$59.45
Vermont	\$28,464	1,244,909	\$22.86
United States	\$5,350,817	938,279,056	\$5.70

Source: National Agricultural Statistics Service, 2002 Census of Agriculture.

Trend in Farmland Assessed Acreage and Current Enrollment

Trend in Farmland Assessed Acreage

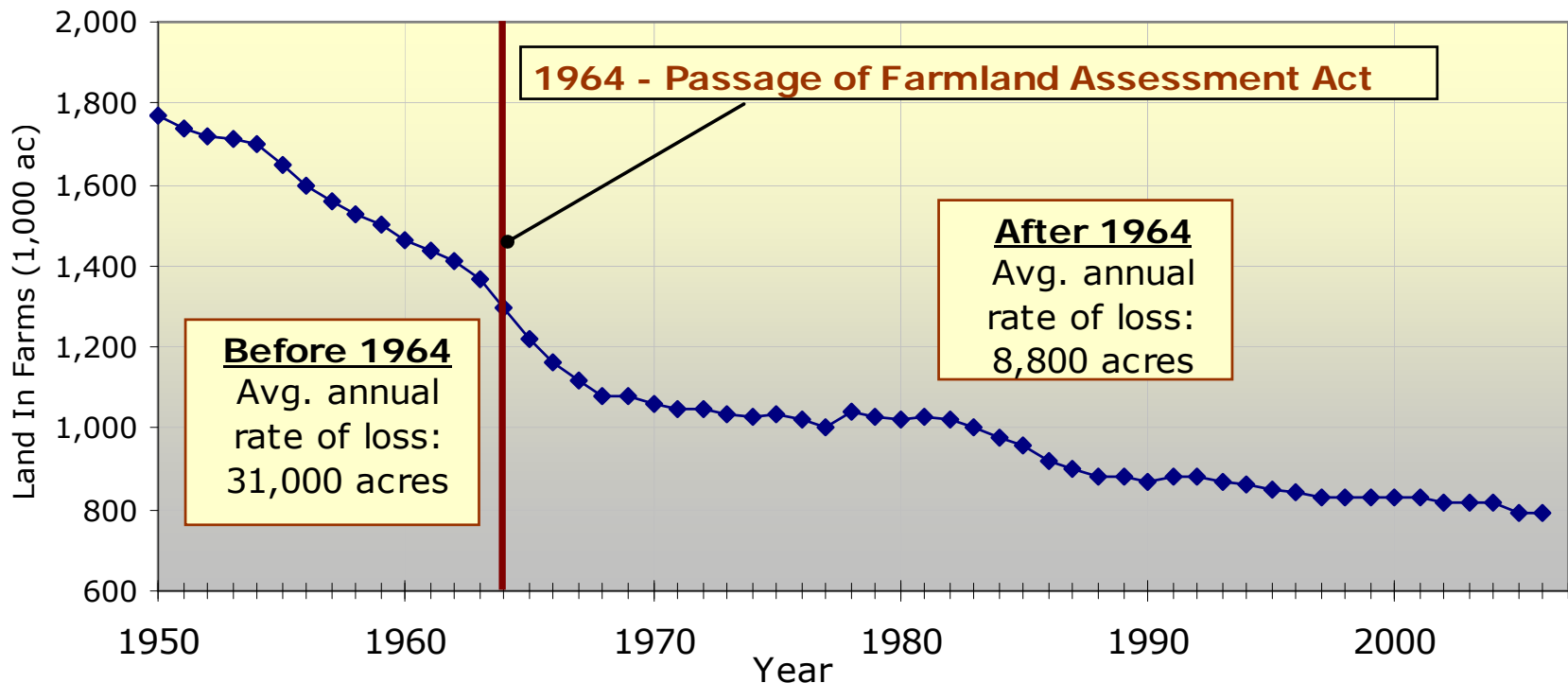
Enrollment in farmland assessment began in the 1965 tax year, with qualified acreage rising steadily through the early 1980s. Total qualified acreage peaked in 1983 at 1.027 million acres. Since that time, land under farmland assessment has been on a general decline, reflecting the contraction in the state's agricultural land base. This trend was broken for several years in the late 1980s and early 1990s due to the economic downturn and generally slower rates of development in that period.



The Impact of Farmland Assessment on New Jersey Farmland Loss

Data from the National Agricultural Statistics Service show that the rate of New Jersey farmland loss from 1950-1964 was much greater (31,000 acres per year) than the rate of loss after the adoption of farmland assessment in 1964 (8,800 acres per year). These differences, depicted in the chart below, are statistically significant ($p=.001$).

Land in Farms (1950-2006).



Current Enrollment

Based on data from FA-1 forms submitted in the 2006 tax year, 1.027 million acres of land were under farmland assessment in 2005.

Cropland harvested accounts for 48 percent of the total enrolled acreage. Other agricultural lands (e.g., pasture and equine acreage) and associated appurtenant woodland account for another 31 percent of qualified land. Non-appurtenant woodland (land managed for the production of forest products and subject to an approved woodland management plan) comprises roughly 22 percent of total farmland assessed acreage.

Land Use Type	Acres
Cropland Harvested	489,156
Cropland Pastured	40,130
Permanent Pasture	93,478
Equine (boarding/training/rehab)	10,254
Non-Attached Woodland	221,479
Attached Woodland	173,275
Total Acres	1,027,772

Geographic Distribution of Qualified Acreage

Out of New Jersey's 566 municipalities, 313 had acreage under farmland assessment in 2005. The distribution of farmland assessed acreage across municipalities is shown in Figure 3.

While the majority of municipalities have land actively devoted to agricultural or horticultural use, the intensity of such activity (measured as the percentage of municipal area under farmland assessment) varies considerably. The highest intensity is found in southwestern municipalities (parts of Salem, Cumberland and Gloucester), northern Burlington County, and the northwestern counties (Hunterdon, Warren, Sussex, and parts of Somerset).

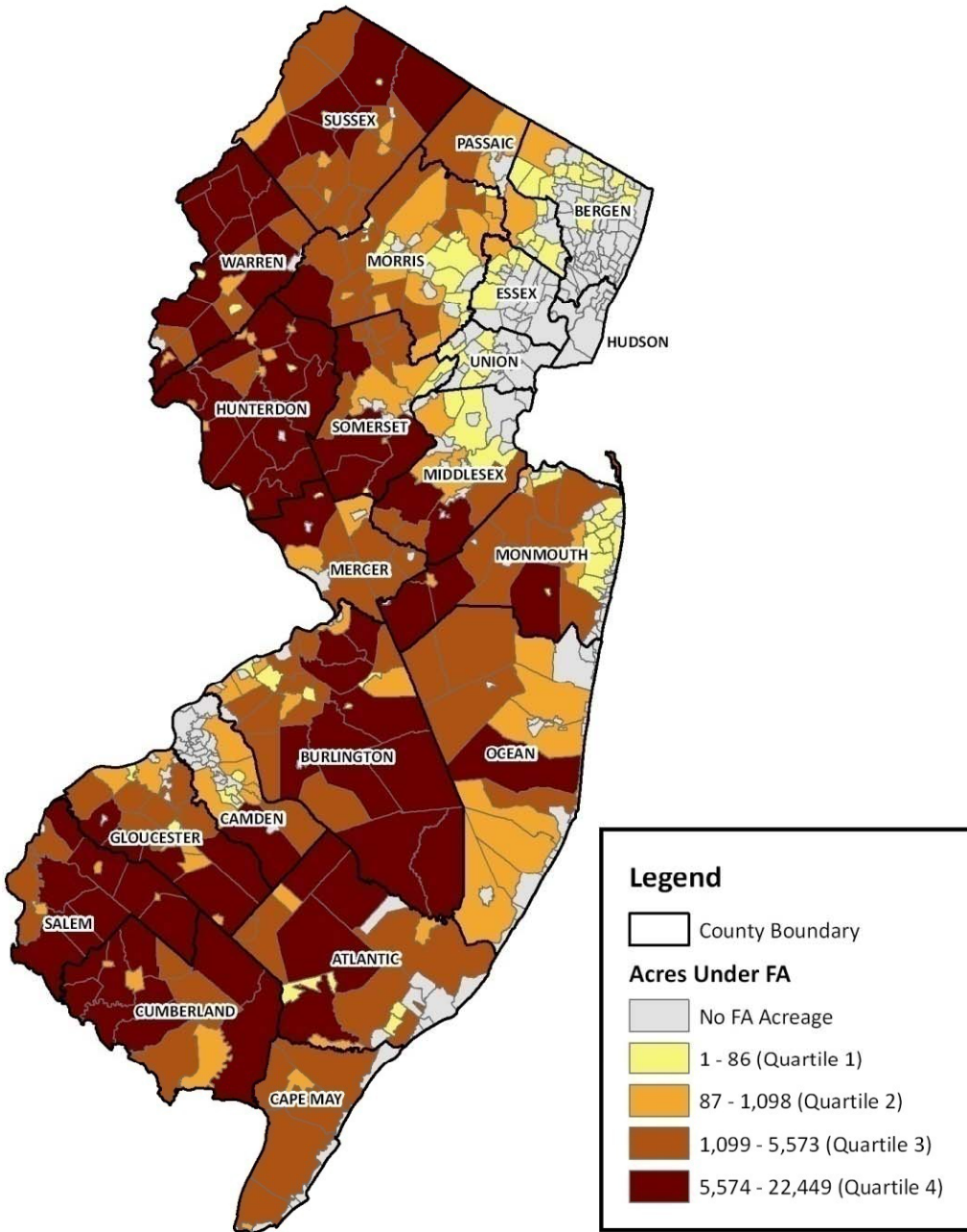
20 Most Agriculturally Intensive Municipalities

(Based on Percent of Land Area under Farmland Assessment)

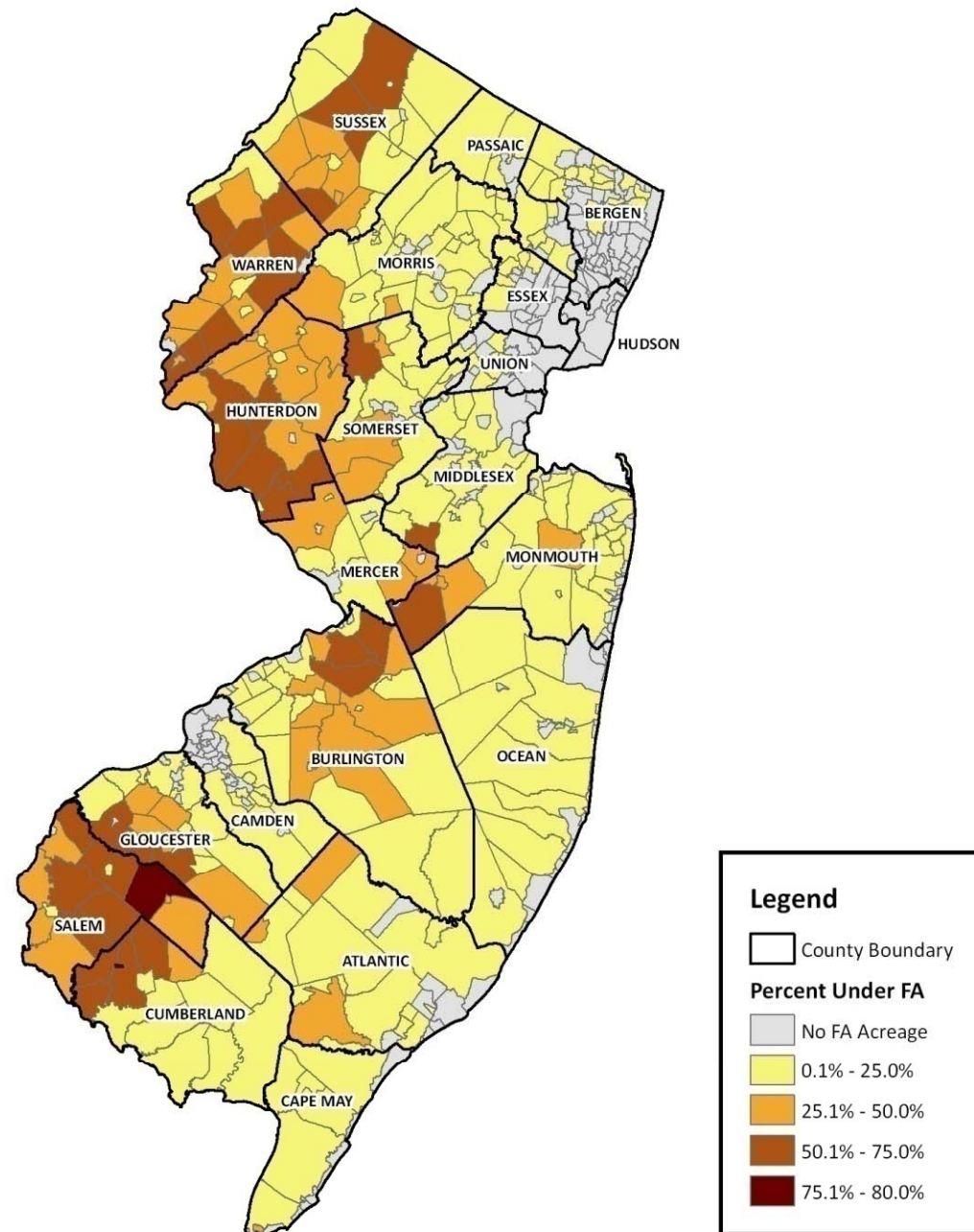
Municipality	County	Percent of Land Under Farmland Assessment
Upper Pittsgrove Township	Salem	80.0%
Shiloh Borough	Cumberland	75.4%
Mannington Township	Salem	74.7%
Pilesgrove Township	Salem	73.8%
Franklin Township	Warren	73.6%
Hopewell Township	Cumberland	72.5%
Stow Creek Township	Cumberland	71.7%
Springfield Township	Burlington	71.2%
Chesterfield Township	Burlington	69.6%
Upper Deerfield Township	Cumberland	68.7%
South Harrison Township	Gloucester	68.6%
Delaware Township	Hunterdon	65.9%
Franklin Township	Hunterdon	64.6%
Pohatcong Township	Warren	63.8%
Frelinghuysen Township	Warren	63.3%
Upper Freehold Township	Monmouth	62.7%
Kingwood Township	Hunterdon	61.9%
Alloway Township	Salem	61.7%
Bedminster Township	Somerset	61.3%
Hope Township	Warren	59.7%

Figure 3: Statewide Farmland Assessed Acreage.

Acres Under Farmland Assessment in New Jersey



Percent of Land Under Farmland Assessment in New Jersey



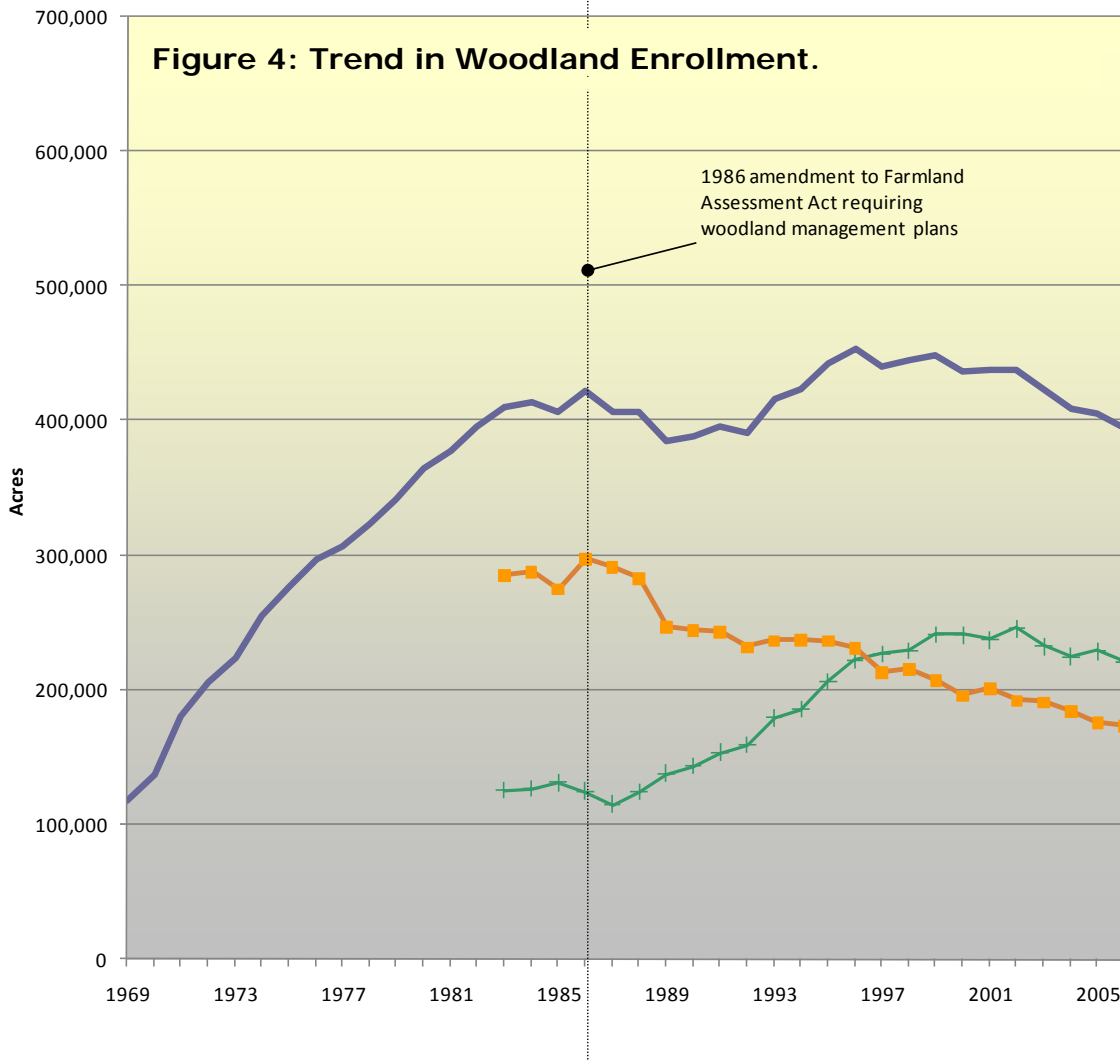
Non-Attached Woodland

As shown in Figure 4, woodland enrollment under farmland assessment peaked in 1986 at nearly 422,000 acres. Since that time, appurtenant woodland acreage has declined at a rate similar to that of agricultural land. Qualified non-appurtenant woodland acreage generally rose through the 1990s.

The composition of qualified farmland assessed acreage is not uniform across the state. Specifically, larger tracts of non-appurtenant woodland are more concentrated in the northwestern part of the state and the Pinelands region (Figure 5). More than one-third (38 percent) of non-attached woodland acreage, approximately 84,000 acres, is concentrated in Hunterdon, Warren and Sussex counties. Atlantic, Burlington, and Ocean counties, which fall predominantly within Pinelands, have more than 55,000 acres of non-attached woodland (25 percent of the state total).

Trend in Woodland Acreage Under Farmland Assessment

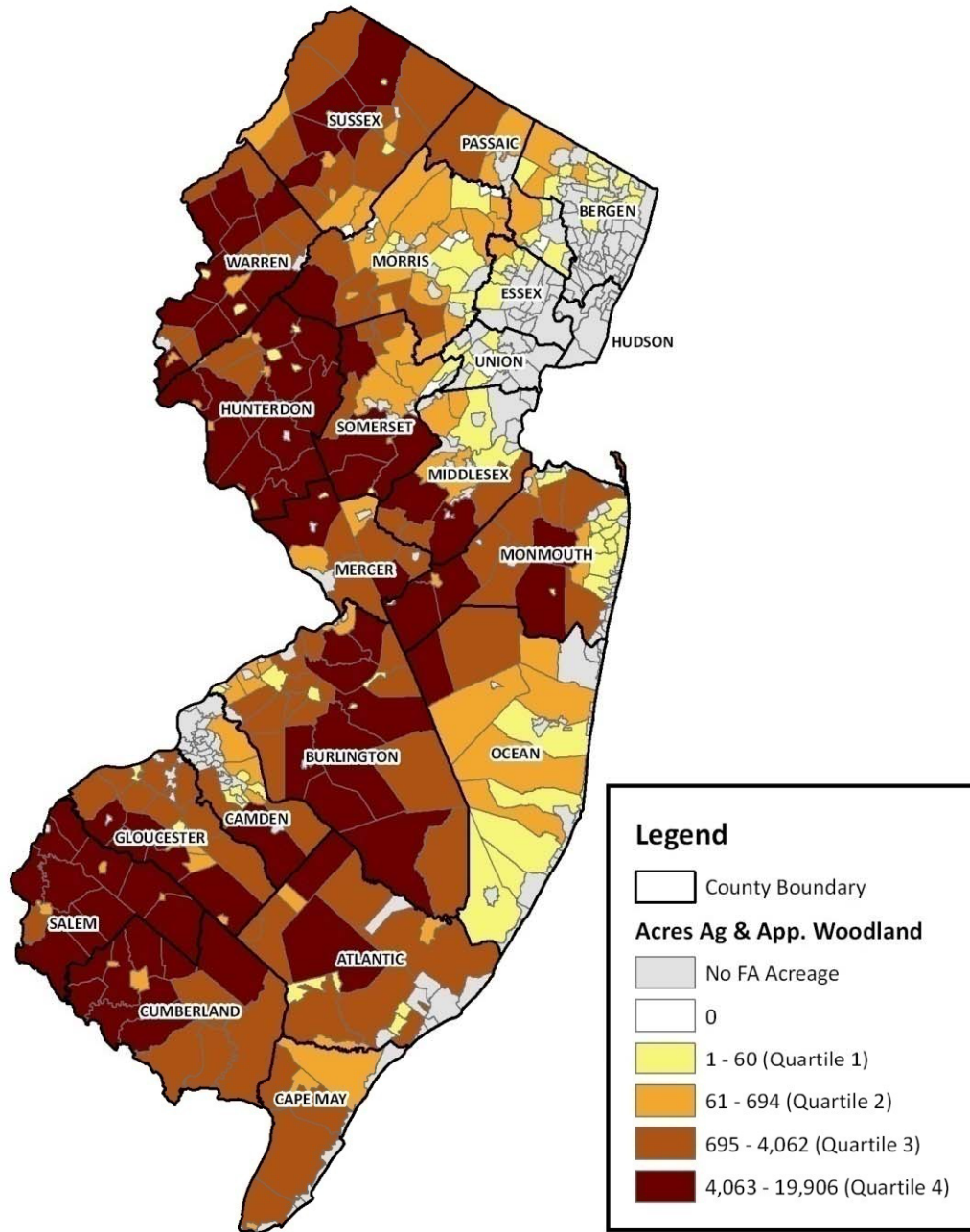
— Non-Appurtenant Woodland — Appurtenant Woodland — Total Woodland



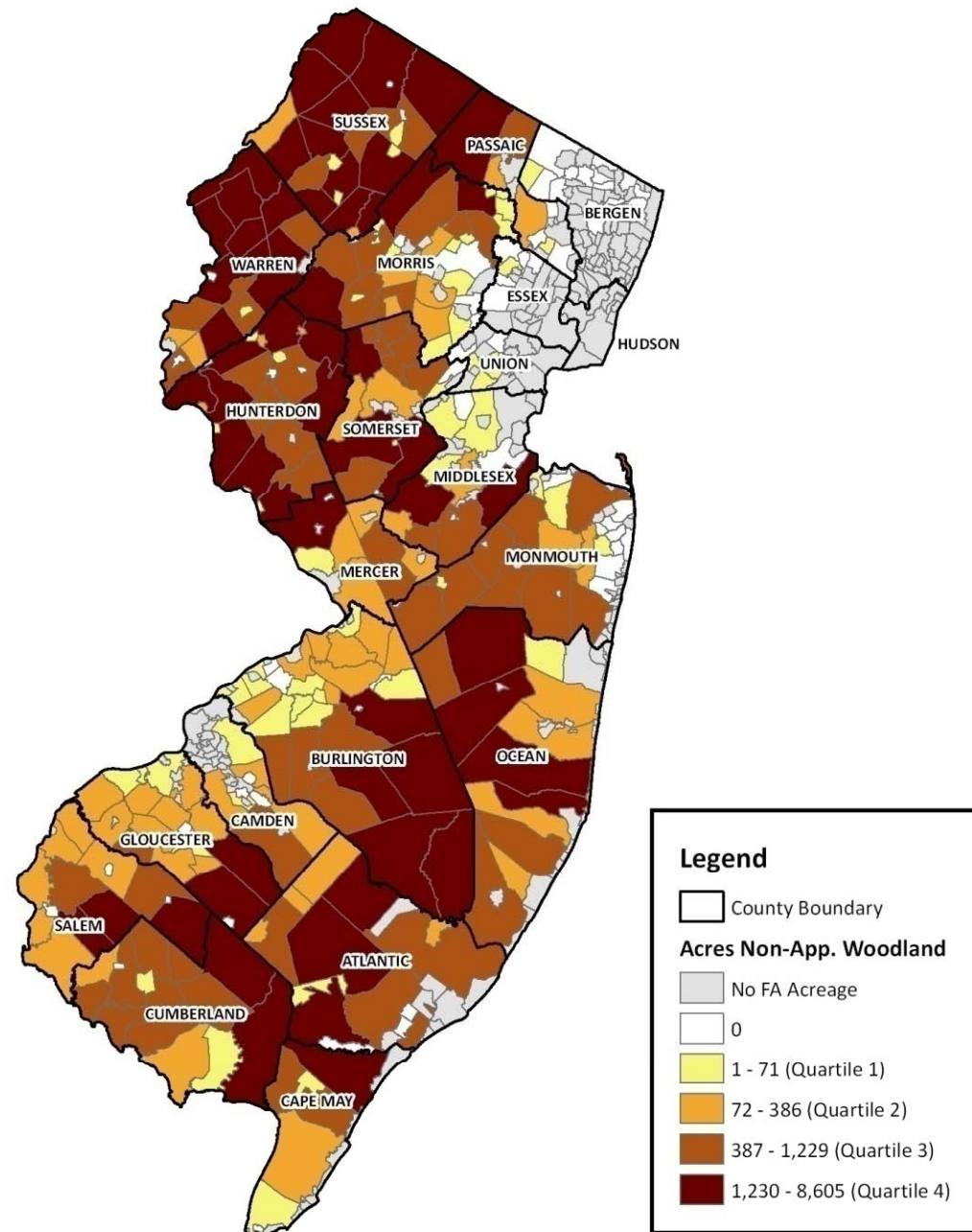
Professional foresters report that USDA forest stewardship incentives in the 1990s encouraged active forest management in the state, leading to higher enrollment of woodland under farmland assessment. However, rising land values and development demand have since led to the loss of forest acreage. The acquisition of forested lands under the state Green Acres program and private land trusts has similarly reduced the amount of forest land applications for farmland assessment.

**Figure 5: Breakdown of Farmland Assessed Acreage:
Agricultural Land and Non-appurtenant Woodland.**

Acres of Agricultural Land and Appurtenant Woodland in New Jersey



Acres of Non-Appurtenant Woodland in New Jersey



Policy Change Simulations

Research Design, Methods and Data Policy Simulations

Five hypothetical policy scenarios were developed, each representing a change in one or more of the basic revenue requirements for program eligibility. The minimum acreage requirement, 5 acres, was held unchanged in each scenario. For each, the impact on qualified farmland assessed acreage and agricultural industry revenues was estimated.

Policy Simulations			
Simulation	Minimum Revenue	Additional Revenue/Acre (Ag Land)	Additional Revenue/Acre (Woodland)
Policy #1	\$750	\$5.00	\$0.50
Policy #2	\$1,000	\$5.00	\$0.50
Policy #3	\$2,500	\$5.00	\$0.50
Policy #4	\$10,000	\$5.00	\$0.50
Policy #5	\$500	\$50.00	\$5.00

Data Sources

The primary data source for this analysis is the annual summary of FA-1 forms compiled by the New Jersey Field Office of the National Agricultural Statistics Service (NASS). The FA-1 form is the application for farmland assessment filed annually (before August 1).

The FA-1 form requires applicants to provide information on the total “actively devoted” acreage of a property, and acreage defined under the major land uses recognized under the Act (i.e., cropland harvested, permanent pasture, cropland pastured, appurtenant woodland, and non-appurtenant woodland, and acreage devoted to certain equine activities). Each applicant also reports the acreage of various crops grown, as well as the number and type of livestock on the property.

All policy simulations are based on FA-1 form data for the 2006 Tax Year (on which landowners report 2005 land use, crop, and livestock data). This Farmland Assessment Database contains 29,239 approved FA-1 forms and 1,027,772 qualified acres.

Data Sources

For each FA-1 form, revenue generated from qualified acreage was estimated based on reported crop acreage, livestock numbers, and/or forest products.

For crops, revenue estimation was based on 2005 yield and price data reported by the National Agricultural Statistics Service for New Jersey commodities. National price and yield data were used for some secondary crops. For livestock, NASS data on average prices received per head were used. A combination of secondary data from the U.S. Forest Service and the advice of consulting foresters in New Jersey were used to determine prices for fuel wood, pulp wood, and timber.

Policy Simulations

Stratification of the Farmland Assessment Database was necessitated by both the manner in which FA-1 forms are completed by landowners and later compiled into a database by NASS.

There are common instances of two or more FA-1 forms being submitted for a single parcel of land during the application process. For example, some assessors require individual FA-1 forms to be submitted for each block and lot. In some cases, a parcel is bisected by a municipal boundary, requiring the submission of FA-1 forms in two or more municipalities. When FA-1 form data are entered into the NASS database, the linkages between multiple FA-1 forms submitted for a single parcel are lost. Further, to honor confidentiality provisions governing data release and use, individual identifiers on each FA-1 form were removed prior to the transfer of data to the Rutgers study team.

Policy Simulations

Given these data limitations, the Farmland Assessment Database was stratified into two sets:

- (1) Parcels under common ownership, that are reported on separate FA-1 forms, and meet the current eligibility requirements in isolation of a contiguous parcel(s). This dataset contained 22,765 FA-1 forms comprising 867,583 acres (this equates to 77.9% of total FA-1 forms and 84.4% of total acreage) For exposition purposes, this dataset will be referred to as the "Qualified Dataset", and
- (2) Parcels under common ownership, that are reported on separate FA-1 forms, and meet the current eligibility requirements ***only when viewed in connection with a contiguous parcel(s)***. This dataset contained 6,474 FA-1 forms (160,189 acres) that were not used in the simulation modeling.

Policy Simulations

Schematic of the "Contiguity Problem"

Example:

An 18-acre property producing \$1,800 in revenue. The property comprises 3 tax lots, and is bisected by a municipal boundary.

For farmland assessment purposes, two FA-1 forms are filed in Municipality A (Block 1, Lot 5: 4 acres with \$600 in revenue; Block 1, Lot 4: 6 acres with \$200 in revenue) and one form is filed in Municipality B (Block 1, Lot 1: 8 acres with \$1,000 in revenue).



Policy Simulations The “Contiguity Problem”

Once recorded, this hypothetical property will appear as three separate FA-1 forms in the Farmland Assessment Database. While the three parcels constitute a qualified property under single management, the study team is unable to determine that they are contiguous and under common ownership. Consequently, only Parcel 3 meets the minimum eligibility criteria in isolation of contiguous parcels, and would be contained in the Qualified Dataset.

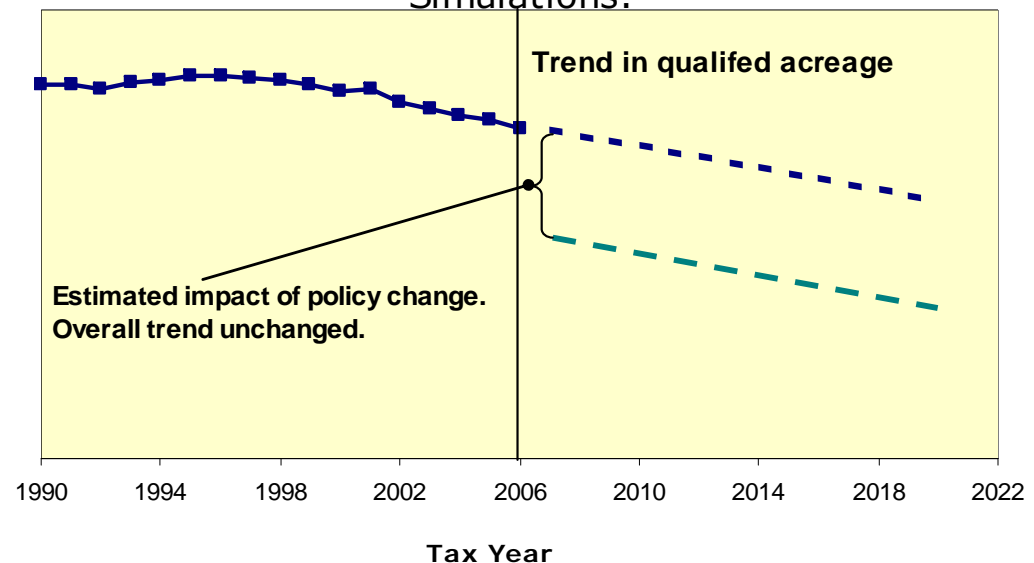
- Parcel 1: 4 acres, \$600 revenue (**Not Qualified** due to acreage)
- Parcel 2: 6 acres, \$200 revenue (**Not Qualified** due to revenue)
- Parcel 3: 8 acres, \$1,000 revenue (**Qualified**)

Policy Simulations

Models were developed and programmed in SAS (a statistical modeling software package) to simulate the impacts of each of the five policy scenarios on (1) qualified acreage and (2) farm industry revenues. The models provide a snapshot of what the impact of alternate revenue requirements for farmland assessment would have been vis-à-vis conditions existing in the 2006 tax year. It is assumed that the change in eligibility criteria would result in a reduction in qualified acreage, but that the policy change would not impact the general trend in enrolled land.

Each parcel, or individual FA-1 form, in the *Qualified Dataset* was evaluated against the alternate eligibility criteria to determine whether it would meet the new threshold(s) or be rendered ineligible.

Conceptual Diagram of Policy Change Simulations.



Policy Simulations

Parcels determined to be ineligible under each scenario were aggregated and analyzed to determine:

- Impacts on total qualified acreage
- Impacts on qualified acreage, by land use (e.g., cropland harvested, non-attached woodland, etc.)
- Impacts on commodity acreage
- Impacts on livestock
- Impacts on agricultural industry revenue

All analysis was conducted within the context of FA-1 forms in the *Qualified Dataset*. To estimate the total impact of each policy scenario (i.e., the impact on all acreage reported on the 29,239 FA-1 forms submitted in 2006), a simple expansion factor was calculated.

Policy Simulations

The expansion factor (EF), which accounts for the fact that not all of the parcels in the Farmland Assessment Database could be modeled, was calculated and applied as follows:

$$EF = \frac{\text{Total Farmland Assessed Acres}}{\text{Acres in Qualified Dataset}}$$

$$\text{Total Acres Rendered Ineligible} = \sum(EF \times A_{clr})$$

where: A_{clr} = acres rendered ineligible in the Qualified Dataset, and
c=crop category,
l=land use type,
r=region (e.g., county)

This allows the total acres rendered ineligible under each policy scenario to be estimated from the model results. Estimated impacts can be decomposed by crop category, land use type, and geographic region.

Study Limitations

The policy simulations in this study faced several challenges stemming from the nature of available data. Among the most significant are:

- (1) Data on FA-1 forms are self-reported by landowner applicants and are assumed to be accurate in terms of reported acreage, land use/crop composition, and livestock numbers.
- (2) No data on production or actual revenue generation are reported on FA-1 forms. Therefore, estimates of income generation are imputed for each FA-1 form based on average statewide crop yields and average prices received by farmers, as reported by the National Agricultural Statistics Service (NASS).
- (3) The modeling does not account for potential farm productivity adjustments landowners may make in an effort to meet higher revenue requirements.

Study Limitations

- (4) The most significant data challenge lies in the inability to determine the contiguity of land, under one ownership, listed on multiple FA-1 forms due to application and State data entry processes.

The incidence of multiple FA-1 form submissions for a single parcel of land is difficult to accurately determine. A total of 29,239 approved FA-1 forms were contained in the 2006 Tax Year dataset. As a point of reference, New Jersey has 9,924 farms (according to the 2002 Census of Agriculture).

This comparison must, however, be qualified. First, eligibility for farmland assessment in New Jersey is completely independent from the USDA definition of a farm as “any place from which \$1,000 or more of agricultural products were sold or normally would have been sold.” Some properties enrolled under farmland assessment do not meet the \$1,000 income threshold set under the USDA’s farm definition. Second, not all of the woodland properties enrolled under farmland assessment are classified by the USDA as “farms.”

Summary of Simulation Findings

The table below summarizes the impact on acreage qualified for farmland assessment and the estimated farm industry/forestry revenue loss associated with each simulated policy scenario. In estimating industry revenue losses, it is assumed that lands losing farmland assessment eligibility will exit agriculture and/or active forestry management.

Summary of Impacts from All Policy Simulations						
Simulation	Minimum Revenue	Additional Revenue /Acre (Ag Land)	Additional Revenue /Acre (Woodland)	Land Rendered Ineligible (Acres)	% Land Rendered Ineligible	Revenue Impact
Policy #1	\$750	\$5.00	\$0.50	18,103	1.8%	\$629,000
Policy #2	\$1,000	\$5.00	\$0.50	47,378	4.7%	\$2,066,000
Policy #3	\$2,500	\$5.00	\$0.50	149,631	14.8%	\$10,751,000
Policy #4	\$10,000	\$5.00	\$0.50	398,093	39.3%	\$51,153,000
Policy #5	\$500	\$50.00	\$5.00	50,670	5.0%	\$716,000

Note: Minimum requirement for land in agricultural production in all policy simulations is 5 acres.

Summary of Simulation Findings

The table below decomposes the impact on qualified acreage associated with each policy scenario into: (1) agricultural land impacts (cropland harvested, permanent pasture, cropland pastured, and associated appurtenant woodland) and (2) non-appurtenant woodland.

Summary of Impacts from All Policy Simulations

Simulation	Minimum Revenue	Additional Revenue /Acre (Ag Land)	Additional Revenue /Acre (Woodland)	Land Rendered Ineligible (Acres)	Agricultural Land Rendered Ineligible (Acres)	Non-Appurtenant Woodland Rendered Ineligible (Acres)
Policy #1	\$750	\$5.00	\$0.50	18,103	4,125	13,978
Policy #2	\$1,000	\$5.00	\$0.50	47,378	13,546	33,832
Policy #3	\$2,500	\$5.00	\$0.50	149,631	71,856	77,774
Policy #4	\$10,000	\$5.00	\$0.50	398,093	282,733	115,360
Policy #5	\$500	\$50.00	\$5.00	50,670	18,297	32,372

Note: "Agricultural land" includes appurtenant woodland.

Policy Scenario 1 – Overview of Findings

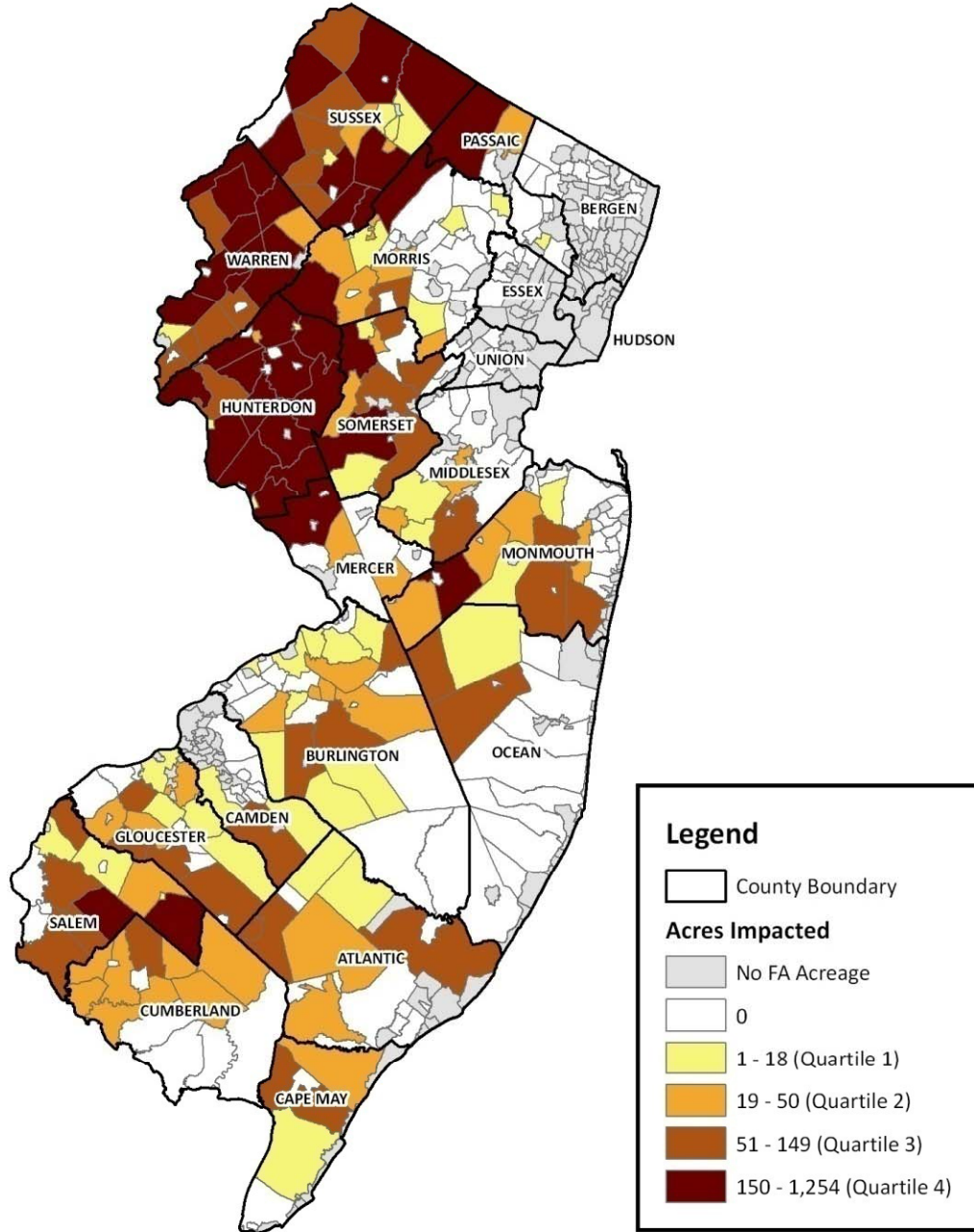
- An estimated 18,100 acres of land would be rendered ineligible if the minimum revenue requirement was raised to \$750. The associated revenue impact is approximately \$629,000.
- Non-appurtenant woodland would be most impacted, accounting for 77 percent of the land losing eligibility. Most of this land is located in the northwestern counties of Hunterdon, Warren and Sussex.
- All of the 1,657 acres of cropland harvested projected to be impacted is classified as field crops. Most of the field crop acreage rendered ineligible would be rye (58% of field crop acreage lost), hay (15%), oats (10%), or sorghum (9%).

Policy Scenario 1 – Simulation Results

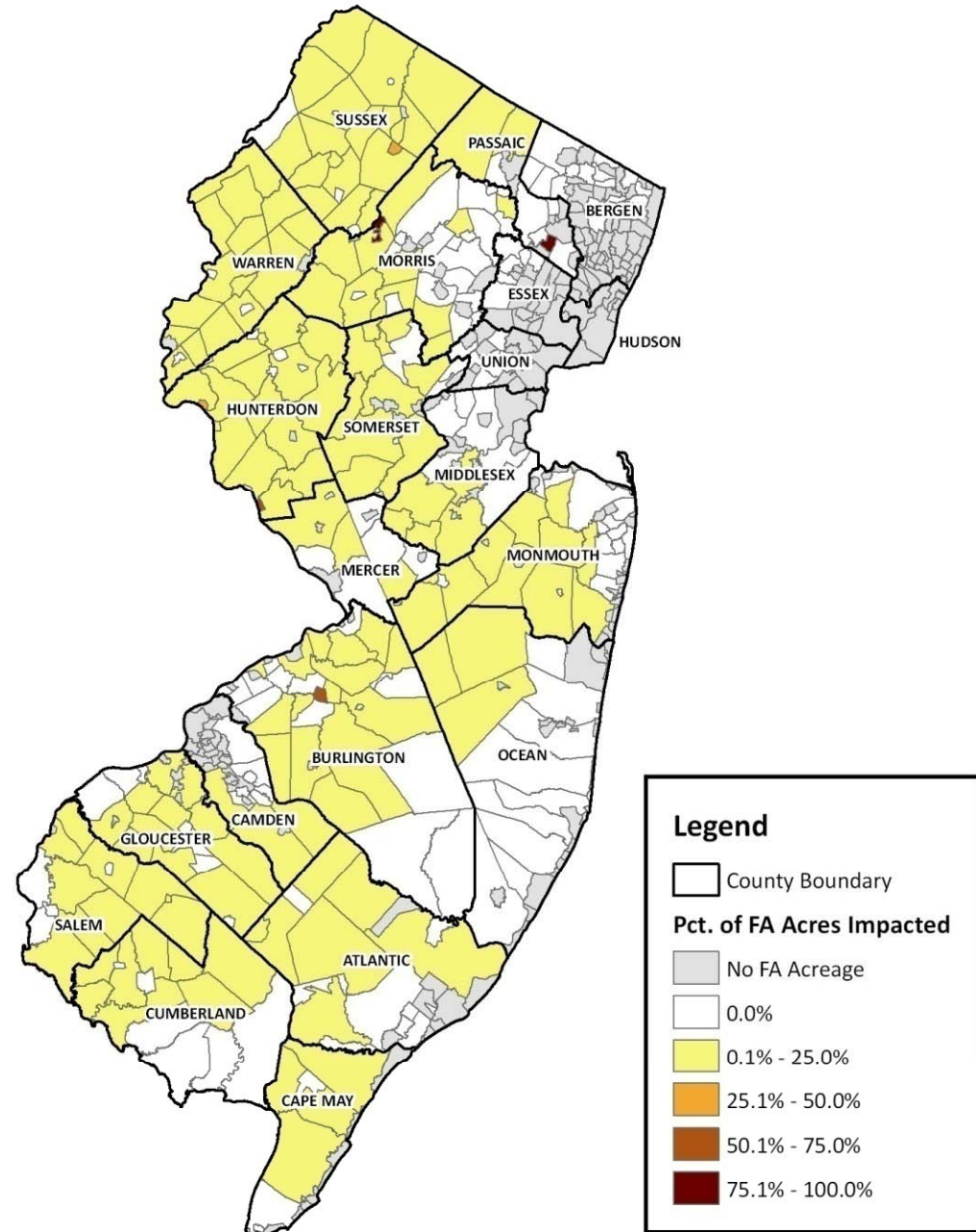
Minimum Requirements	
Minimum Revenue:	\$750.00
Additional Revenue per acre (Ag land above 5 acres)	\$5.00
Additional Revenue per acre (Woodland above 5 acres)	\$0.50

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	1,657	9.2%	0.3%
Cropland Pastured	378	2.1%	0.9%
Permanent Pasture	1,122	6.2%	1.2%
Non-Appurtenant Woodland	13,978	77.2%	6.3%
Appurtenant Woodland	942	5.2%	0.5%
Equine (training/boarding/rehab only)	25	0.1%	0.5%
Total Devoted to Agricultural Use	18,103	100.0%	1.8%
Revenue Impact	\$629,000		0.1%

Statewide Impact: Agricultural Acres Impacted



Statewide Impact: Percent of Farmland Assessed Acres Impacted



County	Agricultural Land & Appurtenant Woodland		Non-Appurtenant Woodland		Percent of Farmland Assessed Acreage		Revenue Impact
	Acres Rendered Ineligible	Appurtenant Woodland Rendered Ineligible	Woodland Rendered Ineligible	Non-Appurtenant Woodland Rendered Ineligible	Rendered Ineligible	Assessed Acreage	
Atlantic	320	87	233		0.8%	\$9,462	
Bergen	0	0	0		0.0%	\$0	
Burlington	436	281	155		0.4%	\$27,169	
Camden	116	109	7		0.9%	\$7,842	
Cape May	118	15	103		1.1%	\$2,764	
Cumberland	263	149	114		0.3%	\$14,789	
Essex	0	0	0		0.0%	\$0	
Gloucester	589	234	355		0.9%	\$24,663	
Hunterdon	3,526	931	2,595		2.8%	\$122,058	
Mercer	433	109	324		1.3%	\$19,136	
Middlesex	146	30	116		0.6%	\$6,571	
Monmouth	633	401	232		1.1%	\$41,538	
Morris	985	209	776		3.1%	\$33,128	
Ocean	164	53	111		0.7%	\$6,129	
Passaic	859	58	801		12.2%	\$28,678	
Salem	845	295	551		0.7%	\$33,364	
Somerset	755	218	537		1.7%	\$33,550	
Sussex	3,476	405	3,072		3.4%	\$83,423	
Union	0	0	0		0.0%	\$0	
Warren	4,439	542	3,897		4.1%	\$134,817	
New Jersey	18,103	4,125	13,978		1.8%	\$629,082	

Top 20 Municipalities (by Acres Rendered Ineligible)

County	Municipality	Acres Rendered Ineligible	Acres of Agricultural Land	Acres of Non-Appurtenant	Revenue Impact
			& Appurtenant Woodland Rendered Ineligible	Woodland Rendered Ineligible	
Warren	Hardwick Twp	1,254	73	1,181	\$19,006
Sussex	Byram Twp	897	17	880	\$8,386
Passaic	West Milford Twp	799	57	742	\$25,364
Hunterdon	West Amwell Twp	625	47	578	\$12,968
Warren	Mansfield Twp	590	43	548	\$18,422
Sussex	Stillwater Twp	518	23	495	\$10,452
Warren	Blairstown Twp	459	54	405	\$22,377
Morris	Washington Twp	429	161	268	\$12,883
Sussex	Wantage Twp	421	42	380	\$14,163
Warren	Independence Twp	387	125	262	\$6,939
Mercer	Hopewell Twp	374	86	289	\$15,392
Hunterdon	East Amwell Twp	317	92	226	\$13,594
Hunterdon	Delaware Twp	304	135	169	\$14,196
Hunterdon	Franklin Twp	292	101	191	\$10,244
Sussex	Sandyston Twp	290	21	269	\$9,979
Hunterdon	Raritan Twp	259	167	92	\$9,913
Hunterdon	Holland Twp	252	67	185	\$7,143
Warren	White Twp	246	5	241	\$10,082
Hunterdon	Lebanon Twp	242	15	227	\$7,166
Monmouth	Millstone Twp	238	105	133	\$11,625
Total Impact on Top 20		9,195	1,433	7,761	\$260,294
Total Impact on Remaining 139 Mun.		8,908	2,692	6,217	\$368,788
Total Statewide Impact		18,103	4,125	13,978	\$629,082

Policy Scenario 2 – Overview of Findings

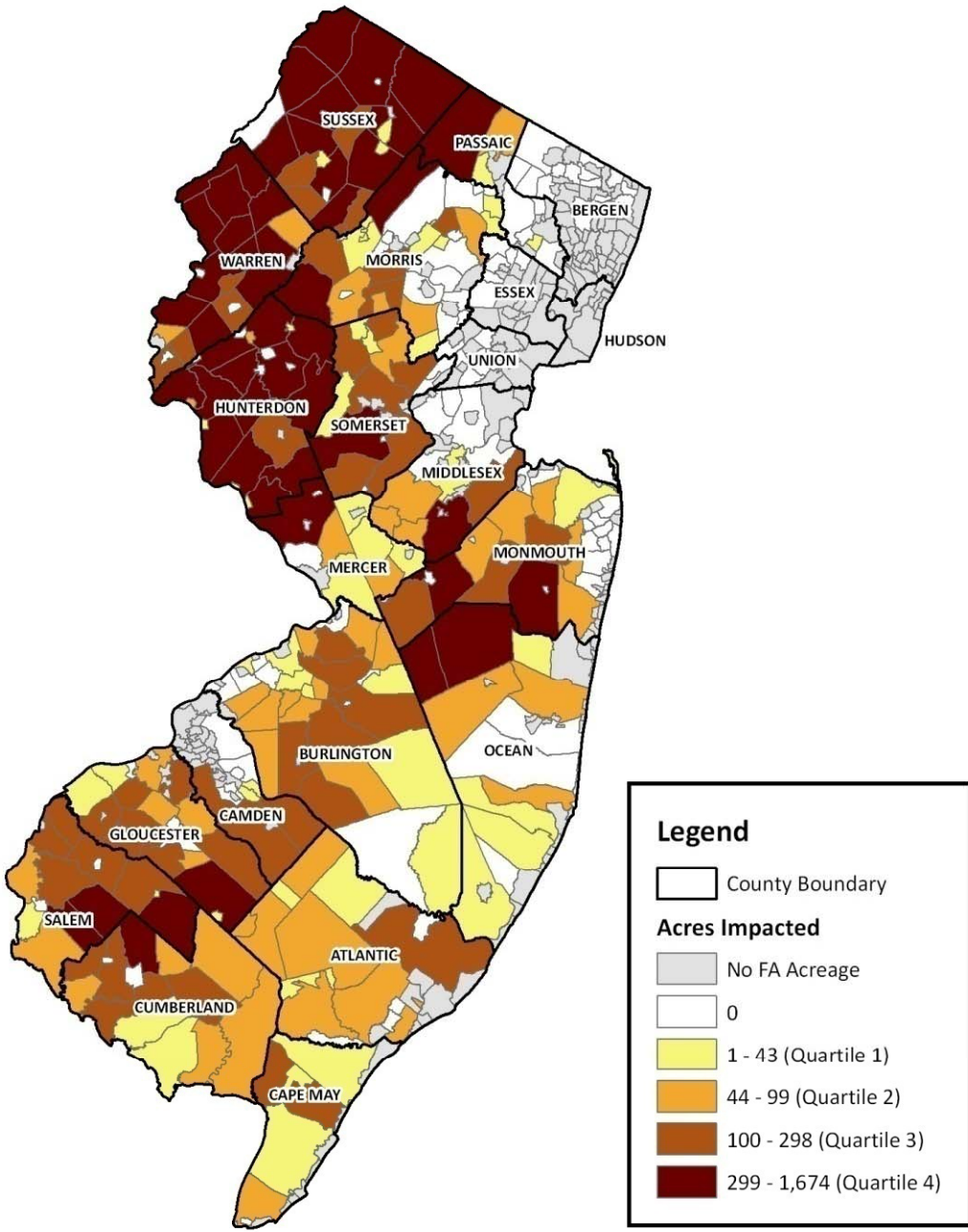
- An estimated 47,377 acres of land would be rendered ineligible if the minimum revenue requirement was raised to \$1,000. The associated revenue impact is approximately \$2.07 million.
- Non-appurtenant woodland would be most impacted, accounting for 71 percent of the land losing eligibility. Most of this land is located in the northwestern counties of Hunterdon, Warren and Sussex.
- Virtually all of the 6,516 acres of cropland harvested projected to be impacted is classified as field crops. The most impacted crops would be soybeans (32% of field crop acreage lost), hay (31%), and rye (22%).

Policy Scenario 2 – Simulation Results

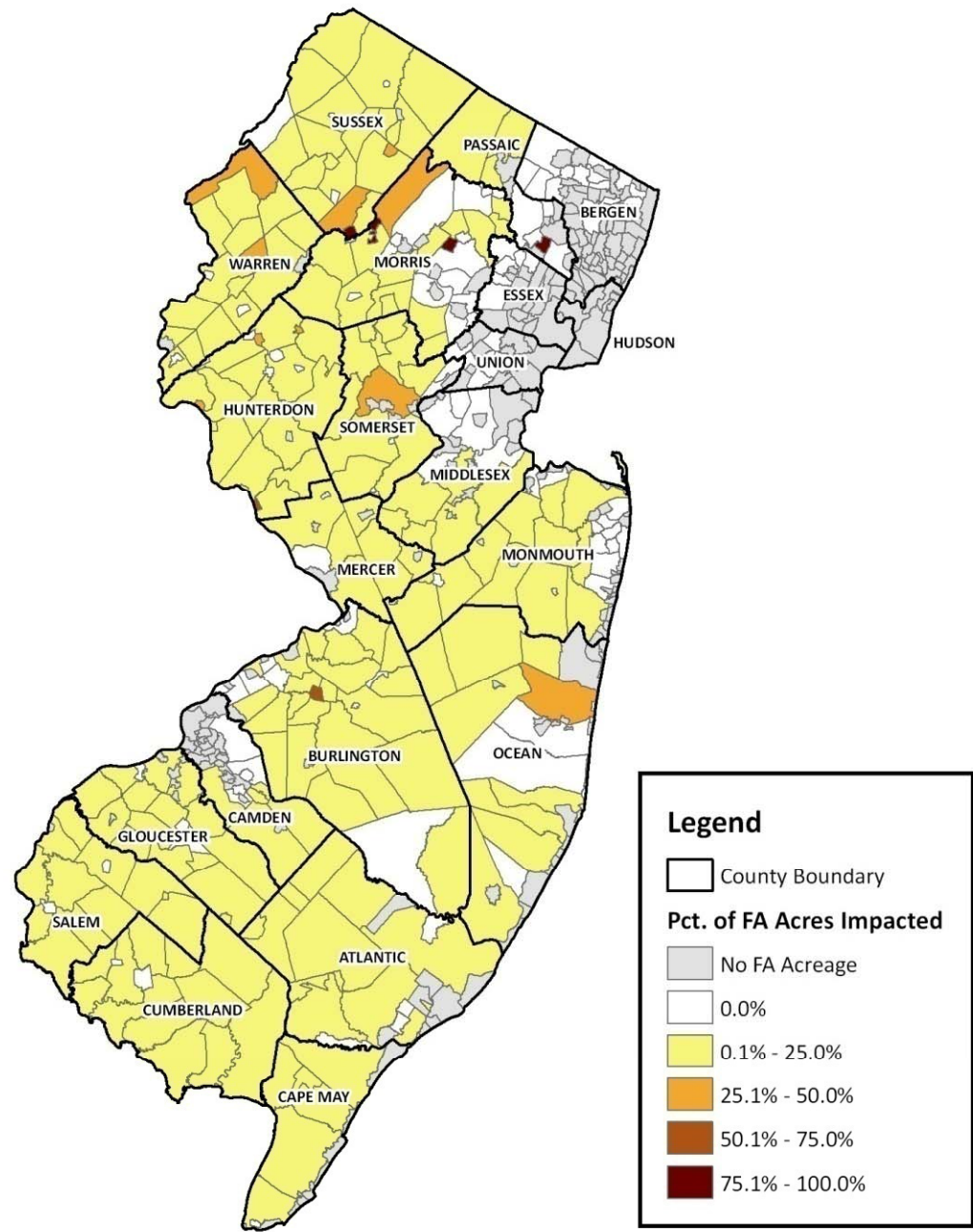
Minimum Requirements	
Minimum Revenue:	\$1,000.00
Additional Revenue per acre (Ag land above 5 acres)	\$5.00
Additional Revenue per acre (Woodland above 5 acres)	\$0.50

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	6,516	13.8%	1.4%
Cropland Pastured	948	2.0%	2.4%
Permanent Pasture	2,845	6.0%	3.1%
Non-Appurtenant Woodland	33,832	71.4%	15.2%
Appurtenant Woodland	3,120	6.6%	1.8%
Equine (training/boarding/rehab only)	117	0.2%	2.2%
Total Devoted to Agricultural Use	47,378	100.0%	4.7%
Revenue Impact	\$2,066,000		0.2%

Statewide Impact: Agricultural Acres Impacted



Statewide Impact: Percent of Farmland Assessed Acres Impacted



County	Agricultural Land & Appurtenant Woodland		Non-Appurtenant Woodland		Percent of Farmland Assessed Acreage		Revenue Impact
	Acres Rendered Ineligible	Appurtenant Woodland Rendered Ineligible	Woodland Rendered Ineligible	Non-Appurtenant Woodland Rendered Ineligible	Rendered Ineligible	Assessed Acreage	
Atlantic	625	185	439		1.5%	\$23,935	
Bergen	0	0	0		0.0%	\$0	
Burlington	1,783	1,076	707		1.5%	\$140,484	
Camden	526	349	177		4.2%	\$31,923	
Cape May	380	65	315		3.5%	\$11,137	
Cumberland	1,293	867	426		1.5%	\$110,129	
Essex	0	0	0		0.0%	\$0	
Gloucester	1,979	958	1,021		3.1%	\$128,269	
Hunterdon	7,641	2,415	5,226		6.0%	\$357,833	
Mercer	1,073	400	673		3.3%	\$63,609	
Middlesex	663	323	340		2.7%	\$45,155	
Monmouth	2,184	966	1,219		3.9%	\$126,706	
Morris	2,873	442	2,431		9.2%	\$95,559	
Ocean	902	106	797		3.6%	\$31,738	
Passaic	1,502	126	1,376		21.4%	\$51,208	
Salem	2,970	1,727	1,244		2.5%	\$180,325	
Somerset	1,741	609	1,132		3.9%	\$92,610	
Sussex	9,476	1,517	7,959		9.2%	\$236,722	
Union	0	0	0		0.0%	\$0	
Warren	9,767	1,416	8,350		9.1%	\$338,907	
New Jersey	47,377	13,546	33,832		4.7%	\$2,066,249	

Top 20 Municipalities (by Acres Rendered Ineligible)

County	Municipality	Acres Rendered Ineligible	Acres of Agricultural Land & Appurtenant Woodland Rendered Ineligible	Acres of Non-Appurtenant Woodland Rendered Ineligible	Revenue Impact
Warren	Hardwick Twp	1,674	161	1,513	\$37,679
Sussex	Byram Twp	1,532	108	1,425	\$18,886
Sussex	Stillwater Twp	1,469	132	1,337	\$25,833
Sussex	Wantage Twp	1,465	151	1,314	\$41,091
Passaic	West Milford Twp	1,384	121	1,263	\$44,825
Morris	Washington Twp	1,187	239	949	\$28,805
Warren	Mansfield Twp	1,162	194	968	\$50,887
Warren	Blairstown Twp	1,078	154	925	\$54,307
Warren	Independence Twp	1,001	158	843	\$15,261
Warren	White Twp	902	98	805	\$28,601
Warren	Knowlton Twp	893	187	706	\$25,241
Mercer	Hopewell Twp	839	274	564	\$38,493
Warren	Liberty Twp	818	57	761	\$22,905
Hunterdon	Lebanon Twp	764	158	606	\$33,911
Hunterdon	West Amwell Twp	716	63	653	\$18,034
Hunterdon	Delaware Twp	715	452	264	\$50,325
Hunterdon	Franklin Twp	701	380	321	\$37,157
Hunterdon	Holland Twp	688	107	581	\$18,964
Monmouth	Millstone Twp	674	231	443	\$31,307
Salem	Pittsgrove Twp	624	362	262	\$27,623
Total Impact on Top 20		20,286	3,786	16,500	\$650,136
Total Impact on Remaining 139 Mun.		27,091	9,760	17,332	\$1,416,113
Total Statewide Impact		47,377	13,546	33,832	\$2,066,249

Policy Scenario 3 – Overview of Findings

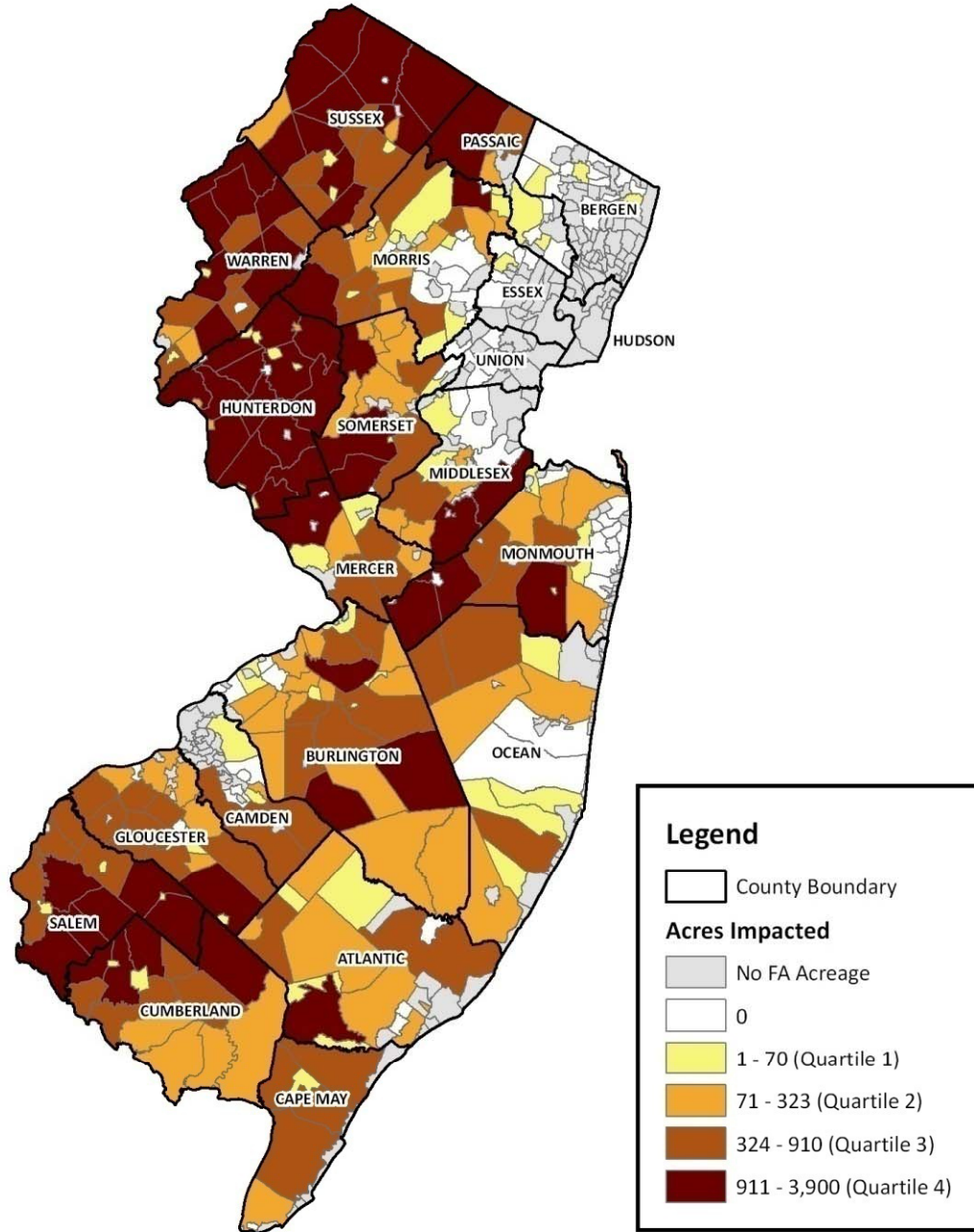
- An estimated 149,631 acres of land would be rendered ineligible if the minimum revenue requirement was raised to \$2,500. The associated revenue impact is approximately \$10.75 million.
- Non-appurtenant woodland would be most impacted, accounting for 52 percent of the land losing eligibility.
- As with earlier scenarios, nearly all of the 39,227 acres of cropland harvested projected to be impacted is classified as field crops. This is equivalent to roughly 11 percent of the entire field crop acreage reported under farmland assessment in the 2006 Tax Year. The most impacted crops are hay (41% of field crop acreage lost), soybeans (28%), and rye (9%). Nominal acreage devoted to fruit, vegetable, and ornamental production would also be impacted. It is also estimated that land used in the production, as well as boarding, training or rehabilitation of nearly 1,700 equine animals would also be rendered ineligible.

Policy Scenario 3 – Simulation Results

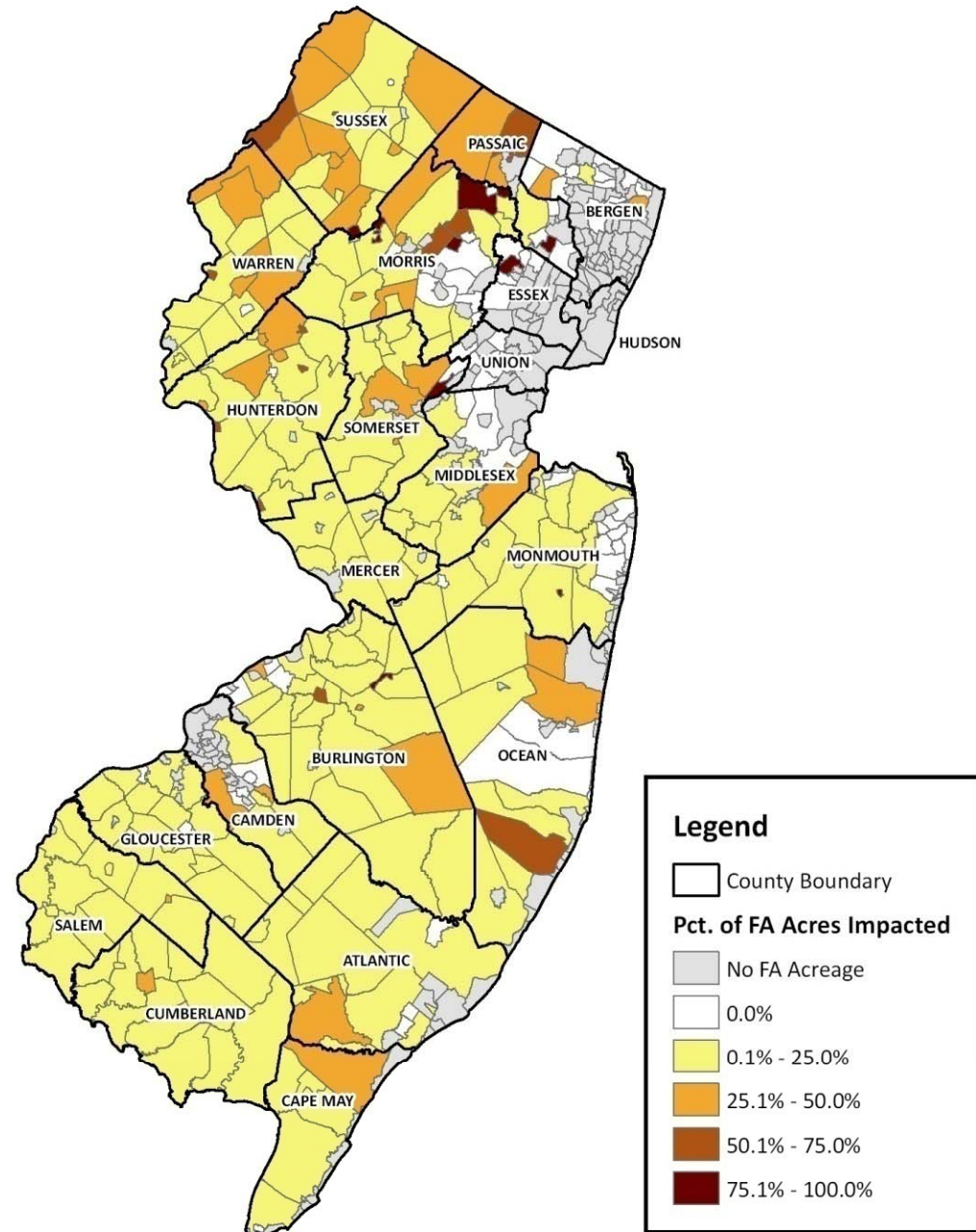
Minimum Requirements	
Minimum Revenue:	\$2,500.00
Additional Revenue per acre (Ag land above 5 acres)	\$5.00
Additional Revenue per acre (Woodland above 5 acres)	\$0.50

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	39,227	26.2%	8.2%
Cropland Pastured	5,159	3.4%	12.8%
Permanent Pasture	11,734	7.8%	13.0%
Non-Appurtenant Woodland	77,774	52.0%	34.9%
Appurtenant Woodland	15,215	10.2%	8.8%
Equine (training/boarding/rehab only)	521	0.3%	9.7%
Total Devoted to Agricultural Use	149,631	100.0%	14.8%
Revenue Impact	\$10,751,000		1.1%

Statewide Impact: Agricultural Acres Impacted



Statewide Impact: Percent of Farmland Assessed Acres Impacted



County	Agricultural Land & Appurtenant Woodland		Non-Appurtenant Woodland	Percent of Farmland Assessed Acreage		Revenue Impact
	Acres Rendered Ineligible	Appurtenant Woodland Rendered Ineligible	Woodland Rendered Ineligible	Rendered Ineligible	Ineligible	
Atlantic	4,496	796	3,700	10.6%		\$145,600
Bergen	49	49	0	6.1%		\$4,616
Burlington	10,297	5,866	4,432	8.8%		\$804,581
Camden	1,715	1,245	470	13.8%		\$191,381
Cape May	1,873	879	994	17.3%		\$91,852
Cumberland	7,469	5,585	1,884	8.6%		\$765,759
Essex	64	6	58	32.4%		\$1,705
Gloucester	6,735	4,725	2,011	10.5%		\$720,342
Hunterdon	23,640	13,189	10,451	18.6%		\$1,824,913
Mercer	4,036	2,505	1,531	12.3%		\$327,036
Middlesex	3,499	1,510	1,989	14.4%		\$232,136
Monmouth	6,199	3,787	2,413	11.2%		\$608,999
Morris	8,047	1,890	6,157	25.6%		\$411,434
Ocean	2,487	563	1,924	9.9%		\$130,490
Passaic	3,111	300	2,812	44.2%		\$117,201
Salem	12,806	9,604	3,203	10.7%		\$1,307,915
Somerset	7,231	4,442	2,789	16.3%		\$617,203
Sussex	24,065	8,070	15,996	23.2%		\$1,145,497
Union	0	0	0	0.0%		\$0
Warren	21,806	6,846	14,960	20.3%		\$1,301,920
New Jersey	149,627	71,856	77,774	14.8%		\$10,750,578

Top 20 Municipalities (by Acres Rendered Ineligible)

County	Municipality	Acres Rendered Ineligible	Acres of Agricultural Land	Acres of Non-Appurtenant	Revenue Impact
			& Appurtenant Woodland	Woodland Rendered	
			Rendered Ineligible	Ineligible	
Sussex	Wantage Twp	3,900	1,643	2,257	\$210,290
Hunterdon	Delaware Twp	2,937	2,297	641	\$272,495
Atlantic	Estell Manor City	2,919	35	2,884	\$18,865
Warren	Mansfield Twp	2,896	647	2,249	\$145,469
Warren	Hardwick Twp	2,884	472	2,413	\$100,935
Sussex	Stillwater Twp	2,878	385	2,493	\$98,807
Hunterdon	Kingwood Twp	2,870	1,629	1,241	\$176,981
Warren	Blairstown Twp	2,782	1,014	1,768	\$211,493
Sussex	Frankford Twp	2,600	1,223	1,377	\$135,825
Mercer	Hopewell Twp	2,517	1,342	1,175	\$151,313
Passaic	West Milford Twp	2,415	158	2,257	\$89,981
Burlington	Woodland Twp	2,362	26	2,336	\$10,683
Morris	Washington Twp	2,362	751	1,610	\$116,400
Hunterdon	Lebanon Twp	2,234	640	1,594	\$134,020
Salem	Pittsgrove Twp	2,150	1,470	681	\$229,159
Somerset	Bedminster Twp	2,069	1,374	695	\$166,530
Sussex	Byram Twp	2,065	151	1,914	\$41,677
Warren	Knowlton Twp	1,992	706	1,286	\$100,437
Sussex	Hampton Twp	1,867	1,026	842	\$107,122
Salem	Alloway Twp	1,852	870	982	\$168,406
Total Impact on Top 20		50,551	17,856	32,696	\$2,686,887
Total Impact on Remaining 139 Mun.		99,076	54,000	45,078	\$8,063,691
Total Statewide Impact		149,627	71,856	77,774	\$10,750,578

Policy Scenario 4 – Overview of Findings

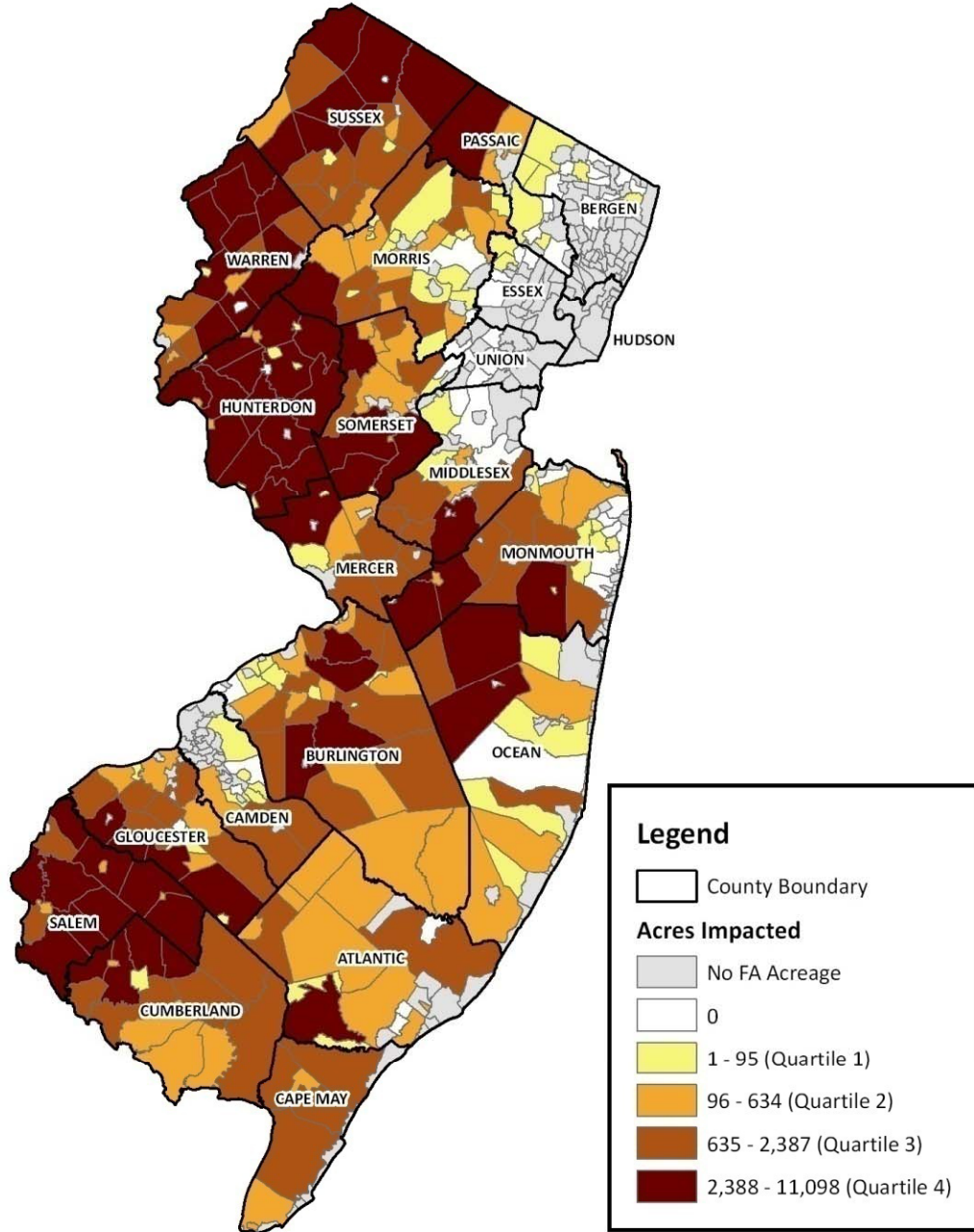
- An estimated 398,093 acres of land would be rendered ineligible if the minimum revenue requirement was raised to \$10,000. The associated revenue impact is approximately \$51.15 million.
- The greatest amount of acreage rendered ineligible would fall in the cropland harvested category (169,839 acres, or 43% of the total impacted area). Non-appurtenant woodland would also be substantially impacted, accounting for 29 percent of the land losing eligibility.
- The very large majority of the cropland harvested acreage rendered ineligible is classified as field crops. The most impacted crops include hay (32% of field crop acreage lost), soybeans (31%), and wheat (7%). While 50 percent of current field crop acreage would be rendered ineligible under this scenario, lesser impacts were also estimated in the vegetable sector (approximately 1,040 acres, half of which is producing pumpkins or sweet corn), ornamental sector (285 acres), and fruit sector (185 acres). It is also estimated that land used in the production, as well as boarding, training or rehabilitation of nearly 6,500 equine animals would also be rendered ineligible.

Policy Scenario 4 – Simulation Results

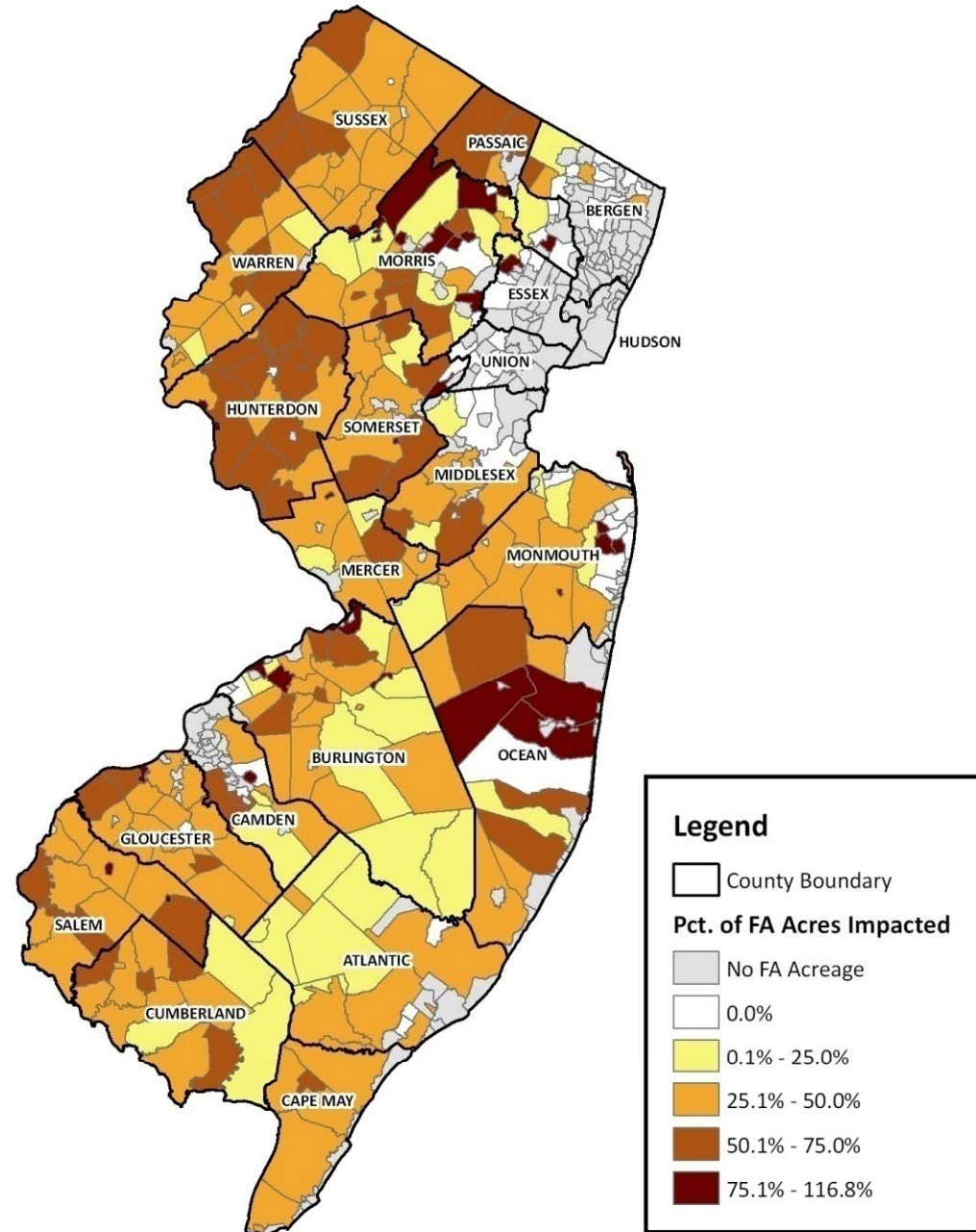
Minimum Requirements	
Minimum Revenue:	\$10,000.00
Additional Revenue per acre (Ag land above 5 acres)	\$5.00
Additional Revenue per acre (Woodland above 5 acres)	\$0.50

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	169,839	42.7%	35.3%
Cropland Pastured	16,011	4.0%	39.8%
Permanent Pasture	36,399	9.1%	40.2%
Non-Appurtenant Woodland	115,360	29.0%	51.8%
Appurtenant Woodland	59,303	14.9%	34.2%
Equine (training/boarding/rehab only)	1,180	0.3%	21.9%
Total Devoted to Agricultural Use	398,093	100.0%	39.3%
Revenue Impact	\$51,153,000		5.1%

Statewide Impact: Agricultural Acres Impacted



Statewide Impact: Percent of Farmland Assessed Acres Impacted



County	Agricultural Land & Appurtenant Woodland		Non-Appurtenant Woodland		Percent of Farmland Assessed Acreage	
	Acres Rendered Ineligible	Appurtenant Woodland Rendered Ineligible	Woodland Rendered Ineligible	Non-Appurtenant Woodland Rendered Ineligible	Rendered Ineligible	Revenue Impact
Atlantic	7,029	2,866	4,164		16.5%	\$711,186
Bergen	147	104	43		18.3%	\$45,947
Burlington	31,936	26,958	4,979		27.3%	\$4,419,947
Camden	3,710	3,056	653		30.0%	\$784,152
Cape May	3,982	2,897	1,085		36.8%	\$584,456
Cumberland	26,557	23,146	3,411		30.6%	\$3,746,957
Essex	70	12	58		35.4%	\$4,974
Gloucester	23,331	19,671	3,661		36.4%	\$3,765,771
Hunterdon	65,372	50,469	14,903		51.5%	\$8,381,222
Mercer	12,641	10,036	2,605		38.4%	\$1,671,015
Middlesex	9,659	7,046	2,613		39.8%	\$1,289,209
Monmouth	15,822	12,598	3,224		28.5%	\$2,921,047
Morris	14,956	6,254	8,703		47.6%	\$1,614,510
Ocean	11,643	1,838	9,805		46.5%	\$524,694
Passaic	3,673	451	3,222		52.2%	\$263,235
Salem	50,428	45,738	4,690		42.0%	\$7,876,365
Somerset	20,742	14,950	5,792		46.8%	\$2,455,760
Sussex	48,126	27,231	20,896		46.5%	\$4,739,435
Union	0	0	0		0.0%	\$0
Warren	48,265	27,413	20,852		44.9%	\$5,353,595
New Jersey	398,088	282,733	115,360		39.3%	\$51,153,477

Top 20 Municipalities (by Acres Rendered Ineligible)

County	Municipality	Acres Rendered Ineligible	Acres of Agricultural Land & Appurtenant Woodland Rendered Ineligible	Acres of Non-Appurtenant Woodland Rendered Ineligible	Revenue Impact
Sussex	Wantage Twp	11,098	8,002	3,097	\$1,140,245
Hunterdon	Delaware Twp	8,510	7,419	1,091	\$1,270,536
Hunterdon	Kingwood Twp	8,400	6,717	1,683	\$892,487
Salem	Upper Pittsgrove Twp	7,839	7,427	412	\$1,377,433
Salem	Pittsgrove Twp	6,862	5,776	1,086	\$1,251,356
Mercer	Hopewell Twp	6,729	5,005	1,724	\$760,460
Salem	Mannington Twp	5,733	5,285	449	\$768,412
Hunterdon	Alexandria Twp	5,587	4,290	1,297	\$689,419
Somerset	Hillsborough Twp	5,518	4,118	1,400	\$635,242
Sussex	Frankford Twp	5,455	3,876	1,578	\$601,030
Burlington	Springfield Twp	5,391	5,277	113	\$826,751
Salem	Alloway Twp	5,378	4,130	1,248	\$798,150
Salem	Pilesgrove Twp	5,246	5,050	196	\$1,024,947
Hunterdon	Tewksbury Twp	5,174	4,292	882	\$750,794
Morris	Washington Twp	5,106	2,533	2,573	\$507,561
Warren	Mansfield Twp	5,038	2,573	2,465	\$550,356
Warren	Blairstown Twp	4,988	2,377	2,611	\$594,769
Somerset	Bedminster Twp	4,930	3,436	1,494	\$526,242
Hunterdon	Readington Twp	4,913	3,852	1,061	\$697,329
Salem	Lower Alloways Cree	4,722	4,599	123	\$578,626
Total Impact on Top 20		122,617	96,036	26,583	\$16,242,147
Total Impact on Remaining 139 Mun.		275,471	186,697	88,777	\$34,911,330
Total Statewide Impact		398,088	282,733	115,360	\$51,153,477

Policy Scenario 5 – Overview of Findings

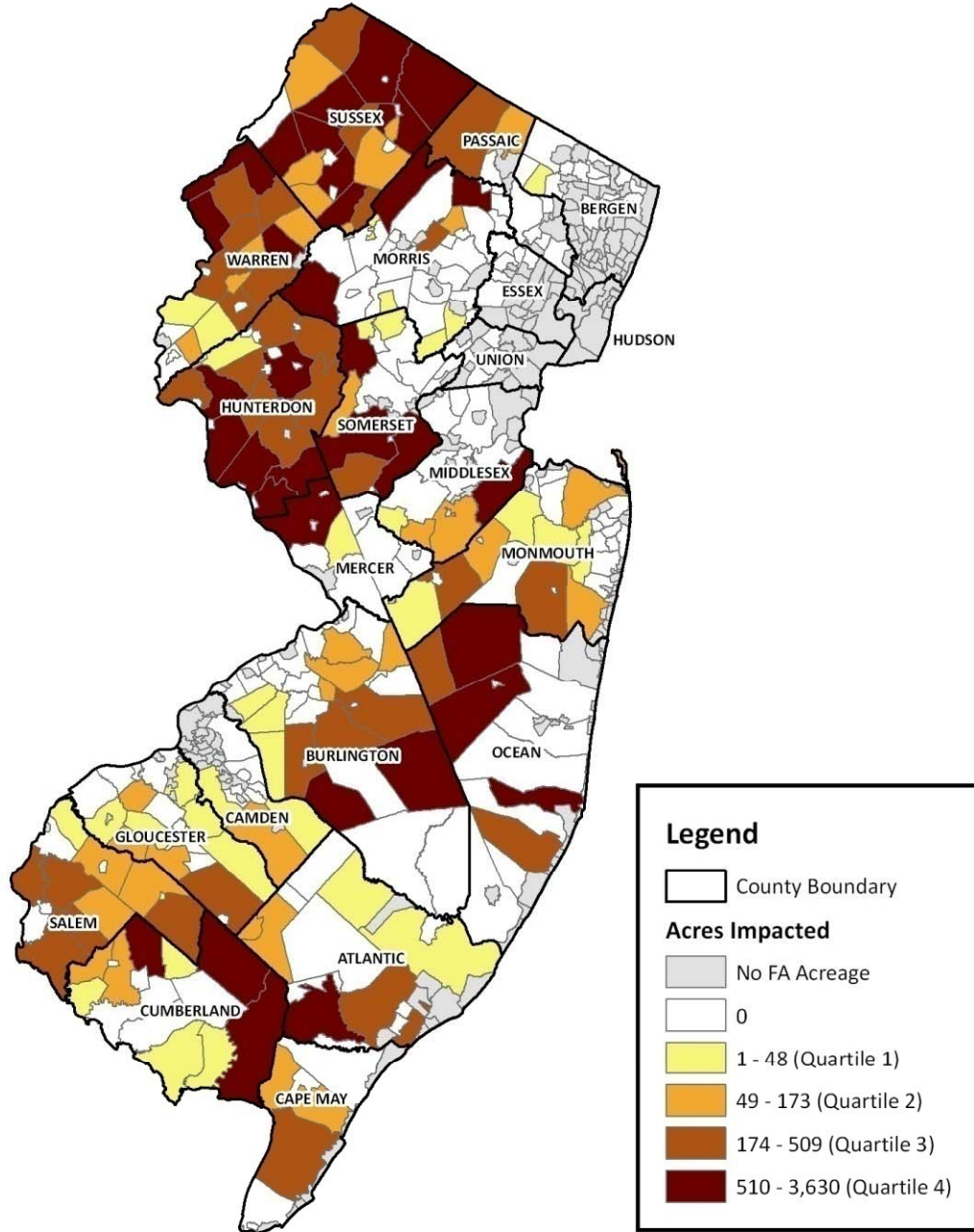
- An estimated 50,670 acres of land would be rendered ineligible if the minimum revenue requirement was maintained at \$500, but the additional acreage requirements for agricultural land and woodland were raised, respectively, to \$50/acre and \$5/acre. The associated revenue impact is approximately \$716,000.
- Non-appurtenant woodland would be most impacted, accounting for 64 percent of the land losing eligibility. Cropland harvested accounts for an additional 11 percent of land that would be rendered ineligible.
- All of the 5,757 acres of cropland harvested projected to be impacted is classified as field crops. The most impacted crops would be hay (41% of field crop acreage lost), rye (33%), and soybeans (12%).

Policy Scenario 5 – Simulation Results

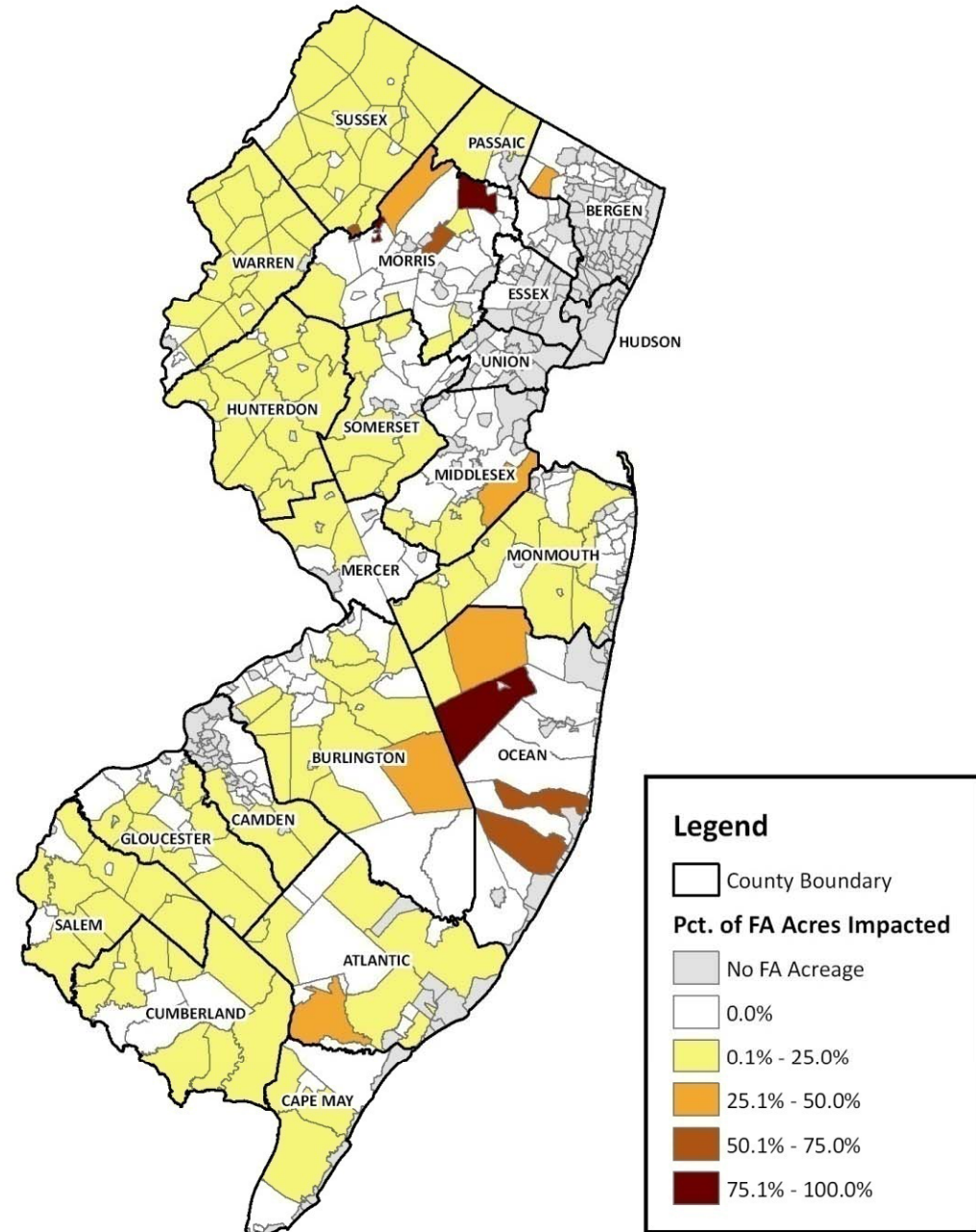
Minimum Requirements	
Minimum Revenue:	\$500.00
Additional Revenue per acre (Ag land above 5 acres)	\$50.00
Additional Revenue per acre (Woodland above 5 acres)	\$5.00

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	5,757	11.4%	1.2%
Cropland Pastured	2,855	5.6%	7.1%
Permanent Pasture	5,363	10.6%	5.9%
Non-Appurtenant Woodland	32,372	63.9%	14.5%
Appurtenant Woodland	4,210	8.3%	2.4%
Equine (training/boarding/rehab only)	112	0.2%	2.1%
Total Devoted to Agricultural Use	50,670	100.0%	5.0%
Revenue Impact	\$716,000		0.1%

Statewide Impact: Agricultural Acres Impacted



Statewide Impact: Percent of Farmland Assessed Acres Impacted



County	Agricultural Land & Appurtenant Woodland		Non-Appurtenant Woodland		Percent of Farmland Assessed Acreage		Revenue Impact
	Acres Rendered Ineligible	Rendered Ineligible	Woodland Rendered Ineligible	Woodland Rendered Ineligible	Rendered Ineligible	Rendered Ineligible	
Atlantic	2,782	233	2,549	6.5%	\$14,120		
Bergen	26	26	0	3.2%	\$1,447		
Burlington	4,159	1,225	2,934	3.6%	\$49,162		
Camden	175	175	0	1.4%	\$5,167		
Cape May	557	475	82	5.1%	\$12,841		
Cumberland	2,353	1,126	1,226	2.7%	\$28,182		
Essex	0	0	0	0.0%	\$0		
Gloucester	672	214	458	1.0%	\$15,528		
Hunterdon	6,792	4,352	2,440	5.3%	\$160,385		
Mercer	614	458	156	1.9%	\$14,409		
Middlesex	1,455	210	1,245	6.0%	\$8,480		
Monmouth	1,026	464	562	1.9%	\$23,587		
Morris	3,271	422	2,849	10.4%	\$38,907		
Ocean	8,004	308	7,695	32.0%	\$33,569		
Passaic	492	98	394	7.0%	\$6,199		
Salem	1,726	1,211	515	1.4%	\$41,883		
Somerset	3,198	2,608	590	7.2%	\$75,609		
Sussex	7,934	2,618	5,316	7.7%	\$98,914		
Union	0	0	0	0.0%	\$0		
Warren	5,434	2,075	3,360	5.1%	\$87,450		
New Jersey	50,669	18,297	32,372	5.0%	\$715,838		

Top 20 Municipalities (by Acres Rendered Ineligible)

County	Municipality	Acres Rendered Ineligible	Acres of Agricultural Land & Appurtenant Woodland	Acres of Non-Appurtenant Woodland	Revenue Impact
			Rendered Ineligible	Rendered Ineligible	
Ocean	Manchester Twp	3,630	0	3,630	\$11,038
Atlantic	Estell Manor City	2,427	0	2,427	\$4,297
Burlington	Woodland Twp	2,301	0	2,301	\$4,088
Ocean	Ocean Twp	1,872	0	1,872	\$4,088
Ocean	Jackson Twp	1,593	29	1,564	\$6,464
Middlesex	Old Bridge Twp	1,315	134	1,181	\$3,901
Somerset	Bedminster Twp	1,310	1,146	164	\$32,487
Sussex	Frankford Twp	1,282	419	864	\$11,634
Warren	Hardwick Twp	1,207	136	1,071	\$7,874
Sussex	Byram Twp	1,186	86	1,100	\$4,439
Sussex	Stillwater Twp	1,179	81	1,098	\$8,866
Morris	Washington Twp	1,168	330	838	\$21,967
Morris	Kinnelon Boro	1,140	0	1,140	\$6,278
Hunterdon	West Amwell Twp	1,046	533	514	\$15,185
Cumberland	Vineland City	887	0	887	\$1,635
Hunterdon	Delaware Twp	847	766	81	\$26,679
Warren	Independence Twp	813	139	674	\$6,883
Warren	Knowlton Twp	755	168	587	\$7,331
Hunterdon	East Amwell Twp	747	465	282	\$22,296
Hunterdon	Kingwood Twp	718	637	81	\$23,271
Total Impact on Top 20		27,424	5,069	22,355	\$230,701
Total Impact on Remaining 139 Mun.		23,245	13,228	10,017	\$485,137
Total Statewide Impact		50,669	18,297	32,372	\$715,838

Impact of Recent Grain Prices on Findings

The prices of several important grain crops have increased significantly since 2005, as shown in the table below. Most notably, the prices of corn, wheat, and soybeans – crops covering more than 170,000 acres – have risen by 183%, 131%, and 91%, respectively.

Commodity	2005 Acres	2005	2008	% Difference
		Value/Acre	Value/Acre	
Barley for Grain	2,435	\$142	\$447	215%
Corn for Grain	62,230	\$259	\$732	183%
Corn for Silage	15,243	\$319	\$319	0%
Grass for Silage	921	\$287	\$287	0%
Alfalfa Hay	32,556	\$408	\$464	14%
Other Hay	88,047	\$184	\$208	13%
Oats for Grain	3,010	\$103	\$271	163%
Rye for Grain	11,236	\$89	\$134	51%
Sorghum	5,507	\$127	\$384	202%
Soybeans	87,958	\$158	\$302	91%
Wheat	22,079	\$172	\$398	131%
Other Field Crops	2,297	\$204	\$359	76%
Total Field Crops	333,519	\$214	\$377	77%

Policy Scenario 2

Revised Impacts Assuming 2008 Grain Prices

Grains and other field crops account for roughly 333,500 acres of New Jersey's farmland assessed acreage. Consequently, the impact of price increases in this sector were evaluated by re-simulating Policy Scenario 2 (\$1,000 minimum revenue). This scenario was selected due to current policy discussions of raising the revenue requirement to this new level.

As shown in the following slide, the revised estimate is that 40,747 acres would not be eligible for farmland assessment under Policy Scenario 2 when 2008 grain prices are considered; this is 6,630 acres less than the original simulation. Much of this reflects a reduced impact on cropland harvested (approximately 4,400 acres less are estimated to be impacted) and associated appurtenant woodland (1,120 acres).

As with the initial simulation, most of the impacted land, 81 percent of ineligible acreage, falls in the non-appurtenant woodland category.

Policy Scenario 2

Revised Impacts Assuming 2008 Grain Prices

Minimum Requirements	
Minimum Revenue:	\$1,000.00
Additional Revenue per acre (Ag land above 5 acres)	\$5.00
Additional Revenue per acre (Woodland above 5 acres)	\$0.50

Summary of Impacts			
Land-Use Category	Land Rendered Ineligible (Acres)	% of Total Land Rendered Ineligible	% of Category Rendered Ineligible
Cropland Harvested	2,109	5.2%	0.4%
Cropland Pastured	825	2.0%	2.1%
Permanent Pasture	2,644	6.5%	2.9%
Non-Appurtenant Woodland	33,057	81.1%	14.8%
Appurtenant Woodland	2,000	4.9%	1.2%
Equine (training/boarding/rehab only)	112	0.3%	2.1%
Total Devoted to Agricultural Use	40,748	100.0%	4.0%
Revenue Impact	\$1,420,000		0.1%

Differential Assessment Programs in the Northeast

Research Design State Assessments

The status of differential assessment programs in the following nine Northeastern states was reviewed:

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Pennsylvania
- Rhode Island
- Vermont

Specific components of the review included an examination of:

- Goals of the program, including targeted land uses
- Notable changes in the enabling legislation or regulations
- Eligibility criteria
- Change of use, or rollback, provisions
- Recent or current policy proposals related to use value assessment

Research Design State Assessments

For each state, the review included an examination of enabling legislation, regulations, and implementation guidelines for each state.

Where possible, consultation was made with personnel at:

- State department of agriculture
- State Farm Bureau
- Forestry associations/foresters
- Land conservation organizations
- Tax assessors
- Academic experts

Differential Assessment Programs in the U.S.

According to the American Farmland Trust, all 50 states have had programs in place to reduce farm property taxes since 1989. By far, the most common approach to granting farmland owners property tax relief is some form of differential assessment program (known also as “current use assessment” or “use value assessment”, which exist in every state except Michigan. Maryland is credited as passing the first differential assessment law for farmland in 1956.

As a side note, Michigan (as well as New York and Wisconsin) employs a “circuit breaker” tax credit to provide tax relief to farmers. It provides relief to farmers, in the form of a state income tax credit, when property taxes exceed a certain percentage of their income. Michigan also requires the landowner to enter into a 10-year restrictive agreement and pay a recapture tax if a qualified property changes to a non-agricultural use.

Types of Differential Assessment

Nearly all differential assessment programs follow either of two basic models: *preferential assessment* or *deferred assessment*.

Preferential assessment is the least restrictive form of differential assessment. It allows farmland to be assessed based on its use value in agriculture and no penalties are levied when such land is changed to a non-agricultural use.

Deferred assessment also allows farmland to be assessed according to its use value in agriculture, however, a landowner must pay a penalty (often called a rollback tax or recapture fee) when land is converted to a non-agricultural use.

New Jersey's farmland assessment program is an example of deferred assessment since the Act specifies a rollback penalty to be levied when qualified land changes use.

Types of Differential Assessment

A recent national review of state differential assessment policies conducted by Dr. Rod Clouser, University of Florida Extension Public Policy Specialist, found that 15 states have preferential assessment programs for farmland.

In contrast, 34 states have some form of deferred assessment. The most common model of deferred assessment (used in 26 states) involves a rollback penalty (calculated as the difference in taxes paid under differential assessment and those that would have been paid under market value assessment) for a specified length of time. Clouser reports that the length of the rollback period ranges from 2 to 10 years. Some states calculate a rollback penalty as a fixed or sliding scale percentage of the market value of land in the year in which there is a transition to a non-agricultural use.

At least one state (California) requires a landowner to enter into a restrictive agreement that prohibits non-agricultural uses on the land for a specific period as a condition for deferred assessment. California's restrictive agreements run for 10 years.

Review of Differential Assessment Programs in the Northeast

There is considerable variation in the provisions of state differential assessment laws and regulations in terms of eligible lands, land (and landowner) qualification criteria, and rollback provisions. These differences are evident in broad evaluations of state differential assessment laws conducted by American Farmland Trust (1997) and Clouser (2005), as well as cursory reviews conducted by the study team.

New Jersey agriculture is, in many ways, distinctly different from agriculture in the larger farming states of the Midwest or South. New Jersey farms may be broadly characterized as being smaller in geographic scale, more diversified, and more productive (in terms of gross sales or net farm income per acre). New Jersey is classified as 100 percent metropolitan by the U.S. Census Bureau, providing one indication of the fact that farming in the state occurs largely within the influence of urbanization. With this fact comes both opportunities (e.g., access to local markets) and challenges (e.g., development pressures and high land values).

Review of Differential Assessment Programs in the Northeast

Agriculture in the Northeast, while diverse, shares several of these characteristics. In light of these commonalities, it is useful to examine state differential assessment policies in neighboring states. However, comparisons of differential assessment practices in other states should be made with caution. Each state represents a unique environment with respect to:

- The composition and nature of the agricultural industry
- Extent of forested land and the nature of forest management objectives
- Management objectives for wetlands and non-agricultural open space
- Land values and the degree of suburbanization
- The nature and power of local government in making decisions regarding land use and differential assessment determinations

Northeast Differential Assessment Program Summary

	Land Category	Size Requirement	Revenue Requirement
Connecticut	Agricultural Land	None	None
	Forest Land	25 acres	None
	Open Space Land	<i>Locally Determined</i>	<i>Locally Determined</i>
Maine	Agricultural Land	5 acres	\$2,500 gross income
	Forest Land	10 acres	None
	Open Space Land	None	None
Massachusetts	Agricultural Land	5 acres	\$500 gross income first 5 acres/\$5 per additional agricultural acre/\$0.50 per additional forest acre
	Forest Land	10 acres	None
New Hampshire	Open Space Land	<i>10 acres</i>	<i>\$2,500 gross income (Agriculture)</i>
New Jersey	Agricultural Land	5 acres	\$500 gross income first 5 acres/\$5 per additional agricultural acre/\$0.50 per additional forest acre
New York	Agricultural Land	<i>7 acres</i>	\$10,000 (> 7 acres) or \$50,000 (< 7 acres) gross income
	Forest Land	50 acres	None
	Open Space Land	None	None
Pennsylvania	Agricultural Land	10 acres	\$2,000 gross income
	Forest Reserve Land	10 acres	None
	Agricultural Reserve Land	10 acres	None
Rhode Island	Agricultural Land	<i>5 acres</i>	<i>\$2,500 gross income</i>
	Forest land	10 acres	None
	Open Space Land	<i>10 acres</i>	None
Vermont	Agricultural Land	<i>25 acres</i>	<i>\$2,000 gross income first 25 acres/\$75 per additional acre up to \$5,000 maximum</i>
	Forest Land	25 acres	None
	Conservation Land	None	None
	Farm Buildings	None	N/A

Note: **Bold** text indicates a mandatory eligibility criteria, *italicized* text indicates one of several possible eligibility criteria.

Connecticut

Laws:

Public Act 490 (1963): This act provides use value assessment for agricultural, forest, and open space lands.

Eligibility Criteria:

Agricultural Land

- No minimum size or revenue requirements.
- The act defines agricultural land as any tract or tracts of land, including woodland and wasteland, constituting a farm unit.
- The act specifies that the assessor determines whether land is classified as farmland. The assessor takes into account, among other things, the acreage of the land, the portion thereof in actual use for farming or agricultural operations, the productivity of such land, the gross income derived therefrom, the nature and value of the equipment used in connection therewith, and the extent to which the tracts comprising such land are contiguous.

Forest Land

- No minimum revenue or forest management plan requirement.
- The act specifies that forest land must meet one of the following size requirements:
 - one tract of land of 25 or more contiguous acres,
 - two or more tracts of land aggregating 25 acres or more in which no single component tract shall consist of less than 10 acres,
 - or any tract of land which is contiguous to a tract owned by the same owner and has been classified as forest land pursuant to this law.
- The act states that land owners must employ a certified forester to examine the land to determine if it conforms to forest stocking, distribution and condition standards established by the State Forester.

Connecticut

Eligibility Criteria (cont'd):

Open Space Land

- No minimum size, revenue, or easement requirements set by law.
- Not required, municipalities have option to implement use assessment of open space land.
- Municipality sets any eligibility criteria and use values.
- The act defines open space as any area of land, including forest land, land designated as wetland and not excluding farmland, the preservation or restriction of the use of which would:
 - maintain and enhance the conservation of natural or scenic resources,
 - protect natural streams or water supply,
 - promote conservation of soils, wetlands, beaches or tidal marshes,
 - enhance the value to the public of abutting or neighboring parks, forests, wildlife preserves, nature reservations or sanctuaries or other open spaces,
 - enhance public recreation opportunities,
 - preserve historic sites,
 - or promote orderly urban or suburban development.

Change in Use Penalty:

The Real Estate Conveyance Tax Act (1972) states that any land which has been classified by the record owner as farmland, forest land or open space land if sold or transferred within a period of ten years from the time title to such land was acquired or from the time such land first caused to be so classified, whichever is earlier, shall be subject to a conveyance tax applicable to the total sales price of the land. Any land which has been classified by the owner as farmland, forest land or open space land if changed within a period of ten years of the acquisition of title to a use other than farm, forest, or open space, shall be subject to the conveyance tax as if there had been an actual conveyance. In case of a change of use, the value of any such property shall be the fair market value as determined by the assessor in conjunction with the most recent revaluation. The conveyance tax rate is 10% of the total sales price if sold within the first year of ownership, 1% less for each additional year of ownership up to the tenth year ownership. No conveyance tax will be imposed following the end of the tenth year of ownership.

Connecticut

Additional Information:

Landowners do not have to reapply every year. Classification stays unless the use of land changes or the land ownership changes. The towns do have the right to periodically ask for an update of the usage by having the owner complete another application form.

Town assessors may not declassify property as forest land, because the law affirmatively provides that the state forester is the sole government official authorized to designate property as forest land and that property so designated shall be classified as forest land by the town assessor; an assessor may not deny an application to continue forest land classification unless the state forester has cancelled the designation.

The open space land component of Public Act 490 is not mandatory and is an option at the municipal level. Municipalities can dictate the eligibility criteria and valuation of open space land under this option. Discussions with the Connecticut Farm Bureau indicate that this option is primarily used by municipalities to prevent development of forest lands that do not meet the 25 acre minimum size requirement for forest land classification and wetlands by providing a lower taxation value in comparison to vacant land.

Past/Current Issues:

There has been some disagreement over the use of an income test by local assessors as instructed by the Department of Agriculture. Connecticut Farm Bureau has taken issue with this since the law does not prescribe any income requirement for eligibility into the program, and the court has consistently upheld a liberal interpretation of the law.

According to Connecticut Farm Bureau there have been discussions over changing the values used for current use assessment from recommended to mandatory values statewide.

There have also been concerns raised over requiring a forest management plan for forest land in the future.

Amendments to the law and regulations over the years have focused on the administration of the program to streamline its implementation.

Connecticut

Resources:

Connecticut Farm Bureau. (2005). *PA 490: A Guide, A practical guide and overview of Public Act 490*. Windsor, Connecticut.

Connecticut Department of Agriculture. (n.d.). *Public Act 490 – The basics*. Retrieved August 4, 2008 from <http://www.ct.gov/doag/cwp/view.asp?a=1366&q=259834>

Connecticut Department of Agriculture. (n.d.). *Public Act 490 land values*. Retrieved August 4, 2008 from <http://www.ct.gov/doag/cwp/view.asp?a=1366&q=259038>

Public Act 490, 4 C.T. Stat. Ann. § 12-107a – 107f (1963).

Real Estate Conveyance Tax Act, 4 C.T. Stat. Ann. § 12-504a – 504f (1972).

Maine

Laws:

Farm and Open Space Tax Law (1975): This act provides use value assessment for agricultural and open space lands.

Maine Tree Growth Tax Law (1971): This act provides use value assessment for forest lands.

Eligibility Criteria:

Agricultural Land (Farm and Open Space Tax Law)

- Minimum size requirement of at least 5 contiguous acres.
- An application may be made for more than 1 tract of property as long as one of the tracts contains 5 contiguous acres.
- Tract must contribute to a gross income per year of at least \$2,000 in one of the 2, or 3 of the 5 calendar years preceding the date of application. Gross income includes the value of commodities produced for consumption by the farm household.
- Owner must file with the assessor on each fifth year a determination of the gross income derived by either the owner or lessee in each of the previous five years from acreage classified as farmland.
- Tract must be used for farming, agriculture, or horticultural activities, but may include woodland and wasteland within the farm unit.

Forest Land (Maine Tree Growth Tax Law)

- No minimum revenue requirement.
- Minimum size requirement of at least 10 acres.
- Parcel of land used primarily for growth of trees to be harvested for commercial use.
- The law specifies that a forest management and harvest plan must be prepared for the parcel and updated every 10 years.
- The law states that the landowner must submit every 10 years to the assessor a statement from a licensed professional forester that the landowner is managing the parcel according to the schedules in the plan.

Maine

Eligibility Criteria (cont'd):

Open Space Land (Farm and Open Space Tax Law)

- No minimum size or revenue requirements.
- The law states that a tract must be preserved or restricted in use to provide a public benefit by conserving scenic resources, enhancing public recreation opportunities, promoting game management, or preserving wildlife or wildlife habitat.
- Any building or improvement area(s) are excluded from classification as open space land.

Change in Use Penalty:

Agricultural Land (Farm and Open Space Tax Law)

The law specifies that land withdrawn from classification is penalized the taxes which would have been assessed the previous 5 years at market value, less all taxes paid the previous 5 years, plus interest at a rate determined annually by the municipality during those 5 years. An owner of farmland that has been classified for 5 full years or more may pay any penalty owed in up to 5 equal annual installments with interest at the rate set by the town to begin 60 days after the date of the supplemental assessment.

Forest Land (Maine Tree Growth Tax Law)

The Tree Growth Tax Law states that classified forest land no longer used primarily for the growth of trees to be harvested for commercial use is subject to a penalty equal to 30% of the difference between the 100% Tree Growth valuation and the fair market value of the property on the date of withdrawal. If the land has been classified for more than 10 years, the 30% used in the calculation of the penalty is 1% less for each year over 10 years up to 20 years. Land classified for 20 years or more uses 20% in the calculation of the penalty. If the penalty is less than the tax that would have been imposed over the 5 years preceding the change in classification at market value, less all taxes paid, plus interest, this amount must be paid as a penalty instead.

Maine

Change in Use Penalty (cont'd):

Open Space Land (Farm and Open Space Tax Law)

The law states that classified open space land that no longer meets the requirement for classification is subject to a penalty equal to 30% of the difference between the 100% open space valuation and the fair market value of the property on the date of withdrawal. If the land has been classified for more than 10 years, the 30% used in the calculation of the penalty is 1% less for each year over 10 years up to 20 years. Land classified for 20 years more uses 20% in the calculation of the penalty.

Additional Information:

Municipalities can submit for a 90% reimbursement per acre of the per acre tax revenue lost as a result of the Maine Tree Growth Tax Law if they achieve the minimum assessment ratio (currently 70%). If a municipality fails to achieve the minimum assessment ratio, they will lose 10% of the reimbursement provided for each one percentage point below that ratio.

Past/Current Issues:

According to the Maine Farm Bureau, there have been recent discussions to amend Maine's Farm and Open Space Tax Law, however, no legislation has been passed. A few of the movements under recent discussion are: reducing the minimum acreage requirement of farmland to less than 5 acres to accommodate small organic farms, assess agricultural buildings at use value in response to reports of assessors increasing agricultural building valuations, and making public access available on farms for hunting, fishing, etc.

Maine

Resources:

Maine Farm and Open Space Tax Law, 36 M.R.S. § 1101 – 1121 (1975).

Maine Revenue Service. (2007). *Property tax bulletin No. 19* (Maine Tree Growth Law). Augusta, Maine.
<http://maine.gov/REVENUE/forms/property/pubs/bull19.pdf>

Maine Revenue Service. (2007). *Property tax bulletin No. 20* (Maine Farmland Tax Law). Augusta, Maine.
<http://maine.gov/REVENUE/forms/property/pubs/bull20.pdf>

Maine Revenue Service. (2007). *Property tax bulletin No. 21* (Maine Open Space Tax Law). Augusta, Maine.
<http://maine.gov/REVENUE/forms/property/pubs/bull21.pdf>

Maine Tree Growth Tax Law, 36 M.R.S. § 571 – 584-A (1971).

Massachusetts

Laws:

Assessment and Taxation of Agricultural and Horticultural Land (1972): This act provides use value assessment for agricultural lands.

Classification and Taxation of Forest Lands and Forest Products (1981): This act provides use value assessment for forest lands.

Eligibility Criteria:

Agricultural Land (Assessment and Taxation of Agricultural and Horticultural Land)

- Minimum size requirement of at least 5 contiguous acres.
- Minimum revenue requirement of gross sales not less than \$500 per year. In cases where the land is greater than 5 acres, requirements for gross sales and program payments shall increase at the rate of \$5 per acre except in cases of woodland and wetland for which such increases shall be at \$0.50 per acre.
- Land must be actively devoted to agricultural or horticultural uses for the 2 immediately preceding tax years prior to application.

Forest Land (Classification and Taxation of Forest Lands and Forest Products)

- No minimum revenue requirement.
- Minimum size requirement of at least 10 contiguous acres.
- Land must be under same ownership and be managed under a 10 year management plan.
- Land must not have been used for purposes incompatible with forest production in the 2 immediately preceding tax years prior to application.

Massachusetts

Change in Use Penalty:

The statute states that if any land in agricultural, horticultural or forest production is sold for another use within a period of 10 years after the date of its acquisition or after the earliest date of its uninterrupted use by the current owner in agricultural, horticultural or forest production, it is subject to a conveyance tax applicable to the sale price of the land. The conveyance tax is 10 percent if sold within the first year of ownership, 1 percent less for each additional year of ownership, and none if sold after the tenth year of ownership. If there is filed with the board of assessors an affidavit by the purchaser that the land is being purchased for agricultural, horticultural or forest production use, no conveyance tax shall be payable by the seller by reasons of sale, but if the land is not in fact continued in this use for at least 5 consecutive years, the purchaser shall be liable for any conveyance tax that would have been payable on the sale as a sale for other use.

Whenever land does not meet the definition of agricultural, horticultural or forest land, it shall be subject to roll-back taxes for the tax year in which it is disqualified and in each of the 4 immediately preceding tax years if these roll-back taxes exceed the amount imposed under the conveyance tax. If the roll-back taxes exceed the amount imposed under the conveyance tax, the land shall not be subject to the conveyance tax. Roll-back taxes are subject to a simple interest rate of 5 percent per annum.

Additional Information:

The statute specifies that a city or town has an option to purchase any classified agricultural, horticultural or forest land whenever the owner plans to sell or convert it to a residential, commercial, or industrial use. If being sold, the city or town has the right to match a bona fide offer to purchase it. If being converted, the city or town has the right to purchase it at its fair market value. The city or town may also assign its option to a non-profit, conservation organization. The Massachusetts Farm Bureau estimates as many as 10% of eligible sales are purchases by towns exercising this option.

Resources:

Assessment and Taxation of Agricultural and Horticultural Land, IX M.A. Gen. Laws § 61A-1 – 24 (1972).

Classification and Taxation of Forest Lands and Forest Products, IX M.A. Gen. Laws § 61-1 – 8 (1981).

New Hampshire

Laws:

Current Use Taxation Law(1973): This law provides use value assessment for open space land which includes farm land, forest land, and other types of undeveloped land.

Eligibility Criteria:

Open Space Land

- The Current Use Board Regulations specify that open space land is land that meets any of the following conditions:
 - A tract of farm land, forest land or unproductive land totaling 10 or more acres.
 - A tract of any combination of farm land, forest land or unproductive land, which totals 10 or more acres.
 - A tract of undeveloped land of any size, actively devoted to the growing of agricultural or horticultural crops with an annual gross income from the sale of crops normally produced thereon totaling at least \$2,500.
 - A certified tree farm of any size.
 - A tract of unimproved wetland of any size.

Change in Use Penalty:

The Current Use Board Regulations state that land under current use classification shall be considered changed, and the land use change tax imposed, when a change contrary to the requirements of the category under which the land is classified takes place. The land use change tax will be at the rate of 10% of the full and true value determined without regard to the current use value of the land. Such assessed value will be determined as of the actual date of the change in land use and shall be in addition to the annual real estate tax imposed upon the property.

New Hampshire

Additional Information:

The Current Use Taxation Law established a Current Use Advisory Board whose duties include establishing a schedule of criteria and current use values to be used for the forthcoming year, establishing minimum acreage requirements of 10 acres or less, and making any changes in the administration of the law as experience and public reaction may recommend.

New legislation was passed in 2007 which allows current use taxation of land under certain farm buildings. Land under agricultural buildings is taxed at current use while land under residences (other than labor housing) continues to be taxed at market value.

Past/Current Issues:

There was a change in 1993 to not include revenue from value-added agricultural products in the \$2,500 revenue requirement.

According to New Hampshire's Farm Bureau, Department of Agriculture, and Department of Resources and Economic Development there have been recent discussions to amend New Hampshire's Current Use Taxation Law. These include extending current use assessment to undeveloped shorefront properties, removing the revenue requirement for agricultural production land under 10 acres, and increasing the penalty for change in use.

Resources:

Current Use Taxation, V R.S.A. § 79-A:1 – 26 (1973).

New Hampshire Department of Revenue Administration. (2007). *State of New Hampshire current use criteria booklet for April, 1 2007 to March 31, 2008*. Concord, NH. <http://www.nh.gov/revenue/currentuse.html>

New Hampshire Department of Revenue Administration. (n.d.). *Current Use Board Rules* (CUB 100 – 300). Concord, NH. <http://www.gencourt.state.nh.us/rules/cub100-300.html>

University of New Hampshire Cooperative Extension. (n.d.). *Current use assessment*. Durham, NH. <http://extension.unh.edu/CommDev/articles/CUAsses.pdf>

New York

Laws:

Agricultural Districts Law (1971): This act provides use value assessment for agricultural lands.

Forest Tax Law (1974): This act provides use value assessment for forest lands.

Conservation Easement Tax Credit (2006): This act provides a tax credit for land under a conservation easement.

Eligibility Criteria:

Agricultural Land (Agricultural District Law)

- No minimum size requirement for agricultural land with the exception of a 7 acre minimum for land used to support a commercial horse boarding operation, and land used by a newly established farm operation solely for the planting of new orchards, vineyards, or Christmas trees.
- Up to 50 acres of farm woodland per tax parcel can qualify for assessment.
- The law specifies that land must meet the following use requirements:
 - Land used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products.
 - Land used in the preceding two years to support a commercial horse boarding operation that boards at least 10 horses.
 - Land used in agricultural production shall not include land or portions thereof used for processing or retail merchandising of such crops, livestock or livestock products.
- The law states that land must meet the following revenue requirements:
 - An average gross sales value of \$10,000 or more for land used for production for the sale of crops, livestock or livestock products of 7 acres or more.
 - An average gross sales value of \$50,000 or more for land used for production for the sale of crops, livestock or livestock products of less than 7 acres.
 - Annual gross receipts of \$10,000 or more commercial horse boarding operations.
 - The annual gross sales value of processed woodland products can not exceed the annual gross sales value of crops, livestock or livestock products.

New York

Eligibility Criteria (cont'd):

Forest Land (Forest Tax Law)

- No minimum revenue requirement.
- At least 50 contiguous acres, exclusive of any portion not devoted to the production of forest crops.
- The law specifies that land must be exclusively devoted to and suitable for forest crop production through natural regeneration or through forestation and shall be stocked with a stand of forest trees sufficient to produce merchantable forest crop within thirty years of the time of original certification.
- The law states that land owners must have an approved management plan and must file a certificate of approval specifying that the tract is committed to continued forest crop production for an initial period of ten years. This certified commitment must be renewed annually for the upcoming ten years.

Open Space Land (Conservation Easement Tax Credit)

- No minimum size or revenue requirements.
- The statute states that land must be in a perpetual and permanent conservation easement, where the easement is held by a public or private conservation agency.
- The statute specifies that the easement must serve to protect open space, biodiversity, or scenic, natural, agricultural, watershed, or historic preservation resources by limiting or restricting development, management, and/or use of the property.
- A requirement of the statute is that landowners must show that the easement was wholly or partially donated (sold for less than fair market value).

Change in Use Penalty:

Agricultural Land (Agricultural District Law)

The law states that if land within an agricultural district which received an agricultural assessment is converted, it shall be subject to payments equaling five times the taxes saved in the last year in which the land benefited from an agricultural assessment, plus interest of six percent per year compounded annually for each year in which an agricultural assessment was granted, not exceeding five years. Land outside of an agricultural district is liable for the penalty if the conversion occurs within 8 years since the land last received an agricultural assessment.

New York

Change in Use Penalty (cont'd):

Forest Land (Forest Tax Law)

The law specifies a penalty of two and one-half times the amount of taxes that would have been levied on the forest land for the current year and any prior years in which such an exemption was granted, utilizing the applicable tax rate for the current year and for such prior years, not to exceed a total of ten years. If the converted land constitutes only a portion of a certified eligible tract, the penalty shall be twice the amount previously stated, using the converted land as the basis for calculation.

Open Space Land (Conservation Easement Tax Credit)

There is no change in use penalty due to easement restrictions on the property and the law providing a tax credit rather than a change in the assessed value of the land.

Additional Information:

Agricultural Land (Agricultural District Law)

Land owners must apply every year to be considered for agricultural assessment. Agricultural land outside an agricultural district shall be eligible for an agricultural assessment and must meet the same eligibility criteria and are subject to the same change in use penalty as agricultural land within an agricultural district.

The state provides assistance to each taxing jurisdiction in an amount equal to one-half of the tax loss that results from requests for agricultural assessments in the district.

Forest Land (Forest Tax Law)

If a portion of the qualified land is converted, the unconverted land will still remain eligible regardless of its size.

New York

Past/Current Issues:

In 2008, a bill was introduced to increase the allowed farm woodland from 50 acres per tax parcel to 100 acres per tax parcel. This bill did not pass.

Resources:

Agricultural Districts Law, 25-AA N.Y. A.G.M. § 300 – 310 (1971).

Conservation Easement Tax Credit, 22 N.Y. TAX § 606-kk (2006)

Land Trust Alliance. (2008). *Frequently asked questions about New York's Conservation Easement Tax Credit: A guide for landowners and land trusts*. Saratoga Springs, New York.

New York State Department of Environmental Conservation. (n.d.). *Forest Tax Law Program*. Retrieved on August 11, 2008, from <http://www.dec.ny.gov/lands/5236.html>

New York State Office of Real Property Services. (2007). *Agricultural assessments: Questions and answers "Partial reduction in real property taxes for eligible farmland in New York State"*. Albany, New York.
<http://www.orps.state.ny.us/pamphlet/exempt/eligibleFarmlandPub.pdf>

Taxation of Forest Land, 4 N.Y. R.P.T. § 2-480-a (1974).

Pennsylvania

Laws:

Clean and Green Act (1974): This act provides use value assessment for agricultural, agricultural reserve, and forest reserve lands.

Eligibility Criteria:

Agricultural Land

- The act specifies that land that is in agricultural use is eligible for preferential assessment if it has been producing an agricultural commodity or has been devoted to a soil conservation program under an agreement with the Federal Government for at least 3 years preceding the application for preferential assessment, and is one of the following:
 - Comprised of 10 or more contiguous acres, including any farmstead land and woodlot.
 - Has an anticipated yearly gross income of at least \$2,000 from the production of an agricultural commodity.

Agricultural Reserve Land

- No minimum revenue requirement.
- Minimum size requirement of 10 or more contiguous acres, including any farmstead land and woodlot.
- The act requires that land is noncommercial open space for outdoor recreation or enjoyment of scenic or natural beauty and is open to the public for such use, without charge or fee, on a nondiscriminatory basis.
- Agricultural reserve land is land that is not currently used for agricultural production but could be used for agricultural production in the future

Forest Reserve Land

- No minimum revenue requirement.
- Minimum size requirement of 10 or more contiguous acres, including any farmstead land.
- Land which is presently stocked with trees, including land that is rented to another person for the purpose of producing timber or other wood products.

Pennsylvania

Change in Use Penalty:

The act states that if an owner of enrolled land changes the use of the land to something other than agricultural use, agricultural reserve or forest reserve or changes the use of the enrolled land so that it otherwise fails to meet the eligibility requirements, that landowner shall be responsible for the payment of roll-back taxes and interest on that land. Roll-back taxes are imposed for the current disqualifying year and in those 6 immediately preceding years. Each year of roll-back is multiplied by a factor representing simple interest at a rate of 6% annum from that particular tax year to present.

Additional Information:

An owner of enrolled land may not unilaterally terminate or waive the preferential assessment of enrolled land. Preferential assessment terminates as of the change of use of the land to something other than agricultural use, agricultural reserve or forest reserve.

Past/Current Issues:

There was a bill introduced in 1997 to increase minimum acreage requirement to 25 or 50 acres; however, the bill did not pass.

Act 156 of 1998 extended preferential assessment to any farmstead land enrolled in Clean and Green, regardless of whether the land was enrolled as agricultural or forest reserve or agricultural use. The impact of this aspect of the act apparently caused a significant reduction in the property tax bases in many rural taxing jurisdictions and also resulted in an increase of the so-called mini-estates.

Act 235 of 2004 made changes to the Clean and Green Act which limit the assessment of farmstead land at Clean and Green values when the majority of enrolled land is classified as agricultural use (in response to Act 156). Act 235 also removed the assessment of farmstead land under Clean and Green values for agricultural reserve and forest reserve land. The act also expanded the activities that owners of Clean and Green lands may perform on their land to include hunting, agritourism, and agritainment enterprises.

According to the Pennsylvania Farm Bureau and Department of Agriculture, there is currently a discussion to include oil and gas exploration as an approved activity under the Clean and Green Act.

Pennsylvania

Resources:

Becker, J.C. (2005). *Act 319 – Use value assessment under Pennsylvania’s “Clean and Green Act”*. University Park, Pennsylvania: Penn State University.

Clean and Green Act, 7 P.A. Code § 137b (1974).

Pennsylvania Farm Bureau. (2007). *Understanding the basics of Pennsylvania’s Clean and Green Act*. Camp Hill, Pennsylvania.

Whitmer, W. (2000). *The Clean and Green Program: Answers to frequently asked questions*. University Park, Pennsylvania: Penn State Cooperative Extension.

Rhode Island

Laws:

Farm, Forest, and Open Space Act (1956): This act provides use value assessment for agricultural, forest, and open space lands.

Eligibility Criteria:

Agricultural Land

- The act states that agricultural land is any tract(s) of land, exclusive of house site, that meets any one of the following conditions and which has a current U.S. Department of Agriculture conservation plan, either applied for or in force within the past 10 years:
 - Land which is actively devoted to "agricultural or horticultural use" as set forth in "agricultural operations".
 - » Agricultural operations includes any commercial enterprise which has as its primary purpose horticulture, viticulture, viniculture, floriculture, forestry, stabling of horses, dairy farming, or aquaculture, or the raising of livestock, furbearing animals, poultry, or bees.
 - Land which constitutes a "farm unit" which means land owned by the farmer, including woodland and wetlands, at least five acres of which are actively devoted to agricultural and horticultural use and which have produced an annual gross income from the sale of its farm products of at least \$2,500 in one of the two preceding years.
 - Land that is actively devoted to agricultural and horticultural use by a "Subsistence Farmer" who derives his or her primary means of sustenance from the consumption of agricultural products grown on their land. Certain income limits apply to non-farm related income.
 - Land which meets the qualifications for payments with the Federal Government for a conservation set aside, or it has a combination of income, crop and acreage which in the Director of the Department of Environmental Management's opinion qualifies this land for inclusion as a farm.

Rhode Island

Eligibility Criteria (cont'd):

Forest Land

- No minimum revenue requirement.
- Minimum size requirement of 10 or more contiguous acres.
- The act specifies that forest land is any tract or contiguous tracts of land bearing a dense growth of trees, including any underbrush, and having either the quality of self perpetuation, or being dependent upon its development by the planting and replanting of trees in stands of closely growing timber.
- The act requires land to be actively managed under a forest management plan approved by the director of environmental management.

Open Space Land

- No minimum revenue requirement.
- The act specifies open space land as any tract or contiguous tracts of undeveloped land, where the undeveloped land serves to enhance agricultural values, or land in its natural state that conserves forests, enhances wildlife habitat or protects ecosystem health and that are one of the following:
 - Ten total acres or larger, exclusive of house site, where "house site" means the zoned lot size or one acre, whichever is smaller, and land surrounding dwellings or devoted to developed facilities related to the use of the residence.
 - Tracts of land of any size that are designated as open space land in the comprehensive community plan.
 - Tracts of land of any size that have conservation restrictions or easements in full force and applied for as open space.

Change in Use Penalty:

The act states that when land classified as farm, forest, or open space land is applied to a use other than as farm, forest, or open space, or when the land owner voluntarily withdraws that classification, it shall be subject to a land use change tax. The tax is 10% of the then fair market value of the land if the use is changed or classification is withdrawn during the first six years of classification. The rate is 1% less for each additional year under classification up to the 15th year. No tax shall be imposed following the end of the 15th year of classification.

Rhode Island

Change in Use Penalty (cont'd):

The act specifies that owners of land classified as farmland who have held title to the land, and where the land has been farmed for five years previous to classification, are liable for a land use tax of 10% of the then fair market value if the use is changed or classification is withdrawn during the first year of classification; decreasing by 1% for each additional year under classification up to the tenth year classified; with no tax imposed following the end of the tenth year of classification.

Resources:

Farm, Forest, and Open Space Act, 44 R.I. Gen. Laws § 27 (1956).

Land Use Change Tax, 44 R.I. Gen. Laws § 5-39 (1956).

Rhode Island Department of Environmental Management. (2002). *Rules and regulations for enforcement of the Farm, Forest, and Open Space Act*. Providence, Rhode Island.

Rhode Island Department of Environmental Management. (2003). *A citizen's guide to the Farm, Forest, and Open Space Act*. Providence, Rhode Island.

Vermont

Laws:

Current Use Program (1978): This act provides use value assessment for agricultural and forest lands.

Eligibility Criteria:

Agricultural Land

- The act states that agricultural land is any land, exclusive of house site(s) or other development, which meets any of the following conditions:
 - It is owned by a farmer and is part of the farm unit.
 - » "Farmer" means a person who earns at least one-half of the farmer's annual gross income from the business of farming.
 - It is leased to a farmer as part of his farming operation under a written lease for at least three years.
 - It has and will continue to produce an annual gross income of at least \$2,000 from the sale of farm crops in one of two, or three of the five, immediately preceding calendar years for parcels of up to 25 acres, and \$75 per acre for each acre over 25, with the total income required not to exceed \$5,000. Farm crops include animal fiber, cider, wine and cheese produced on the enrolled land or on the house site adjoining the enrolled land from agricultural products grown on the enrolled land.
 - It is at least 25 contiguous acres and in active use to do one or a combination of the following:
 - » Grow and annually harvest hay or cultivated crops.
 - » Pasture at least one animal unit per three acres for a minimum of 30 days per year (an animal unit is defined as one horse, one cow, one mule, five goats or five sheep).
 - » Cultivate and harvest Christmas trees.
 - » Cultivate trees, bushes or vines to produce an annual crop of edible fruit.
 - » Produce an annual maple product.

Vermont

Eligibility Criteria (cont'd):

Forest Land

- No minimum revenue requirement.
- Minimum size requirement of at least 25 contiguous acres.
- The act requires land be under an approved forest management plan for purposes of harvesting repeated forest crops in accordance with accepted forest management practices.
- The act specifies that land which is not capable of growing 20 cubic feet per acre per year, and open land not to be restocked within two years under the provisions of a forest management plan, cannot exceed 20% of the total eligible land appraised at use value.
- The act requires that forest land in the program be inspected by a state forester at least once every ten years.

Conservation Land

- No minimum size or revenue requirements.
- The act defines conservation land as any land, exclusive of any house site, which is owned by a qualified organization, and is under active conservation management in accord with standards established by the commissioner of Forests, Parks and Recreation.
- Conservation land in the program will be inspected by state foresters at least once every ten years.

Farm Buildings

- No minimum size or revenue requirements.
- The act defines eligible farm buildings as all farm buildings and other farm improvements which are actively used by a farmer as part of a farming operation, are owned by a farmer or leased to a farmer under a written lease for a term of three years or more, and are situated on land that is enrolled in a use value appraisal program or on a house site adjoining enrolled land.
- The act specifies that "Farm Building" shall include up to \$100,000 of the facility value if it is used for processing farm crops, a minimum of 75 percent of which must be produced on the enrolled land, and may include a dwelling used during the preceding tax year exclusively to house one or more farm employees, and their families, as a nonmonetary benefit of the farm employment.

Vermont

Change in Use Penalty (cont'd):

The act states that land which has been classified as agricultural land or managed forest land shall be subject to a land use change tax upon the development of that land. Said tax shall be at the rate of 20 percent of the full fair market value of the changed land determined without regard to the use value appraisal; or the tax shall be at the rate of 10 percent if the owner demonstrates to the satisfaction of the director that the parcel has been enrolled continuously more than 10 years. If land is taken out of the program because of its ineligibility or withdrawn at the request of the owner, a determination of the fair market value of the land will be determined at the time of withdrawal, however no land use change tax will be charged until the time at which the development of the land occurs.

There is no change in use penalty for conservation land and farm buildings.

Additional Information:

Annually the state pays to each town the amount necessary to eliminate the need for the town to increase its tax rate due to the loss of property tax from enrolled land.

Enrollment into the program places a lien on the property to ensure payment of the change in use tax if ever developed.

Past/Current Issues:

The current use program was amended early on to include conservation lands, and again in 2003 to include farm buildings for reduced taxation.

Vermont

Resources:

Current Use Program, 32 V.T. Stat. Ann. § 124-3751 – 3776 (1978).

Vermont Department of Taxes. (n.d.). *Use value appraisal of agricultural, forest, conservation and farm buildings property - Standards*. Montpelier, Vermont.

<http://www.state.vt.us/tax/pdf.word.excel/forms/pvr/lu-standards.pdf>

Vermont Department of Taxes. (2008). *Agricultural land, forest land, conservation land and farm buildings use value appraisal application and instructions*. Montpelier, Vermont.

<http://www.state.vt.us/tax/pdf.word.excel/forms/pvr/lu-afcfb.pdf>

Summary and Conclusions

Summary and Conclusions

The Farmland Assessment Act of 1964 is a critical agricultural retention policy in New Jersey that allows qualified agricultural and forested lands to be assessed according to their current use value, without reflecting the prospective value of potential future non-agricultural uses. To receive farmland assessment, a land owner needs to submit an application on an annual basis. The eligibility requirements are specified, in part, through the constitutional amendment enabling farmland assessment and, in part, by statute.

The constitutional amendment provided that, for a property to qualify for farmland assessment, it must comprise a minimum of five acres that is actively devoted to agricultural or horticultural use and has been so devoted for the immediately preceding two years. It also established a rollback provision that requires payment of additional taxes at the time properties enrolled under farmland assessment change to a non-agricultural use.

Summary and Conclusions

The determination of which lands should be considered “actively devoted to agricultural or horticultural use” was outlined in Chapter 48, Laws of 1964 (N.J.S.A. 54:4-23.1 et. seq.), which established a minimum revenue threshold of \$500 to be derived from a range of agricultural activities identified in the law. In 1973, a new provision was added requiring that, for agricultural land beyond five acres, revenue averaging at least \$5.00 per acre must have been generated for the two-year period preceding the tax year in question; for woodland and wetland, the additional revenue requirement was set at an average of \$0.50 per acre.

A 1986 amendment further required owners of land “devoted exclusively to the production for sale of tree and forest products” to establish and comply with a woodland management plan. The Act was again amended in 1996 to expand the definition of agricultural use to include the boarding, raising, rehabilitating, and training of livestock animals. This amendment also allowed for the calculation of “imputed grazing values” for certain lands used for livestock grazing.

Summary and Conclusions

Through the years, the basic requirements for farmland assessment have come under scrutiny, with periodic calls for changes in the minimum acreage and minimum revenue requirements, as well as the rollback period. With the exception of the changes to the Farmland Assessment Act previously outlined, the basic eligibility criteria have remained unchanged.

A 1998 study by Adelaja, Schilling and Menzo simulated a number of hypothetical revisions in the Farmland Assessment Act's eligibility criteria to determine impacts on qualified acreage, agricultural industry revenues, and municipal finances. The authors made the assumption that lands losing eligibility for farmland assessment would exit agriculture and, where development demand existed, transition into non-agricultural uses. In 2001, the Farmland Assessment Review Committee, convened by the New Jersey Department of Agriculture to review the study, recommended that the eligibility and rollback provisions of the Act remain unchanged. The Committee also recommended an educational outreach campaign to communicate the benefits of the program.

Summary and Conclusions

This study was commissioned in 2008 by the New Jersey Department of Agriculture to examine the current implications of hypothetical revisions in the minimum revenue criteria for (1) qualified farmland assessed acreage and (2) farm industry revenues. To provide further context for public policy discussion, the team also reviewed the status of differential assessment programs in other Northeast states.

Data compiled by the New Jersey Office of the National Agricultural Statistics Service show that 1.03 million acres of land was qualified for farmland assessment during the 2006 Tax Year, the base year used for analysis in this study. The study team simulated five policy scenarios, each reflecting an increase in the revenue requirement(s). A summary of key results follows.

Summary and Conclusions

Raising the minimum revenue requirement to \$750 (holding constant the additional revenue requirements of \$5 per acre and \$0.50 per acre) would result in 18,103 acres of land being rendered ineligible for farmland assessment and the estimated loss of \$629,000 in agricultural industry revenue, assuming no productivity adjustments are made. Roughly 23 percent of the acreage projected to lose farmland assessment would be agricultural land (cropland harvested, permanent pasture, cropland pastured, and associated appurtenant woodlands), while 77 percent would be non-attached woodland.

Raising the minimum revenue requirement to \$1,000 (holding constant the additional revenue requirements of \$5 per acre and \$0.50 per acre) would result in 47,378 acres of land being rendered ineligible for farmland assessment and the estimated loss of \$2.07 million in agricultural industry revenue, assuming no productivity adjustments are made. Roughly 29 percent of the acreage projected to lose farmland assessment would be agricultural land, while 71 percent would be non-attached woodland.

Summary and Conclusions

Raising the minimum revenue requirement to \$2,500 (holding constant the additional revenue requirements of \$5 per acre and \$0.50 per acre) would result in 149,631 acres of land being rendered ineligible for farmland assessment and the estimated loss of \$10.75 million in agricultural industry revenue, assuming no productivity adjustments are made. Roughly 48 percent of the acreage projected to lose farmland assessment would be agricultural land, while 52 percent would be non-attached woodland.

Raising the minimum revenue requirement to \$10,000 (holding constant the additional revenue requirements of \$5 per acre and \$0.50 per acre) would result in 398,093 acres of land being rendered ineligible for farmland assessment and the estimated loss of \$51.15 million in agricultural industry revenue, assuming no productivity adjustments are made. Roughly 71 percent of the acreage projected to lose farmland assessment would be agricultural land, while 29 percent would be non-attached woodland.

Summary and Conclusions

Maintaining the minimum revenue requirement at \$500, but raising the additional revenue requirement for agricultural and forested land to \$50 per acre and \$5.00 per acre, respectively, would result in 50,670 acres of land being rendered ineligible for farmland assessment and the estimated loss of \$716,000 in agricultural industry revenue, assuming no productivity adjustments are made. Roughly 36 percent of the acreage projected to lose farmland assessment would be agricultural land, while 64 percent would be non-attached woodland.

Summary and Conclusions

The loss of farmland assessment would result in considerable increases in the property tax levies for affected landowners. This raises an expectation that landowners with an interest in retaining their land in agricultural production would, where possible, make productivity adjustments in order to meet higher revenue requirements. Simulations of the alternate revenue eligibility criteria examined in this study do not consider the opportunity for landowners of impacted properties to increase productivity through higher cropping intensities, increased livestock stocking rates, transitions to higher valued agricultural commodities, more intensive forest cultivation, or other revenue enhancing activities.

Summary and Conclusions

It should be noted, however, that forestry experts in New Jersey interviewed as part of this study – as well as individuals knowledgeable of forest management in other Northeast states - expressed concern over the possible need for more intensive harvesting of forest land that may be precipitated by a need to generate higher revenues to remain qualified for farmland assessment. Such concern stemmed from the potential conflict between increased harvesting and sustainable forest management objectives. Some agriculturalists expressed similar concern that higher revenue requirements may, in certain cases, result in the adoption of livestock stocking rates or cropping intensities that exceed the managerial capabilities of a landowner or optimal production capabilities of specific land parcels.

Summary and Conclusions

The future disposition of land that is rendered ineligible for farmland assessment under each scenario is similarly not considered. However, given the substantial rise in the property tax bills that would accompany the loss of farmland assessment, the study team concurs with the findings of the 1998 study that lands owned by individuals incapable of making productivity adjustments necessary to meet higher revenue requirements would likely exit agriculture or forestry production and, where development demand exists, transition into non-agricultural use.

It is important to note that the 1998 study concluded that the influx of lands losing farmland assessment into the market will not spur additional development demand; the pace of development would not be influenced by increased availability of more agricultural land on the market. However, any conversion of agricultural and forested land into non-agricultural uses would result in both land use and fiscal consequences for impacted communities. While the fiscal implications of such land use transitions will be location-specific, it is well established that agricultural land, even under farmland assessment, is a good tax ratable. In contrast, residential development often strains local finances, increasing local and educational expenses disproportionately more than it increases local tax revenues.

References

- Adelaja, A.O., Schilling, B.J., & Menzo, J.E. (1998). *Farmland assessment in New Jersey: Effects of revisions in eligibility requirements on land use, open space and municipal finance*. New Brunswick: Rutgers the State University of New Jersey, New Jersey Agricultural Experiment Station.
- Agricultural Districts Law, 25-AA N.Y. A.G.M. § 300 – 310 (1971).
- American Farmland Trust. (1997). *Saving American farmland: What works*. Northampton, Massachusetts: American Farmland Trust.
- Assessment and Taxation of Agricultural and Horticultural Land, IX M.A. Gen. Laws § 61A-1 – 24 (1972).
- Becker, J.C. (2005). *Act 319 – Use value assessment under Pennsylvania’s “Clean and Green Act”*. University Park, Pennsylvania: Penn State University.
- Classification and Taxation of Forest Lands and Forest Products, IX M.A. Gen. Laws § 61-1 – 8 (1981).
- Clean and Green Act, 7 P.A. Code § 137b (1974).
- Clouser, R.L. (2005). *Issues at the rural-urban fringe: Methods to sustain agricultural land -- Use-value assessment* (FE553). Gainesville, Florida: University of Florida, Institute of Food and Agricultural Sciences, Florida Cooperative Extension.
- Connecticut Farm Bureau. (2005). *PA 490: A Guide, A practical guide and overview of Public Act 490*. Windsor, Connecticut.

Connecticut Department of Agriculture. (n.d.). *Public Act 490 – The basics*. Retrieved August 4, 2008 from <http://www.ct.gov/doag/cwp/view.asp?a=1366&q=259834>

Connecticut Department of Agriculture. (n.d.). *Public Act 490 land values*. Retrieved August 4, 2008 from <http://www.ct.gov/doag/cwp/view.asp?a=1366&q=259038>

Conservation Easement Tax Credit, 22 N.Y. TAX § 606-kk (2006).

Current Use Taxation, V R.S.A. § 79-A:1 – 26 (1973).

Farm, Forest, and Open Space Act, 44 R.I. Gen. Laws § 27 (1956).

Farmland Assessment Act, 54 N.J.S.A. § 4-23 (1964).

Farmland Assessment Review Committee. (2001, March). *Recommendations of the Farmland Assessment Review Committee*. Trenton, New Jersey: NJ Department of Agriculture.

Koch, A. R. (1986). *The second ten years of farmland assessment issues, 1974-1984*. New Brunswick: Rutgers the State University of New Jersey, New Jersey Agricultural Experiment Station.

Land Trust Alliance. (2008). *Frequently asked questions about New York's Conservation Easement Tax Credit: A guide for landowners and land trusts*. Saratoga Springs, New York.

Land Use Change Tax, 44 R.I. Gen. Laws § 5-39 (1956).

- Local Property Tax Bureau. (1969-2006). *Summary of data from FA-1 forms for (1969-2006) tax year*. Trenton, New Jersey: New Jersey Department of Treasury, Division of Taxation.
- Luke, G.W. (1976). *Actively devoted: The first decade of the New Jersey Farmland Assessment Act*. New Brunswick: Rutgers the State University of New Jersey, New Jersey Agricultural Experiment Station.
- Maine Farm and Open Space Tax Law, 36 M.R.S. § 1101 – 1121 (1975).
- Maine Revenue Service. (2007). *Property tax bulletin No. 19* (Maine Tree Growth Law). Augusta, Maine. <http://maine.gov/REVENUE/forms/property/pubs/bull19.pdf>
- Maine Revenue Service. (2007). *Property tax bulletin No. 20* (Maine Farmland Tax Law). Augusta, Maine. <http://maine.gov/REVENUE/forms/property/pubs/bull20.pdf>
- Maine Revenue Service. (2007). *Property tax bulletin No. 21* (Maine Open Space Tax Law). Augusta, Maine. <http://maine.gov/REVENUE/forms/property/pubs/bull21.pdf>
- Maine Tree Growth Tax Law, 36 M.R.S. § 571 – 584-A (1971).
- National Agricultural Statistics Service. (2004, June). *2002 Census of agriculture: United States: Summary and state data*. Washington, D.C.: United States Department of Agriculture.
- National Agricultural Statistics Service. (2006). *New Jersey Farmland Assessment 2005, 2006 Tax Year*. Trenton, New Jersey.

- New Hampshire Department of Revenue Administration. (n.d.). *Current Use Board Rules (CUB 100 – 300)*. Concord, NH. <http://www.gencourt.state.nh.us/rules/cub100-300.html>
- New Hampshire Department of Revenue Administration. (2007). *State of New Hampshire current use criteria booklet for April, 1 2007 to March 31,2008*. Concord, NH. <http://www.nh.gov/revenue/currentuse.html>
- New Jersey Department of Environmental Protection, Office of Information Resources Management, Bureau of Geographic Information Systems. (2008). *Municipalities of New Jersey (Clipped to coast by NJDEP), New Jersey State Plane NAD83 [Data File]*. Trenton, New Jersey: NJ Department of Environmental Protection.
- New Jersey Division of Taxation, Local Property Branch. (1990). *Farmland assessment: Handbook for New Jersey assessors*. Trenton, New Jersey: New Jersey Department of Treasury.
- New York State Department of Environmental Conservation. (n.d.). *Forest Tax Law Program*. Retrieved on August 11, 2008, from <http://www.dec.ny.gov/lands/5236.html>
- New York State Office of Real Property Services. (2007). *Agricultural assessments: Questions and answers "Partial reduction in real property taxes for eligible farmland in New York State"*. Albany, New York. <http://www.orps.state.ny.us/pamphlet/exempt/eligibleFarmlandPub.pdf>
- Pennsylvania Farm Bureau. (2007). *Understanding the basics of Pennsylvania's Clean and Green Act*. Camp Hill, Pennsylvania.
- Plantinga, A., Lubowski, R., & Stavins, R. (2002). The effects of potential land development on agricultural land prices. *Journal of Urban Economics*, 52, 561-581.

Public Act 490, 4 C.T. Stat. Ann. § 12-107a – 107f (1963).

Real Estate Conveyance Tax Act, 4 C.T. Stat. Ann. § 12-504a – 504f (1972).

Rhode Island Department of Environmental Management. (2002). *Rules and regulations for enforcement of the Farm, Forest, and Open Space Act*. Providence, Rhode Island.

Rhode Island Department of Environmental Management. (2003). *A citizen's guide to the Farm, Forest, and Open Space Act*. Providence, Rhode Island.

State Farmland Evaluation Advisory Committee. (2007). *State of New Jersey forty-fourth report of the State Farmland Evaluation Advisory Committee: Productivity values for 2008 tax year*. Trenton, New Jersey.

Switz v. Middletown Township, 40 N.J. Super. 217 (N.J. Super. Ct. 1956), *mod'd*, 23 N.J. 580 (Supreme Ct. of N.J. 1957).

Switz v. Kingsley, 69 N.J. Super. 27 (N.J. Super. Ct. 1961), *aff'd*, 37 N.J. 566 (Supreme Ct. of N.J. 1962).

Taxation of Forest Land, 4 N.Y. R.P.T. § 2-480-a (1974).

Tremblay, R.H., Foster, J.H., MacKenzie, J., Derr, D.A., Lessley, B.V., Cole, G.L., & Bills, N.L. (1987). *Use value assessment of agricultural land in the northeast* (VT Agr. Exp. Sta. Bull. 694). Burlington: University of Vermont.

United States Department of Agriculture, Economic Research Service. (1850-1992). *Average value per acre of farm real estate by counties, Selected years 1850-1992* [Data file]. Available from Economic Research Service website, <http://www.ers.usda.gov/data/archive/87012/>

United States Department of Agriculture, Economic Research Service. (1949-2007). *Value added to the U.S. economy by the agricultural sector via the production of goods and services, New Jersey* [Data files]. Available from Economic Research Service website, <http://www.ers.usda.gov/Data/FarmIncome/>

United States Department of Agriculture, National Agricultural Statistics Service. (2006). *Land values and cash rents 2006 summary*. Retrieved August 8, 2006, from <http://usda.mannlib.cornell.edu/usda/nass/AgriLandVa//2000s/2006/AgriLandVa-08-04-2006.pdf>

University of New Hampshire Cooperative Extension. (n.d.). *Current use assessment*. Durham, NH. <http://extension.unh.edu/CommDev/articles/CUAsses.pdf>

Vermont Department of Taxes. (n.d.). *Use value appraisal of agricultural, forest, conservation and farm buildings property - Standards*. Montpelier, Vermont. <http://www.state.vt.us/tax/pdf.word.excel/forms/pvr/lu-standards.pdf>

Vermont Department of Taxes. (2008). *Agricultural land, forest land, conservation land and farm buildings use value appraisal application and instructions*. Montpelier, Vermont. <http://www.state.vt.us/tax/pdf.word.excel/forms/pvr/lu-afcfb.pdf>

Whitmer, W. (2000). *The Clean and Green Program: Answers to frequently asked questions*. University Park, Pennsylvania: Penn State Cooperative Extension.

Appendix A

Crop and Livestock Revenue Assumptions

Revenue Assumptions Field Crop

Field Crops			
	Harvested Acres	Avg Revenue /Acre (\$)	Estimated Total Revenue (\$)
Barley For Grain	2,435	142	345,827
Corn For Grain	62,230	259	16,117,518
Corn For Silage	15,243	319	4,862,549
Grass for Silage	921	287	264,442
Alfalfa Hay	32,556	408	13,282,930
Other Hay	88,047	184	16,200,685
Oats for Grain	3,010	103	309,979
Rye for Grain	11,236	89	999,960
Sorghum	5,507	127	699,440
Soybeans	87,958	158	13,897,427
Wheat	22,079	172	3,797,519
Other Field Crops	2,297	204	468,527
Total Field Crops	333,519	214	71,246,801

Revenue Assumptions Fruit and Ornamentals

Fruit Crops			
	Harvested Acres	Avg Revenue /Acre (\$)	Estimated Total Revenue (\$)
Apples	2,902	5,991	17,387,679
Blueberries	9,803	7,396	72,504,467
Cranberries	3,638	6,173	22,454,288
Grapes	741	4,764	3,531,553
Peaches	6,963	4,171	29,043,924
Strawberries	364	7,933	2,886,819
Other Fruit	957	5,795	5,544,077
Total Fruit	25,368	6,045	153,352,807

Ornamental Crops			
	Harvested Acres	Avg Revenue /Acre (\$)	Estimated Total Revenue (\$)
Bedding Plants	2,014	47,140	94,925,818
Cut Flowers	3,313	3,323	11,009,099
Trees & Shrubs	29,485	5,051	148,930,250
Cultivated Sod	11,854	5,711	67,695,339
XMAS Trees	7,989	8,299	66,304,031
Other Ornamentals	589	5,596	3,294,925
Total Ornamentals	55,244	7,099	392,159,461

Revenue Assumptions Vegetables

Vegetable Crops			
	Harvested Acres	Avg Revenue /Acre (\$)	Estimated Total Revenue (\$)
Asparagus	1,712	3,000	5,134,500
Lima Beans	981	920	902,152
Snap Beans	2,915	1,880	5,479,636
Cabbage	1,477	4,628	6,836,944
Carrots	495	6,813	3,369,029
Sweet Corn	6,966	1,720	11,981,864
Cucumbers	3,097	3,030	9,383,304
Eggplant	822	4,914	4,038,817
Lettuce	2,285	4,394	10,040,729
Onion	450	5,518	2,481,445
Peas	1,522	1,553	2,363,511
Sweet Pepper	3,480	6,422	22,349,844
White Potato	2,387	2,055	4,904,874
Sweet Potato	1,376	3,484	4,792,242
Pumpkins	3,573	1,454	5,195,287
Spinach	1,681	3,253	5,467,968
Squash	4,068	2,623	10,669,839
Tomatoes	4,834	8,300	40,118,050
Melons	1,035	3,225	3,338,198
Other Vegetables	14,863	2,275	33,812,870
Total Vegetables	60,016	3,210	192,661,103

Revenue Assumptions Livestock

Livestock			
	Number of Head	Avg Revenue/Head (\$)	Estimated Total Revenue (\$)
Beef Cattle	19,253	413	7,951,489
Mature Dairy	10,994	2,584	28,408,496
Young Dairy	9,428	0	0
Equine	30,996	3,464	107,369,326
Sheep	16,282	130	2,116,660
Swine	15,171	110	1,668,810
Bees (# Hives)	7,361	39	287,079
Ducks	26,953	9	242,577
Fur Animals	7,026	13	88,809
Goats	10,840	663	7,186,920
Meat Chickens	127,350	2	198,666
Egg Chickens	1,544,192	11	16,986,112
Turkeys	35,683	18	642,294
Other Livestock	291,151	23	6,696,473
Total Livestock	2,152,680	84	179,843,711

Revenue Assumptions Aquaculture and Woodland Products

Aquaculture			
	Harvested Acres	Avg Revenue/Unit (\$)	Estimated Total Revenue (\$)
Clams Oysters	25	7,129	178,938
Pond Fish	489	7,129	3,486,794
Total Aquaculture	514	7,129	3,665,732

Woodland Products			
	Number of Units	Avg Revenue/Unit (\$)	Estimated Total Revenue (\$)
Fuelwd (cords)	27,448	175	4,803,400
Pulpwd (cords)	84,197	45	3,788,865
Timber (Bd. Ft.)	5,282,776	0.28	1,479,177
Total Woodland Products	N/A	N/A	10,071,442