NJ State Agriculture Development Committee /

NJ County Agriculture Development Boards

# Strategic Targeting Project

Preliminary Report March 2003







# **Table of Contents**

	<u>Page</u>
Acknowledgements	i
Table of Contents	ii
Maps	iv
Tables	vi
Executive Summary	1
Introduction	2
Project Goals and Objectives	6
Progress to Date	8
Agricultural Development Areas	8
County Comprehensive Farmland Preservation Plans	9
Planning Incentive Grant Project Areas	10
State Development and Redevelopment Plan	11
Other Significant Plans and Developments	12
Preliminary Analysis	13
Soils	14
Agricultural Land Use	21
Sewer Service Areas	21
Preliminary Farmland Preservation Priorities	28
Census of Agriculture	28
Farmland Assessment	30

# <u>Page</u>

	Population	42
	Housing	42
	Building Permits	46
	Transportation Network Proximity	46
	Farmland Preservation Program Activity	48
	Coordination with County and Municipal Plans	52
	State Development and Redevelopment Plan Consistency	54
	Garden State Greenways Coordination	54
	Pinelands Management Plan Coordination	58
	Highlands Critical Resource Area Proposal	58
	Crossroads of the American Revolution	62
	New Jersey Trails Plan	62
	Watershed Management Area Coordination	63
	Ground Water Recharge and Protection	63
Next S	Steps	67
Apper	ndix	69
	Geographic Information System Metadata	69

# Maps

<u>Numb</u>	ber	<u>Page</u>
1	New Jersey – "Farming on the Edge"	3
2	Agricultural Soil Types – NJ Important Farmlands Inventory	15
3	Agricultural Land Use	22
4	Land Use and Soil Classifications	23
5	Agricultural Land Use and Soil Classifications	24
6	Sewer Service Areas	25
7	Agricultural Use, Soil Classifications and Sewer Service Areas	26
8	Preliminary Farmland Preservation Priorities	29
9	Change in Farmland Acreage by County (1982 – 1997)	33
10	Market Value of Agricultural Products Sold by County (1997)	35
11	Land Devoted to Agriculture and Horticulture (2001)	37
12	Land Devoted to Agriculture Less Woodland and Wetland (2001)	38
13	Percentage of Assessed Agricultural Land by Municipality (2001)	39
14	Acreage Change in Cropland Harvested (1980 - 2001)	40
15	Percentage Change in Cropland Harvested (1980 – 2001)	41
16	Population Change by County (1980 – 2000)	44
17	Population Change by Municipality (1980 – 2000)	45
18	Building Permits – New Housing Units Authorized (2000 – 2002)	47
19	Major Roads, Passenger Rail, Soils and Agriculture	49
20	Farmland Preservation Program Activity	50
21	Preliminary Planning Incentive Grant Project Areas	55

### <u>Number</u>

# <u>Page</u>

22	State Development and Redevelopment Plan Planning Areas and Centers, Pinelands Management Areas, and Farmland Preservation Program Activity	56
23	Preliminary Garden State Greenways "Green Infrastructure"	57
24	Green Acres Program Activity	59
25	Farmland Preserved through Green Acres Program	60
26	Agricultural Land Use and Farmland Preservation Program Activity in Highlands Critical Resource Area	61
27	NJ Trails Plan and Agricultural Land Use	64
28	Soils Classifications in Agricultural Land Use by Watershed Management Areas	65
29	Ground Water Recharge Potential	66

# Tables

<u>Numb</u>	<u>er</u>	<u>Page</u>
1	Acres in Agricultural Use by Soil Class	16
2	Prime Soils in Agricultural Use by County	17
3	Soils of Statewide Importance in Agricultural Use by County	18
4	Farmlands of Local Importance in Agricultural Use by County	19
5	Unique Farmlands in Agricultural Use by County	20
6	Preliminary Farmland Preservation Priorities – Acres by County	27
7	NJ Land in Farms (1954 – 1997)	31
8	NJ Land in Farms by County (1982 – 1997)	. 32
9	Total Value of Agricultural Products Sold by County (1997)	. 34
10	NJ Population by County (1980 – 2000)	. 43
11	Land in Farms (1992 – 1997) and Preserved Farmland (2002)	51
12	Size of Farms (1992 – 1997) and Size of Preserved Farms (2002).	53

# SADC / CADB Farmland Preservation Program Strategic Targeting Project Preliminary Report

Executive Summary March 2003

New Jersey is a national leader in preserving its farmland, in confronting legendary development pressures and in promoting "smart growth." A more strategic approach to prioritizing farmland preservation investments will insure that all levels of government make the most efficient and effective use of available resources in securing a bright future for farming and the agricultural industry.

Since the inception of the Garden State's Farmland Preservation Program, the concept of strategic targeting has been critically important. Much progress has already been made in this regard, especially in recent years:

- 18 of 21 NJ counties have established Agricultural Development Areas through their County Agriculture Development Boards
- 5 counties have adopted Comprehensive Farmland Preservation Plans
- Planning Incentive Grant Project Areas have been created in 41 municipalities in 8 counties
- Other significant planning initiatives, such as the State Development and Redevelopment Plan and the Garden State Greenways Vision, have incorporated substantial commitments to farmland preservation

The SADC / CADB Farmland Preservation Strategic Targeting Project has 3 primary goals:

- 1. To coordinate farmland preservation / agricultural retention efforts with proactive planning initiatives,
- 2. To update / create maps used to target preservation efforts, and
- 3. To coordinate farmland preservation efforts with open space, recreation and historic preservation investments.

The preliminary analysis contained in this report uses the latest, best-available digital data to compare a wide variety of factors impacting farmland preservation, including natural resources, development and agricultural trends, infrastructure investments and related land preservation initiatives. The analysis employs agricultural soil capabilities, agricultural land use, and sewer service area status to create a proposed priority system to evaluate farmland preservation opportunities and update current ranking policies.

The Strategic Targeting Project calls for careful evaluation of information gathered through an extensive outreach commitment as part of a planning process that will result in a coordinated landowner contact effort. The Project will be incorporated as a key component of the Department of Agriculture's Smart Growth Plan, and will be updated periodically to maintain its effectiveness in strategically prioritizing farmland preservation investments.

# Introduction

In its report entitled "Farming on the Edge: Sprawling Development Threatens America's Best Farmland," the American Farmland Trust reveals the following alarming findings:

- Every single minute of every day, America loses two acres of farmland. From 1992 to 1997 we converted to developed use more than 6 million acres of agricultural land—an area the size of Maryland.
- We lost farm and ranch land 51% faster in the 90s than in the 80s. The rate of loss for 1992-1997, 1.2 million acres per year, was 51% higher than from 1982-1992.
- We're losing our best land—our most fertile and productive—the fastest. The rate of conversion of prime land was 30 percent faster, proportionally, than the rate for non-prime rural land from 1992-1997. This results in marginal land, which requires more resources like water, being put into production.
- Our food is increasingly in the path of development. 86% of U.S. fruits and vegetables, and 63% of our dairy products, are produced in urban-influenced areas.
- Wasteful land use is the problem, not growth itself. From 1982-1997, U.S. population grew by 17%, while urbanized land grew by 47%. Over the past 20 years, the acreage per person for new housing almost doubled and since 1994, 10+ acre housing lots have accounted for 55% of the land developed.
- Every state is losing some of its best farmland (see Map 1).

The report goes on to indicate that this regrettable loss is not inevitable. All across America, towns, counties, states and the federal government are combining resources to protect irreplaceable farmland by:

- Stopping the loss of our nation's best farmland through effective planning and smart growth that directs development to less productive land;
- Permanently saving farms through publicly funded agricultural conservation easement programs;
- Supporting farming practices that enhance the environmental benefits of farmland; and
- Expanding efforts to increase the profitability of urban-edge farming.

New Jersey is a national leader in preserving its farmland, in confronting legendary development pressures and in promoting "smart growth." In his State of the State Address earlier this year, Governor James McGreevey declared that "there is no single greater threat to our way of life in New Jersey than the unrestrained, uncontrolled development that has jeopardized our water supplies, made our schools more crowded, our roads congested, and our open space



disappear." He went on to say that "every day in New Jersey we lose 50 acres to uncontrolled, thoughtless development—50 acres every single day which we will never get back. It is time to draw the line and say "no more" to mindless sprawl." Governor McGreevey recognized that "farmland preservation is vital to ensuring a way of life in our rural areas," committing to a goal of preserving 20,000 acres of farmland a year during his administration.

Since the inception of New Jersey's Farmland Preservation Program, the concept of strategic targeting has been critically important. The Agriculture Retention and Development Act of 1983 authorized County Agriculture Development Boards (CADBs) to identify Agricultural Development Areas (ADAs), where agriculture is the preferred, but not necessarily the exclusive use of the land, as the initial geographic target areas for program activity. Eighteen of the Garden State's 21 counties have established designated and/or voluntary ADAs.

In recent years, the State Agriculture Development Committee (SADC) encouraged the CADBs and County Planning Boards to adopt Comprehensive Farmland Preservation Plans to:

- Inventory existing farmland,
- Update ADAs,
- Coordinate agricultural retention efforts with municipal and regional master plans and open space preservation efforts,
- Identify program funding and staffing resources,
- Develop databases and geographic information systems (GIS), and
- Promote the expansion of agriculture as an industry.

To date, five counties have adopted Comprehensive Farmland Preservation Plans and three more counties are expected to adopt Plans in 2003. Four other counties have some type of growth management, strategic, long-range farmland preservation plan in place. In addition, under the new Planning Incentive Grant (PIG) Program, 28 municipalities have adopted Farmland Preservation Elements as part of their official Master Plans.

With the November 1998 approval of the constitutional amendment dedicating a significant increase in state funding for farmland, open space and historic preservation, and the subsequent adoption of the Garden State Preservation Trust Act in 1999, a number of new program options were developed. Increasingly, landowners are working directly with the SADC or their municipalities to permanently protect their farms. To make the most efficient use of available resources, it has become apparent that a statewide targeting initiative is imperative. This Strategic Targeting Project will strategically coordinate farmland preservation / agriculture retention efforts with proactive land use planning at all levels of government, update maps used to target farmland preservation activities, and better coordinate farmland preservation efforts with open space, recreation and historic preservation investments.

The SADC is working cooperatively with the CADBs to complete this Strategic Targeting Project early in 2003 as an essential component of an Agricultural Smart Growth Plan for the New Jersey Department of Agriculture. The Smart Growth Plan is designed to provide the Garden State with economic development opportunities and other strategies that support a sustainable agricultural industry, innovative conservation planning and progressive land use options that respect landowner equity, ensure the conservation of natural resources, and a coordinated vision for farmland preservation transcending political borders. The Strategic Targeting Plan will incorporate the State Development and Redevelopment Plan's planning areas and centers, county and municipal master plans and regulations, existing and proposed infrastructure investments, and the latest GIS data and technology. To the greatest extent possible, the Strategic Targeting Plan will also coordinate with other initiatives attempting to protect greenways, scenic viewsheds, watersheds, environmentally sensitive corridors, trail opportunities and important cultural landscapes with significant historic resources.

The planning process for this project calls for draft maps to be released early in 2003, CADB and County Planning Board review by the end of April, a series of regional public meetings in April and May, and adoption by the SADC in May. Coordination with other State agencies will occur through the Department of Agriculture's Smart Growth Working Group and the State Smart Growth Policy Council. Periodic reviews and amendments will be required to keep the Strategic Targeting Project up to date as an effective catalyst for the Garden State's ambitious Farmland Preservation / Agriculture Retention Program.

# **Project Goals and Objectives**

The SADC / CADB Strategic Targeting Project has three primary goals:

- 1. To coordinate farmland preservation / agricultural retention efforts with proactive planning initiatives,
- 2. To update / create maps used to target preservation efforts, and
- 3. To coordinate farmland preservation efforts with open space, recreation and historic preservation investments.

In addition, the Strategic Targeting process will enable the SADC and the CADBs to accomplish a number of objectives beyond the establishment of geographic priorities. This Project will facilitate more informed decisions in managing the Farmland Preservation Program and in revising application and project area ranking criteria.

In coordinating with proactive planning efforts, the Strategic Targeting Project will provide the foundation for the Department of Agriculture's Smart Growth Plan and help secure the land base that will sustain the Garden State's agriculture industry into the future. The Project's first goal will also assist in implementing the State Development and Redevelopment Plan by coordinating municipal, county, and other regional plans and development regulations with the State Plan's centers and planning area priorities. Furthermore, the strategic targeting of farmland for preservation will help to avoid conflicts with other types of infrastructure investments, such as highway and wastewater system expansions. The Project will provide farmers, landowners and developers with more predictable information, accommodating limited development without sacrificing the most productive agricultural soils. The Strategic Targeting Project will incorporate the latest GIS technology and data while supporting other related strategies transcending political boundaries, such as ground water and watershed planning.

Many of the maps used to target farmland preservation have not changed significantly since they were adopted more than a decade ago. In a few cases, counties have relied on the initiative of individual landowners to establish ADAs in order to apply to various farmland preservation programs. The Strategic Targeting Project will assist CADBs in updating and creating ADA maps using the latest and best-available data. The Project will help to establish priority areas within ADAs for easement purchases, including Planning Incentive Grant project areas, and assist in achieving quantifiable 1-, 5-, and 10-year program targets.

Finally, the Strategic Targeting Project will be critical in coordinating farmland preservation efforts with open space, recreation and historic preservation initiatives. Environmental organizations and government agencies are identifying greenways, greenbelts, viewsheds and other ecologically

significant corridors, often encompassing agricultural areas. In addition, recreational interests are proposing and establishing trails and other facilities that impact farmers and the agricultural community. Others are advocating for the preservation of rural historic sites and significant cultural landscapes. The Project will help to determine when farmland preservation agencies should take the lead in preserving important agricultural lands with environmental or historical value, and to identify other ways to accomplish recreational, historical or environmental objectives without serious harm to agricultural activities. The Strategic Targeting Project can also be instrumental in preserving the context of historic sites or scenic vistas without taking farmland out of private ownership or out of production.

## Progress to Date

In advancing a coordinated, statewide strategic targeting initiative for farmland preservation, it is imperative to recognize past and current, on-going efforts to focus available resources on the Garden State's most productive and most threatened agricultural land. The Farmland Preservation Strategic Targeting Project builds upon the many years of continuing need to identify and protect critically important resources in the most densely developed state in the country. As the farmland base continues its decline and as development pressures associated with a geographic location in center of our nation's largest population concentration increase, a strategic approach to farmland preservation in New Jersey is essential. Combining the best efforts of all levels of government will be necessary to maximize the impact of the substantial investment in farmland preservation and agriculture retention.

#### Agricultural Development Areas

The Agriculture Retention and Development Act of 1983 authorized County Agriculture Development Boards (CADBs) to identify Agricultural Development Areas (ADAs) as the initial geographic target areas for Farmland Preservation Program activity. By definition, ADAs are lands where agriculture is the preferred, but not necessarily exclusive use of the land, constituting no greater than 90% of the agricultural land base in the county. ADAs can be designated as large, contiguous blocks of primarily farmland or they can be established one parcel at a time at the request of individual landowners. Eighteen of the Garden State's 21 counties have created designated and/or voluntary ADAs.

The Act specifies four basic criteria for ADAs and encourages CADBs to adopt local criteria for consideration in evaluating proposals. The statutory criteria are as follows:

- Encompasses productive agricultural lands which are currently in production or have a strong potential for future production in agriculture and in which agriculture is a permitted use under the current municipal zoning ordinance or in which agriculture is permitted as a non-conforming use;
- 2. Is reasonably free of suburban and conflicting commercial development;
- Comprises not greater than 90 percent of the agricultural land mass of the county;
- 4. Incorporates any other characteristics deemed appropriate by the board.

The CADB must also consider the following factors in developing local criteria for the identification of ADAs:

- 1. Soils;
- 2. Current and anticipated local land use plans and regulations;
- 3. Farmland assessment status;
- 4. Anticipated approvals for non-agricultural development;
- 5. Accessibility to publicly funded water and sewer systems;
- Compatibility with comprehensive and special purpose county and State plans;
- 7. Proximity and accessibility to major highways and interchanges;
- 8. Minimum size of an ADA;
- 9. Landowner sign-up;
- 10. Land in boroughs, towns or cities;
- 11. Inclusion of entire or partial lots and blocks;
- 12. Land ownership;
- 13. Natural and special features;
- 14. Type and distribution of agriculture.

Many CADBs created ADAs in the early years of Program development. Some counties have continually evaluated and updated their maps to reflect changes in the landscape, development regulation amendments and plans for infrastructure investments. Other counties have made few changes to the maps since their adoption and should reevaluate ADA criteria and maps for relevance and possible updating.

#### **County Comprehensive Farmland Preservation Plans**

In recent years, the State Agriculture Development Committee (SADC) encouraged CADBs and County Planning Boards to adopt Comprehensive Farmland Preservation Plans. These Plans have seven basic components:

- A detailed inventory of existing farmland,
- Up to date ADA maps,
- One, 5 and 10 year farmland preservation acreage targets,
- A discussion of efforts to coordinate agricultural retention with municipal and regional master plans and open space preservation initiatives,
- Identification of adequate program funding and staffing resources,
- Development of databases and geographic information systems (GIS), and
- A plan to promote the expansion of agriculture as an industry on a regional basis.

To date, 5 counties have adopted Comprehensive Farmland Preservation Plans (Hunterdon, Middlesex, Monmouth, Ocean and Somerset), while 3 other counties anticipate Plan adoption in 2003 (Morris, Cumberland and Sussex). In addition, 4 New Jersey counties have in place some type of strategic, long-range, growth management plan with a significant farmland preservation element (Burlington, Gloucester, Salem and Warren).

#### Planning Incentive Grant Project Areas

The passage of the Planning Incentive Grant (PIG) Act in 1999 created a new approach to farmland preservation. The Act provided grants to counties and municipalities to help acquire easements on reasonably contiguous blocks of farmland in designated project areas as a reward for adopting farmland preservation plans. Furthermore, the PIG Act amended the Municipal Land Use Law to incorporate a Farmland Preservation Element as an optional component of the municipal master plan, and authorized the creation of an Agricultural Advisory Committee to the municipal Planning Board. Where the county is the lead agency in applying for a PIG, the CADB is designated to coordinate the comprehensive planning activities.

In the 7 PIG application rounds to date, a total of 67 applications attempting to preserve 1,495 farms and 99,182 acres have been submitted to the SADC. Counties have sponsored 13 of those project area applications while 54 proposals have been submitted by municipalities. A total of 55 applications have received preliminary approval and 11 others are under active review. PIG applications are now active in 41 municipalities in 8 counties, as listed below:

<u>County</u>	Municipalities
Burlington	Southampton, Pemberton, Medford, Shamong, Tabernacle, Washington, North Hanover
Hunterdon	Raritan, Readington, Bethlehem, East Amwell, Delaware, Tewksbury, Franklin, Kingwood, Alexandria, Lebanon, Holland
Mercer	Hopewell
Monmouth	Roosevelt, Millstone, Howell, Colts Neck, Middletown, Holmdel, Upper Freehold, Manalapan
Morris	Washington, Chester
Ocean	Plumsted
Somerset	Bedminster, Franklin, Hillsborough, Peapack and Gladstone
Warren	Washington, Pohatcong, Greenwich, Harmony, Knowlton, White, Franklin

#### State Development and Redevelopment Plan

The State Planning Commission completed an extensive planning process by adopting a revised State Development and Redevelopment Plan (SDRP) in March 2001. New Jersey's SDRP incorporated a series of goals, objectives, policies, strategies and benchmarks linked to a policy map. The policy map divided the State into 6 Planning Areas:

- PA 1 Metropolitan
- PA 2 Suburban
- PA 3 Fringe
- PA 4A Rural
- PA 4B Rural Environmentally Sensitive
- PA 5 Environmentally Sensitive

While farmland can be located in any Planning Area, the overwhelming majority of the Garden State's agricultural land is found in Planning Areas 4A and 4B. To date, approximately 94% of all farmland preserved is in PA 4A or 4B.

Under the SDRP, growth is to be directed to Centers of development within each Planning Area. Centers can be existing or proposed, and are categorized by size as follows:

- Urban Centers
- Regional Centers
- Towns
- Villages
- Hamlets

Growth boundaries define centers from their environs. In Rural Planning Areas, most centers can be described as existing Villages and Hamlets, with little opportunity to accommodate significant growth.

A series of policies are also an integral component of the SDRP. One of the most significant policies with respect to farmland preservation provides priorities for agricultural land retention, as follows:

- County or Municipal Farmland Preservation Plans approved by the SADC, or:
  - 1. PA 4A and PA 4B
  - 2. PA 3 and PA 5
  - 3. PA 1 and PA 2

As the SADC moves to adopt a process for approving County and Municipal Farmland Preservation Plans, it is expected that these local plans will become increasingly instrumental in prioritizing investments in farmland preservation.

#### Other Significant Plans and Developments

Many other planning initiatives have an agricultural component or have significant implications for the strategic targeting of farmland preservation investments. In some cases, these efforts clearly recognize the importance of farmland preservation and retention of agriculture as an industry. In other instances, farmland preservation is only one way to accomplish an unrelated objective. Regardless, these plans provide the opportunity for innovative partnerships and new resources to help preserve the Garden State's agricultural land base.

A few of the most noteworthy plans and developments with considerable potential to assist in the preservation of large numbers of farmland acreage are listed as follows:

- NJ Conservation Foundation / NJ Department of Environmental Protection Garden State Greenways Vision
- US Department of Agriculture Forest Service New York New Jersey Highlands Regional Study
- Crossroads of the American Revolution
- NJ Department of Environmental Protection Trails Plan
- NJ Department of Transportation Scenic Byways Program
- NJ Geological Survey Groundwater Recharge Study
- NJ Department of Community Affairs Smart Growth Grants
- Developing Support for a Workable Statewide Transfer of Development Rights Program

Other plans and initiatives are directing public and private investments in growth inducing infrastructure which must be considered in avoiding conflicts with development proposals and in minimizing payment of inflated land costs resulting from these investments. Some of these plans include:

- NJ Department of Environmental Protection Wastewater Plans
- NJ Department of Environmental Protection Water Plans
- NJ Department of Transportation Plans
- NJ Transit Public Transit Plans

# **Preliminary Analysis**

As referenced in the Acknowledgements section of this report, many public agencies have invested substantial resources in the development of data essential to a meaningful strategic targeting effort for farmland preservation. Only very recently has sufficient digital data and the ability to process it become available on a reasonably consistent, statewide basis to enable a study such as this Farmland Preservation Strategic Targeting Project to be undertaken. The critical data and Geographic Information System (GIS) data layers are described in Appendix A and summarized below:

- US Department of Agriculture Natural Resource Conservation Service and NJ Department of Environmental Protection Digital Soils Surveys
- NJ Department of Environmental Protection Land Use / Land Cover Data
- NJ Department of Community Affairs Office of Smart Growth Map of Existing and Future Sewer Service Areas
- US Department of Commerce Census Bureau Statistics
- NJ Department of Community Affairs Building Permit Data
- NJ Division of Taxation Farmland Assessment Data
- NJ Department of Labor State Data Center

This preliminary analysis involves three primary data sets: agricultural soils, agricultural land use and existing and future sewer service areas. The analysis process employs these three factors in establishing preliminary farmland preservation priorities, comparing the priorities to Agricultural Census and Farmland Assessment statistics, population and building permit trends, and Farmland Preservation Program activity to date. In addition, the Strategic Targeting Project compares proposed priorities to special planning initiatives including the State Development and Redevelopment Plan's Centers and Planning Areas, the Pinelands Management Plan and new proposals for ground water recharge and protection of New Jersey's "Highlands region."

The next phase of analysis will incorporate the latest information from counties, municipalities and other State agencies. Data to be considered will include the up to date County Agriculture Development Area maps, Planning Incentive Grant Project Areas, and information contained in County Comprehensive Farmland Preservation Plans. Finally, it is anticipated that other significant initiatives in cultural landscape preservation such as the Crossroads of the American Revolution as well as major highway and passenger rail investments will be considered in greater detail.

It is important to note that the Strategic Targeting Project is a regional planning process, not a regulatory tool, utilizing the most recent, "best available" statewide data. The conclusions will require periodic updates over time to

incorporate the latest information. While it is hoped that counties and municipalities will use the Project as a resource in local planning, highly localized interpretations of the data are discouraged. Users are encouraged to pay particular attention to the "metadata" in Appendix A and to contact information sources directly in order to accurately determine data limitations.

#### Soils

The soils analysis component of the Strategic Targeting Project relies on the U.S. Department of Agriculture Natural Resource Conservation Service New Jersey Important Farmlands Inventory, which was developed from the standard land capability classification system. The Important Farmlands Inventory identifies the following categories of soil quality as follows:

- **Prime Farmland** is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods. Prime Farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently of are protected from flooding.
- Soils of Statewide Importance are nearly Prime Farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields as high as Prime Farmland if conditions are favorable.
- **Farmland of Local Importance** includes those soils that are not prime or of statewide importance and are used for the production of high value food, fiber or horticultural crops.
- **Unique Farmlands** are soils with severe limitations used to produce special crops (e.g., cranberry bogs).

With a land area of approximately 4,876,000 acres, New Jersey is blessed with a significant number of acres that can be characterized under the Important Farmlands Inventory. Roughly 1,028,000 acres (21.1%) can be considered Prime Soils, while another 758,000 acres (15.6%) are categorized as Soils of Statewide Importance. Local Soils constitute 448,000 (9.2%) acres of the Garden State's land base and 475,000 (9.7%) have been identified as Unique. The largest concentrations of Prime Soils are found in Burlington, Cumberland and Salem Counties, while Atlantic, Hunterdon, Ocean and Burlington Counties contain the largest number of acres of Soils of Statewide Importance (see Map 2 and Tables 1 through 5).



	New Jersey							
Soil Classifications	Total of Acres	%	Acres in Ag Use	%	% of Soil Class in Ag Use	Acres Not in Ag Use	%	% of Soil Class Not in Ag Use
Prime	1,028,249.61	21.09%	421,413.37	53.60%	40.98%	606,836.24	14.84%	59.02%
Statewide	758,284.94	15.55%	180,846.74	23.00%	23.85%	577,448.23	14.12%	76.15%
Local	447,781.56	9.18%	31,204.51	3.97%	6.97%	416,577.05	10.19%	93.03%
Unique	474,794.24	9.74%	20,336.97	2.59%	4.28%	454,457.27	11.11%	95.72%
Nonprime	1,867,820.05	38.31%	115,998.41	14.75%	6.21%	1,751,821.64	42.83%	93.79%
Unclassified	297,128.83	6.09%	16,448.87	2.09%	5.54%	280,679.96	6.86%	94.46%
Drained	2,051.27	0.04%	14.60	0.00%	0.71%	2,036.67	0.05%	99.29%
Total	4,876,110.50	100.00%	786,263.47	100.00%	16.12%	4,089,857.06	100.00%	83.88%

#### New Jersey Important Farmlands Inventory Acres in Agricultural Use by Soil Class

Table 1

	Prime				and the local of the			
County	Total of Acres	%	Acres Ag in Use	%	% of Soil Class in Ag use	Acres Not in Ag use	%	% of Soil Class Not in Ag Use
Atlantic	53,158.07	5.17%	8,783.87	2.08%	16.52%	44,374.20	7.31%	83.48%
Bergen	7,320.91	0.71%	155.93	0.04%	2.13%	7,164.98	1.18%	97.87%
Burlington	105,912.89	10.30%	54,701.06	12.98%	51.65%	51,211.83	8.44%	48.35%
Camden	23,838.69	2.32%	4,114.33	0.98%	17.26%	19,724.36	3.25%	82.74%
Cape May	32,747.08	3.18%	4,688.08	1.11%	14.32%	28,059.00	4.62%	85.68%
Cumberland	92,840.65	9.03%	48,797.94	11.58%	52.56%	44,042.71	7.26%	47.44%
Gloucester	83,312.77	8.10%	39,095.46	9.28%	46.93%	44,217.31	7.29%	53.07%
Hunterdon	76,281.62	7.42%	41,319.19	9.80%	54.17%	34,962.43	5.76%	45.83%
Mercer	48,557.22	4.72%	15,962.28	3.79%	32.87%	32,594.94	5.37%	67.13%
Middlesex	58,536.72	5.69%	17,418.65	4.13%	29.76%	41,118.07	6.78%	70.24%
Monmouth	76,397.59	7.43%	35,005.33	8.31%	45.82%	41,392.26	6.82%	54.18%
Morris	60,527.20	5.89%	9,830.78	2.33%	16.24%	50,696.42	8.35%	83.76%
Ocean	37,995.66	3.70%	2,584.17	0.61%	6.80%	35,411.49	5.84%	93.20%
Passaic	2,870.13	0.28%	77.51	0.02%	2.70%	2,792.62	0.46%	97.30%
Salem	86,042.76	8.37%	62,365.64	14.80%	72.48%	23,677.12	3.90%	27.52%
Somerset	67,916.15	6.61%	20,091.94	4.77%	29.58%	47,824.21	7.88%	70.42%
Sussex	33,550.24	3.26%	16,061.63	3.81%	47.87%	17,488.61	2.88%	52.13%
Union	3,818.68	0.37%	38.39	0.01%	1.01%	3,780.29	0.62%	98.99%
Warren	76,624.58	7.45%	40,321.19	9.57%	52.62%	36,303.39	5.98%	47.38%
Total	1.028.249.61	100.00%	421,413.37	100.00%	40.98%	606,836.24	100.00%	59.02%

#### New Jersey Important Farmlands Inventory Prime Soils in Agricultural Use by County

#### New Jersey Important Farmlands Inventory Soils of Statewide Importance in Agricultural Use by County

	Statewide		er er stat		and a start	States Parts		
County	Total of Acres	%	Acres Ag in Use	%	% of Soil Class in Ag use	Acres Not in Ag use	%	% of Soil Class Not in Ag Use
Atlantic	127,076.41	16.76%	13,918.28	7.70%	10.95%	113,158.13	19.60%	89.05%
Bergen	6,962.65	0.92%	81.91	0.05%	1.18%	6,880.74	1.19%	98.82%
Burlington	74,972.72	9.89%	22,100.88	12.22%	29.48%	52,871.84	9.16%	70.52%
Camden	24,497.65	3.23%	4,804.73	2.66%	19.61%	19,692.92	3.41%	80.39%
Cape May	16,578.27	2.19%	1,485.15	0.82%	8.96%	15,093.12	2.61%	91.04%
Cumberland	50,477.06	6.66%	12,703.48	7.02%	25.17%	37,773.58	6.54%	74.83%
Gloucester	33,334.87	4.40%	12,375.71	6.84%	37.13%	20,959.16	3.63%	62.87%
Hunterdon	96,874.24	12.78%	44,237.77	24.46%	45.67%	52,636.47	9.12%	54.33%
Mercer	22,456.20	2.96%	7,569.14	4.19%	33.71%	14,887.06	2.58%	66.29%
Middlesex	34,212.11	4.51%	5,174.84	2.86%	15.13%	29,037.27	5.03%	84.87%
Monmouth	64,418.61	8.50%	14,964.66	8.27%	23.23%	49,453.95	8.56%	76.77%
Morris	31,636.47	4.17%	3,812.50	2.11%	12.05%	27,823.97	4.82%	87.95%
Ocean	75,254.82	9.92%	4,126.54	2.28%	5.48%	71,128.28	12.32%	94.52%
Passaic	1,667.65	0.22%	30.41	0.02%	1.82%	1,637.24	0.28%	98.18%
Salem	15,130.81	2.00%	8,537.04	4.72%	56.42%	6,593.80	1.14%	43.58%
Somerset	49,577.73	6.54%	12,308.91	6.81%	24.83%	37,268.82	6.45%	75.17%
Sussex	2,071.93	0.27%	667.85	0.37%	32.23%	1,404.08	0.24%	67.77%
Union	1,649.95	0.22%	31.47	0.02%	1.91%	1,618.48	0.28%	98.09%
Warren	29,434.79	3.88%	11,915.47	6.59%	40.48%	17,529.32	3.04%	59.55%
Total	758,284.94	100.00%	180,846.74	100.00%	23.85%	577,448.23	100.00%	76.15%

#### New Jersey Important Farmlands Inventory Farmlands of Local Importance in Agricultural Use by County

	Local		S. Istantis					
County	Total of Acres	%	Acres Ag in Use	%	% of Soil Class in Ag Use	Acres Not in Ag Use	%	% of Soil Class Not in Ag Use
Atlantic	43,057.20	9.62%	2,052.30	6.58%	4.77%	41,004.90	9.84%	95.23%
Bergen	-	0.00%		0.00%	0.00%	-	0.00%	0.00%
Burlington	96,088.31	21.46%	4,617.01	14.80%	4.80%	91,471.30	21.96%	95.20%
Camden	14,742.37	3.29%	1,093.98	3.51%	7.42%	13,648.39	3.28%	92.58%
Cape May	1,654.88	0.37%	154.96	0.50%	9.36%	1,499.92	0.36%	90.64%
Cumberland	16,497.27	3.68%	709.79	2.27%	4.30%	15,787.48	3.79%	95.70%
Gloucester	12,085.85	2.70%	1,706.34	5.47%	14.12%	10,379.51	2.49%	85.88%
Hunterdon	15,036.28	3.36%	5,711.56	18.30%	37.99%	9,324.72	2.24%	62.01%
Mercer	3,521.62	0.79%	775.40	2.48%	22.02%	2,746.22	0.66%	77.98%
Middlesex	6,736.36	1.50%	78.73	0.25%	1.17%	6,657.63	1.60%	98.83%
Monmouth	33,741.16	7.54%	3,065.87	9.83%	9.09%	30,675.29	7.36%	90.91%
Morris	12,019.24	2.68%	699.67	2.24%	5.82%	11,319.57	2.72%	94.18%
Ocean	145,304.72	32.45%	1,678.31	5.38%	1.16%	143,626.41	34.48%	98.84%
Passaic	1,473.01	0.33%	39.86	0.13%	2.71%	1,433.15	0.34%	97.29%
Salem	10,572.49	2.36%	675.52	2.16%	6.39%	9,896.97	2.38%	93.61%
Somerset	31,864.44	7.12%	7,494.72	24.02%	23.52%	24,369.72	5.85%	76.48%
Sussex	-	0.00%	-	0.00%	0.00%	-	0.00%	0.00%
Union	260.94	0.06%		0.00%	0.00%	260.94	0.06%	100.00%
Warren	3,125.42	0.70%	650.49	2.08%	20.81%	2,474.93	0.59%	79.19%
Total	447,781.56	100.00%	31,204.51	100.00%	6.97%	416,577.05	100.00%	93.03%

#### New Jersey Important Farmlands Inventory Unique Farmlands in Agricultural Use by County

	Unique							
County	Total of Acres	%	Acres Ag in Use	%	% of Soil Class in Ag Use	Acres Not in Ag Use	%	% of Soil Class Not in Ag Use
Atlantic	67,052.21	14.12%	3,860.63	18.98%	5.76%	63,191.58	13.90%	94.24%
Bergen	945.89	0.20%	-	0.00%	0.00%	945.89	0.21%	0.00%
Burlington	116,694.32	24.58%	10,437.25	51.32%	8.94%	106,257.07	23.38%	91.06%
Camden	12,434.69	2.62%	159.12	0.78%	1.28%	12,275.57	2.70%	98.72%
Cape May	52,518.76	11.06%	76.52	0.38%	0.15%	52,442.24	11.54%	99.85%
Cumberland	64,509.16	13.59%	318.64	1.57%	0.49%	64,190.52	14.12%	99.51%
Gloucester	11,818.39	2.49%	187.22	0.92%	1.58%	11,631.17	2.56%	98.42%
Hunterdon		0.00%		0.00%	0.00%		0.00%	0.00%
Mercer	270.30	0.06%	0.24	0.00%	0.09%	270.06	0.06%	99.91%
Middlesex	6,834.57	1.44%	118.74	0.58%	1.74%	6,715.83	1.48%	98.26%
Monmouth	21,377.84	4.50%	643.37	3.16%	3.01%	20,734.47	4.56%	96.99%
Morris	11,901.20	2.51%	112.93	0.56%	0.95%	11,788.27	2.59%	99.05%
Ocean	65,500.65	13.80%	693.35	3.41%	1.06%	64,807.30	14.26%	98.94%
Passaic	1,847.32	0.39%	-	0.00%	0.00%	1,847.32	0.41%	100.00%
Salem	27,001.39	5.69%	1,792.48	8.81%	6.64%	25,208.91	5.55%	93.36%
Somerset	0.76	0.00%	-	0.00%	0.00%	0.76	0.00%	100.00%
Sussex	9,217.98	1.94%	463.34	2.28%	0.00%	8,754.64	1.93%	0.00%
Union	544.83	0.11%		0.00%	0.00%	544.83	0.12%	100.00%
Warren	4,323.98	0.91%	1,473.14	7.24%	34.07%	2,850.84	0.63%	65.93%
Total	474,794.24	100.00%	20,336.97	100.00%	4.28%	454,457.27	100.00%	95.72%

#### Agricultural Land Use

Using 1995 – 1997 Land Use / Land Cover data from the NJ Department of Environmental Protection, New Jersey's acreage in agricultural use can be estimated at 786,000 acres, or 16.1% of its total land area. About 421,000 acres in agricultural use (53.6% of all acres in agricultural use) are classified as Prime Soils, and an additional 181,000 acres (23.0%) are Soils of Statewide Importance. Approximately 31,000 acres in agricultural use (4.0%) are classified as of Local Importance, while roughly 20,000 acres (2.6%) are considered Unique. It is important to note that of the Garden State's 1,028,000 acres of Prime Soil, only 41.0% are currently in agricultural production and only 23% of the Soils of Statewide Importance are in farm use. The Counties with the most acres of Prime Soils in agricultural use are Salem, Burlington and Cumberland. The most significant concentrations of Statewide Soils in farm use are found in Hunterdon, Burlington and Monmouth Counties (see Maps 3 through 5).

#### **Sewer Service Areas**

As the most densely developed state in the nation, it is not surprising to find that a significant portion of New Jersey is currently served by public wastewater treatment systems. A sizeable number of acres adjacent to these Existing Sewer Service Areas have been identified for system expansion as Future Sewer Service Areas. A total of 69,000 acres of Prime and Statewide Soils in farm use and nearly 21,000 acres of Other Soils in active agricultural use are located in Existing Sewer Service Areas. Another 43,000 acres of Prime and Statewide Soils in farm use and more than 12,500 acres of Other Soils in agricultural production are located in Future Sewer Service Areas. The largest concentrations of Prime and Statewide Soils in agricultural use in Existing Sewer Service Areas are found in Gloucester, Somerset, Middlesex and Burlington Counties. Warren, Cumberland, and Hunterdon Counties contain the greatest number of acres of Prime and Statewide Soils in farm use in Future Sewer Service Areas.

The overwhelming majority of land in active agricultural use (589,000 acres or roughly 80% of New Jersey's farmland) is found outside Existing or Future Sewer Service Areas. These acres can be divided into 416,000 acres of Prime and Statewide Soils and 173,000 acres of Other Soils. The Counties with the most Prime Farmlands and Soils of Statewide Importance in active agricultural use outside Existing or Future Service Areas are Hunterdon, Salem and Burlington (see Maps 6 and 7, and Table 6).











State Agriculture Development Committee Preliminary Farmland Preservation Priorities Acres by County March, 2003

	Print & Chatanida Colle in	Other Soils in Active	Prime & Statewide Soils in	Other Soils in Active	Prime & Statewide Soils in	Other Soils in Active
		A aniouthurs Hes Outeida	Active Agriculture Use in	Aariculuture Use in Future	Active Agriculture Use in	Agriculture Use in Existing
	Active Agriculture Use	Agriculture Use Outside	Entrine Sewer Service Areas	Sewer Service Areas	Existing Sewer Service Areas	Sewer Service Areas
County	Outside Sewer Service Areas	Sewer Service Areas		178	224	42
Atlantic	19056	6566	0001	O.	141	197
Bergen	31	25	28	00	0624	1516
Burlington	55956	18071	4888	712	0031	701
Camden	4343	1614	4	16	3022	205
Cane Mav	4997	2651		-	433	202
Cumberland	43898	7359	8113	3654	3390	000
Clouceter	29121	8471	3494	1220	12380	3034
Unuter den	66458	17905	5015	1733	2854	934
Inniatinu	13027	7454	936	863	6593	4360
Mercer	6381	115	4885	109	9360	1119
Middlesex	2000	6023	711	205	6649	2194
Monmouth	00000	0000	1750	621	305	161
Morris	10144	C007	024	σ	1379	947
Ocean	4506	1939	2	00	36	66
Passaic	65	167	0	22 0	662	510
Salem	57737	34285	17	0	10001	3015
Somerset	14969	7993	2107	844	10322	900
	12621	32012	864	1372	555	080
Sussex	12021	c	0	0	60	62
Union	D	07227	0382	901	1731	175
Warren	36040	61771	2006		60327	20774
TOTAL	415906	172702	43458	12021	12020	

Table 6

#### **Preliminary Farmland Preservation Priorities**

Using the soils data contained in the New Jersey Important Farmlands Inventory in conjunction with Existing and Future Sewer Service Area maps, a preliminary priority system for evaluating farmland preservation opportunities can be developed. This proposal views the Prime and Statewide Soils in agricultural use outside Sewer Service Areas as the highest priority for farmland preservation investments, followed by farmland comprised of Other Soils outside Sewer Service Areas. The next level of priority would be extended to Prime and Statewide Soils in farm production in Future Sewer Service Areas, followed by Other Soils in active agricultural use in Future Sewer Service Areas. The lowest priority category would apply to farmland in Existing Sewer Service Areas, with Prime and Statewide Soils ranking above Other Soils in these largely developed areas (see Map 8 and Table 6).

It is important to note that the proposed priority system should be weighted to not eliminate opportunities to preserve strategically located farms in developed areas within Existing Sewer Service Areas. The priority system must take into account the statutory mandate to consider the likelihood of conversion from agricultural use and the geographic diversity of the State. The priority system should call attention to the farmlands within or within close proximity to Sewer Service Areas as those lands subject to the greatest development pressures and least likely to be available for preservation 3, 5, or 10 years from now. This proposal should also be viewed as an opportunity to reevaluate Future Sewer Service Area boundaries with respect to concentrations of farmlands with Prime and Statewide Soils as well as public investments in growth-inducing infrastructure.

#### **Census of Agriculture**

Every 5 years, the U.S. Department of Agriculture National Agricultural Statistics Service conducts a very thorough census of agriculture. The census is the most comprehensive source of uniform agricultural data for every county in the nation. For this purpose, a farm is defined as any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the reference year. Response to the census of agriculture is required by law, and the privacy of an individual operator's responses is safeguarded. Municipal data is not provided. The most recent year for which data is available is 1997. Data for 2002 is not expected until February 2004 since report forms for the calendar year were due in February 2003.

In reviewing farm acreage trends from 1954 to 1997, the Garden State lost 832,641 acres (50.0%) of its agricultural land base to competing land uses. Most of that decline occurred from 1954 to 1974, when land in farms dropped from 1,665,241 to 961,395 acres (703,846 acres, an average rate of loss of 35,192



acres per year). Since 1974, New Jersey's land in farms has continued to fall at a much more gradual rate to 832,600 acres (an additional loss of 128,795 acres, at an average rate of loss of 5,600 acres per year) (see Table 7).

From 1982 through 1997, New Jersey's land in farms declined by 83,731 acres from 916,331 to 832,600 acres (at a rate of 5,582 acres per year). The Counties experiencing the greatest acreage loss from 1982 to 1997 were Hunterdon, Mercer, Burlington, Cumberland and Monmouth. In addition to the urbanized Counties of Essex and Union where the number of acres remaining in agricultural production have declined to the point where the census withheld the data to avoid disclosing information for individual farms, Cape May, Mercer and Camden Counties witnessed the greatest rate of loss of land in farms (see Map 9 and Table 8).

While the census of agriculture documents the continuing erosion of farm acres in the Garden State, the wealth of information gathered provides many positive perspectives on farming and its economic impact. One of those indicators involves the dramatic growth in the market value of agricultural products sold. Since 1969, the value of agricultural products sold increased from \$213,893,000 to \$697,380,000, a gain of 226%. The Counties with the highest total market value of agricultural products sold in 1997 were Cumberland, Burlington, Monmouth, Salem, Gloucester and Atlantic. In addition, despite continuing declines in land in farms, the census documented that New Jersey still had 17.6% of its total land base in agricultural production in 1997 (see Map 10 and Table 9).

#### Farmland Assessment

The Farmland Assessment Act of 1964 established a system of differential property taxation for farmlands, woodlands and wetlands in New Jersey. This initiative recognized that these natural lands and working landscapes, that demand very little in public services, were being pressured by rising property taxes into higher intensity land uses. The significant reduction in the rate of loss since 1964 of agricultural land described in the previous section of this report can be attributed largely to the Farmland Assessment Act.

The Act requires that landowners apply for this preferential property taxation annually through their municipal tax assessors, enabling detailed data analysis at the local and county level. State Farmland Assessment acreage totals for the 2001 tax year, as well as preliminary information for the 2002 tax year, are summarized as follows:


Table 7

					Acreage Change	% Change
County	1982	1987	1992	1997	1982-1997	1982-1997
Atlantic	27,504	29,423	29,606	31,050	3,546	12.9%
Bergen	2,728	2,596	2,636	2,633	-95	-3.5%
Burlington	112,689	103,224	97,186	103,667	-9,012	-8.0%
Camden	11,690	10,033	7,799	9,007	-2,683	-23.0%
Cape May	13,992	13,553	11,644	9,669	-4,323	-30.9%
Cumberland	75,189	72,406	68,627	66,288	-8,901	-11.8%
ssex	1,204	580	613	*0	-1,204	-100.0%
Gloucester	66,133	62,128	61,748	58,373	-7,760	-11.7%
Hudson	*0	*0	*0	*0	*0	0.0%
Hunterdon	120,240	123,698	106,324	105,230	-15,010	-12.5%
Mercer	40,023	41,303	35,786	28,391	-11,632	-29.1%
Middlesex	32,438	25,222	25,011	28,100	-4,338	-13.4%
Monmouth	68,275	65,846	58,758	59,405	-8,870	-13.0%
Morris	25,576	27,086	23,915	22,351	-3,225	-12.6%
Ocean	9,960	8,820	10,365	11,381	1,421	14.3%
Passaic	1,499	1,380	1,838	2,232	733	48.9%
Salem	96,585	95,265	98,256	92,047	-4,538	-4.7%
Somerset	49,508	45,190	43,989	46,258	-3,250	-6.6%
Sussex	73,161	78,641	75,531	73,001	-160	-0.2%
Jnion	579	449	325	*0	-579	-100.0%
Warren	87,358	87,583	87,638	82,900	-4,458	-5.1%
4J Total	916.331	804 426	847 595	832 600	-83 731	-0.1%

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NJ Land in Farms Acres by County

Table 8

3/21/2003

Source: U.S. Census of Agriculture

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# Total Value of Agricultural Products Sold - 1997 12/27/2002

Table 9

COUNTY	MARKET VALUE IN DOLLARS
ATLANTIC	\$63,469,000.00
BERGEN	\$9,008,000.00
BURLINGTON	\$87,535,000.00
CAMDEN	\$17,473,000.00
CAPE_MAY	\$6,807,000.00
CUMBERLAND	\$94,152,000.00
ESSEX	\$1,223,000.00
GLOUCESTER	\$66,972,000.00
HUDSON	\$0.00
HUNTERDON	\$36,057,000.00
MERCER	\$13,255,000.00
MIDDLESEX	\$34,355,000.00
MONMOUTH	\$67,973,000.00
MORRIS	\$29,956,000.00
OCEAN	\$8,170,000.00
PASSAIC	\$3,863,000.00
SALEM	\$67,908,000.00
SOMERSET	\$14,026,000.00
SUSSEX	\$19,187,000.00
UNION	\$9,986,000.00
WARREN	\$46,005,000.00
STATEWIDE TOTAL	\$697,380,000.00

SOURCE: U.S.D.A. 1997 Census of Agriculture - New Jersey State and County Data



	<u>2001</u>	<u>2002</u>
Cropland Harvested Acreage	552,552	525,410
Cropland Pastured Acreage	40,337	39,703
Permanent Pasture Acreage	104,967	100,377
Non-Appurtenant Woodland	237,553	246,039
Appurtenant Woodland Acreage	200,791	192,271
Boarding, Rehabilitation & Training	13,779	7,738
Total Devoted to Ag & Hort Use	1,149,973	1,111,538

For the 2001 tax year, the Counties with the highest total acreage devoted to agricultural or horticultural use, as well as acreage categorized as cropland harvested, were Burlington, Hunterdon and Salem. Municipalities with the most agricultural acres in 2001 include the following (see Maps 11 and 12):

Acres

Wantage Township, Sussex County	24,663
Woodland Township, Burlington County	22,519
Upper Pittsgrove Township, Salem County	20,707
Upper Freehold Township, Monmouth County	20,004
Hopewell Township, Mercer County	18,960

The top 5 Municipalities with the highest percentage of their land base qualified for Farmland Assessment in 2001 were as follows (see Map 13):

	Percentage
Upper Pittsgrove Township, Salem County	80.2%
Stow Creek Township, Cumberland County	77.6%
Mannington Township, Salem County	77.4%
Pilesgrove Township, Salem County	77.0%
Franklin Township, Warren County	75.8%

In comparing cropland harvested acreage totals from tax year 1980 to 2001 information, significant acreage losses were noted in parts of Somerset, Middlesex, Monmouth, Mercer and Hunterdon Counties. On the basis of percentage change, many municipalities throughout the State witnessed a dramatic reduction in their cropland harvested acreage totals, while other communities, primarily in southern New Jersey, experienced meaningful gains (see Maps 14 and 15).





## AGRICULTURAL LANDS







### Population

From 1980 to 2000, the Garden State's population increased by 1,165,463 residents (15.8%), from 7,365,011 to 8,414,350 persons. The greatest numerical population increases in that 20 year time frame were recorded in Ocean, Middlesex, Monmouth and Somerset Counties. On a percentage change basis, the greatest rate of population growth from 1980 to 2000 occurred in Ocean, Somerset, Hunterdon and Atlantic Counties (see Map 16 and Table 10).

Not surprisingly, municipalities experiencing dramatic population growth in the last two decades were concentrated in Ocean, Middlesex, Somerset, Monmouth and Atlantic Counties (see Map 17). The top five municipalities in numerical population growth from 1980 to 2000 were as follows:

	Population Increase
Edison Township, Middlesex County	27,494
Dover Township, Ocean County	25,251
Howell Township, Monmouth County	23,838
Mount Laurel Township, Burlington County	22,607
Brick Township, Ocean County	22,490

On a percentage basis, the following municipalities experienced the greatest rate of population change from 1980 to 2000:

	Percentage Population Change
Plainsboro Township, Middlesex County	260.7%
Bedminster Township, Somerset County	236.2%
Washington Township, Mercer County	194.7%
Woolwich Township, Gloucester County	168.6%
Tavistock Borough, Camden County	166.7%

### Housing

Housing development in agricultural areas can have a devastating impact on the viability of farming and the sustainability of the agricultural industry. Not only do the number of Right to Farm complaints from new neighbors unaccustomed to the practicalities of farming tend to increase, but as minimum lot sizes in rural areas continue to grow, each new house consumes increasing numbers of acres over time. As well documented in the American Farmland Trust's *"Farming on the Edge"* Study, the most productive farmland is almost always the easiest to develop.

				Population C	hange	Populatio	n Change
	Å	opulation		1980 to 2(	000	1990	to 2000
Geographic Area	1980	1990	2000	Number	Percent	Number	Percent
County							
Atlantic	194,119	224,327	252,552	58,433	30.1%	28,225	12.6%
Bergen	845,385	825,380	884,118	38,733	4.6%	58,738	7.1%
Burlington	362,542	395,066	423,394	- 60,852	16.8%	28,328	7.2%
Camden	471,650	502,824	508,932	37,282	7.9%	6,108	1.2%
Cape May	82,266	95,089	102,326	20,060	24.4%	7,237	7.6%
Cumberland	132,866	138,053	146,438	13,572	10.2%	8,385	6.1%
Essex	851,304	778,206	793,633	-57,671	- 6.8%	15,427	2.0%
Gloucester	199,917	230,082	254,673	54,756	9.8%	24,591	10.7%
Hudson	556,972	553,099	608,975	52,003	9.3%	55,876	10.1%
Hunterdon	87,361	107,776	121,989	34,628	39.6%	14,213	13.2%
Mercer	307,863	325,824	350,761	42,898	13.9%	24,937	7.7%
Middlesex	595,893	671,780	750,162	154,269	25.9%	78,382	11.7%
Monmouth	503,173	553,124	615,301	112,128	22.3%	62,177	11.2%
Morris	407,630	421,353	470,212	62,582	15.4%	48,859	11.6%
Ocean	346,038	433,203	510,916	164,878	47.6%	77,713	17.9%
Passaic	447,585	453,060	489,049	41,464	9.3%	35,989	7.9%
Salem	64,676	65,294	64,285	- 391	-0.6%	-1,009	-1.5%
Somerset	203,129	240,279	297,490	94,361	46.5%	57,211	23.8%
Sussex	116,119	130,943	144,166	28,047	24.2%	13,223	10.1%
Union	504,094	493,819	522,541	18,447	3.7%	28,722	5.8%
Warren	84,429	91,607	102,437	18,008	21.3%	10,830	11.8%
Total	7.365.011	7.730.188	8.414.350	1.165.463	15.8%	684.162	8.9%

# Population for the Counties in New Jersey: 1980, 1990, and 2000

Table 10





Housing data from 1990 and 2000 show the greatest numerical increase in dwelling units in the following municipalities:

Increase in Housing Units

Dover Township, Ocean County	5,463
Mount Laurel Township, Burlington County	4,550
Gloucester Township, Camden County	4,364
Bridgewater Township, Somerset County	4,122
South Brunswick Township, Middlesex County	3,900

On the basis of percentage change in the number of housing units from 1990 to 2000, the top 5 municipalities are listed below:

	Percentage Change
Greenwich Township, Warren County	113.1%
Woolwich Township, Gloucester County	106.0%
Montgomery Township, Somerset County	90.2%
Harrison Township, Gloucester County	70.3%
Washington Township, Mercer County	64.1%

### **Building Permits**

Building permit data is assembled on a monthly basis by municipal Construction Code Officials. This data can be useful in anticipating housing development trends over time, and in projecting future development pressure. For the period from 2000 through 2002, the top five municipalities for new housing units authorized were as follows (see Map 18):

	New Housing Units Authorized
Newark City, Essex County	2,955
Jackson Township, Ocean County	1,998
Franklin Township, Somerset County	1,953
Lakewood Township, Ocean County	1,682
Egg Harbor Township, Atlantic County	1,656

### **Transportation Network Proximity**

Passenger rail and limited access highway networks represent major public investments in growth-inducing infrastructure. Careful planning is required to manage development pressures in the vicinity of rail stations and highway interchanges. Highway and transit planners should avoid major capacity



improvements into active agricultural areas, or at very least design projects to minimize adverse impacts to farmers.

Significant concentrations of Prime and Statewide Soils in agricultural use near passenger rail lines are found in Somerset, Hunterdon, Middlesex and Atlantic Counties. Limited access highways in close proximity to major farming areas with Prime and Statewide Soils include (see Map 19):

- NJ Turnpike (and Interstate 295) in Middlesex, Mercer, Monmouth, Burlington, Gloucester and Salem Counties
- Interstate 195 in Mercer and Monmouth Counties
- Interstate 78 in Somerset, Hunterdon and Warren Counties
- Interstate 287 in Somerset County
- Interstate 80 in Warren County
- US 202 in Hunterdon County
- NJ 18 and 33 in Monmouth County
- NJ 55 in Gloucester, Salem and Cumberland Counties

### Farmland Preservation Program Activity

As of the end of 2002, the SADC, in conjunction with its Farmland Preservation Program partners, had permanently preserved 796 farms and 100,145 acres of the Garden State's agricultural land base. Using the U.S. Census of Agriculture 1997 figure of 9,101 farms and 832,600 acres as the best estimate of New Jersey's total land in agricultural production, preserved farms represent 9% of all farms and preserved acres represent 12% of all farm acres. While a few other states have preserved more acreage, New Jersey's Farmland Preservation Program has permanently protected a higher percentage of its farmland base than any other state in the nation (see Map 20 and Table 11).

Another 29,003 acres of Farmland Preservation Program applications have received SADC final approval and have been funded. Most of these farms are expected to close in the next 12 months, adding another 3.5% to the State's preserved acreage total.

The Counties with the greatest number of preserved acres to date are Burlington, Salem and Hunterdon, collectively accounting for approximately 42% of the State's total. The New Jersey Counties with the highest percentage of their county agricultural base preserved include Cape May, Ocean and Morris. Other Counties with the percentage of their farm base permanently preserved at a level above the statewide average include Salem, Mercer, Burlington, Cumberland, Monmouth and Middlesex. The most significant concentrations of preserved farmland and program activity to date can be listed as follows:





Source: US Census of Agriculture NJ State Agriculture Development Committee

1/2/2003

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Table 11

		1		1	12/31/02	% of County	12/31/02	Potential % of Cty
County	1992	1997	Difference	% Change	Preserved	<b>Base Preserved</b>	Potential	Base Preserved
Atlantia	29 606	31.050	1.444	4.9	243	0.8	2,636	8.5
Dorron	2 636	2.633	-3	-0.1	216	8.2	222	8.4
liafia	07 196	103 667	6.481	6.7	15,485	14.9	18,289	17.6
Burlington	31,100	0000	1 208	15.5	49	0.5	495	5.5
Camden	1,133	0,660	1 075	-17.0	2.270	23.5	2,270	23.5
Cape May	11,044	000'0	0 330	34	9.125	13.8	11,613	17.5
Cumberland	170'00	00,000	N / A	N / N	C	0.0	0	0.0
Essex	613	WITINI	V/N		000 3	10	ACT 7	13.2
Gloucester	61,748	58,373	-3,3/5	0.0-	50'0			00
Hudson	N/A	N/A	N/A	N/A	0	0.0		
Hunterdon	106,324	105,230	-1,094	-1.0	11,772	11.2	17,560	16.7
Marcar	35.786	28,391	-7,395	-20.7	4,540	16.0	6,161	21.7
Middlocov	25.011	28.100	3,089	12.4	3,394	12.1	4,224	15.0
Middlesex	58.758	59 405	647	1.1	7,491	12.6	8,687	14.6
Monmouth	20,130	22,722	-1 564	-6.5	3.867	17.3	4,227	18.9
Morns	10.965	11 281	1 016	9.8	2.050	18.0	2,371	20.8
Ocean	10,000	2 232	394	21.4	0	0.0	0	0.0
Passaic	98 256	92.047	-6,209	-6.3	14,782	16.1	17,659	19.2
Comoreot	43,989	46.258	2.269	5.2	4,378	9.5	4,704	10.2
Succes	75.531	73.001	-2,530	-3.3	6,996	9.6	8,996	12.3
Union I	325	Withheld	N/A	N/A	0	0.0	0	0.0
Marron	87.638	82.900	-4,738	-5.4	8,158	9.8	11,310	13.6
Total	847 595	832.600	-14,995	-1.8	100,145	12.0	129,148	15.

Land in Farms 1992 - 1997 vs. Permanently Preserved Farmland

51

- Northern Burlington, Western Monmouth and Western Ocean Counties
- Salem, Western Cumberland and Southern Gloucester Counties
- Southern Hunterdon, Southwestern Somerset and Southern Warren Counties

Another aspect of strategically targeting farmland preservation efforts can involve the size of preserved farms in relation to the size of all New Jersey farms. The Census of Agriculture provides detailed information on the distribution of farms by size, documenting that while the average farm size in 1997 was 91 acres, the median farm size was only 23 acres. Fully two thirds (66.5%) of the Garden State's farms (6,056 out of a total of 9,101 farms) were less than 50 acres in size, representing 97,444 acres or 11.7% of New Jersey's total land in farms. On the other end of the distribution, the 350 farms above 500 acres in size account for 331,353 acres, or 40% of the Garden State's agricultural land base (see Table 12).

In comparing Farmland Preservation Program preserved farm statistics to the distribution of farm sizes in the State, most of the program activity to date has involved farms of between 100 and 220 acres in size. Only 4% of all farms less than 50 acres in size have been permanently preserved to date. Only 3% of all farms greater than 500 acres in size are preserved to date, representing 7,390 acres or only 2% of the 331,353 acres in that category. Additional research is required to determine whether larger farms are being preserved incrementally or whether different approaches are necessary to identify and encourage owners of large farms to participate in New Jersey's Farmland Preservation Program.

### **Coordination with County and Municipal Plans**

It is important to note that this phase of the Strategic Targeting Project was completed from a consistent, statewide perspective. In most cases, the approaches used in this report build on the prior efforts of the SADC and other agencies at all levels of government and non-governmental organizations of various scopes of geographical reference. After an extensive outreach process, comparing the information contained in this report to other statewide, regional, county and municipal plans, a coordinated vision for strategically preserving farmland in the Garden State will be developed.

Central to this approach is the assemblage of updated CADB Agricultural Development Area maps. In addition, the SADC will work with the municipalities and the CADBs to document the project areas developed through the Planning Incentive Grant program on a statewide basis. The SADC will review this information carefully to identify any gaps between the statewide priority system maps and the ADAs or PIG project area maps. The SADC, in conjunction with the counties and municipalities involved, will identify and eliminate any errors or gaps in mapping. Legitimate differences of a substantive nature will be

As of December 31, 2002

Source: US Census of Agriculture and New Jersey State Agriculture Development Committee

s/\stratplan\presbyfarmsize.xls\smry

Census     Census     Preserved       1097 Size of Farm     Farms     %     Acres     %     Farms     %     Preserved       110 9 Acres     2,249     24.71%     13,205     1.59%     6     9%     5.009     6     9%     5.009     6     9%     5.009     6     6     9%     5.009     6     9%     5.009     6     6     9%     5.13%     5.					New	Jersey			
1997 Size of Farms     %     Acres     %     Chaus     Acres     Chaus     Acres     Chaus     Acres     Acres <th></th> <th>1</th> <th>Cen</th> <th>sns</th> <th></th> <th>A CONTRACT OF A CONTRACT OF</th> <th>Prese</th> <th>erved</th> <th></th>		1	Cen	sns		A CONTRACT OF	Prese	erved	
Ito 9 Acres     2.249     2.74%     13.205     1.59%     6     0%     48     0.9       50 to 49 Acres     3,807     41.83%     84,239     10.12%     55,039     673       50 to 99 Acres     589     6.47%     34,243     4.11%     793     293     17%       70 to 99 Acres     566     6.47%     51,354     6.17%     5,936     17%       70 to 99 Acres     794     4.90%     51,354     6.17%     53     27%     10,256     27%       140 to 179 Acres     172     1.89%     84,13     4.61%     52     27%     10,256     27%       180 to 219 Acres     172     1.89%     143,401     17.22%     57     147     55     74     49     21%     21%       200 to 999 Acres     238     2.65%     15,519     13.91%     11     21%     6.307     21%       200 to 999 Acres     200 to 999 Acres     2.024%     55,672     5.69%     10     0%     21%     19       200 t	1997 Size of Farm	Farms	%	Acres	%	Farms	% Cnsus	Acres	% Cnsus
(10 to 49 Acres)     3,807     41,83%     84,239     10,12%     154     4%     5,036     61,7%     5,936     17%       50 to 89 Acres)     568     6,47%     3,3,23     6,17%     15,936     17%       50 to 89 Acres)     568     6,47%     3,4,233     4,11%     78     299     17%     5,936     17%       100 to 139 Acres     246     4,90%     5,532     5,43%     86     3,3,43     309       140 to 179 Acres     236     3,14%     45,223     5,43%     86     27%     10,256     27%       180 to 219 Acres     17,3     46,401     17     22%     309       191 to 200 system     102     17,22%     15,143     451%     17%     159     27%       200 to 999 Acres     238     2,656     15,20%     11,22%     14%     100     4%       1,000 to 1399 Acres     2,101     17,22%     17     14%     6,307     49       2,000 to 1999 Acres     2,101     17,22%     57     1	1 to 9 Acres	2,249	24.71%	13,205	1.59%	9	%0	48	%0
S0 to 68 Acres     589     6.47%     34,243     4.11%     99     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17%     5,936     17,519     22%     11,519     23%       140 to 179 Acres     286     3.14%     45,223     5,43%     86     30%     13,437     307       140 to 179 Acres     172     1984     4,5,23     5,43%     86     30%     13,437     307       220 to 259 Acres     172     1,89%     40,844     4,91%     5,57     6,93%     19     217       220 to 259 Acres     201     100,00%     13,91%     1     107     103     101     103       200 to 099 Acres     90     0,99%     115,619     13,91%     1     103     117       200 to 099 Acres     90     0000%     83,5160     100,00%     796     9%     100,145     12% <td>10 to 49 Acres</td> <td>3,807</td> <td>41.83%</td> <td>84,239</td> <td>10.12%</td> <td>154</td> <td>4%</td> <td>5,009</td> <td>6%</td>	10 to 49 Acres	3,807	41.83%	84,239	10.12%	154	4%	5,009	6%
C) (10 (93) Acres)     600     6.66% (50, 32)     50, 325     6.04% (15, 13)     135     22% (1, 51)     23%       (10) (10) (13) Acres)     134     4.90% (51, 354)     6.17% (51, 36)     13, 431     37%       (10) (12) Acres)     194     2.13% (51, 354)     6.17% (51, 36)     36% (13, 34)     37%       (10) (12) Acres)     172     139% (40, 84, 4)     4.91% (55, 22%)     13, 43     37%       (10) (13) Acres)     172     139% (41, 4)     4.91% (51, 22%)     57     14% (15, 24)     37%       (10) 01 (1399 Acres)     200     17, 22% (51, 21)     17, 22% (51, 21)     14%     10, 044     139       (1000 10) 999 Acres)     200     10, 20% (15, 81)     17, 22% (51, 14)     14%     10, 044       (100 00 1399 Acres)     201     10, 20% (51, 14)     17, 22% (51, 14)     14%     100, 145     12%       (100 00 1399 Acres)     21, 24% (55, 61)     10, 20% (51, 14)     10, 24% (51, 14)     14%     100, 145     12%       (100 14)     21, 25% (51, 14)     21, 25% (51, 14)     10, 24% (51, 24)     21%     100 <td< td=""><td>50 to 69 Acres</td><td>589</td><td>6.47%</td><td>34,243</td><td>4.11%</td><td>66</td><td>17%</td><td>5,936</td><td>17%</td></td<>	50 to 69 Acres	589	6.47%	34,243	4.11%	66	17%	5,936	17%
100 to 139 Acres     446     4.90%     51,354     6.17%     160     36%     18,879     37%       140 to 179 Acres     1286     3.14%     45,223     5.43%     86     30%     13,434     30%       180 to 259 Acres     172     1.831%     40,841     4.61%     52     27%     8,134     30%       220 to 299 Acres     172     1.831%     40,841     1.72%     57     14%     1,904     139       200 to 999 Acres     238     2.62%     15,819     13.91%     1     1     27       500 to 999 Acres     238     2.62%     15,819     13.91%     1     1     9       1,000 to 1.999 Acres     29,101     10.00%     832,600     10.391%     1     9     0     0       2,000 Acres     21,04     1,01%     832,600     10.00%     796     9%     100,145     1     2       2,000 Acres     61,01     10,02%     796     9%     100,145     1     2     3% <t< td=""><td>70 to 99 Acres</td><td>606</td><td>6.66%</td><td>50,325</td><td>6.04%</td><td>135</td><td>22%</td><td>11,519</td><td>23%</td></t<>	70 to 99 Acres	606	6.66%	50,325	6.04%	135	22%	11,519	23%
Id0 to 179 Acres     286     3.14%     45,223     5.43%     86     30%     13,434     309       IB0 to 219 Acres     194     2.11%     38,413     4.61%     52     27%     10,256     27%       280 to 4299 Acres     40,841     1,3041     1.2.2%     57     14%     13,91       200 to 999 Acres     209     0.39%     115,819     13.91%     1     14%     13,91       500 to 999 Acres     20     0.39%     115,819     13.91%     1     14%     13,91       1,000 to 1,999 Acres     20     0.39%     115,819     13.91%     1     14%     13,91       2,000 Acres or More     22     0.24%     55,672     6.69%     0     0%     13     14%       2,000 Acres     21     100,00%     832,600     100.00%     796     9%     100,145     12%       10 to 49 Acres     2,09     23,12%     11,916     1.41%     14%     10%     12%     12%       10 to 49 Acres     514     6.56% </td <td>100 to 139 Acres</td> <td>446</td> <td>4.90%</td> <td>51,354</td> <td>6.17%</td> <td>160</td> <td>36%</td> <td>18,879</td> <td>37%</td>	100 to 139 Acres	446	4.90%	51,354	6.17%	160	36%	18,879	37%
IBO to 219 Acres     194     2.13%     38,413     4.61%     52     27%     10,256     27%       Z20 to 299 Acres     172     1.89%     40,844     4.91%     36     21%     8,591     21%       Z60 to 999 Acres     2302     4.42%     15,819     1.7.22%     57     4,93     4     4     4     6,304     4     35       Z60 to 999 Acres     390     0.99%     15,819     1.9.20%     10     4%     1,963     14       Z100 to 1.999 Acres     90     0.99%     15,819     1.17.22%     6.90%     0	140 to 179 Acres	286	3.14%	45,223	5.43%	86	30%	13,434	30%
Z20 to 259 Acres     172     1.89%     40,844     4.91%     36     21%     8,591     21%       Z50 to 499 Acres     402     4.42%     133,401     17.22%     57     14%     19,084     13%       J500 to 999 Acres     238     2.62%     193,602     19.20%     1     4%     6,307     4%       J000 to 1399 Acres     23     0.099%     115,819     13.91%     1     4%     6,307     4%       J000 to 1399 Acres     21     0.099%     15,617     6.69%     0     0%     0     9%     1%     4%     4%     4%       J000 Acres     22     0.24%     85,607     100.00%     835,600     100.00%     796     9%     10     9%     1%       J010 40 Acres     3,726     41,916     1.41%     1.41%     10.41%     10.41%     10.41%     0     0%     0     0%     0     0%     0%     100     13%     14%     12%     10.41%     10.41%     10.41%     10.41%	180 to 219 Acres	194	2.13%	38,413	4.61%	52	27%	10,256	27%
E60 to 499 Acres     402     4.42%     143,401     17.22%     57     14%     19,084     13%       500 to 999 Acres     238     2.62%     159,862     19.20%     10     4%     6,307     4%       1,000 to 1,999 Acres     238     2.62%     159,862     19.20%     1     4%     4%       1,000 to 1,999 Acres     200     0.99%     115,819     13.91%     1     4%     4%       2000 Acres or More     2     0.24%     55,672     6.69%     0     0%     1     4%       2000 Acres     0.01     100.00%     832,600     100.00%     796     9%     1     4%       10 49 Acres     2,099     23,12%     11,916     1,41%     0     0     0%     0     0       10 49 Acres     5,126     41,04%     83,502     9.85%     93,65     1.41%     0     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1	220 to 259 Acres	172	1.89%	40,844	4.91%	36	21%	8,591	21%
500 to 999 Acres     238     2.62%     15,819     13.31%     10     4%     6,307     4%       1,000 to 1,999 Acres     90     0.99%     115,819     13.31%     1     1%     1,083     1%       2,000 Acres or More     22     0.24%     55,672     6.69%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0     0%     0     0     0%     0     0     0%     0     0     0%     0     0     0%     0     0     0%     12%	260 to 499 Acres	402	4.42%	143,401	17.22%	57	14%	19,084	13%
1,000 to 1,999 Acres     90     0.99%     15,819     13.31%     1     1,083     19%     1,083     19%     1083     19%     1083     19%     1083     19%     10     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0     0%     0%     0     0%     10%     10%     10%     10%     10%     10%     10%     10%     10%     10%     10%     10%     10%     10%     <	500 to 999 Acres	238	2.62%	159,862	19.20%	10	4%	6,307	4%
2,000 Acres or More     22     0.24%     55,672     6.69%     0     0%     0     0%     0     0%     0     0%     0     0%     0	1,000 to 1,999 Acres	60	0.99%	115,819	13.91%	-	1%	1,083	1%
Total     9,101     100.00%     832,600     100.00%     796     9%     100,145     12%       1992 Size of Farm     1     1     1     1     9     1     100.00%     832,600     100.00%     796     9%     100,145     12%       10 0 49 Acres     2,099     23.12%     11,916     1.41%     83,502     9.85%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.85%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%     9.95%<	2,000 Acres or More	22	0.24%	55,672	6.69%	0	%0	0	%0
1992 Size of Farm   11,916   1.41%     1 to 9 Acres   2,099   23.12%   11,916   1.41%     1 to 9 Acres   3,726   41.04%   83,502   9.85%     50 to 69 Acres   3,726   41.04%   83,502   9.85%     50 to 69 Acres   614   6.76%   35,452   4.18%     50 to 69 Acres   53,094   7.44%     50 to 139 Acres   549   6.05%   63,094   7.44%     140 to 179 Acres   3224   3.57%   51,114   6.03%     180 to 219 Acres   3224   3.57%   51,114   6.03%     500 to 999 Acres   176   1.94%   4.52%     500 to 999 Acres   250   2.75%   173,111   20.42%     1,000 to 1,999 Acres   7.4   97,450   11.50%     2,000 Acres or More   15   0.17%   38,371   4.53%     2,000 Acres or More   15   0.17%   38,371   4.53%	Total	9,101	100.00%	832,600	100.00%	796	6%	100,145	12%
1992 Size of Farm   1					in chi				
Ito 9 Acres   2,099   23.12%   11,916   1.41%     0 to 49 Acres   3,726   41.04%   83,502   9.85%     50 to 69 Acres   614   6.76%   35,452   4.18%     70 to 99 Acres   549   6.52%   49,050   5.79%     70 to 139 Acres   549   6.05%   63,094   7.44%     70 to 139 Acres   549   6.05%   63,094   7.44%     80 to 179 Acres   324   3.57%   51,114   6.03%     180 to 219 Acres   1394   2.14%   38,314   4.52%     220 to 259 Acres   176   1.94%   42,087   4.97%     500 to 999 Acres   250   2.75%   173,111   20.42%     1,000 to 1,999 Acres   74   0.82%   97,450   11.50%     2,000 Acres or More   15   0.17%   38,371   4.53%     2,000 Acres or More   15   0.00%   847,595   100.00%	1992 Size of Farm						A Longerth and		
10 to 49 Acres     3,726     41.04%     83,502     9.85%       50 to 69 Acres     614     6.76%     35,452     4.18%       70 to 99 Acres     592     6.52%     49,050     5.79%       100 to 139 Acres     592     6.52%     49,050     5.79%       140 to 179 Acres     324     3.57%     51,114     6.03%       140 to 179 Acres     324     3.57%     51,114     6.03%       180 to 219 Acres     194     2.14%     4.52%       220 to 259 Acres     176     1.94%     4.52%       220 to 259 Acres     746     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	1 to 9 Acres	2,099	23.12%	11.916	1.41%				
50 to 69 Acres     614     6.76%     35,452     4.18%       70 to 99 Acres     592     6.52%     49,050     5.79%       100 to 139 Acres     592     6.52%     49,050     5.79%       140 to 179 Acres     549     6.05%     63,094     7.44%       180 to 219 Acres     324     3.57%     51,114     6.03%       180 to 219 Acres     194     2.14%     38,314     4.52%       220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     266     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	10 to 49 Acres	3,726	41.04%	83,502	9.85%				
70 to 99 Acres     592     6.52%     49,050     5.79%       100 to 139 Acres     549     6.05%     63,094     7.44%       140 to 179 Acres     324     3.57%     51,114     6.03%       180 to 219 Acres     194     2.14%     38,314     4.52%       220 to 259 Acres     176     1.94%     42,087     4.97%       220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     266     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	50 to 69 Acres	614	6.76%	35,452	4.18%				
100 to 139 Acres     549     6.05%     63,094     7.44%       140 to 179 Acres     324     3.57%     51,114     6.03%       180 to 219 Acres     194     2.14%     38,314     4.52%       220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     466     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	70 to 99 Acres	592	6.52%	49,050	5.79%				
140 to 179 Acres     324     3.57%     51,114     6.03%       180 to 219 Acres     194     2.14%     38,314     4.52%       220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     466     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	100 to 139 Acres	549	6.05%	63,094	7.44%				
180 to 219 Acres     194     2.14%     38,314     4.52%       220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     466     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	140 to 179 Acres	324	3.57%	51,114	6.03%				
220 to 259 Acres     176     1.94%     42,087     4.97%       260 to 499 Acres     466     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	180 to 219 Acres	194	2.14%	38,314	4.52%				
260 to 499 Acres     466     5.13%     164,134     19.36%       500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53%       2,000 Acres or More     9,079     100.00%     847,595     100.00%	220 to 259 Acres	176	1.94%	42,087	4.97%				
500 to 999 Acres     250     2.75%     173,111     20.42%       1,000 to 1,999 Acres     74     0.82%     97,450     11.50%       2,000 Acres or More     15     0.17%     38,371     4.53% <b>Total 9,079 100.00% 847,595 100.00%</b>	260 to 499 Acres	466	5.13%	164,134	19.36%				
1,000 to 1,999 Acres 74 0.82% 97,450 11.50% 2,000 Acres or More 15 0.17% 38,371 4.53% <b>Total 9,079 100.00% 847,595 100.00%</b>	500 to 999 Acres	250	2.75%	173,111	20.42%				
2,000 Acres or More 15 0.17% 38,371 4.53% <b>Total 9,079 100.00% 847,595 100.00%</b>	1,000 to 1,999 Acres	74	0.82%	97,450	11.50%				
Total 9,079 100.00% 847,595 100.00%	2,000 Acres or More	15	0.17%	38,371	4.53%				
	Total	9,079	100.00%	847,595	100.00%				

# New Jersey Size of Farms and Farms Preserved 1992 - 1997

Table 12

discussed and resolved, if possible. The end result of this Project will be a clear indication of farmland preservation priorities enabling coordinated landowner outreach as well as closer coordination with land use planning and open space, recreation and historic preservation initiatives (see Map 21).

### State Development and Redevelopment Plan Consistency

As previously stated in the Progress to Date section of this report, the consistency of farmland preservation efforts to other programs and investments at all levels of government is critically important. Combining the efforts of the SADC, the counties, municipalities and non-profit organizations involved in farmland preservation will be much greater than the sum of the individual efforts, especially if other public investments and programs take agricultural retention strategies into account.

To that end, approximately 94% of all farmland preserved to date is located in the Rural Planning Areas, 4A and 4B (Rural Environmentally Sensitive). This Strategic Targeting Project should be an important tool in identifying centers of development, particularly in the Rural Planning Areas. The information in this report should be used in evaluating centers boundaries and proposals for mapping changes, as well. Finally, as the SADC moves to adopt a process for approving County and Municipal Farmland Preservation Plans as part of the prioritization of farmland preservation investments described in the policies of the SDRP, ensuring the consistency of local plans to Planning Area designations will become increasingly important (see Map 22).

### Garden State Greenways Coordination

The New Jersey Conservation Foundation, in conjunction with the New Jersey Department of Environmental Protection Green Acres Program, is developing a statewide open space and greenway preservation plan. Based on input from the conservation community and various levels of government, along with extensive GIS mapping and analysis, the vision will identify a potential "green infrastructure" – a statewide network of open space and connective corridors, including agricultural lands. The plan is designed to serve as a guide for state agencies, local governments, and private land trusts in making coordinated decisions about land conservation (see Map 23).

The Green Acres Program is providing data on existing open space and potential greenway connections. In order to refine and add to the mapping effort, a series of planning workshops were conducted. The Conservation Foundation has assembled an extensive statewide GIS database of protected open space, open space and greenway plans, natural resources, trails and other recreation facilities. It is imperative for the SADC and the agricultural community to interact





### FARMLAND PRESERVATION STATUS





with environmental interests to insure that New Jersey's farmlands are respected for their value as working landscapes as well as their environmental benefits.

To date, the Green Acres Program has permanently protected an estimated 26,936 acres of agricultural land. The overwhelming majority of the farmland preserved (17,669 acres) was acquired for State agency use, primarily for the Department of Environmental Protection Divisions of Parks and Forestry and Fish and Wildlife. The Green Acres Program was instrumental in coordinating with Federal agencies and utility companies to preserve another 7,850 acres throughout the State. The Program has also protected 1,417 acres of farmland through the acquisition of conservation easements. The SADC will continue efforts to more closely coordinate program investments and develop cooperative preservation projects, where appropriate (see Maps 24 and 25).

### Pinelands Management Plan Coordination

The Pinelands Comprehensive Management Plan established a system of Management Areas to guide growth away from the most critical resources to the locations in the region best suited to accommodate development. Agricultural Production and Special Agricultural Production Areas were identified to protect the region's concentration of farmlands, largely through strict land use regulations and a Transfer of Development Rights option.

The SADC led in the creation of a funding formula designed to compensate farmland owners in the Pinelands in exchange for a development easement, permanently protecting their farms. To date, 60 farms representing approximately 6,000 acres have received final approval and have been funded. An additional 55 farms, consisting of more than 10,000 acres, are under review. The SADC will continue to coordinate with the New Jersey Pinelands Commission to expand the commitment to permanently protect the agricultural resources in the Pinelands (see Map 22).

### Highlands Critical Resource Area Proposal

In recent years, efforts have intensified to protect the New York - New Jersey Highlands region as a Critical Resource Area. The Highlands region in New Jersey encompasses approximately 789,000 acres in portions of 7 northern counties. About 14% (110,883 acres) of the region in New Jersey is in agricultural production, mostly in Warren, Hunterdon and southern Morris Counties. To date, more than 10,700 acres of farmland have been permanently preserved in the Highlands region, and another 3,700 acres have received final approvals. Nearly 5,000 additional acres of Farmland Preservation Program applications in the region are under review (see Map 26).







The U.S. Department of Agriculture Forest Service has recently completed an extensive update of a 1992 regional study of the Highlands region in New York and New Jersey. The goals for the long-term stewardship of the region include the following:

- 1. Managing future growth that is compatible with the region's ecological constraints;
- 2. Maintaining an adequate surface and ground water supply that meets the needs of local and downstream users;
- 3. Conserving contiguous forests using management practices that are consistent with private property rights and regional resources;
- 4. Providing appropriate recreational opportunities; and
- 5. Promoting economic prosperity that is compatible with the above goals.

It will be increasingly important for New Jersey's agricultural community to be involved in the efforts to protect the Highlands region in order to maintain and enhance its farms and forests as working landscapes. The SADC should work with potential partners to expedite the permanent preservation of farmland in this critical area.

### **Crossroads of the American Revolution Proposal**

The National Park Service recently completed a Special Resource Study, National Heritage Area Feasibility Study and Environmental Assessment of a proposal to elevate the national significance of resources related to the Crossroads of the American Revolution in New Jersey. The study area included fifteen counties from Bergen and Passaic in the north to Camden and Gloucester in the South, encompassing more Revolutionary War actions than any other colony (see Map 24).

The study identified significant potential to preserve additional acres around existing State and National Historic Sites, to better protect the context of these important cultural resources and contribute to public understanding. The SADC should work closely with Green Acres Program staff to identify the potential to partner in preserving significant farmland acreage in the study area.

### NJ Trails Plan

The New Jersey Department of Environmental Protection Division of Parks and Forestry Office of Natural Lands Management has developed a plan to establish a system of trails throughout the State. The existing and proposed trail network is designed to accommodate a variety of uses including hiking, horseback riding, mountain biking, cross-country skiing, off-road motorized vehicles, disabled access and water activities such as canoeing or kayaking. When properly designed and managed, trail corridors can be compatible with agricultural areas. The SADC and the CADBs should work closely with Green Acres Program staff and other recreational interests to identify partnership opportunities for land preservation and to design and manage trails near farms to avoid conflicts (see Map 27).

### Watershed Management Area Coordination

Watershed Management Areas have been established by the Department of Environmental Protection to call attention to and help to resolve regional environmental issues. The agricultural community should work with environmental interests to identify areas within specific watersheds to focus farmland preservation efforts to help protect and enhance environmental quality and foster stewardship of natural resources. Watersheds with significant concentrations of farms include the Upper, Central and Lower Delaware River Tributaries, the Raritan River, the Millstone River, Crosswicks Creek, and the Cohansey River (see Map 28).

### **Ground Water Recharge and Protection**

In response to Senate Bill S-889, the Department of Environmental Protection Green Acres Program was required to develop and apply an evaluation system to prioritize public open space acquisition based on protection of water resources. The New Jersey Geological Survey recently developed an objective method to evaluate tracts of land relative to their importance in protecting ground water recharge areas, aquifer productivity and wellhead protection areas. This method utilizes a quantitative model that evaluates the contribution of climate, land cover, and soils to the average annual rate of recharge to land areas of the state. Protecting recharge areas is critical to maintaining productive aquifers and maintaining stream flow during dry periods, protecting water resources for all users, including farmers. The SADC should work with Green Acres Program staff to coordinate the development of a system to incorporate the protection of water resources into the evaluation of farmland preservation applications (see Map 29).






## **Next Steps**

This Preliminary Report identifies a number of activities necessary to complete the Strategic Targeting Project for Farmland Preservation. In the weeks and months to come, the SADC and the CADBs will continue to exchange data and coordinate farmland preservation perspectives with other related agencies and organizations at all levels of government to take full advantage of the opportunities at hand.

The SADC is committed to lead in establishing a coordinated, strategic approach to preserving farmland in New Jersey through the following activities:

- Complete an Extensive Outreach Process involving meetings with all 18 CADBs, and representatives of County Planning Boards and County Boards of Agriculture, as well as at least 3 regional public meetings and dialogue with other State agencies, interested municipal officials and nongovernmental organizations
- Work with the CADBs and municipalities to Update County ADA and Planning Incentive Grant Project Area Maps to compile a consistent statewide representation of current Farmland Preservation Program priority areas
- Compare CADB Preservation Priorities to the Proposed SADC Priority System to eliminate gaps and identify potential opportunities to assemble large, contiguous blocks of preserved farmland
- Develop a Coordinated Landowner Outreach Strategy to maximize staff resources at all levels of government in creating a more proactive approach to program development
- Expand efforts to Coordinate Farmland Preservation with Recreation, Open Space, and Historic Preservation Initiatives by emphasizing agricultural priority areas and identifying cooperative projects, where appropriate
- Integrate Farmland Preservation with Progressive Land Use Planning by working with municipal, county and state agencies to implement conservation techniques into development regulations
- Reevaluate SADC Prioritization Criteria and Revise, if Warranted, to maximize the potential of investments in farmland preservation and agriculture retention statewide

- Incorporate the Strategic Targeting Project into the Department of Agriculture's Smart Growth Plan to insure a bright future for farming in the Garden State
- Provide resources to **Update Data Periodically** in order to keep the Strategic Targeting Project effective in leading the process to prioritize the farmland preservation efforts of all Program partners